

Insight

NZ exports - more diverse than commonly thought

New Zealand businesses offer a wide range of products that are competitive in the global market.

The days of New Zealand being the 'market garden' for the United Kingdom disappeared in the 1960's. The size of our dairy and meat export portfolio can fool us into thinking that the non-food manufacturing sector is not very competitive. That view is simply untrue. We are competitive (have a comparative advantage) in a wide set of goods and services to various markets around the world. This diversification reduces the risk profile of our exports, which is likely to have helped support the New Zealand economy through the recent economic slowdown.

This note provides some empirical evidence to illustrate the diversity of our export portfolio – a level of diversity that has existed for many years.

Policy context: what's (allegedly) wrong with our export sector?

Improving New Zealand's international linkages has been a government priority for many years. It is a critical goal in the context of lifting our productivity performance.¹ There has been a lot of talk in recent years about:

- New Zealand's apparent poor export performance
- The lack of diversity in New Zealand exports
- New Zealand exporters concentrating on the 'wrong' products.

¹ See Treasury. (2009). 'International Connections and Productivity: Making Globalisation Work for New Zealand'. Treasury Productivity Paper 09/01. <http://www.treasury.govt.nz/publications/research-policy/tprp/09-01>

The importance of exporters

The group of products in which a country has a comparative advantage is important from an economic performance perspective for two basic reasons:

- any enterprise that manages to actually export has faced competition from some of the most efficient foreign firms in the world, and at the least matched them. Such enterprises may not have exported very much (and many New Zealand firms are in this category) but the fact they have exported at all is impressive
- any enterprise that has a comparative advantage in exporting has hurdled a higher bar – it has generated a share of New Zealand exports that is higher than the average of all other countries (what economists refer to as revealed comparative advantage).

It is commonly understood that New Zealand has a very strong comparative advantage in agricultural products, lesser comparative advantages in other primary products and marginal comparative advantages in a range of non-food manufactures. Indeed, this is correct if one is looking at highly aggregated commodity groups. However, at disaggregated levels the patterns of New Zealand's comparative advantages in goods are much more diverse – and this does not count the many comparative advantages New Zealand has in the services sector.

What are New Zealand's comparative advantages?

There are over 5,000 product groups in the United Nations trade classification system (6-digit Harmonised System). In 2007, New Zealand exported around 2,000 of these products.¹ This is an interesting statistic in itself. It shows that New Zealand firms have overcome a variety of size and geographical challenges and other export barriers to enable them to export a very diverse set of products – many of them in small quantities but exported nonetheless.

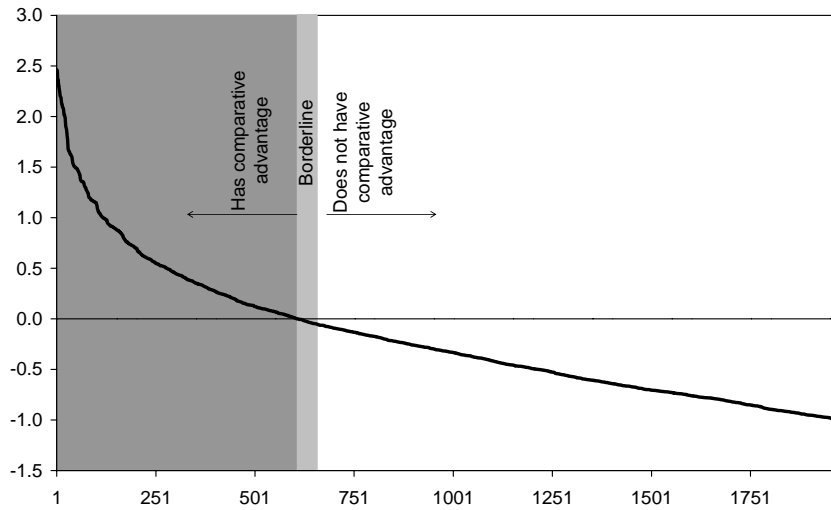
Of these 2,000 odd products, New Zealand had a comparative advantage in 611 product groups. This is shown in Figure 1 where New Zealand exports are ranked by level of revealed comparative advantage expressed in logarithms.

The 611 product groups in which NZ had a comparative advantage in 2007 come from nearly all tradable sectors of the economy. Their incidence is given in Figure 2. Most tradable sectors (livestock products, machinery etc.) have some products with high revealed comparative advantages (RCA indices greater than 5). Food and agricultural products tend to have higher comparative advantage.

