

# Chapter 1

## Introduction and background

*When the produce of any particular branch of industry exceeds what the demands of the country requires, the surplus must be sent abroad and exchanged for something for which there is a demand at home. Without such exportation a part of the productive labour of the country must cease and the value of the productive labour of the country must cease, and the value of its annual produce diminish (Smith, 1776, Book 2, Chapter V).*

### 1.1 Introduction

Ever since Adam Smith penned these words and expounded the theory of absolute advantage, it has been widely accepted that nations mutually benefit from trade. International trade, the oldest and most important economic nexus among nations, is central to the evolution of international economic and political relations. It has existed since nations or other political units came into being. Once established, a “national border” is created. Governments enforce the border, in economic terms, using tariff and non-tariff barriers that either prevent or limit trade. This invariably adds to transaction costs, distorts the volume and value of goods, services and factors of production, and consequently reduces welfare.

As borders influence how economic agents conduct their business, it is necessary to study international trade. The main aim is to maximise the collective well-being of all citizens of the nation(s) and understand the environment in which governments, firms and individuals make decisions. Therefore, other branches of economics, including theories of the firm and the consumer, and the public sector – although not discussed directly in this study – are relevant.

### 1.2 Objective of the research

As the understanding of the causes of trade deepens, it has a greater and more direct impact on the political economy. Various studies<sup>1</sup> have been undertaken in an attempt to clarify the problems of identifying and evaluating trade policy reform and its subsequent effects.

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<sup>1</sup> Empirical literature that suggests more open countries grow faster include Greenaway and Nam (1987), the World Bank's (1987) Development Report, Michaely *et al.*, (1991), Thomas and Nash (1991) and Little *et al.*, (1993), Helleiner (1990), Greenaway (1993), Dollar (1992), Sachs and Warner (1995), Krueger (1998), Edwards (1998), and Frankel and Romer (1999). Rodriguez and Rodrik (2000) critique this literature, arguing that methodological problems with the empirical strategies used make interpreting its results less unambiguous than the various authors assert.

It is not the purpose of this research to discuss the welfare gains of trade, since these benefits have been recognised throughout the ages. It focuses on the causes of exports. However, Barbon (1690) states that the “use of trade is to make, and provide things necessary, or useful for the support, defence, ease, pleasure, and pomp of life.” In addition, trade raises the rent of land, and brings peace and better wages for workers. It also increases the revenue of the government and contributes to employment. “Thus busy man is employed, and it is for his own benefit” (Barbon, 1690).

Economic development and growth literature abounds in discussions on relationships between exports and economic growth. Important channels between trade and growth include improved resource allocation, stronger incentives for adaptation and innovation, cheaper capital goods, and higher foreign direct investment flows associated with new trade opportunities. Essentially, the debate centres on whether or not countries should promote the export sector to obtain economic growth or not. The econometric evidence on the causality between trade openness and economic growth is somewhat mixed. A vast body of literature studies the export-led growth hypothesis, the impact of trade openness or the magnitude of trade flows on income levels (Frankel & Romer, 1999; Wacziarg & Welch, 2002) and on the rate of economic growth (e.g. Rodriguez & Rodrik, 2000; Wacziarg, 2001). Giles and Williams (2000: 261-337) surveyed over 150 papers and concluded that, when interpreting the findings of the applied research on the export-led growth hypothesis, extreme care should be exercised. Greenaway and Sapsford (1994) hold that, although “the jury is still out,” most studies indicate that exports do indeed contribute to growth. Cline (2002: 2) summarises the position taken by this research:

*The opportunity to expand exports is a key determinant of the prospects for economic growth in developing countries. Exports provide often-scarce foreign exchange, scope for economies of scale, and stimulus to productivity growth as developing countries seek to compete in international markets.*

Regardless of whether exports drive economic growth, one of the primary aims of any country’s economic policy, including its trade and industry policy, is to create and maintain a sustainable, internationally competitive manufacturing sector that will contribute to job creation, higher incomes and other socio-economic goals. Although trade may not be the panacea for all economic problems, the success of a country’s policies will largely depend on the ability of the role-players to do business in the dynamic global economy. Understanding these factors or determinants will contribute to better policy that is more likely to support policy objectives such as economic growth, employment generation and a more equitable distribution of income.

