

Discussion

1. Palle S. Andersen

It is never pleasant to be the first discussant on the stage and it becomes particularly unpleasant when one is faced with the task of coming up with some constructive criticism of a good paper. And Steve Dowrick's paper on openness and growth is, indeed, a very good one.

In such a situation one way out is to spend a lot of time summarising the paper and its main results, but even that road is closed, because Dowrick himself provides a very good summary.

Fortunately, while fully agreeing with Dowrick's method and principal results, there are a few places where a word of caution or some complementary remarks are in place. I shall divide my intervention into three parts: comments about the theory, a few methodological remarks and some suggestions concerning the data and the empirical results. In addition, I have a number of minor points which I shall pass on after the session.

Openness and Long-Run Growth: Theoretical Foundation

Going through the major growth models it is hard to find good reasons for including foreign trade and openness among the growth-promoting factors. There is nothing in the Harrod-Domar model, nor do we find any influence in the Neoclassical model, which dominated growth theory from the early 1960s to the mid 1980s. There is one theory by Thirlwall (see note 6 in Dowrick's paper) of which a first version appeared in the early 1970s. It has reappeared under various names of which the latest is 'the 45-degree rule' (Krugman 1989) which captures the underlying idea, that if a country wants to keep its current account in balance and a stable exchange rate, its growth is constrained by demand growth of its major trading partners multiplied by the ratio of income elasticities for, respectively, exports and imports. This actually provides a strong theoretical foundation for openness and growth, assuming that by policies you are able to lift export elasticities and reduce the propensity to import. There is also some empirical evidence supporting this hypothesis for the 1960s, but not after the breakdown of the Bretton Woods system and the strong expansion of international capital flows.

So, to find theoretical support for any influence of trade on growth we have to turn to more recent theories of growth, the endogenous growth models. This is nicely covered in Dowrick's paper, so I shall confine myself to a few comments:

- It is not my impression that trade has figured prominently in endogenous models. It is not through trade that you can hope to create constant marginal returns to capital, nor is trade the first transmission mechanism that comes to mind when looking for endogenous explanations of technical progress. There is also the question of causality. Is technical innovation of some kind improving competitiveness and the net export position, or do higher net exports or more intense international pressure promote technical progress? I do not find the trade link overly convincing.

I rather think that the international transmission of knowledge and technical progress comes through direct investment flows, but more about this later.

- In several places of the paper Dowrick discusses the welfare gains associated with more open trade, looking at static as well as dynamic gains and discussing the consequences of deregulating in a second-best world with distorted factor and output markets. I do not quite share Dowrick's scepticism regarding the size and the relevance of the likely welfare gains. I do not find Baldwin's cited estimates terribly convincing and, if the criteria proposed are used in evaluating fixed investment projects, I very much doubt that we would be able to get the investment/GDP ratios that we think are desirable for high and sustainable growth.
- Regarding the initial situation, it should be recalled that a key feature of most of the endogenous growth theories (the main exception appears to be the model proposed in Mankiw *et al.* (1992)) is the assumption of monopolistic competition as opposed to perfect competition in the neoclassical models. Consequently, if we adopt these models as the theoretical foundation it is the second-best case with imperfect product and factor markets that is relevant for discussing trade effects.
- As noted in the paper, the stakes are higher in such a case and the uncertainties are especially high when a country starts rather late with liberalising trade. Take Latin America as an illustration. For several decades virtually all countries in this region pursued inward-oriented policies and over long periods actually achieved rather high rates of growth. Since the late 1980s they have started to liberalise foreign trade but many find it hard to build a solid basis for exports. They cannot compete with the more developed countries because of low productivity; nor can they compete with the dynamic Asian countries because their labour costs are too high. So, in many cases their only comparative advantage lies in the production of primary commodities which is not a desirable basis for high and sustainable growth and is unlikely to provide any terms-of-trade improvements. There have been some gains emanating from expanded intra-regional trade and cross-border investment flows, but this is all on a rather small scale. A few countries (Chile is the best example) have tried to overcome the comparative advantage problem by keeping their exchange rate low, but that is clearly a policy where you *can* question the welfare gains and, of course, this option is not open to the whole region.

Methodology

In deriving empirical estimates Dowrick applies regression analysis to pooled time-series and cross-country data. This is the methodology applied by most researchers and Dowrick is already at the forefront in this area. It is not a method without problems and, although he probably has a vested interest, it is not inappropriate to quote a recent evaluation by Solow:

'I had better admit that I do not find this a confidence-inspiring project. It seems altogether too vulnerable to bias from omitted variables, to reverse causation and above all to the recurrent suspicion that the experiences of very different national economies are not to explained as if they represent different "points" on some well-defined surface' (Solow 1994, p. 51).

