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COMPETITIVENESS

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The notion of international 'competitiveness' has been prominent in public and professional discussion of Australia's current account and foreign debt problem. There is a large technical literature on the subject but most of it is mathematical and intelligible only to the initiated. The object of this article is to explain what is meant by competitiveness in a way that is acceptable to the profession but intelligible to Paul Keating and Paul Kelly.

Preliminaries

Some economists (Corden 1977, 1991; Pitchford 1989, 1990) question whether Australia has a current account and foreign debt problem. They regard the current account deficit (CAD) as generated by normal capital inflow, mainly private, and therefore presumptively self-servicing. They treat the current account as, in the main, driven by the capital account. This view is not shared by all economists and by hardly anyone else. Those who disagree with the Corden-Pitchford view believe that a country, no more than an individual, can indefinitely overspend its income and live on tick. If export earnings are insufficient to pay for imports of goods and services, whether because of a slump in overseas markets for exports or a domestic boom spilling over into imports or for longer-term structural reasons, and the deficit has to be financed by running down international reserves or borrowing, it is the current account that drives the capital account. (The problem cannot be assumed away by a floating exchange rate since, rather than permit the drastic consequences of a massive deprecation, the authorities tend to step in to manage the float). The actual situation, of course, is usually a mixture of the two cases. Part of Australia's CAD of the 1980s can be attributed to normal capital inflow, but much of it has been due to inability to make ends meet on current account.

There is general agreement among economists about the twin causes of the longer-term problem: inadequate domestic saving and inadequate international competitiveness. The interaction between these two causes is most simply explained by the Swan diagram (Swan 1963): to achieve two objectives, internal and external balance, requires two instruments, demand management and the real exchange rate; or, in Corden's terminology, 'expenditure-cutting' and 'expenditure-switching' (Corden 1960). If a CAD is
due to domestic excess demand spilling over into imports, demand management (expenditure-cutting) is the appropriate policy. (Expenditure-cutting is the short-term, promotion of saving, i.e., reducing consumer spending relative to income, the longer-term aspect of demand management). But if the CAD is due to a fall in world demand for a country's exports or inadequate international competitiveness, expenditure-cutting alone will not do; it will cause underemployment at home (upsetting internal balance) before external balance is restored. Expenditure-cutting needs to be accompanied by expenditure-switching, i.e., by a real depreciation.

Some contributors to the discussion forget or ignore one or other of the two factors. Kelly (1992) at various points focuses on competitiveness alone, forgetting about the saving aspect. Forsyth (1990), on the other hand, ignores competitiveness on the ground that, since $X-M = S-I$, it is all a matter of the saving-investment imbalance. Whitelaw and Howe (EPAC 1992) argue that growth alone can do the trick: if consumption lags behind more rapidly growing income, the saving rate rises while growth of productivity improves competitiveness. One instrument, after all, is enough. But this rests on a large "other things equal" assumption. If faster growth results from more investment and higher productivity is passed on to consumers in higher wages, the net increase in saving and competitiveness will be small, and increased aggregate demand, unless adequately restrained, will spill over into imports.

With these preliminaries out of the way, we can turn to the question: what is meant by competitiveness?

**External and Internal Competitiveness**

The technical literature distinguishes two concepts of price competitiveness:

(i) external (the relative prices of domestic and foreign goods) and
(ii) internal (the relative domestic prices of tradables and non-tradables).

The general view is that internal competitiveness is more fundamental because it determines the ability of tradable goods industries to attract resources (eg. Martin-Nguyen 1989, Dwyer 1991). I shall argue that external competitiveness, the ability of domestic firms or industries to maintain or increase their market share relative to that of foreign competitors, is just as important. It is of little use attracting resources into your industries if you cannot sell the extra output.

