

Australia's Current Account Deficit, National Savings and Industry Policy

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Abstract

The argument that there exist a causal link between national savings and current account deficits is often simplistically formulated in terms of national income accounting identities. However the validity of formulating national saving-argmenting policies to target current account deficits is open to much debate when the possible theoretical linkages between these aggregates are investigated more closely. In particular, if the adjustment mechanism to external balance is expenditure driven rather than relying on exchange rate induced relative price changes, the alternative case of interventionist policy to promote net exports is strengthened. Theoretical arguments opposing the use of interventionist trade policies are often derived from inappropriately constructed, or simplistically interpreted, economic models.

1. Introduction

The contention that there exists a causal linkage between national savings and current account deficits has played a significant role in the formulation

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of economic policy in Australia. The perceived role for increased national savings is portrayed in the following passage from the Fitzgerald Report (1993, p. 14):

we cannot, and should not, as a nation expect to finance future growth in our economy by going substantially further into debt to foreigners. The extent to which we can grow over the mid and later 1990s and beyond will depend on how much we can lift domestic saving.

The link between current account deficit reduction and expansion of national savings is placed at the centre of the current government's macro-economic policy as reflected in the Treasurer's 1996-7 Budget Speech:

... the Australian economy has been growing for 5 years since the recession of the early 1990s but there has been little or no progress in boosting saving or reducing unemployment. The policies of the former [ALP] Government has given Australians ... a national saving problem where the average current account deficit has doubled as a share of GDP since the beginning of the 1980s. [Commonwealth Treasury, 1996-7, p. 11]

The objective of increasing national savings in the context of reducing foreign debt was again emphasised in the subsequent fiscal budget:

increasing savings will bring important economic benefits for Australia. It will reduce our reliance on foreign debt. With more saving we can finance more of our investment to grow the economy faster and produce jobs. Higher savings will raise the speed limits to growth that have held us back over the past decade. [Commonwealth Treasury, 1997-8, p. 1]

However the mechanisms by which national savings, foreign debt and the current account are linked appear not to be widely understood. It is argued in this paper that one of the primary reasons for this is that much of the discussion has centred on national income accounting identities that merely link these variables definitionally without inferring causal relationships. Upon examining the conceivable theoretical relationships between savings, the current account and net capital flows, the nature of the causal link between national savings and current account deficits becomes somewhat unclear. More significantly, the validity of formulating national saving-augmenting policies to target current account difficulties is open to debate. Instead, a case may be argued for a shift in emphasis to more directly targeted trade and industry policies formulated on the premise that Australia's current account difficulties arise directly from deep seated structural problems within the Australian economy. From this perspective Australia's 'poor' savings performance may be seen to be a symptom of, rather than a

cause of, Australia's incessant current account problems. An examination of the direction of Australia's recent trading pattern is therefore essential in a consideration of the relative merits of alternatively advocated current account deficit alleviating policies.

The remainder of this paper is organised as follows. Section 2 considers the theoretical linkages between national savings and the current account. Significant trends in Australia's recent experience are highlighted in section 3, while some policy implications relating to trade and industry policy are considered in section 4.

2. Theoretical Considerations

Prior to considering the key theoretical linkages between national savings and the current account, it is important to establish the *definitional* relationships between these variables.

Definitional Relationships

The notion of a direct relationship between domestic savings, current account deficits and foreign debt accumulation emerges directly from an examination of well known national income accounting identities.

$$(T-G) + (S-I) = (X-M-R) \quad (1)$$

$$(X-M-R) + K = 0 \quad (2)$$

where the variables are government revenue T and *current* spending G ,¹ private sector savings S and investment I , exports X , imports M , other net income flows paid overseas R , and net capital inflow from overseas K .

From these identities it can be observed that a current account deficit ($X-M-R < 0$) is associated with both negative domestic net savings ($\{T-G\} + \{S-I\}$) and positive net capital inflow ($K > 0$), i.e. borrowing from overseas. Likewise an improvement in the current account balance would be associated with both an increase in net domestic savings and a reduction in net borrowing from overseas (K).