*Trade is a means to an end, not an end in itself. Advocates of globalization lecture the rest of the world incessantly about the adjustments countries have to*

*undertake in their policies and institutions in order to expand their international trade and become more attractive to foreign investors. This way of thinking about trade confuses means for ends. Trade serves at best as an instrument for achieving the goals that societies seek: prosperity, stability, freedom, and quality of life (Rodrik, 1999:1).*

### **1.3 Necessary but not sufficient conditions for trade**

Trade involves the transport of goods from one location (usually where they are grown, mined or produced) to the market, requiring a transport infrastructure. Therefore there must be a source of supply in one country and a source of demand in another. Besides the means to move the product between them, the supplier must receive satisfactory compensation. In ancient and medieval times, trade occurred mainly with the neighbouring city-states. Flourishing trade this period is ascribed to the existing infrastructure, common language, and currency (Maneschi, 1998: 6).

The magnitude of natural obstacles and distance between two trading partners will limit or even eliminate trade. In addition to these geographic limitations, artificial barriers have been imposed. Trade facilitation proposals, including standards and regulatory reform, customs procedure, mobility of labour and business professionals, and electronic commerce are a well-established agenda item in policy debates (World Bank, 2000). Various stakeholders – including the business community, industry groups, standards organisations and intergovernmental bodies – have pointed out the importance of addressing non-tariff barriers to global trade. As liberalisation progresses, trade facilitation issues are flagged as a major impediment to economic development, and especially to international trade. Although the cost implications of barriers are well documented, evidence is emerging that the benefits of facilitation measures may outweigh the benefits of further tariff reduction and may yield greater welfare gains than incremental tariff reduction. This is because the gains from lower tariffs have been captured in the last 50 years of multilateral trade liberalisation. Furthermore, these are the most difficult areas yet to be negotiated, given that tariff reductions have been concentrated in less protected sectors. Further welfare gains from liberalisation will be more difficult to achieve. This resistance to liberalisation will put pressure on trade negotiators to find other areas for near-term success, including trade facilitation.

Infrastructure and an efficient bureaucracy are therefore necessary, but not sufficient, conditions under which trade occurs in the modern world. The better the quality of the infrastructure compensating for geographic impediments, the more likely greater volumes will be traded internationally.

#### **1.4 Export promotion defined**

The literature is not explicit on exactly what export promotion or even outward orientation is. Bhagwati (1988) describes export promotion as a set of incentives that do not discriminate against exports in favour of the domestic market. In other words a neutral trade regime. Lal and Rajapatirana (1987) accept subsidisation of exports to the extent that it restores equality between the effective exchange rates on imports and exports. Krueger (1978: 282) acknowledge that export promotion should go further than the mere absence of an anti-export bias and claim that “there are numerous countries where incentives for export and import substitution have been about equal, and the results have not been spectacular.” Rhee (1981) on the other hand distinguishes two types of export promotion: a “neutral status” where exporters enjoy world prices for their inputs and can compete on an equal footing; and an “extended neutral status” where besides enjoying an equal footing with foreign competitors is also on an equal footing with the domestic import substitutes producer.

This study will ascertain how various policies have had an impact on South Africa’s competitiveness and identify how a neutral trade regime can be implemented. This however does not mean that interventions are prohibited. Rather policies and interventions should focus on efficient resource allocation and reasonable growth.