It is also relevant to recall Levine and Renelt (1992) and Levine and Zervos (1993), who apply Leamer's extreme-bounds test to check the robustness of the

determinants and find very few of the variables passing the test. It may be argued that this test is perhaps too strong and may be misleading when it comes to testing several policy-related variables that are difficult to separate (see Sala-i-Martin (1994)). Yet, having experimented a bit with estimation in this area myself, I have to recognise that few variables are robust and that the problem of biases because of omitted variables or omitted countries has to be taken seriously.

With respect to country-specific features, most researchers rely on fixed or random-effects models. Dowrick presents estimates for both, but he will have to explain to me after the session precisely how the random-effects model has been implemented.

Finally, regarding the specification, it is worth noting that when using the investment/GDP ratio as a proxy for the growth of the capital stock (see equation (1)) one is implicitly assuming that the capital/output ratio is the same in all countries which is quite a strong assumption. At the same time, this assumption can be used as a rough test of the plausibility of the parameter estimates. For instance, if you consider the GLS-equation 4.1 in Table 4 and assume that the output elasticities with respect to labour and capital should sum to unity, the implied capital/output ratio is about 3. This is a bit high, but not entirely implausible. I also note in passing that equation (1) can be looked upon as the traditional neoclassical or growth accounting equation, with trade, initial income and time and country-specific factors added to explain the Solow residual.

Empirical Estimates

Most research in this area is based on the data produced by Summers and Heston. This is, undoubtedly, the best around but in two respects I have problems:

- I can well understand that the Middle East oil producers were left out, because in their case openness makes no sense. I was, however, sorry to see that the Sub-Saharan countries were also left out. Had they been in, they would probably have strengthened the estimates favouring openness, because most of them have pursued inward-oriented policies with little or no growth. From my own experience I have found that the data for the former British colonies in the area are relatively good so it should not be a problem to include them in the sample. The former French and Belgian colonies are more problematic, because the statistics are poor. Yet it would be a shame to leave them out because their growth performance has been strongly influenced by the policy of linking their currencies to the French franc. One way out would be to use the World Bank *World Tables* which, unlike the tables in the IMF *International Financial Statistics (IFS)*, have all the necessary data for all countries.
- A second problem concerns the data on trade intensity. As a rough check of the data in Table 1, I calculated trade intensities using the national accounts data in the *IFS*. When comparing trade ratios from respectively PPP and market-based national accounts data one would expect a systematically widening discrepancy as one moves from the rich to the poorest countries. This, however, I did not find which is surprising and perhaps a bit disturbing. What I did find, on the other hand, was a very large discrepancy for most Latin American countries, but not for the Asian countries. Given their past policies, I do not dispute the low trade intensities

Dowrick finds for the Latin American countries, but the extent to which they are outliers may be overstated. Also to reduce the impact of the three outliers with very high trade shares and recognise that imports are used for exports as well as domestic demand, it might be an idea to measure trade intensity as $0.5 (X + M)/(GDP + M)$.

Regarding the empirical estimates reported by Dowrick, one very clear result is that openness affects growth via the investment/GDP ratio. This points to foreign direct investment as an important transmission channel of the gains from trade, but I have seen little mention of this in the literature; perhaps because it is just too obvious.

It is somewhat disturbing that the initial income level becomes insignificant when I/GDP is dropped and that openness does not seem to affect investment in the developed countries. The latter could, however, reflect factors that are not taken into account (rising government deficits, higher real interest rates, etc.); if not it would indeed be bad news for the developed countries, including Australia.

The rather large differences between the estimates of openness effects in equations with, respectively, GDP/P and GDP/L as the dependent variable are puzzling, given that openness has no effect on employment growth. For the same reason I would be a bit cautious in drawing too firm conclusions when comparing Tables 3 and 4.

Finally, the interpretation of 'static' and 'dynamic' efficiency gains is not quite clear. As I read the paper it has:

- level of openness and its effect on the rate of growth = dynamic gains;
- change of openness and its effects on the rate of growth = static gains; but
- no measure of the effect of changes in openness on the level of GDP.

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2. Lam San Ling

Steve Dowrick has written on a topic which is of great interest today. The paper contains a useful survey of the new endogenous growth theories and their implications for the case for free trade. Dowrick has also undertaken a careful empirical study of the trade-growth relationship.