An argument can therefore be developed along the lines that a reduction in overseas borrowing (K) is achieved by financing a greater proportion of domestic private investment spending through domestic savings and budget surpluses ($T-G+S$). If this is accomplished, then it follows from equations (1) and (2) that the current account balance must improve.

However, it is often overlooked that equations (1) and (2) are merely identities and therefore convey no information about causation. It is essen-

tial therefore to investigate the mechanism whereby domestic savings/investment 'imbalances' and corresponding overseas capital flows impact on the current account. These linkages can conveniently be summarised under the headings of relative price and expenditure effects.

Relative Price Effects

The notion that changes in (net) domestic savings impact directly on current account balances is usually associated with theoretical modelling that implies current account balances are primarily determined by net (international) capital flows. It is *exchange rate driven* changes in the relative prices of traded and non-traded goods which is seen as providing the causal linkage between these variables.

The postulated relative price effect, derived directly from the traditional textbook representation of the Mundell - Fleming framework, can be summarised as follows. An increase in the domestic savings ratio means that less foreign savings (net capital inflow, K) are required to finance domestic expenditures. Given an unchanged balance on goods and services and domestic interest rates, this would result in a depreciation of \$A, given the reduced demand for Australian currency. The depreciation of \$A leads to an improvement in net exports ($X-M$), and a reduced current account deficit. The improved net export performance enhances output and employment growth, offset partially by the effects of an appreciating \$A induced by higher interest rates (an effect less likely if the money supply is correctly assumed to be endogenously determined).

Significantly, the exchange rate driven relative price effects just outlined imply that policies targeted directly at improving net exports are unlikely to be successful. If such policies achieve increased net exports, an exchange rate appreciation is the likely outcome, thereby offsetting the initial improvement in net exports. Therefore, as Forsyth (1990, pp. 3-16) has stated, this line of argument would suggest that policies which fail to 'affect the balance of savings and investment' are incapable of providing a solution to Australia's current account.

Critical to the operation of the relative price adjustment mechanism is the *presumption* that a reduction in capital inflow (displaced by increased domestic savings) leads to a depreciation of \$A and a subsequent improvement in net exports and the current account. However, these outcomes become less apparent once the analysis proceeds beyond simplistic text book variations of the Mundell-Fleming model.²

The issue of exchange rate determination remains very much an unsettled issue in the international economics and finance literature. On the one hand it is argued that exchange rates are determined largely endogenously to the Australian economy by market supply and demand variations. Changes in the direction of net capital flows are therefore seen to impact directly on exchange rates, which in turn induce accommodating changes in exchange rate sensitive net exports. However, a number of empirical studies³ add support to the alternative view that the \$A is established essentially exogenously to the Australian economy and determined by international commodity prices and, in particular, expectations of future movements in such prices. This would imply that fluctuations in capital flows have little impact on the exchange rate in the Australian case. To the extent that this is the case, the relative price effect represents a rather ineffectual mechanism through which changes in the domestic/foreign financing ratio may impact on the current account.

Even if a \$A depreciation occurs due to a shift from foreign to domestic savings, this does not necessarily imply that an improvement in the current account will occur. Firstly, it must be recognised that the relative price effect requires a depreciation of the *real* exchange rate, and therefore the probable domestic inflationary pressures flowing from nominal exchange rate movements need to be considered. In particular, higher priced imported inputs employed in the traded goods sector reduces the extent to which this sector's competitive position is enhanced by nominal exchange rate depreciations.

Moreover, it can not be taken for granted that the value of net exports will increase following real exchange rate depreciation. The direction in changes to net exports following exchange rate movements depends critically on export and import demand price elasticities (often discussed in terms of the 'Marshall-Lerner' conditions). A number of empirical studies have found that import demand is significantly price inelastic.⁴ These findings are consistent with RBA estimates suggesting that, other things being equal, Australia's import bill will rise following a depreciation, with the price effect proportionately twice as large as the induced volume impact (Bullock et al, 1993). These results reflect in the main the composition of Australia's imports, where intermediate and capital goods are significant and link Australia's import demand closely to the level of national income rather than to relative prices.