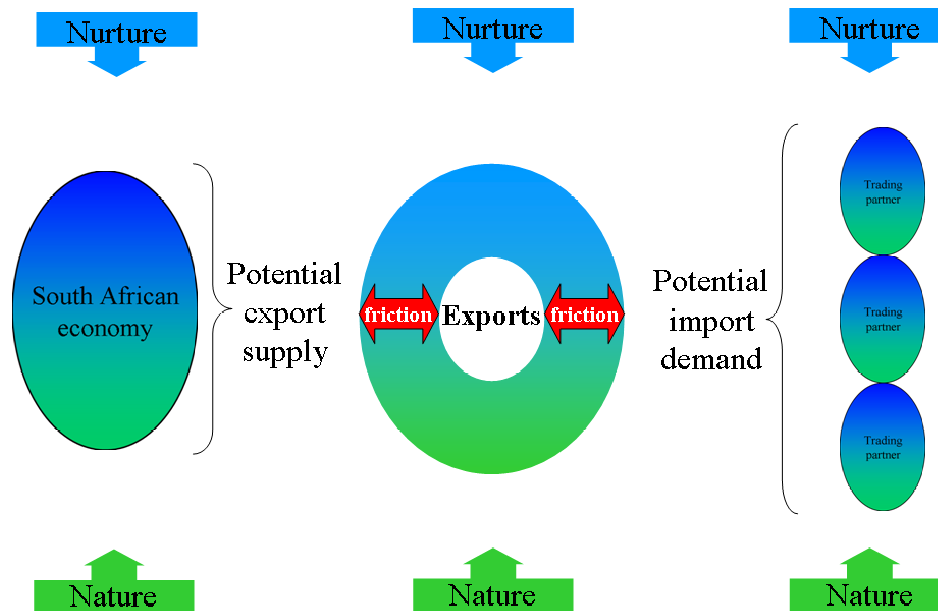
#### **1.5 Motivation of the study**

Policies and other actions of government have an asymmetric impact on economic performance. Good policies enhance growth and poor policies slow it down, while very poor policies can set development back by decades (Dornbusch, 1992). Solignac Lecomte (2001) claims, that although many factors explain successful development, trade policy is critical. It must take account of its trade interests, in the light of its overall development strategy that are addressed by policies and negotiating goals.

Since market access or even preferential access to foreign markets does not guarantee success, policies have to address developmental aspects. A country must have the ability to supply what is demanded by foreign customers. It must also have the capability to deliver the product (or service) to the foreign market. The ability to supply is partly determined by a countries natural resources or endowments. Value is added to these by enterprises, which in turn has partly been influenced by various political and historical forces. Nature and nurture are therefore the two main forces determining export supply capacity. Similarly, trade flows can be hindered or advanced by natural geographic features, while ports and other infrastructure certainly nurture the development of trade. Figure 1 below schematically shows how various forces affect the volume of exports.

Understanding the components of each of these factors and how they affect the volume, composition and direction of exports will contribute to better policy development. Accepting that exports will contribute to an improvement in national welfare, how best can they be promoted, and what are the most efficient and effective instruments to this end are central to this research.

**Figure 1 Forces determining or influencing the volume of exports**



Source: Own compilation.

Towards the end of 1995, the South African government accepted that targets set in the Reconstruction and Development Programme (RDP) would not be achieved and therefore compiled a macroeconomic framework called strategy for growth, employment and redistribution (GEAR) which focuses on:

- A competitive, fast-growing economy creating sufficient jobs;
- Redistribution of income and opportunities;
- Health and education services available to all South Africans; and
- A secure, productive environment.

At the heart of GEAR are two core objectives: firstly, the framework looks at promoting growth through exports and investments and secondly, it intends to promote redistribution by creating jobs and reallocating resources through the national budget. The Department of Trade and Industry's (DTI) industrial strategy (DTI, 2002), micro-reform strategy (DTI, 2002), and integrated manufacturing strategy (IMS) (DTI, 2002) build on GEAR's goals and objectives. The IMS again emphasises global competitiveness and exports.

To design effective instruments, it is important to understand the behaviour and the relationships of the relevant economic agents. Once policy-makers know and understand the determinants of exports at a sectoral level, they can avoid “one-size-fits-all” prescriptions and can design instruments that will maximise the growth of exports and optimise the returns on public resources. This research will identify and categorise products according to their determinants, giving the technocrat a deeper understanding of the issues and methods for dealing with them.

This study assumes that different sectors and industries (with potentially different conditions, including different elasticities, technologies, market supply positions, etc.) react differently to different policies and attempts to establish the factors that determine the volume of exports for the different manufacturing sectors. This information will empower policy-makers to evaluate the impact of their decisions and policies on each sectors’ export performance.