¹ This note draws on material from R Lattimore., C Schilling and J Ballingall. (2009, forthcoming). *New Zealand's Role in World Food Networks*. Report to the Ministry of Foreign Affairs and Trade.

Figure 1 NZ's comparative advantages (2007)

y-axis: log of revealed comparative advantage; x-axis: number of products



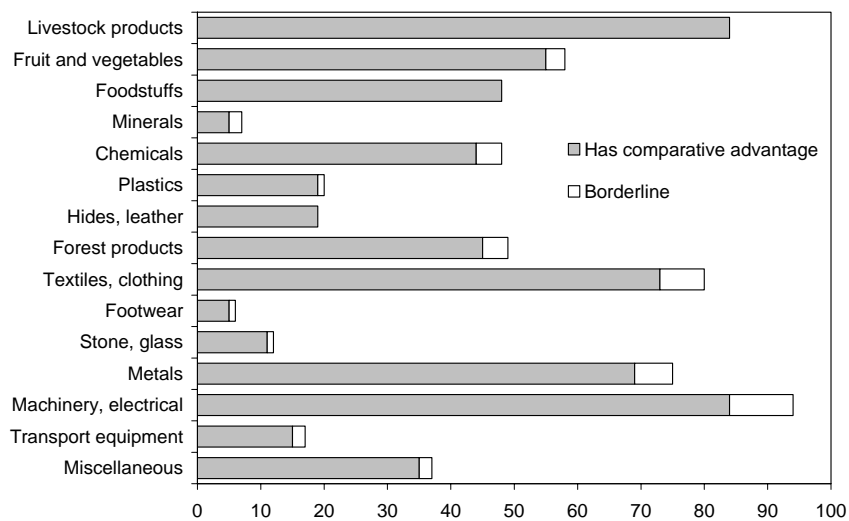
Source: NZIER

These comparative advantages have taken a very long time to develop. Our comparative advantages began with seal products, wool, gold and native timber from 1795. Meat and dairy products came along in the 1880's and comparative advantages in non-food manufactures blossomed from the 1960's.

However, comparative advantages do change and we are currently seeing some of the strongest growth in the level of comparative advantage in high value added foods like specialty sausages, bakery and cereal products and wine – rather than basic agricultural products.

Figure 2 Comparative advantage by sector

y-axis: commodities with comparative advantage; x-axis: number of products



Source: NZIER

How is comparative advantage affected by the exchange rate?

How does this explain the export performance issue? Over the last decade New Zealand macro-economic policy has permitted the current account deficit to balloon out to over 8 percent of GDP. This has contributed to the exchange rate tracking strongly above its long term average. The high exchange rate, in turn, has reduced the demand for New Zealand exports.

In other words, there would have been more products with comparative advantage had the exchange rate been lower in 2007. A lower exchange rate would have pushed the schedule in Figure 1 upwards – more products would have exhibited a comparative advantage. For argument's sake imagine that the cut-off value for revealed comparative advantage in 2007 had been 10 percent below the zero axis. Figure 2 shows that 43 additional products (which were 'borderline' in Figure 1) would have had a comparative advantage. These additional products are mainly non-food manufactures. Forty of the 43 additional products are outside the food and agriculture groups – 10 are machinery and equipment items and 7 are textiles and clothing items.

Implications for New Zealand's export profile

The analysis above suggests the following:

1. The high exchange rate tends to squeeze out non-food manufacturing exports and forces the economy back onto its reliance on food and agriculture, thereby reducing diversity. In 2007, 49 percent of New Zealand's goods exports came from the non-food manufacturing sector, down from 53 percent in 1990.
2. The large inflow of foreign savings required to fund the real estate bubble (including in farming) reduced the demand for exports generally and skewed the composition of exports towards products with the highest indices of comparative advantage.
3. The export mix we currently observe will change over time depending on the phase in the exchange rate cycle, and more importantly on the global demand for the product and the ease of economic adjustment and supply expansion in New Zealand.
4. The pattern of comparative advantages is much more diverse than some commentators suggest. This has been the result of market forces, not government intervention.
5. Large jumps in comparative advantage can occur², but it is usually easier to develop a comparative advantage in a product group that is allied to a current production base. For this reason we are more likely to see new comparative advantages in New Zealand arising in goods and services allied to fashion clothing, selected machinery and equipment items and, of course, food and agriculture.

² Opportunistic 'product jumps' do occur occasionally, like Finnish forestry companies diversifying into cell phones because its close trading partner (the Soviet Union) had a strong excess demand for electronic product developments. But what is more likely is the New Zealand experience based on the advent of refrigeration enabling meat and dairy product exports based on the then existing sheep and wool comparative advantage.