

Chapter 9

Conclusion and recommendations for further research

Why do some nations succeed and others fail in international competition?
(Porter, 1990:1).

9.1 Introduction

Why nations advance and prosper has been a question asked by philosophers and economists over the ages and has drawn the attention of writers, academics and governments. Although various aspects of current globalisation trends have been criticised, the economic benefits of trade have been long recognised and generally accepted. South Africa is not an island unto itself. It is substantially involved in and dependent on the rest of the world and cannot ignore globalisation or its consequences.

The purpose of this study was to identify the determinants of South African exports. The identification of these determinants and the development of trade models are worthless if they cannot be used equitably to improve welfare, create wealth and employment opportunities. Understanding South African export determinants and the consequences of policies that are used to stimulate these variables will contribute to these economic objectives.

Identification of the determinants of trade in economic theory, policy and modelling is essential. This study was conducted in five phases:

1. Historic overview (Chapter 2);
2. Theoretical overview (Chapter 3);
3. Modelling and scenario testing (Chapters 4 to 6);
4. Identifying factors that influence enterprise to export (Chapter 7); and
5. Analysing and reporting the policy imperatives (Chapter 8).

9.2 Goals of Economic Policy

All too often the ultimate goal of economic policies is missed. This is because of the focus on the outputs of individual programmes or interventions rather than their collective outcomes. Internal performance (including investment levels, productivity growth and technological upgrading) and external performance (as measured by the trade balance, net capital flows and exchange rate stability) should contribute to welfare improvement, particularly equitable wealth creation. In the current South African environment this implies employment creation. Successful trade or industrial strategy therefore depends on complementary socio-economic strategy to counter

tendencies towards inequality, uneven development and marginalisation that characterises the globalisation process. In the South African context, this includes black economic empowerment, the promotion of small businesses and the creation of sustainable employment. The cost of raw materials, access to cheap labour, control over proprietary technologies, and privileged access to markets are also less relevant. However, strengths in manufacturing based on energy and raw materials should be exploited, while simultaneously enhancing basic comparative advantage.

9.3 Determinants of South African exports

South African exports have been influenced by a great number of interlinked factors. Geography and resources have played an important role. However, politics have played an important role. These in turn have been influenced by philosophical thought. Although the historical development is interesting, its impact on current determinants is more important. Evaluation and quantification of these determinants are relevant in policy formulation and implementation of programmes.

9.3.1 Historical legacy

The analysis of South Africa's modern trade history provides an understanding and context to the current problems. South Africa's abundant resources and other natural attributes have influenced what is exported. However, other South African export determinants can be traced back to policies and interventions of the past. **Historical** factors such as South Africa's past colonial links explain why trade with Britain remains so strong. South Africa's distance from the major industrial countries has also negatively affected South Africa's trade. Also included under **geographical** factors is that a large percentage of the industrial output is in Gauteng. There is thus an extra cost involved in exporting products from this region that obviously has had a negative impact on trade. The **social** factors in South Africa have also had their influences. Productivity is lower because of the distance labour has to travel from their home to work. The education system resulted in a level of technology which, in some cases, can be exported. However much of the technology used has been bought abroad. There are often restrictions limiting the licence holder from exporting. Other **political** factors that have economic consequences are tariff and non-tariff trade barriers. The fact that Britain joined the EU resulted in a decline in trade. Other trade blocs will no doubt also affect South African exports. However, trade with neighbouring countries will increase as a result of the various agreements in Southern Africa. Many of South Africa's major trading partners have extended General System of Preferences (GSP). South African export growth has been consistent and export orientation has risen across all of the manufacturing sectors, with the share of exports in total manufacturing output rising despite strong domestic demand. This suggests that exporting has become a

permanent feature for firms that engage far more with foreign markets. As export share rises, the efficiencies and learning entailed in competing in demanding world markets can be expected to benefit productivity and domestic competitiveness.

9.3.2 Theoretical input

The early literature into the causes of trade is also insightful. The ancient and classical economics have provided a systematic framework for examining the underlying issues of international trade. Adam Smith, writing at the time of the Enlightenment, had a strong impact on the development of economic thought. Although these theories originated and developed based on their criticism of mercantilist policy, the theory has continued to command attention mainly because of its use as the basic “scientific” argument of free trade adherents in their attack on protectionism. Trade models isolate a cause that can be examined and the impact of various exogenous variables can be estimated.

The Ricardian model, with its emphasis on labour, makes it useful for the analysis of technological progress on the patterns of specialisation and the distribution of the gains of trade. However, Ricardo assumes too much exogeneity and is silent on what causes labour productivity to differ. Once capital is brought into the picture, as the Heckscher-Ohlin model does, trade flows are determined by more than labour alone. Capital-rich countries allocate relatively more capital, but do so to different degrees in different industries. This causes the productivity per worker to increase in a particular sector. This theory too, is mute on what determines the allocation of capital to industries. Despite persistent refutation of the Heckscher-Ohlin model, it remains part of the trade economist toolkit.