External competitiveness is what people have in mind in public discussion and what businessmen themselves mean by competitiveness. The Australian coal industry becomes more competitive with its American rivals in the Japanese market if it can increase its market share. An Australian manufacturer becomes more competitive with imports if he can increase his share in the domestic market. The ability of a firm or industry to maintain or increase its market share depends on its profitability, the relation between prices and costs. The competitiveness of Australian tradables producers improves if their profitability increases because their product prices rise or their costs fall, relative to those of their foreign competitors. In the case of competition in the domestic market, this may occur through a nominal depreciation or tariff or in the longer-term if the Australian producers' unit costs fall relative to those of their foreign competitors, e.g., through a lower rate of inflation or faster growth of productivity. It is this relation between the prices of tradables and their costs of production (which are largely determined by the prices of non-tradables) that links external price competitiveness, the ratio of the prices of domestic and foreign goods, with internal price competitiveness, the ratio of the domestic prices of tradables and non-tradables.

**External Competitiveness**

External competitiveness does not depend on relative prices alone. There has been much emphasis in trade theory recently on non-price competitiveness (eg. Porter 1990, Hoffman 1989). It derives from the view that non-price competitiveness has played a major part in Japanese success in export (and also domestic) markets. It is said that Japanese manufacturers compete primarily through quality, not price. Stringent quality control, attention to consumer tastes and flexible adjustment to changing market trends (aided by a 'just in time' inventory policy), product innovation and skillful marketing; all these, it is said, enable Japanese producers to compete internationally on
reputation (Kasper-Nguyen 1992) rather than prices, with the inference that American and other producers must follow the Japanese example if they are to hold their own. Warr (1992) has recently made the plausible suggestion that, in the course of economic development, the emphasis shifts from price competition to non-price competition, from comparative advantage in labour-intensive products to competitive advantage in skill and technology intensive products.

There can be no doubt that non-price competitiveness is important. But even for Japanese firms, prices and costs matter. Non-price competitiveness supplements but does not supplant price competitiveness.

If external price competitiveness depends on the relative prices of domestic and foreign goods, it seems natural to measure it by comparing indices of the general level of prices, such an index of wholesale prices or a cost of living index or GDP deflator, at home and abroad, converted at the nominal exchange rate. This is a widely used measure of external competitiveness, exemplified by the Morgan Guaranty estimate of the real exchange rate index (Morgan Guaranty 1978), where changes in the index are interpreted as deviations from purchasing power parity (cf. Dwyer 1991). The weakness of this measure of international competitiveness is that it focuses on just one determinant, although admittedly an important one, the relative rates of inflation at home and abroad. It neglects both relative productivity growth and the crucial distinction between tradables and non-tradables.

Where trade takes the form of sale of homogeneous products in a perfect world market, the law of one price holds. To the extent that the world wheat market approximates this situation, Australian wheat farmers are price takers. They sell at the given world price, and their profitability depends on this price in domestic currency relative to their costs. It is increased by nominal depreciation of $A and reduced by rising domestic wages and other costs (in effect, the prices of non-tradables). If demand is perfectly elastic (for a relatively small supplier) any increased output can be sold at the world price. This, therefore, is a case of internal competitiveness; the only relevant price ratio is that between the domestic prices of tradables and non-tradables.

The situation is very different in the case of exports of manufactures by a large country which has some market power over foreign-currency prices. A depreciation of the pound sterling, it used to be said in the textbooks, reduces the prices of British exports in $US. It reduces the cost to foreigners of a bundle of commodities denominated in domestic currency (Dwyer 1991, p. 54). Provided US demand is elastic, the volume of British exports (ie. their market share) increases; their external competitiveness has improved. The British balance of payments improves once the favourable volume effect outweighs the unfavourable price effect (the J-curve case, cf. Arndt-Dorrance 1987). British external competitiveness here improves through a change in the relative prices of British and foreign goods, that is, through a worsening of Britain’s terms of trade.

This is the neo-classical theory of exchange rate adjustment, from Marshall to Meade (Arndt 1976, 1979). It underlies the Marshall-Lerner rule (according to which a depreciation improves the balance of payments provided the sum of the price elasticities of domestic and foreign demand is greater than one). It goes back to Hume’s specie-flow model: Two goods, domestic (exports) and foreign (imports); no non-tradables; gold the only money. An adverse trade balance causes specie to flow out, the money supply declines; domestic prices fall; external balance is restored through a decline in the terms of trade. Since there are no non-tradables, the only price ratio that can change is that between domestic and foreign prices; in other words, external competitiveness.