Besides attempting to broaden the country’s export basket and diversify export destinations, the DTI is also actively involved in drawing new entrants into foreign markets and encouraging existing exporters to boost volumes. Crucial to this approach is the bringing on board of small-, medium- and micro-enterprises (SMMEs), which form approximately 90 per cent of all South African enterprises and yet comprise less than 3 per cent of exporters and less than 1 per cent of export sales (Calof & Viviers, 1995).

It is imperative that financial and non-financial measures be instituted to capture fully both the short- and long-term capacity for labour absorption and output growth.

## **1.6 Delimitation of the research**

Policy is not made in isolation. The International Trade Centre (ITC) identifies the following three broad groups of factors that play a role in international trade (ITC, 2002):

- Border-in factors (a conducive domestic economic environment; supply-side factors);
- Border factors (trade facilitation; ports; customs; international financial transactions); and
- Border-out factors (demand-side issues).

**Table 1** Typography of factors affecting exports

		Drivers or determinants		Necessary but not sufficient	Obstacles to trade
		Push	Pull		
Border-in	Macro	Relative prices (export to domestic price <sup>2</sup> ) Incentives (subsidies) Strong real effective exchange rate	Relative prices (South African export to world price) Foreign demand (income)	Simple procedures to trade Efficient communications systems (mail, telephone, fax and e-mail) Reputation as a reliable supplier	Effective rate of protection and anti-export bias Corruption Strong real effective exchange rate Volatile currency Dutch disease Distance from market
	Meso (Sectoral)	Capacity to produce for the export market Subsidised factor inputs Clusters (industrial districts) Institutional support Specific skills Moral suasion	Preferential market access, e.g. AGOA	Low compliance costs Standards	Brain drain Drought Labour Cost of labour Availability of suitable labour (skills) Cost of capital Access to technology Access to raw material Effective rate of protection and anti-export bias Distance from port
	Micro	Entrepreneur Innovation Technology Moral suasion Sunk costs	Cultural connections in foreign markets Language	Reputation as a reliable supplier	Access to finance High entry costs
Border				Efficient financial infrastructure Efficient logistics and ports	Distance from market Instability – war, strikes Corruption
Border-out		Trading partner's income Market access Preferential market access, e.g. AGOA		Efficient financial infrastructure Efficient logistics and ports	Trade barriers Sanctions Regional trade agreements Lack of foreign currency Corruption

Source: Own compilation using ITC (2002) terminology.

Not all these factors, especially border-out factors, can be controlled or changed by government, although they can be influenced by it. Policy-makers should understand the importance and role of each of these factors and how they can be used to stimulate trade. Table 1 shows the typography of various factors that affect export.

This research focuses on the South African border-in macro- and sectoral (meso) drivers or determinants (shaded area), although obstacles to trade and conditions necessary but not sufficient for trade will be addressed briefly where necessary. Micro or enterprise factors are also discussed. Lall and Tuebal (1998) distinguish between three policy types – “functional”<sup>3</sup> and “horizontal”<sup>4</sup>

<sup>2</sup> Export prices are determined by wages, productivity, user cost of capital, technology and taxes.

<sup>3</sup> These include policies designed to enhance competitive pressures (competitions policy; lowering tariffs).

<sup>4</sup> Generalised incentives to promote greater research and development, and training are included.

policies improve market operations and “selective” policies<sup>5</sup> designed to promote the advance of particular sectors or particular firms.

### **1.7 Problem statement**

This study will identify the determinants of exports and how they can be applied to create and administer policy instruments to promote exports that will improve the South African economy’s short- and long-term capacity for labour absorption and output growth.

The following sub-problems are studied:

- What are the determinants (variables) of exports at the macro- (international and national) and meso- or sectoral levels?
- To what extent do these variables influence the volume of exports?
- Which variables determine the destination of the exports?
- What instruments can be used to stimulate the volume of exports?
- What has been the impact of the instruments in the past?
- Who is best placed to administer these instruments? and
- How do these instruments affect the rest of the economy?

In turn these sub-problems can be related to foreign demand, supply for the export market, and various resistors (see Figure 1) that limit trade.

#### **(i) Hypothesis 1**

The following international or foreign demand factors (and institutions) affect the national level of exports:

- Economic activity or income of trading partners;
- Trade policy; and
- Trade relations

#### **(ii) Hypothesis 2**

The determinants of exports at a sectoral level that contribute to export supply are:

- The determinants of export prices;

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<sup>5</sup> Examples include preferential access to capital and sector-specific subsidies.