Since the standard trade model assumes no transport or transaction costs and no trade barriers, it focuses on in-market issues. It traces comparative advantage from factor endowment observations through to the structure of production, trade, factor prices, commodity prices, the effects of factor growth, and distribution of income. Comparative advantage changes over time and can even be acquired.

New trade theory provides a more balanced perspective, focusing on both the demand- and supply-sides. Productivity gains from specialisation are amplified through innovation gains, scale economies at the firm level and by “externalities” such as learning and improvements in human capital.

Perhaps the most important, but certainly the most lasting contribution of the early theorists, was their exposition of welfare implications of free trade. Free trade is accepted, though not

universally, as the ideal policy prescription. As a nation starts to liberalise its trade policies, its welfare generally improves, but specific domestic interest groups are also harmed. Therefore trade policy has historically been, and will probably continue to be, the subject of intense debates.

9.3.3 Empirical estimations

Chapter 5 reviewed previous research on export supply and demand equations and identified factors peculiar to South African. The analysis was undertaken for total exports, the manufacturing sector and at individual industry level. Both the long-term and short-term models behave as expected, although different industries respond differently to exogenous shocks. Policy-makers therefore should not apply the same instruments to all industries to achieve their objectives. Export elasticities are generally small and insignificant which implies that exports are not fully responsive to changes in economic activity and relative prices. Therefore, policy should aim at strengthening the responsiveness of these sectors.

Both the South African economy's real income (and output of final goods and services) and international competitiveness are driven by quantitative (labour and capital) and qualitative (productivity) inputs. Although aggregate demand and aggregate supply jointly determine the domestic economic growth rate, demand and particularly export demand, is important and has contributed to growth in the past. Export-led growth was driven exogenously by foreign demand, predominantly gold exports. As demonstrated, this pattern of trade has changed. The contribution of gold to the South African export basket is diminishing, while the demand for globally manufactured products, for the most part differentiated products, is increasing (RSA, 2002).

Probably the most important factor on the demand-side, is the level of economic activity in the international markets. In the short-run, as foreign income increases so should the demand for South Africa's products. This is especially true if industrial output increases because most of South African exports are raw materials used as inputs in industry. In the long-run it is not clear what the impact on the South African level of exports will be. However, as substitutes are found for the raw materials used and as other international companies respond to the increased international demand, the demand for South African exports will decline. This will however be difficult to verify because of the lack of reliable trade figures and it will not be possible to determine the exact impact trade sanctions had.

South Africa's trading partners' capacity to import is important. Factors such as availability of foreign exchange will influence the capacity to imports. The fact that her neighbours' capacity to import is low has definitely had a negative impact on South Africa's level exports and influenced the pattern of trade. With markets to the north demanding products and where South Africa

generally has a competitive advantage, the lack of foreign exchange has hampered the export drive. South African exporters have investigated various options for bridging this problem. Nevertheless, trade to this region should grow. It will, however, remain low as long as there is a shortage of hard currency. However, most of major South Africa's trading partner's currencies are considered hard. Most of our trading partners have also removed exchange control and importers are free to buy foreign currency and remit it to foreign suppliers without too many problems.

The capacity to import has therefore not been a problem for most of South African exporters. Policy should aim therefore, at strengthening the responsiveness. The coefficient of income elasticity of export supply should be converted to a positive sign, for those sectors that it is negative, and the significance of those elasticities should be improved in the long-run. Although Gumede (2003: 5) maintains that "South Africa's trade and industrial policies seem to be pulling to that direction already," they do need to be strengthened.

The problematic nature of most estimates can be attributed to a few data points, given that the time-series techniques applied require many more data points. Pooling of sectors provides a remedy to that problem. Pooled regression results are more robust. For instance, a total pool of manufacturing sectors gives expected signs, at least for the long-run regression.

This problem is partly solved by using the gravity model that focuses on bilateral demand factors and includes a combination of macroeconomic variables (size, income, exchange rates, prices etc.). Indicators of transportation costs between countries and more generally, market access variables, were used to explain patterns of trade.

The gravity model also indicated countries with the greatest potential. From a policy perspective this is important since focused action from government could contribute to reducing any unnecessary friction between South Africa and the particular trading partner. Detailed bilateral research, at a sector, industry or product level as well as an analysis of South African exports and partner countries' imports needs to be undertaken. An obvious reason for not achieving full potential is market access and the model would be considerably improved with the inclusion of tariffs and an indicator of non-tariff barriers. The gravity model can therefore inform trade negotiators where the biggest potential gains are if the friction is caused by market access, while incentives and subsidies can contribute to the supply-side and capacity creation.

