

The development of an export opportunities model for South African services

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**Thesis submitted for the degree *Philosophiae Doctor* in International Trade at the
Potchefstroom Campus of the North-West University**

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May 2011

ACKNOWLEDGEMENTS

The completion of this thesis would not have been possible without the guidance and support I received from my family, friends and colleagues. Here I would like to thank a few of the most important people involved:

- To my promoter, Prof. Wilma Viviers, thank you for your guidance, knowledge and motivation through the entire process of this thesis. You have been an inspiration and a mentor to me in my personal life, as well as in my career.
- To Ermie Steenkamp, thank you for your valuable input in developing the model for services and for being a supportive friend and colleague.
- To Prof. Ludo Cuyvers, thank you for your advice and valuable input into the development of the model for services.
- To my colleagues at the School of Economics at the NWU and the EPRG team, I appreciate all your support, motivation and input.
- To my husband, Carl, and my son, Antony, thank you for all your love, patience and support during the completion of this thesis. It has been a privilege to share this experience with you.
- To my father, Prof. Peter van Eldik, thank you for your advice and guidance during the completion of this thesis. I appreciate the time you spent to give me additional feedback. Thank you also for all the support you have given us as a family.
- To the rest of my family, thank you for all your support during the completion of my thesis.
- Lastly, I thank the Lord for all the blessings we have received during the period of completing this thesis.

ABSTRACT

The services sector has played an increasingly important role in international trade in recent years. The negotiations under the General Agreement on Trade in Services (GATS) in recent years have initiated a global drive to liberalise services trade. However, this liberalisation process holds many challenges, especially for developing countries that do not have an adequate regulatory system to sufficiently support and promote these new export sectors. The Department of Trade and Industry (DTI) in South Africa recognised a need to undertake scientific research to identify the development and export potential of key services sectors.

In the period from 2005 until 2009, the services sector contributed 65% on average to the GDP of South Africa. In 2010, 79% of the labour force in South Africa was employed in the services sector. However, services only contributed 19% to total exports from South Africa in the period from 2005 until 2009 (ITC, 2010a). The largest services export sectors for South Africa over the five-year period were travel (63%), transportation (11%), and business services (9%). This indicates that South Africa's services exports are mostly concentrated in one sector, namely travel, and this clearly indicates the need for South Africa to diversify exports of services into other sectors.

Export promotion is one of the methods that governments can use in order to stimulate the export growth of a country. Given the need to increase and diversify the exports of South African services, this study aimed to investigate the literature in order to establish possible guidelines for the export promotion of services specifically.

Export promotion instruments should aim to identify potential export opportunities in order to allocate scarce government resources to the active promotion of the sectors with the highest export potential. In order to aid government with this process, Cuyvers, De Pelsmacker and Roozen (1995) developed a decision support model (DSM) that could determine potential export opportunities for products in Belgium by using a scientifically-based method. This model was adapted for South African products in 2007 and further refined in 2009 and 2010 for the DTI in South Africa. In all cases, the DSM analysis was only applied to products and the services sector was never taken into consideration owing to the data differences and the nature of services.

Therefore, this study aimed to develop a similar model for the services sector in South Africa that could identify the sectors and countries with the highest potential for services export diversification. The results of such a model could also be incorporated into a services sector strategy for South Africa. Such a services strategy does not currently exist for South Africa and if the results of this model were incorporated into such a strategy, it would be the first of its kind.

The study reviewed the methodology of the DSM for products and found that the methodology of the first two filters could be applied to the available services data in a similar manner. However, owing to the nature of services and the limited availability of data, the third and fourth filters had to be adapted to consider these differences. Therefore, a new model was developed to incorporate the nature of services, and the new model was named the export opportunities model (EOM) for services. A new methodology was developed for the third and fourth filters in the EOM for services. A new cell structure was also constructed to categorise the results of the EOM according to the specific market characteristics, which could be used in export promotion strategies to develop specific promotion instruments for each type of market.

The results of the EOM for services on a geographical basis showed that the highest export opportunities for services in South Africa were in Eastern and South-Eastern Asia, followed by the European market. The results also identified specific sectors that have high export potential for South African services. The sectors with the highest export potential are travel, transportation, construction services, communications services and other business services. These results can be incorporated into a services sector export promotion strategy for the DTI in South Africa.