- Real effective exchange rate; and
- Domestic demand pressure (vent-for-surplus theory).

### (iii) Hypothesis 3

The physical and psychological distances (and other resistors) between trade partners determine the direction and volume of trade.

### (iv) Hypothesis 4

The supply for the export market is driven by certain qualitative determinants that motivate firms to sell globally.

## 1.8 Methodology and outline of this study

As with other social sciences, there are a number of factors that influence economic actions and reactions. Some of these are direct and easy to identify, others work indirectly through other variables. This study takes an eclectic approach drawing on historical, theoretical and empirical sources to identify the main factors that influence the composition and direction of South Africa's exports.

Because history can assist in identifying both the direct and indirect factors, **Chapter 2** gives an overview of South African economic and trade history, and places it in its international context. Although many of these factors are no longer relevant because the institutional structures have changed, the broad behavioural relations may still apply. By highlighting past policy blunders, it is hoped they will be avoided in future, and by so doing will give positive direction to new policy creation and development. This Chapter therefore focuses on extracting determinants that were, and still may be, applicable to South Africa today. In short, it analyses the political and social conditions that have influenced South Africa's trade; it reviews international and South African trade policy; and identifies historic trends and determinants of trade that can be included in an empirical analysis.

**Chapter 3** provides a brief overview of the context and scientific grounding in which each of the various trade theories developed over the centuries. The current implication to South Africa of each of these theories is highlighted and supported by an analysis of the applicable literature. Again, understanding the relevance of each theory and its applicability to South Africa will provide insight for policy-makers. It will also give an indication of which variables determine South African exports. Intra-industry trade (IIT) theory is used to draw together the historic determinants discussed in Chapter 2, and the theories of trade are considered in **Chapter 4**.

Demand-and-supply factors influencing exports and informing policy-makers how to direct macro policies (see Table 1) to address priority economic objectives are discussed in **Chapter 5**. For instance, unemployment is a severe problem, not only in South Africa, but also in many developing countries. Different sectors have different labour multipliers. Understanding the impact of fiscal and monetary policies on individual sectors' export performance would contribute to an efficient export-led job creation strategy. The gravity model described in **Chapter 6** is used to add the bilateral dimension to the trade equations presented in Chapter 5. These two chapters look at possible tools that can be used to stimulate trade. The determinants of each sector's export are analysed and the elasticities reported. Some of the advantages and problems experienced with data and the methodology used are also considered. This approach to inform policy is based Schumpeter's (1933: 12) advice:

*The only way to a position in which our science might give positive advice on a large scale to politicians and businessmen, leads through quantitative work. For as long as we are unable to put our arguments in figures, the voice of our science, although occasionally it may help to dispel gross errors, will never be heard by practical men. They are, by instinct, econometricians all of them, in their distrust of anything not amenable to exact proof.*

Traditionally social sciences, including economics, follow the quantitative (as apposed to a qualitative) methodology used in the natural sciences (Flick, 1998: 257, McCloskey, 1983). Quantitative methods verify theory and are more objective. On the other hand qualitative methods tend to be subjective and have been developed to discover theory. They stress the understanding and causal analysis of data rather than the use of statistical techniques (Bryman & Cramer, 1990: 1).

Qualitative techniques are used to understand the enterprise's behaviour and causes of trade. The firm determinants are briefly analysed in **Chapter 7** using qualitative analytical techniques. These findings are integrated with other similar research and the macro- and meso-analysis presented in the previous two chapters, to propose an export development framework.

Drawing from the research and findings in the previous chapters, **Chapter 8** presents a set of policy proposals that can increase South African exports, while focusing on economic objectives of wealth creation, equity and employment. The study concludes with **Chapter 9** that also makes suggestions for further research.

Considering so many sectors in one study presented many challenges, especially concerning presentation. Analysing sectoral details makes for tedious reading, whereas ignoring or not reporting such detail presents a void. For this reason annexures are used extensively to reveal the

sectoral findings without distracting the reader or breaking the thread of the argument, yet providing a complete report of the research.