The issues surrounding the behaviour of exporters are difficult to understand. In the South African environment not only are there the normal complexities of determining what the capacity is, how the prices are moving etc., but economists have to take additional factors such as

sanctions, over-invoicing export sales to claim additional export incentives and under-invoicing export sales and over-invoicing of imports to avoid the stringent currency controls regulations. Although economic models are useful because of their simplicity that is made possible by assumptions, it is also their weakness. Recognition of all the factors, including both supply- and demand-side fundamentals in economic theory, policy and modelling is fundamental. An understanding of the economic players and nuances in their particular sectors will contribute to better policy that can be implemented.

9.3.4 Focus on enterprises

Essentially, policy should enable enterprises to become competitive and thereby contribute to welfare. The OECD defines competitiveness as “The degree to which a country can, under free and fair market conditions, produce goods and services which meet the test of international markets, while simultaneously maintaining and expanding the real incomes of its people over the long-term” (Walter 1995:1). Policy can only contribute to this if policy-makers have a comprehensive understanding not only of the international demand conditions but also the South African supply-side.

From a policy perspective it is important to recognise that it is the enterprise that exports. There are certain but necessary not sufficient conditions that apply and a number of drivers that contribute to the firm being successful. Similarly, certain industries must have conditions in place without which it will be impossible to export and drivers that will contribute to the comparative advantage. The economy, made up of a number of industries and sectors cannot be completely self sufficient. Some sectors (or products) will exhibit a higher propensity to export than others. Although policy should encourage a natural selection process, interventions in certain areas may be necessary to achieve specific outcomes. It has been argued that creating employment opportunities is such an outcome and sectors with a high labour absorption rate and a comparative advantage should be stimulated.

From a firm’s view point, appropriate trade, fiscal and monetary policies are necessary, but not sufficient conditions to export, or indeed to do business. From the previous chapters, exports are determined by comparative advantage, irrespective of what causes it. Certain sectors therefore have a natural propensity to export. In the past, policies have been made without due consideration of firms and the entrepreneurs who run them. The information from the focus group approach provides a useful insight for enterprise development and helps fill in gaps to ensure that national Economic Policy is more effective and implemented more efficiently.

Information, with high total acquisition costs and low marginal costs, may therefore be considered a public good. Information is needed by both experienced and novice exporters. Value added to information through training, business counselling and networking is crucial to successful exporting. The role of government in this regard, needs to be investigated. However, the way information and training is packaged needs to be revisited. Exporters are different. Programmes and export promotion schemes should take cognisance of the firms experience in international markets, its size, where the firm is located and its sector or industry.

9.4 Policy imperatives

Globalisation, although not a new phenomena, is central to the current economic debate. The move to unrestricted cross-border flows of goods, services and capital has always been one of the principles of globalisation. Classical economists show that openness contributes to welfare and it has been regarded as the cornerstone of a global system. International trade allows countries to exploit their comparative advantages. Trade cannot therefore be a “zero-sum game” where one country benefits at the expense of another. Efficiency gains result from efficient use of resources through specialisation. Therefore countries will become “better off” in terms of consuming at a higher output level, if they specialise in those activities that they can manufacture relatively cheaper in an international sense. It was assumed that with improved institutional quality and technology spillovers, openness would automatically allow accelerated growth in developing countries and bring about global income convergence. Empirical evidence supporting this approach has been elusive. Therefore national policy measures at the micro and macro level are important. “Government’s have, rightly or wrongly, implemented various policies designed to improve comparative advantage in factor costs. Examples are the reduction of interest rates, efforts to hold down wage costs, devaluation that seeks to affect comparative prices, subsidies, special depreciation allowances, and export financing addressed to specific sectors. Each in its own way, and over differing time horizons, aims to lower relative costs of the nation’s firms compared to those of international rivals” (Porter, 1990:627).

Government’s primary role should focus on developing the infrastructural and creating the environment in which firms can compete internationally. This includes stable fiscal and monetary policy. Trade policy should generally aim to reduce the anti-export bias and gain market access. Since all sectors and industries are not the same, attention should be paid to those sectors that can contribute the most to the countries economic goals and increase its welfare. Similarly, attention should be paid to countries that indicate that potential to increase trade exists rather than negotiating with countries with little or no potential.

Enterprises are critical and policies need to be developed to take account of the various needs and potential of individual firms. Firms that belong to an industry that shows great potential should be targeted for preferential assistance. Even firms within a particular sector can be targeted depending on its size, location and experience in global markets.