Export price elasticity estimates from the Bullock et al (1993) analysis suggest that a 1% fall in relative price of Australia's manufactured exports leads to a 5–6% increase in export volumes. Australian Treasury (1997) suggests a slightly less optimistic price elasticity estimate of 2.9% for

ETMs.⁵ However, price elasticities for primary product exports tend to be significantly lower, with the Treasury analysis suggesting that the price elasticity for Australian commodities exports is 0.45%. It is also likely that export elasticity values are significantly overstated in empirical studies because important changes in the composition of traded goods (particularly exports) was occurring, making the estimates time specific (ie. the estimates may be of limited use in forecasting out of sample). In addition, in the case of most studies, very large \$A fluctuations occurred during the estimating period, taking adjustments beyond the usual inertia range.

Therefore it can be seen that the available data does not provide compelling support for the proposition that exchange rate depreciations necessarily lead to improved trade and current account balances. The available analysis leads to the conclusion that expenditure on imports is likely to increase as a result of an exchange rate depreciation. On the other hand, the exchange rate effects on export earnings are much more difficult to predict. Positive export earning outcomes are constrained to the extent that commodity exports remain a significant proportion of Australia's merchandise exports. The overall effect of a depreciation on exports is likely therefore to depend on the extent to which internationally traded services are responsive to exchange rate induced relative price changes,⁶ and the extent to which manufactured exports are able to capture a larger share of total merchandise exports.

Finally, it must be recognised that exchange rate depreciations may add significantly to the debt servicing requirements, recorded as a most significant item in Australia's overall current account balance. The extent to which increased debt servicing requirements impacts on the current account following a depreciation of \$A will depend upon factors such as the extent to which Australia's foreign debt is denominated in foreign currencies, and the composition (debt versus equity) of Australia's net capital flows. Higher debt servicing requirements would in turn add to the extent to which net exports need to improve following exchange rate depreciation if the current account deficit and rate of foreign debt accumulation is to be reduced.

A considerable degree of doubt therefore exists as to the capacity of the relative price adjustment mechanism to ensure that increased domestic savings ratios produce an improved current account outcome. It also suggests that policy makers need to be aware that increased domestic savings may impact on the current account through a different adjustment process which has outcomes that conflict with other central macroeconomic policy targets.

Expenditure Effects

The expenditure effect linking the current account balance with increased domestic savings ratios can be summarised as follows. An increase in the *net savings / national income* ratio implies a reduction in the percentage of income devoted to the consumption of goods and services produced both domestically and overseas. The reduction in expenditure on imported consumption goods, along with an induced fall in the demand for imported inputs, would have a direct and favourable affect on net exports and the current account balance. If the exchange rate was largely exogenously determined, and /or net exports were not significantly sensitive to exchange rate movements, the improvement in net exports would not necessarily be offset by an exchange rate appreciation. Clearly, the expenditure effect will operate most effectively under the opposite conditions that strengthen the operation of the relative price effects outlined earlier.

Significantly for policy makers, the expenditure effect adjustment process would not only reduce the demand for imported goods and services, but also for those goods and services produced in Australia. The implication therefore is that if increased savings and an improved current account balance are linked through the expenditure effect, the inevitable result would appear to be reduced rates of domestic GDP and employment growth. It is in this context that Argy (1991, p. 1) has concluded that it is easy to correct a *perceived* savings/investment imbalance if we are prepared to keep the economy permanently sedated. However, if investment and growth performance and living standards are to be maintained at an accustomed level, such policies are ill suited.

A Role for Trade and Industry Policy?

It has been argued that the causal linkages between increased domestic savings and the current account balance are complex and difficult to predict with confidence. The 'popular' representation of the process linking these variables is expressed either in terms of definitional relationships derived from national income accounting, or less naively, in terms of what has been referred to above as the relative price effects. The latter line of argument depends critically on the notion that the \$A is determined endogenously by changes in the direction of capital flows and that these exchange rate movements have a predictable relative price impact on export and import expenditures. If these conditions do not arise, then savings and net exports will be linked through an expenditure effect which is likely to have significantly adverse effects on output and employment growth.

It is interesting to note that trade and industry policies targeted directly at improving net export performance will be most effective under the very same circumstances in which the expenditure adjustment process is most likely to dominate. Under these circumstances an improvement in net export performance would not result automatically in competitiveness impeding exchange rate appreciation. In the event that an appreciation did occur, the adverse offsetting affect on net exports would also be less significant.