Even in the case of the small country which lacks the market power to influence the foreign-currency prices of its exports and imports and must take these (and therefore its terms of trade) as given, external competitiveness matters because the law of one price does not hold in the short run, even for perfectly substitutable goods, because of price adjustment lags. Depreciation of $A (or a tariff) raises the domestic prices of imports. If domestic import-competing manufacturers rely on cost-plus pricing of their products, they can undercut imports and increase their market share. Their profitability has improved through increased external competitiveness. It is this improvement which to the businessmen themselves constitutes the modus operandi of (tariff or exchange rate) protection (Arndt 1979). The improvement is temporary since depreciation raises domestic costs (wages
and imported inputs) and thus erodes the real depreciation. But the temporary benefit which may last 2-3 years (cf. Gregory 1978) may be significant since it allows time to attract resources into tradable goods industries and expand production and marketing.

**Internal Competitiveness**

It was economists from a 'small country', T.W. Swan (1963), anticipated by Roland Wilson and elaborated by Salter and Corden, who demonstrated that the exchange rate adjustment of the balance of payments depends on the domestic price ratio of tradables to non-tradables, i.e. on internal competitiveness. Since profitability depends on the relation between product prices and costs, anything that raises the domestic prices of tradables relative to those of non-tradables (which largely constitute the cost of producers of tradables) will improve the profitability of producers of tradables, thereby enabling them to attract resources into their industries and thus improve the current account.

Some authors (e.g. Dwyer 1992) speak of 'traded' rather than tradable goods. This is somewhat misleading since a good which is not traded at one set of prices and transport costs may be traded at another. As is now generally recognised, the distinction between tradable and non-tradable goods is not clear-cut. If tradables are defined, with Corden (1981), as goods (and services) the prices of which are influenced by international prices, all goods (and services) in an open market economy are tradable in the long run. They all shift over time from the non-tradable to the tradable end of the spectrum (Arndt 1979).

In the small-country case, with foreign-currency prices given, a nominal depreciation raises the domestic-currency prices of exports and imports, while the prices of non-tradables remain initially unaffected. (If the prices of domestic import-competing products are cost-plus priced, external competitiveness, as we have seen, also improves.) But the improvement is temporary. As domestic costs (the prices of non-tradables) rise, the nominal depreciation is offset. The same applies in principle to the large-country case, although the large country's producers may have enough market power to influence export and import prices in foreign currency, at least for a time. That is why the Swan emphasis on the domestic price ratio as the mechanism of exchange rate adjustment of the balance of payments is now generally accepted for large as for small countries.

The improvement in the balance of payments effected by a fall in the real exchange rate is temporary, both in the case of the wheat farmers whose internal competitiveness improves for a time and in the case of the cost-plus pricing producers of import-competing manufactures whose external competitiveness improves for a time. In both cases the erosion occurs through domestic costs (non-tradables prices). But this way of putting it shares some of the weakness of the Morgan Guaranty type of real exchange rate index. It focuses purely on domestic inflation. Erosion of the relative profitability of tradable goods industries may be held off by productivity growth (in tradables and non-tradables) which slows the rise in costs and may improve non-price competitiveness. It also neglects the fact that what matters for a country's external competitiveness is its relative rates of inflation and productivity growth, relative to those of its trade partner countries. Australia's international competitiveness is affected by the domestic price ratio of tradables to non-tradables in its trade partner countries because a rise in their relative unit costs of production (whether because of faster inflation or slower growth of productivity) depresses the profitability of their tradable goods industries and therefore their market share.