The study also compared the results of the DSM for products with the results of the EOM for services, in order to establish guidelines on regional export opportunities for both products and services. The study found that the highest export opportunities were in the Asian and European regions. The DTI in South Africa could use these product/country combinations and services/country combinations to develop specific export promotion instruments and strategies for each region in the world.

Keywords: Decision support model, export opportunities, export opportunities model, export promotion, services, services sector, South Africa.

OPSOMMING

Die dienstesektor het in die afgelope jare 'n toenemend belangriker rol in internasionale handel gespeel. Die onderhandelinge van die *General Agreement on Trade in Services* (GATS) het in die afgelope paar jaar 'n wêreldwye liberalisering van dienste geïnisieer. Hierdie liberaliseringsproses hou baie uitdagings in, veral vir ontwikkelende lande wat nie voldoende regulerende stelsels in plek het om hierdie nuwe uitvoersektore te ondersteun en te bevorder nie. Die Departement van Handel en Nywerheid (DHN) in Suid-Afrika erken ook die noodsaaklikheid vir wetenskaplike navorsing waardeur die ontwikkeling en uitvoerpotensiaal van sleutel dienstesektore vasgestel kan word.

In die periode van 2005 tot 2009 het die dienstesektor gemiddeld 65% tot die BBP van Suid-Afrika bygedra en in 2010 was 79% van die arbeidsmag in Suid-Afrika in die dienstesektor werksaam. Tog het dienste-uitvoer slegs 19% tot totale uitvoer vanaf Suid-Afrika in die periode van 2005 tot 2009 bygedra. Die grootste dienste-uitvoer in dieselfde vyf jaar was grootliks in die volgende sektore: toerisme (63%), vervoer (11%), en besigheidsdienste (9%). Dit toon dat Suid-Afrika se dienste-uitvoer meestal in een sektor gekonsentreerd is, naamlik toerisme. Dit is 'n aanduiding dat dit nodig is om die uitvoer van dienste na ander dienste-sektore te diversifiseer.

Uitvoerbevordering is een van die metodes waarmee regerings die groei van uitvoer in 'n land aktief kan bevorder. Gegewe die noodsaaklikheid om uitvoer van Suid-Afrikaanse dienste te verhoog en te diversifiseer, was die doel van hierdie studie om spesifiek die literatuur na moontlike riglyne vir die uitvoerbevordering van dienste te ondersoek.

Uitvoerbevorderingsinstrumente moet poog om potensiële uitvoergeleenthede te identifiseer sodat die beperkte hulpbronne in die regering gefokus kan word om die sektore met die hoogste uitvoergeleenthede aktief te bevorder. Om die regering te help met hierdie proses het Cuyvers, De Pelsmacker en Roozen (1995) 'n *Decision Support Model* (DSM) ontwikkel met die doel om potensiële uitvoergeleenthede vir produkte in België deur die gebruik van 'n wetenskaplike metode te bepaal. Hierdie model is in 2007 aangepas vir Suid-Afrikaanse omstandighede en in 2009 en 2010 weer vir die DHN in Suid-Afrika verder verfyn. In alle gevalle is die DSM slegs op produkte toegepas en die dienstesektor was nooit oorweeg nie, omdat die dienste-sektor se data, asook die aard van dienste en produkte verskil.

Die doel van hierdie studie is om 'n soortgelyke model as die DSM, vir die dienstesektor in Suid-Afrika te ontwikkel, en om sodoende die sektore en lande te identifiseer wat die grootste geleenthede sal bied vir diversifisering van die uitvoer van dienste. Die resultate van so 'n model kan ook in die dienstesektor-uitvoerstrategie vir Suid-Afrika geïnkorporeer word. So 'n strategie bestaan tans nog nie vir Suid-Afrika nie, maar die model is 'n eerste van sy soort vir Suid-Afrika en sou gebruik kon word vir die ontwikkeling van so 'n strategie.