The basic conclusion from this section is that domestic saving augmenting policies targeted at reducing the current account deficit entail a significant risk of an accompanying deterioration in Australia's output and employment growth performance. These risks arise because of traded goods price insensitivities to exchange rates that are in turn predominantly determined exogenously by commodity price expectations. It has been argued that under these circumstances, a case can be argued that rather than focusing on savings enhancement, polices targeting current account deficit reduction should be directed specifically at enhancing net export performance. In this context, trade and industry policies may play a pivotal role.

Alternative trade and industry policy stances are considered briefly in section 4 of this paper. In the next section, a brief overview of Australia's recent trading performance is presented.

3. An Overview of Australia's Recent Trading Performance

Australia's current account deficits have been persistent and the debt to GDP ratio today is almost the same as it was fifteen years earlier. As is by now well known, a major component of these deficits has been the growing negative balance on the net income account reflecting servicing of foreign debt accumulated through the persistent current account deficits. It has been the inability of the Australian economy to deliver offsetting balance of trade surpluses which has ensured the continuation of these deficits and the associated foreign debt flows.

Australia's post-war economic development has been characterised by consumption and production patterns similar to comparable OECD nations, however as is highlighted in Table 1, the structural composition of its traded goods has been markedly dissimilar.

Each entry in Table 1 represents the share of each product type in Australia's trade relative to its share in total trade in the OECD nations included in the sample. Australia's emphasis on natural resource based exports during this period is accentuated with its relative export intensity approached only by Finland with a value of 2.55 (down from a value of 2.97

Table 1. Australia's Comparative Trade Pattern*

	1970-72	1977-79	1984-86
A. Exports			
Natural Resource Intensive	3.35	3.30	3.51
Labour Intensive	0.52	0.52	0.63
Scale Intensive	0.50	0.58	0.58
Differentiated Goods	0.22	0.22	0.18
High Technology	0.29	0.44	0.38
B. Imports			
Natural Resource Intensive	0.53	0.67	0.68
Labour Intensive	1.04	0.99	0.93
Scale Intensive	1.08	0.99	0.93
Differentiated Goods	1.34	1.37	1.35
High Technology	1.54	1.39	1.37

Note * The OECD countries included in the sample are; United States, Japan, West Germany, France, United Kingdom, Italy, Canada, Australia, Belgium, Finland, Netherlands, Norway, Sweden. Each entry represents the share of each product in Australia's trade relative to its share in the total trade of these countries.

for 1970-72). Also important are the particularly low export intensities occurring in the case of differentiated high-technology commodities where scale economies are important. Australia's relative export intensity values for these categories have changed very little over the sample time period and are significantly lower than is the case for smaller economies such as Sweden, Finland and Norway. The extremely low relative export intensity for differentiated goods is particularly significant, as the intra-industry trade between countries associated with such goods represented the fastest growing area of international trade during those decades. Conversely, the percentage (by value) of primary products and semi-manufactures in world trade had fallen from around 60 per cent in the mid 1960s to 46 percent in 1987. Significantly, Australia experienced the highest relative import intensity values for differentiated and high technology manufactured goods.

Therefore it can be seen that in the decades following World War II, the composition of Australia's international trade was not moving in the same direction as most other OECD nations with similar structures of production and consumption. Importantly, Australia's atypical trading pattern was associated with a volatile and downward trending terms of trade.

As is highlighted in Table 2, the deficit balance on ETMs has remained unchanged as a percentage of GDP, with recent ETM export growth insufficient to reduce this deficit.