Dowrick's concluding comments reflect the current ambivalence surrounding free trade. In the past, countries putting up trade barriers to protect infant industries, or clamouring for trade concessions, were mainly the developing countries. The recent and disturbing trend, however, is for protectionist pressures and cries against global competition in general to originate from the developed economies – the traditional champions of free trade.

Free Trade: Believers, Would-be Converts, and Doubters

It appears to me that countries in the world may be roughly divided into three groups with regard to their trade policy stance.

Countries like Singapore fall into the first group of small economies which have little choice but to be open and to remain open.¹ Hong Kong – at least before it becomes part of China – is another. These are the 'trade-believers'. Singapore's small population means that producing for the domestic market alone is usually not feasible. Singaporean producers have no choice but to compete globally. Singaporean consumers import two-thirds of their consumption. They are price takers in the world market, thus higher tariffs will be reflected almost immediately in higher prices. The decision to be one of the most open economies in the world is forced on Singapore, so it is not a difficult decision. It has enabled Singapore, as well as other small open economies, to be single-minded about reaping the gains from trade.

Choice is not always a good thing. The second group of countries are the larger developing economies – China, India, and Indonesia come to mind – which have the option of protecting industries that cater to their own domestic markets. They have relatively high levels of protection and all sorts of domestic distortions to begin with. In these countries, efforts to liberalise trade as part of economic reform are frequently resisted by domestic interest groups, but most would agree that greater openness brings substantial net benefits. These are the 'would-be converts'. One preaches free trade to these economies secure in the knowledge that one is right, and hopes that the good guys will prevail. There is evidence that some trade reforms have already been put in place in these countries.

My knowledge of Australia is too limited for me to pronounce Australia a trade-believer, a would-be convert, or a member of the final category, 'the doubters'.

The doubters pose the greatest challenge to multilateral free trade. Confronted with their more sophisticated arguments, even the preacher frequently harbours a certain element of self-doubt. The new challenges to free trade range from concerns about high

1. The few tariffs that it has serve to discourage consumption of selected items rather than to protect domestic production.

unemployment or low wages as a result of LDC imports, to charges that other countries do not play fair in trade.² The doubters pit the free trade ideal against worker welfare and even against the environment. They advocate some form of trade restriction, which could be in the guise of managed trade, or social preconditions to trade.

Many economists, most notably Robert Lawrence and Paul Krugman, have come out against these arguments.³ Lawrence argues, for instance, that technology rather than trade was responsible for the decline in US real wages in the 1980s.

Trade Liberalisation and Growth

Dowrick applies the new endogenous growth theories to the question of whether more trade, especially in the presence of imperfect competition, is welfare enhancing. His econometric work on the effect of increasing openness on economic growth addresses a very pertinent issue. No one really doubts that some trade is better than autarky, or that countries with high initial trade barriers would benefit from trade liberalisation. The debate centres instead on the merits of moving along the continuum between a relatively open trade regime and an even more open one.

Dowrick concludes that for countries with relatively low trade barriers to begin with, greater openness brings only modest benefits, and can even be counter-productive. There are difficulties associated with any empirical work of this nature, including specification problems, simultaneity bias, and measurement errors. I have only a few comments.

First, a word about the trade intensity outliers in Figure 2 of Dowrick's paper. Singapore and Hong Kong's trade ratios stand out so starkly partly because of their entrepot roles. The share of Singapore's trade in GDP falls to below 200 per cent once re-exports are taken out.

Second, trade openness may not be a good measure of a country's trade orientation.⁴ Greater openness is not necessarily due to trade liberalisation. For many developing countries, economic reforms and trade liberalisation did in fact lead to higher trade to GDP ratios. Greater openness reflects a decline in tariff-induced domestic distortions. In contrast, the US trade ratio is likely to increase over time, even if existing tariffs remain, simply because the US would be trading with emerging economies which are growing faster and becoming more open to international trade.

Third, higher economic growth is not the only gain from trade. Intra-industry trade in differentiated products is much more prevalent among the rich countries than among the poor, or between the rich and the poor. The increase in welfare arising from greater diversity represents an important gain from trade for the US and Europe. This gain is not necessarily measurable by a growth indicator.

Finally, the policy issue facing many industrial economies is not so much whether they should liberalise trade further, but whether they should in fact restrict trade. Dowrick shows that the measurable gains to industrial countries from letting trade ratios

2. Bhagwati (1994) summarises the old and new challenges to free trade.

3. See Lawrence (1994) and Krugman (1994).

4. A discussion of the various measures of trade orientation may be found in Edwards (1993).

rise are insignificant or negative. It would be useful to know whether the costs of putting up trade barriers would be equally small.