Die studie het die metodologie van die DSM vir produkte ondersoek en gevind dat die metodologie in die eerste twee filters op dieselfde wyse op die beskikbare data vir dienste toegepas kan word. Weens die aard van dienste en die beperkte beskikbaarheid van data, moes die derde en vierde filters aangepas word om hierdie verskille in ag te neem. In die lig hiervan is 'n nuwe model ontwikkel om die unieke aard van dienste te inkorporeer. Dié model is die *export opportunities model* (EOM) vir dienste genoem. 'n Nuwe metodologie is vir die derde en vierde filters in die EOM vir dienste ontwikkel. 'n Nuwe selstruktuur is ook ontwikkel om die uitvoergeleenthede van die EOM volgens die spesifieke eienskappe van elke mark te kategoriseer. Hierdie selstruktuur kan in uitvoerbevorderingstrategieë gebruik word om spesifieke instrumente vir elke tipe mark toe te pas.

Die resultate van die EOM vir dienste toon, op 'n geografiese basis, dat Oos- en Suidoos-Asië, gevolg deur die Europese markte, die hoogste uitvoergeleenthede vir die dienstesektor in Suid-Afrika bied. Die resultate identifiseer ook spesifieke sektore wat hoë uitvoergeleenthede vir Suid-Afrikaanse dienste inhou. Die sektore met die hoogste uitvoerpotensiaal is toerisme, vervoer, konstruksiedienste, kommunikasiedienste en besigheidsdienste. Hierdie resultate kan deur die DHN in Suid-Afrika in 'n uitvoerpromosiestrategie vir die dienstesektor gebruik word.

Die studie het ook die resultate van die DSM vir produkte met die resultate van die EOM vir dienste vergelyk om riglyne vir die geografiese uitvoergeleenthede van beide produkte en dienste te bepaal. Die studie het gevind dat in die resultate van beide die modelle die hoogste uitvoergeleenthede in die Asiatiese en Europese markte geleë is. Die DHN in Suid-Afrika kan hierdie produk/land- en dienste/land-kombinasies gebruik om spesifieke uitvoerbevorderingsinstrumente en -strategieë vir elke geografiese area te ontwikkel.

Sleuteltermes: Uitvoergeleenthede, uitvoerbevordering, dienste, Suid-Afrika.

ABBREVIATIONS

ASR	=	Australian Services Roundtable
BPM5	=	Balance of Payments Manual, fifth edition
BPM6	=	Balance of Payments Manual, sixth edition
CCRD	=	Consumer and Corporate Regulation Division
CDC	=	Consultancy Development Centre
CSC	=	Canadian Services Coalition
COTII	=	Council of Trade and Industry Institutions
DFAIT	=	Department of Foreign Affairs and International Trade Canada
DHN	=	Departement van Handel en Nywerheid
DSM	=	Decision support model
DTI	=	Department of Trade and Industry
EBOPS	=	Extended Balance of Payments Services Classification
EDC	=	Export Development Canada
EEDD	=	Empowerment and Enterprise Development Division
EOM	=	Export opportunities model
EPO	=	Export promotion organisation
FDI	=	Foreign direct investment
GATS	=	General Agreement on Trade in Services
GATT	=	General Agreement on Tariffs and Trade
GDP	=	Gross domestic product
GNP	=	Gross national product
GSSSD	=	Group Systems and Support Services Division
HMA	=	High market access
HOSI	=	High openness for services imports
HS	=	Harmonized Commodity Description and Coding System
IMF	=	International Monetary Fund
ICTSD	=	International Centre for Trade and Sustainable Development
ITC	=	International Trade Centre
ITED	=	International Trade and Economic Development
LMA	=	Low market accessibility
LNT	=	Limitations on national treatment
LOMA	=	Limitations on market access
LOSI	=	Low openness for services imports