This is a trend consistent with most significant components of manufactured exports. So while it is the case that manufactures now account for a

Table 2. Balance Of Trade As A Percentage Of G.D.P

Year	Standard International Trade Classification (Sitc) Categories ¹				
	Division 5	Division 6	Division 7	Division 8	Division ETM's
81/82	-0.9	-1.6	-5.2	-1.4	-9.2
82/83	-0.8	-1.3	-4.0	-1.3	-7.4
83/84	-0.8	-1.4	-4.1	-1.3	-7.7
84/85	-0.9	-1.7	-4.8	-1.5	-8.9
85/86	-1.0	-1.7	-5.6	-1.7	-10.0
86/87	-1.1	-1.7	-4.8	-1.6	-9.2
87/88	-1.1	-1.6	-4.6	-1.5	-8.9
88/89	-1.2	-1.6	-5.3	-1.6	-9.7
89/90	-1.1	-1.5	-5.4	-1.5	-9.4
90/91	-1.0	-1.2	-4.5	-1.5	-8.2
91/92	-1.0	-1.2	-4.3	-1.6	-8.1
92/93	-1.1	-1.3	-4.7	-1.7	-8.9
93/94	-1.1	-1.2	-4.9	-1.8	-9.1
94/95	-1.2	-1.3	-5.9	-1.8	-10.3
95/96	-1.2	-1.2	-5.5	-1.7	-9.6
96/97	-1.2	-1.1	-5.2	-1.7	-9.1

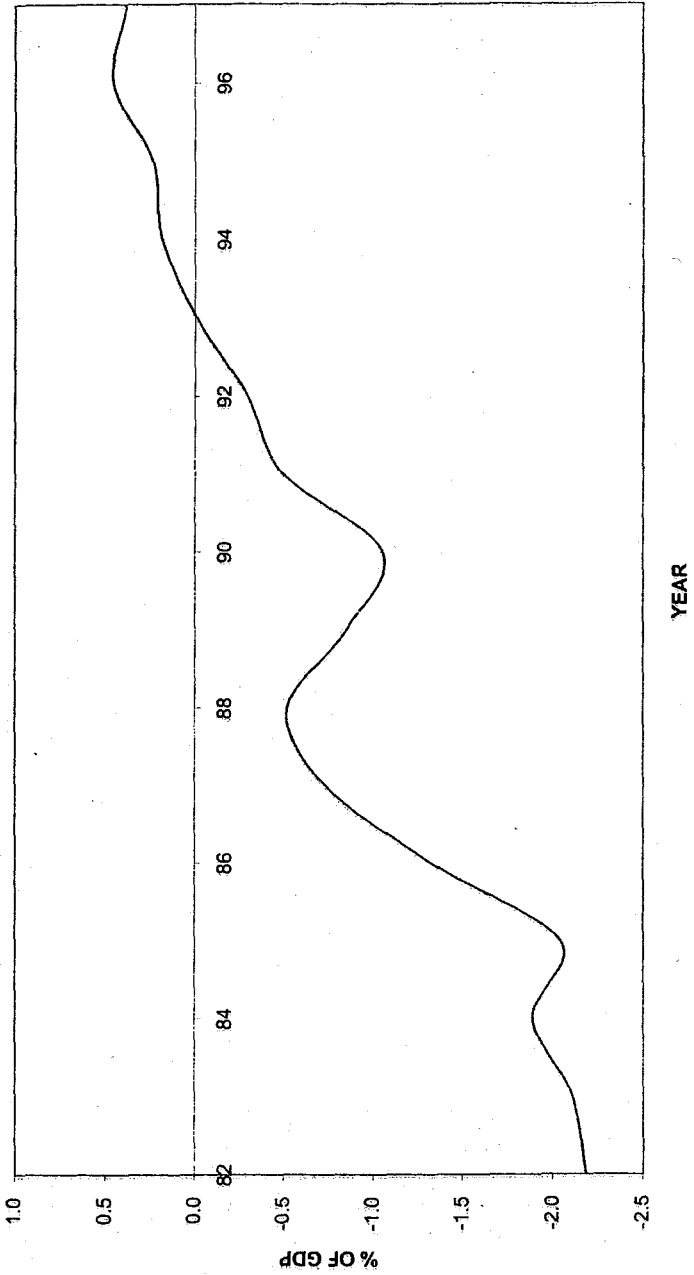
Source: ABS Cat. No. 5422.0, 'International Merchandise Trade' & ABS Cat. No. 5206.0, 'National Income, Expenditure and Product'.