Policy Options: Alternatives to the Free Trade Ideal

The debate on trade liberalisation has not been helped by the complexity of the policy options facing participants in the world trading system today. The choice facing a country is not merely what level of tariffs, quotas or other non-tariff barriers to impose, but also whether to discriminate among trading partners.

The concept of regionalism has recently emerged as an alternative for countries unwilling to go all the way towards free trade. Participating in a regional trade agreement – be it a preferential trading arrangement, free trade area or customs union – allows a country to lower tariffs vis-à-vis some countries but not others. It has the apparent appeal of allowing countries to compete on a more limited basis with friendly neighbours rather than the whole world.

The debate on regionalism is still going on, however. Quite apart from the question of whether trade creation effects exceed trade diversion effects, or whether ‘open regionalism’ is viable, it is yet unclear whether regionalism represents an alternative, or a building block, to a more open multilateral system. A lot more empirical work is required in this area.

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3. General Discussion

The discussion centred on two questions:

- How should openness be measured?
- What are the links between trade liberalisation, domestic policies and economic growth?

There was considerable discussion regarding the merits of using the trade share of GDP as a measure of ‘openness’. A number of participants made the point that openness was an elusive concept, that had as much to do with attitudes and incentives as with cold hard trade statistics. While the increased trade share does reflect greater openness of the Australian economy, most participants thought that the change in openness, and the gains

from specialisation, had been more pronounced than suggested by the change in the trade share.

A number of discussants made the point that when thinking about openness, the key issue was the extent to which Australia's relations with the rest of the world influenced the domestic economy. There was widespread acceptance of the idea that over the past decade these influences had become more pronounced. The government's commitment to the international economy has made more markets contestable and has changed the incentives faced by many producers. It has also focussed many of the policy debates on the question of international competitiveness. This has helped promote reform in the labour market, macro-management and parts of the economy that are not traditionally associated with international trade. No single measure of openness was capable of capturing the strength of these influences. It was also suggested that the benefits of openness were likely to be asymmetric. There may be 'cascading' effects from liberalisation and even if further small tariff reductions yielded only small gains, small increases in tariff protection might be very costly, for they would signal a reduced commitment to the international economy and competition.

There was also a brief discussion on the determinants of openness. It was noted that the standard measures used in empirical work were heavily influenced by political boundaries and that these political boundaries were becoming less relevant for economic activity. The point was also made that an economy's resource structure influences its trade intensity. Countries that have large endowments of natural resources and a small manufacturing sector, may have relatively little intra-industry trade and hence low trade ratios, yet be extremely open in terms of their responsiveness to changes in the international economy. Finally, measuring trade intensity by the *sum* of exports and imports over GDP did not distinguish between exports and imports and also led to extreme values of openness for small economies.

Most participants acknowledged that it was difficult to judge whether or not increased openness was likely to generate small or large increases in economic growth. Part of the problem is that it is difficult to assess what the situation would have been had the trade reform not taken place. Nevertheless, there was widespread acceptance of the idea that the closer integration of the Australian economy with the rest of the world would have some positive effect on growth. There was little support for the notion that free trade would force Australia into activities that did not provide the engine for long-term sustained growth. Reductions in tariffs had not seen resources flow into the primary sector of the economy, but instead have helped revitalise parts of the manufacturing sector.

An important component of the growth engine is the accumulation of 'skills'. It was noted that, unlike physical resources such as coal, the skill level of the workforce is not fixed. Skills can be accumulated as the byproduct of producing certain types of goods and through devoting resources directly to learning, innovation and education. By changing the structure of the economy and the incentives that individuals face, trade can affect the rate of skill accumulation. The type and rate of skill accumulation can also be influenced by government policies. The policy challenge is to frame government programs to encourage the type of accumulation that allows Australia to maximise the growth dividend from the more liberal trade regime. More generally, internationalisation

is likely to increase the costs of any distortions in the economy. As a result, internationalisation makes it more imperative that micro-reform continues throughout the economy.

Finally, a couple of participants suggested that the static benefits of trade reform should not be overlooked. Tariffs act as a tax on exports, and now that this tax is being removed, exports of manufactures are increasing rapidly. Tariffs also created a comparative *disadvantage* and this disadvantage was now being eroded. It was argued that this was an important source of increased productivity.