LPI	=	Logistics Performance Index
MATRADE	=	Malaysian External Trade Development Corporation
MOCII	=	Ministry of Commerce and Industry (India)
MSITS	=	Manual on Statistics of International Trade in Services
NEI	=	National Export Initiative
OECD	=	Organisation for Economic Co-operation and Development
ONDD	=	Office National du Dueroire
OSI	=	Openness for services imports
RCA	=	Revealed comparative advantage
SACU	=	Southern African Customs Union
SAMEX	=	South African Music Exports
SEDA	=	Small Enterprise Development Agency
SEPC	=	Services Export Promotion Council
SP	=	Services produced
TDF	=	Transnational data flow
TEO	=	The Enterprise Organisation
TISA	=	Trade and Investment South Africa
TOM	=	Trade Opportunities Matrix
UNCTAD	=	United Nations Conference on Trade and Development
USD	=	United States dollar
WTO	=	World Trade Organization

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CHAPTER 1

INTRODUCTION

1.1 Background

In recent years, international trade has become more diversified to include services into the scope of trade. Traditionally, services were viewed as domestic “products” offered only for use to participants in the domestic economy (Grönroos, 1999). It has however been established that services have a much more important role in the economic growth of countries and that services have a crucial role to play in employment, economic and trade diversification, economic development and economic growth (Francois, 1990; Kay, Pratt & Warner, 2007; Marchetti, 2007). Therefore, many organisations such as the World Trade Organization (WTO) and the Organisation for Economic Co-operation and Development (OECD) have been actively involved in the process of liberalisation of services trade in their member countries. This is the reason why services trade has become an important topic for investigation in South Africa.

This chapter aims to provide a brief overview of the global trade in services and the importance of increasing services trade in South Africa. To this end, the chapter will further explain the problem statement in section 1.2. Thereafter, it will pose the research questions and the corresponding research objectives in sections 1.3 and 1.4. Next, it will explain the research methodology in section 1.5. Finally, the chapter will set out the chapter outline of the remainder of the thesis in section 1.6.

1.2 Problem statement

The first section of the problem statement will provide an overview of the importance of services trade internationally. Thereafter the role that services play in the South African economy will be discussed, as well as the problem that will be addressed in this study.

1.2.1 International trade in services

“International trade in services” has broadly been defined as trade in products that cannot be seen or touched, for example banking, tourism and telecommunication services (ASR,

2007). Services entail a very broad range of economic activities, which are normally classed as “intangible”.

Gabriele (2004) found that the average trade in services has grown much faster than world gross national product (GNP) figures and world merchandise trade. The average growth rate of services exports globally has been 7.6% per year since 1980. One of the reasons for the dramatic growth in trade in services is because of the technological advances that have been made in recent years, for example through the internet and e-commerce. Information has become more easily accessible and new technology has helped to overcome historical trading problems for many services. Mattoo and Stern (2008) found that despite these advances, international trade in services continues to be affected by many policy barriers, especially in developing countries.

The Uruguay Round of the General Agreement on Tariffs and Trade (GATT) in 1993 also launched the liberalisation process of services trade globally. The General Agreement on Trade in Services (GATS) negotiations have assisted in opening markets for services that were previously protected by domestic Government policies and many of the trade barriers have been lifted as a result of the GATS Agreement (WTO, 2005).

In the GATS Agreement, services have been classified into 12 main sectors and 160 sub-sectors ranging from business services, finance, distribution and transportation, to tourism services. The GATS also define services by the method of delivery or “modes of supply” for each sector (WTO, 2005), as explained in section 3.4.1.

Negotiations under the GATS Agreement is an ongoing process and each gathering of officials, results in countries further decreasing domestic protection and trade restrictions for services sectors. The benefits of services liberalisation are not immediately evident, due to the many challenges that services liberalisation holds for an economy. Therefore, it becomes difficult to introduce healthy competition to the local market, to establish sufficient regulatory institutions that support industry and to establish effective export promotion mechanisms (Mattoo & Stern, 2008).

1.2.2 Trade in services in South Africa

The services sector in South Africa has played a considerable role in the economy and is becoming one of South Africa’s significant export sectors (Steuart & Cassim, 2005). In the

period between 2005 and 2009, the services sector has contributed 65% on average to South Africa's gross domestic product (GDP) (SARB, 2010) and in 2010, 79% of the labour force in South Africa was employed in the services sector (STATSSA, 2010).