Year	Standard International Trade Classification (Sitc) Categories ²				
	Section 54	Section (64,84+85)	Section 75	Section 76	Section 78
81/82	-0.04	-0.9	-0.42	-0.42	-1.1
82/83	-0.05	-0.8	-0.42	-0.43	-0.9
83/84	-0.05	-0.9	-0.53	-0.47	-1.0
84/85	-0.08	-0.9	-0.70	-0.51	-1.3
85/86	-0.10	-0.9	-0.81	-0.58	-1.5
86/87	-0.13	-0.9	-0.82	-0.53	-0.9
87/88	-0.15	-0.9	-0.74	-0.46	-0.9
88/89	-0.14	-0.9	-0.87	-0.46	-1.3
89/90	-0.15	-0.8	-0.82	-0.43	-1.2
90/91	-0.16	-0.7	-0.70	-0.38	-1.0
91/92	-0.15	-0.8	-0.72	-0.43	-1.0
92/93	-0.20	-0.8	-0.79	-0.45	-1.3
93/94	-0.17	-0.8	-0.80	-0.43	-1.4
94/95	-0.17	-0.8	-0.91	-0.62	-1.7
95/96	-0.19	-0.8	-0.85	-0.62	-1.4
96/97	-0.20	-0.7	-0.86	-0.60	-1.3

Notes: ¹ These categories are defined as follows. Division 5 is Chemical and Related Products. Division 6 is defined as Manufactured Goods Classified Chiefly by Material whilst division 7 is Machinery and Transport Equipment. Finally, division 8 constitutes Miscellaneous Manufactured Articles. Elaborately Transformed Manufactures (ETM'S) are defined as divisions 5, 6 (less sections 67 and 68), 7 and 8.

² The various categories are defined as follows. Section 54 constitutes Medicinal and Pharmaceutical Products. Section 75 consists of Office Machines and Automatic Date Processing Machines, whilst section 76 is Telecommunications and Sound Equipment. Finally, section 78 is defined as Road Vehicles.

Figure 1. Balance in Services as a Percentage of GDP



higher percentage of exports than was the case in previous decades, the overall trade deficit as a percentage of GDP in these goods remains almost unchanged from the 1982 levels. Recent growth (from a very low base) in manufactured export volumes has not been sufficient to redress Australia's trade deficit in manufactured goods.

International trade in services has increased in significance during recent decades. As is highlighted in Figure 1, the most positive aspect of Australia's recent trade performance has been the movement from deficit to surplus in the services balance. To a significant extent, this improvement is in turn directly attributable to the improvement in the balance of trade in travel.

In summary, while Australia's production and consumption patterns are not dissimilar to comparable economies, its composition of internationally traded goods remains atypical. Despite recent growth in manufactured exports, the balance of trade on these goods has barely changed as a percentage of GDP over the past 15 years. If it had not been for the improved net services balance, and travel and tourism in particular, Australia's current account deficit would have been significantly higher than it is at present. The capacity for the Australian economy to generate sufficient export earnings to offset the deficit net income component of the current account deficit depends critically on improved net exports of manufactured goods and continuing positive services trade balances.

4. Trade and Industry Policy

This paper has argued that savings augmenting policies may be inappropriately targeted towards alleviating Australia's persistent current account deficits. Instead, trade and industry policies directed specifically at improving Australia's net export performance have to be considered. The superiority of free trade and primacy of market forces are well-guarded principles amongst many professional economists. Advocates of strategic intervention in the areas of trade and industry policy have therefore at times found it difficult to convince policy makers and their advisers that interventionist policies are not inconsistent with sound economic argument. In this section, the grounds upon which the interventionist policy stance may be theoretically justified are briefly stated.

Those who oppose interventionist trade and industry policies envisage an improved trading performance as emerging from policies such as the reduction of existing forms of assistance, combined with various types of microeconomic reform. These policies, it is argued, would result in trade

flows which would more closely reflect Australia's true comparative advantage, with internationally competitive producers being unburdened of assistance measures directed to 'less efficient' producers. Importantly, these policy recommendations emerge from traditional *interpretations* of 'neoclassical' international trade theory; interpretations that require close scrutiny.