Finally, a brief comment on two broader interpretations of a country's international competitiveness. One is that the notion of international competitiveness of a country, as contrasted with a firm of industry, makes sense only if it is defined in terms of its stage of economic development (Melville 1993). Germany is more competitive than Turkey, Japan than India, Mexico than Haiti. No doubt, a country with ample capital, advanced technology and high-quality manpower is likely to be successful in competition, particularly non-price competition, in world markets with countries less well endowed. But it is not plausible to treat competitiveness as correlated simply with per capita GDP, regardless of the real exchange rate. Hong Kong, for instance, has for long been highly competitive with the United Kingdom, despite its much lower per capita GDP.
The second is a recent suggestion that the overall competitiveness of an economy in the longer term should be defined as its 'ability to attract internationally mobile factors of production, especially capital and entrepreneurship' (Kasper-Nguyen 1992). Certainly, a country which is internationally competitive because it enjoys a favourable real exchange rate is likely to be able to attract internationally mobile capital and entrepreneurship and these will in turn tend to improve its real exchange rate through productivity growth. But the case of Japan suggests that this is not the only, or even the major, source of productivity growth.

**Summary**

The argument of the preceding pages can be summed up in five propositions.

1. The international 'competitiveness' of a firm, industry or country refers to its ability to maintain or increase its market share relative to its foreign competitors.

2. This ability depends on both non-price and price competitiveness. The latter, in turn, requires both external competitiveness (a favourable ratio of domestic and foreign prices) and internal competitiveness (a favourable ratio of domestic prices of tradables to non-tradables), since to gain market share producers of tradables must be able not only to attract resources from non-tradable goods industries but also to expand sales.

3. Where the law of one price holds, as in perfectly competitive world markets for homogeneous commodities, internal competitiveness is enough; sales can be expanded indefinitely if demand is perfectly elastic. In trade in manufacturers, where cost-plus pricing prevails, competitiveness means in the first instance external competitiveness, ie. the ability of domestic producers to gain market share by undercutting their foreign competitors. In export markets, this involves worsening terms of trade (the Marshall-Mead case).

4. Any improvement in price competitiveness, external and internal, attained by a nominal depreciation of the currency is temporary. Sooner or later, it will be eroded by rising domestic costs (prices of non-tradables), generally within 2-3 years. But the temporary improvement may give a lasting fillip to the country's competitiveness and external balance.

5. In the long term, a country's international competitiveness will improve if it enjoys a lower rate of inflation and/or faster growth of productivity than its trade partners.

**Policy Implications**

If Australia's CAD and foreign debt are a problem, what can be done about it?

Since the causes of the problem are inadequate saving and inadequate competitiveness, a two-pronged approach is needed. The problem of inadequate saving essentially turns on minimising the public sector borrowing requirement and maximising private (especially household) saving. At bottom, both aspects involve the political problem of reining in (public and private) consumption.

To improve competitiveness, it is necessary to promote non-price competitiveness which is a matter of the Australian business culture. Withdrawal of protection helps and there are other things government can do - labour market reform, R&D, education, competition policy - but it is mainly up to the private sector, enterprise and management.

Price competitiveness depends on the real exchange rate and therefore on its three determinants, - apart from the terms of trade which in the 'small country' are beyond policy control or influence - the nominal exchange rate, the (relative) rate of inflation and the (relative) growth of productivity.

There is now much doubt about the capacity of national governments to control the nominal exchange rate in an environment of open capital account and international capital mobility. There may be a case for some constraint,
eg. through a withholding tax, but this is not favoured by the monetary authorities.

Inflation as a threat to external balance is partly a longer-term problem; this largely overlaps with the problem of inadequate saving. In a climate of inflationary expectations, it is also an aspect of countercyclical demand management; the danger is that excessive reliance on monetary policy, because of political constraints on fiscal policy, has counterproductive effects on the exchange rate, high interest rates attracting capital inflow. There is, finally, the inflationary effect of currency depreciation itself, the erosion of the real depreciation as the rise in domestic prices of tradables feeds into the CPI and wages. The danger here is that depreciation becomes a let-out: the Latin-American syndrome of an indexed exchange rate; loss of the international discipline of a fixed exchange rate.

The two approaches to productivity growth are 'productive investment' and 'microeconomic reform'. A higher rate of investment, in physical and human capital, requires business confidence; but it is also likely to widen the S-I imbalance. Micro-economic reform is mainly a political problem: how to secure trade union acceptance of inroads into customary work practices.

Both inadequate saving and low productivity are basically symptoms of the determination of Australians to maintain higher living standards than their productive capacity can sustain; in other words, to live above their means and cover the gap by borrowing other people's savings - while they can.

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