Despite these impressive figures, the exports of services only contributed 19% to South Africa's total exports between 2005 and 2009 (ITC, 2010a). The largest services export sectors for South Africa over this five-year period were travel (63%), transportation (11%), and business services (9%). These figures indicate that South Africa's services exports are mostly concentrated in one sector, travel. Therefore, South Africa should focus on diversifying services exports into other sectors that also have high potential.

Hausmann and Klinger (2008) confirm this finding in their study, which focused on the problems that South African companies face in exporting. They have found that South Africa needs a much faster growth rate in exports and that this can be achieved by moving exports into more non-resource-based exports that do not need expensive resource inputs. The services sector is one of the sectors that could contribute to this growth.

South Africa can greatly benefit from diversifying its services exports to other sectors such as communications services, construction, insurance services and computer services. As part of the services trade liberalisation process, the South African government needs to investigate the manner in which to increase services exports in the various services sectors in order to become a more significant participant in the world market. This implies the need for a structured export promotion policy for services in order to increase the exports of services.

Steuart and Cassim (2005) reviewed the South African trade in services and found that there was no government policy regarding the South African services sector. Discussions with the Department of Trade and Industry (DTI) in Pretoria, South Africa, in October 2009 confirmed that there is also no services export promotion strategy in place in the South African promotion framework, and this is still the case. The DTI also stated in the South African Trade Policy and Strategy Framework (DTI, 2010a) that South Africa needs to use scientific research to identify the development and export potential of key services sectors and it needs to determine South Africa's competitiveness in services trade in order to increase services trade sufficiently.

Export promotion is one of the methods by which governments are actively involved in stimulating export growth in a country (Gillespie & Riddle, 2004). Cuyvers, De Pelsmacker and Roozen (1995) indicated that export promotion instruments should aim to identify potential export opportunities in order to allocate scarce resources in government to the active promotion of those sectors that hold the greatest potential. In their study, they developed a decision support model (DSM) in order to determine potential export opportunities for products in Belgium by means of a scientific method. This model was adapted for South African products in 2007 (Viviers & Pearson, 2007) and further refined in 2009 and 2010 (Steenkamp, Rossouw, Viviers & Cuyvers, 2009; Viviers, Rossouw & Steenkamp, 2009; Viviers, Steenkamp & Rossouw, 2010) for the DTI in South Africa.

In all of the cases that were mentioned, the DSM analysis was only applied to products and the services sector was never taken into consideration mainly as a result of the data differences and the nature of services. Hausmann and Klinger (2008) found that the South African government is not aware of what feasible new opportunities exist and what barriers it faces in terms of services export. Therefore, this study will investigate whether a DSM similar to that already developed for products; can be developed for the services sector in South Africa. The results of this model will be useful in providing guidelines for the export promotion of services sectors in countries with high growth and accessibility, as required by the DTI (2010b).

1.3 Research questions

The following research questions were posed in considering the problem statement above:

- What role does the services sector play in the South African economy and what the current export activities of South African services are?
- Are there currently any guidelines for services export promotion?
- What are other countries doing to promote services exports?
- What export promotion activities exist in South Africa for services?
- Can the methodology of the DSM for products be used to develop a similar model for services?

- Can an export opportunities model (EOM)¹ for services in South Africa be developed to assist in identifying specific export opportunities for specific services sectors?
- Could such an EOM be used to provide guidelines for an export promotion strategy for services in South Africa?
- Could the EOM for services be combined with the DSM for products in order to provide guidelines for the export promotion of South Africa's total exports of products and services?

1.4 Research objectives

The objective of this study was to develop an EOM that will identify potential export opportunities for services in specific countries. This model will assist the South African government in diversifying the exports of services into sectors and countries that hold the highest potential. These results could be incorporated into the services sector strategy for the export promotion of services in South Africa. More specifically, the study's objectives were:

- to determine the role that services plays in the South African economy and what the current export activities of South African services are;
- to determine whether any guidelines exist for services export promotion;
- to investigate what other countries are doing to promote services exports in order to establish guidelines for the export promotion of services in South Africa;
- to investigate what export promotion activities exist in South Africa for services;
- to assess the DSM for products to identify a methodology for a similar model for services;
- to develop an EOM for services in South Africa that can assist in identifying specific export opportunities for specific services sectors;
- to analyse the results of the EOM and provide guidelines for an export promotion strategy for services in South Africa; and

¹ Cuyvers *et al.* (1995) and Cuyvers (1997, 2004) originally named this model a DSM. The term "DSM" was also used in the applications of the model for South Africa (Viviers & Pearson, 2007; Viviers *et al.*, 2009; Viviers *et al.*, 2010). However, in order to distinguish the model for services from the previous versions of the DSM and other DSMs that are used in other industries (mostly in the fields of engineering and information technology), it was decided to refer to the services model as an EOM.