It is imperative that policy is coordinated. This coordination needs to take place at various levels. Firstly, the macro economic environment should be conducive to trade. Secondly, there should be coordination between government departments. Education, for example, needs to focus on the needs of industries that have the best potential. Labour policy could contribute to a less rigid labour market that will improve the unit labour cost and contribute to competitiveness. Thirdly, it policy coordination needs to take place between the different spheres of government. This will ensure that the necessary infrastructure is available. Finally, communication mechanisms between government and enterprises will contribute to aligning needs and policy.

9.5 Recommendations for further research

9.5.1 Data

South African trade data has to be treated with caution. During the mid-1980s certain data was simply uncategorised. This covered both sectors and geographic data.

Effective evaluation depends on reliable data which, in turn, requires effective data management and reporting by the customs authorities, the national statistic service and the central bank: another major challenge for the national strategy maker (Williams, 2000: 32).

Although a great deal has been done recently, data are still a major problem. Besides improvements in the accuracy of the collection of trade data, much work remains regarding prices - unit value prices in particular. A product level analysis of export pricing is desirable because aggregation across different goods may conceal regularities present at a disaggregated level. This can then be compared to the export component of the Producer Price Index (PPI) data collected by Stats SA.

9.5.2 Gravity model

The gravity model has considerable potential. As econometric techniques improve, particularly dealing with unit roots in panel data, more accurate models can be developed. These models can be used to analyse unrealised bilateral and sectoral potential.

9.5.3 Trade facilitation

Although the cost of trade is coming down, South Africa is far from its trading partners and therefore needs to be as efficient as possible. This is an item on international negotiating fora and South Africa needs to prepare a position that will benefit its trade. However, besides bilateral, regional and multi-lateral negotiations, much can be done unilaterally to reduce the cost of trade. Customs reforms are an example. E-commerce is another area where efficiencies can be realised. It is growing rapidly, even in South Africa. However, infrastructure, especially telecommunication infrastructure can be improved. The regulatory environment is still very restrictive.

9.5.4 Intra-Africa trade

Despite sanctions being lifted, there is still potential to develop trade with Africa. Africa is a natural trading partner and opportunities need to be exploited. Trade facilitation is an important area where gains can be made. Reducing the friction at borders, standardising and improving infrastructure will all contribute to increased trade.

9.5.5 Qualitative research at firm level

This area has received relatively little attention in South Africa. Factors that drive a firm to start exporting, or exporting more, are based on anecdotal evidence. Similarly, no scientific information is available on why firms exit global markets to focus on the domestic market. The DTI has various incentive schemes available for enterprises that want to export. The EMIA scheme, for instance, though bureaucratically well managed, does not provide assistance based on the firm's long-term contribution. Besides follow-up reports submitted immediately after the grant has been given, nothing has not been done to ascertain the medium- or long-term success of the enterprise. As far as could be ascertained, a needs assessment has not been done either. Although the Export Councils are operating and should give feedback to DTI, the EMIA scheme has remained the same since the 1970s.

9.6 Conclusion

Theory can and should be used to determine appropriate policy. Too often government appeases groups or sectors despite their inability to show comparative advantages. The concept of comparative advantage is important, though not always understood. No country can produce and export all products. Similarly, it is unrealistic to expect that it be completely self-sufficient. Comparative advantage can be obtained through endowments, but it can also be created. Unlike the early protagonists of government intervention and the creation of comparative advantages

through infant industry arguments, this research shows that certain functions of government, such as improved education, but also through labour, fiscal and monetary policy, can affect different sectors asymmetrically. Historical evidence shows that countries raise the standard of living of their populations by raising labour productivity. This is usually associated with a substantial change in the sectoral pattern of production and employment, from agricultural to industrial products, and a shift from labour-intensive activities to a growing range of capital- and technology-intensive activities.

Government's policy is clearly focussed on employment and redistribution. Trade can contribute to these objectives. One-size-fits-all will not necessarily contribute to achieving these goals. Knowledge of the impact of government's omission and commission, particularly on various sectors and industries, will achieve better policy and improved welfare for all.

South Africa should not turn its back on natural resources, overall geographic, its natural beauty, or competitive labour force. The best way to succeed is to remain open to international competition. Trade openness and liberalisation has been instrumental in helping diversify exports by reducing the anti-export biases of import protectionism. Although trade policy and export promotion must continue to occupy a central place in South Africa's economic agenda, international economic linkages can only complement, but not substitute, for domestic forces of growth.

Equally important is a clear understanding of the policy imperatives. Although the South African economy has grown, employment has not. With unemployment rising, poverty is increasing and aggravating the Gini-coefficient through socially-unacceptable income distribution. As Rodrik (1999) succinctly puts it "trade is a means to an end, not an end in itself."