Critics of the non-interventionist argue that the economic tools of analysis used to justify that policy stance are simplistic and/or inappropriate. The elegant theoretical models are seen to bear little resemblance to the complex world to which policies are to be applied. It is argued that international trade does not proceed in 'competitive' markets in which price signals direct market forces. Instead, markets are characterised by imperfect competition, returns to scale, various episodes of 'market failure' and uncertainty, all of which distort the market signals conjectured in the theoretical models. Therefore, if policy recommendations are to be forthcoming from within the 'neoclassical' theoretical framework, the efficiency and welfare judgements have to be formulated from within the rarely chartered territories of 'second best theory'.⁷ In this setting, unambiguous efficiency conclusions are difficult to derive and it should be concluded that even within the narrow confines of static allocative efficiency criteria, there is no *general* argument against export assistance schemes or other forms of government intervention. Instead, a case by case approach is implied.

During recent decades, justification for a more interventionist trade and industry policy stance has emerged from theoretical models developed outside of the neoclassical approach. Amongst these approaches, strategic trade theory has received most attention.⁸ These theories observe that international trade has increasingly come to be dominated by intra-industry trade rather than the exchange of commodities of one industry from another along the lines suggested by the principle of comparative advantage. Krugman (1986, p.8) described the determinates of trade flows as follows:

They lie in the advantages of large-scale production, which leads to an essentially random division of labour among countries, in the cumulative advantages of experience which sometimes perpetuate accidental initial advantages, in the temporary advantages conveyed by innovation. What is important is that the conventional economic analysis is based on a theory of trade that does not allow for these kinds of motives for international specialisation.

The notion of competitive markets is replaced with strategic decision making processes by firms in imperfectly competitive markets characterised by barriers to entry, unequal access to technology and economies of

scale. An interventionist trade policy, for example, through selective export subsidies, *may* benefit a country relative to free trade because governments can alter the strategic game played between domestic and foreign firms by using measures which are by their nature unavailable to individual firms.

Much of the theoretical literature from which trade and industry policy implications are derived is static in nature. The case for government intervention is even more compelling when the dynamic dimensions of the increasing returns and technological change processes are fully recognised. For example, drawing on earlier development of the concept of cumulative causation by Myrdal (1957) and Kaldor (1981), Dixon and Thirlwall (1975) and Whiteman (1991) demonstrate how government assistance to strategic sectors may accelerate the flow of resources into high technology areas with potential for future growth. Most significantly, the dynamic 'learning by doing' aspects of increasing returns emphasises that comparative advantage is not a characteristic which is some how exogenously determined, but is instead a largely endogenous process in which nations to a significant degree can create competitive advantage ahead or independent of time.

So it can be seen that economic theorising beyond the confines of 'neoclassical' economics does suggest that an interventionist approach to trade policy has the potential to change the composition of traded goods through time. The conclusion that such intervention necessarily leads to overall efficiency losses is based on a rather simplistic interpretation of the 'neoclassical' model.

It is important to note that those who support an interventionist approach to trade and industry policy rarely support inward-looking import protection measures. The assistance measures are *not* perceived as offering a retreat from the imperatives of globalisation and international trade. Nor are the supporters of such policies necessarily opposed to elements of the various microeconomic reform packages advocated by the non-interventionists. However, such policies are seen as being *necessary but not sufficient conditions* for the kind of export improvement Australia requires in the 1990s and beyond.

In this setting, recommended assistance initiatives include selective depreciation allowances, and conditional grants or low interest loans to accelerate the take up of advanced manufacturing technology. Extension of existing trade enhancement schemes, particularly in the area of risk sharing assistance to established firms that invest in managed export developments, has also been recommended. National procurement development schemes, increased provision of non-tax R&D support, and measures to increase the availability of venture capital are also seen as playing an important role.

Critically, it is in activities that integrate Australian manufacturing selectively into global scale industries that are seen as most usefully attracting government assistance.⁹ The recently completed Goldsworthy Report (1997), for example, presents a particularly strongly argued case in support of selective measures for the rapidly growing information and technology industries.

Until recently most assistance measures were discussed largely in the context of the manufacturing sector in Australia. Promotion of emerging services export sectors also requires careful consideration. To a significant extent trade in services is a reflection of successful product differentiation on a global scale. Apart from assistance relating to capital expenditures, a major potential role for government is to be found in the international promotion and marketing of services such as tourism, education and health. For example, a number of studies¹⁰ have emphasised the importance of the Australian Tourism Commission in promoting Australian tourism, given that the market fails to allow small operationally diversified firms to capture the benefits from promotion activities.