- to combine the results of the EOM for services with the results of the DSM for products, in order to provide guidelines for the export promotion of South Africa's total exports of products and services.

1.5 Research methodology

In order to achieve the research objectives set above, a literature review and an empirical study were conducted. The results of the literature review along with the results of the empirical study were both used to provide guidelines for the development of an export promotion strategy for services.

1.5.1 Literature review

The literature review conducted investigated three main areas, which will subsequently be discussed. Firstly, it aimed to identify existing guidelines for the export promotion of services. Therefore, the literature review investigated the development of international trade theories to establish whether services have been incorporated into trade theories in the past. The existing literature and international trade theory were also reviewed with regard to services. Because it is necessary to understand what is meant by the services sector, the literature review also considered various definitions and classifications of services. The above will be reported on in Chapter 2.

Secondly, the literature review investigated the role that services plays in international trade, the growth in trade in services, as well as the various restrictions experienced in services trade. It is important to understand the manner in which services should be measured and the data should be recorded correctly at a macro-level. If the data is measured and recorded correctly, the various restrictions on trade in services can be more easily identified. The review also investigated the benefits that liberalisation of services holds for countries and considered four international organisations that have been actively involved in the global liberalisation process for services. The literature review considered the role that services has played in the South African economy by evaluating its contribution to GDP, employment and total trade in South Africa. The second main area will be reported on in Chapter 3.

Thirdly, the literature review examined the export promotion literature to establish guidelines for successful export promotion, and identify whether any guidelines exist for the promotion of the services sector. Furthermore, the literature review investigated the promotion activities

of India, Chile, Canada, the USA, Malaysia and Australia to promote their services trade in order to determine additional guidelines. These countries were selected because they have export promotion organisations (EPOs) that conduct specific activities to increase and diversify the exports of services. The literature also investigated what has been done in South Africa regarding the export promotion of products by means of the DSM model (see section 1.2.2) and what the current promotion activities for services in South Africa entail. The third main area will be reported on in Chapter 4.

1.5.2 Empirical study

The empirical section of this study aimed to develop an EOM to be used to identify realistic export opportunities for South African services. The results will provide the South African government with a list of export opportunities based on scientific research findings that can be used to develop export promotion instruments for services specifically.

The empirical study investigated the methodology of the DSM as applied in Belgium and adapted for South Africa (see section 1.2.2) in order to establish whether this model could also be adapted for services in South Africa. Based on the findings of this part of the study, the manner in which the model could be applied and possible changes to the model were determined, taking in consideration the data that was available. This part of the empirical study will be reported on in Chapter 5.

A new EOM for services was constructed and applied to the services data and the results provided a list of realistic export opportunities for services in South Africa. The results of this model will provide a scientific method on which to base the export promotion instruments of the DTI for services specifically, as part of its drive to increase trade in services. This might even lead to the development of an export promotion strategy for services, which currently does not exist in South Africa. This part of the study will be reported on in Chapter 6.

1.6 Chapter outline

Chapter 2 will provide an overview of the role of services in international trade theory, considering early trade theories, neo-classical trade theories, other trade theories and new trade theories. The chapter will also define and classify services.

Chapter 3 of this study will investigate the role of services trade internationally and in South Africa. To this end, it will consider the growth of international trade in services and it will detail restrictions experienced in trade in services. The chapter will also consider the measurement and recording of services data. Furthermore, it will examine the benefits of liberalising services trade and summarise the international organisations involved in the liberalisation of services trade. Lastly, it will discuss the role of services in the South African economy and South African trade in services.