5. Conclusion

The complex nature of causal relationships between national savings and the current account is often not well understood by those who advocate savings augmenting policies to target the current account deficit. The impact of these policies depends critically on the extent to which the traded goods sector responds to exchange rate induced changes in relative prices. In the absence of the required relative price sensitivities, domestic saving augmenting policies targeted at reducing the current account deficit are likely to lead to a deterioration in Australia's output and employment growth performance.

A central implication emerging from the arguments presented in this paper is that if, as well may be the case, the adjustment mechanism to external balance is expenditure driven rather than relying on exchange rate induced relative price changes, the case for interventionist policy to promote exports is strengthened. Under these circumstances, relative price effects induced by an exchange rate appreciation would not offset the improved current account outcome flowing from successfully implemented export promotion policies. If it is accepted that trade and industry policies have a role to play in improving net export performance, questions as to the appropriate stance of trade policy have to be addressed. Theoretical arguments opposing the use of interventionist trade policies are often derived

form inappropriately constructed, or simplistically interpreted, economic models. Interventionist policies are more likely to find theoretical respectability in economic analysis that allows for the existence of imperfect competition, market failure, and dynamic processes related to increasing returns to scale and technical progress and innovation.

Notes

- 1 It is important to note that saving is defined as income less consumption, and not revenue less total expenditures. For example, as Neville (1997) emphasises, a public saving is the difference between public investment and the deficit. Therefore, a reduction in capital expenditure may reduce the budget deficit, but this will not lead to an increase in public sector savings.
- 2 Pope's (1981) analysis of the effects of exchange rate movements on the manufacturing sector clearly demonstrated that, contrary to the standard textbook analysis, an exchange rate revaluation led to an increase in Australian manufacturing output. The empirical findings of her study suggested that a one percent revaluation of \$A in the decade of the 1970s had on average expanded total manufacturing output by 0.2 to 0.25 percentage points eighteen months later. This occurred largely because the lower priced imported inputs flowing from the revaluation more than offset any adverse effect on manufactured exports arising from a revaluation induced decline in international competitiveness.
- 3 See for example Blundell-Wignall, Fahrer and Heath (1993).
- 4 Import price elasticity estimates of -0.76 (for the period 1978-96), -0.42 (1974-93) -0.64, and -0.45 (1974-92) are reported in Commonwealth Treasury (1997), Dwyer and Kent (1993), Wilkinson (1992) and Bullock et al (1993) respectively.
- 5 The (Bullock et al, 1993) estimates cover the time period 1974-1992, while the Australian Treasury (1997) time series covers 1975-1996.
- 6 Given the relatively short time period over which Australia's major service export sectors (travel and tourism, and education) have contributed significantly to total export earnings, price elasticity estimates capable of providing useful out of sample estimates are not available. The Tourism Council of Australia's (1998) review of a number of empirical studies suggests that the international demand for tourism to Australia is price elastic, however the estimates vary significantly between international travel origins. The Bureau of Transport and Communications Economics (1995) has derived similar results relating specifically to real exchange rate price elasticities.
- 7 'Second Best Theory' emerged from Lipsey and Lancaster's (1956-57) important contribution, which demonstrated that there is no a priori way to judge between various situations in which some of the Paretian optimum (static allocative efficiency) conditions are fulfilled while others are not. In a situation in which there exist many constraints that prevent the fulfilment of the paretian optimum conditions, the removal of any one constraint may affect welfare or efficiency either by raising it, by lowering it, or by leaving it unchanged.
- 8 Useful outlines of the basic ideas can be found in Krugman (1987) and Hamilton (1991). See also Spencer and Brander (1983), Helpman and Krugman (1989) and Krager and Zimmermann (1992).

- 9 The Pappas Report (1990) provides a detailed discussion of many of these assistance measures.
- 10 See for example Hall (1991), Grey, Edelmann and Dwyer (1991) and Bureau of Tourism Research (1996).

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