Chapter 4 will investigate the export promotion of services in selected countries and in South Africa. It will present general export promotion guidelines from the literature and export promotion guidelines for services. In addition, it will discuss the export promotion of services in selected countries and export promotion in South Africa, reviewing the methodology of the DSM for products, as applied in South Africa.

Chapter 5 will present the methodology for the EOM for services in South Africa. It will discuss the application of the methodology of the DSM for products to services in South Africa. It will also discuss the data available for the EOM for services.

Chapter 6 will entail the application of the EOM for services that was developed for South Africa and will discuss the four filters of the model.

Chapter 7 will provide an analysis of the results of the EOM for services. It will also provide a comparison between the results of the DSM for products and the EOM for services in South Africa.

Chapter 8 will summarise the study's results and the outcome of this will make policy recommendations for services. The chapter will also make recommendations for future research.

CHAPTER 2

OVERVIEW OF THE ROLE OF SERVICES IN INTERNATIONAL TRADE THEORY

2.1 Introduction

Globalisation and international trade has provided opportunities for economic growth in many countries. For this reason, many governments have become actively involved in promoting their exports in order to increase trade figures. Trade theorists have attempted to measure the effects of international trade on the economies of countries. These theories were traditionally developed for trade in products, but trade in services has recently received attention by researchers and policy-makers (Fourie, 2008). It is largely due to the work of the WTO and the development of the GATS that countries have begun to realise the importance of services trade in an economy. Trade in services grew to 70% of global GDP in 2007 (UNCTAD, 2010) and the rapid expansion of services globally, has left a gap for more in-depth research on the subject (Daniels, 2000).

The objective of this chapter is to identify what has been found on the role of trade in services in theory. The chapter will thus provide a background on the development of international trade theories in section 2.2. Thereafter, it will explain the specific theories that have been applied to services in section 2.3. It will then seek to define the term “services” in section 2.3. Lastly, it will explain four classification schemes of services in section 2.4.

2.2 The role of services in trade theories

Traditional trade theories assumed that services were mostly non-tradable and therefore services did not receive much attention (Francois & Hoekman, 2010). This section will provide a brief overview of international trade theories in order to determine whether any of the theories can be related to the services sector.

2.2.1 Early trade theories

The first trade theories were developed during the seventeenth and eighteenth centuries by the mercantilists. These theories were based on the notion that a country must export more

than it imports in order to become wealthier (Appleyard & Field, 1992; Lindert & Pugel, 1996; Salvatore, 2001). Therefore, countries accumulated wealth in the form of gold or silver, and protected these stocks of gold and silver by restricting imports. This implied the stimulation of exports, which in turn increased the inflows of stocks. Therefore, governments actively interfered in trade. Therefore, the theories stated that countries would do as much as possible to stimulate exports and restrict imports, and this meant that governments actively interfered in trade.

In the late eighteenth century, Adam Smith questioned these theories in his theory of absolute advantage. Smith suggested that countries should specialise in and export the products in which they have an absolute advantage (i.e. the products they can produce more efficiently or cheaply) and they should import the products in which they do not have an absolute advantage (Lindert & Pugel, 1996; Salvatore, 2001). In addition, he included consumers by stating that consumers should be able to buy products in the market that offers the lowest prices (Appleyard & Field, 1992). Therefore, Smith's theory opposed government interference in trade.

In the early nineteenth century, David Ricardo found that a country could benefit from trade even if it did not have an absolute advantage in a specific product. He subsequently developed the Theory of Comparative Advantage, in which he stated that two countries could benefit from trade if they export the product in which they have the greatest comparative advantage and import the other (Appleyard & Field, 1992; Lindert & Pugel, 1996; Krugman & Obstfeld, 2009). Therefore, if a country wishes to trade in two products with another country, it needs to evaluate its own production of both the products. Even if it has an absolute advantage in both products, whichever product it can produce more efficiently, it should export to the other country and import the remaining product. Therefore, the theory attempted to identify the manner in which an economy could ultimately gain from trade (Van Marrewijk, Ottens & Schueller, 2007).

Many extensions of this model were developed to include more realistic scenarios, such as monetary values; wage and exchange rate limits; transportation costs; and consumer tastes and preferences (Appleyard & Field, 1992; Salvatore, 2001). By calculating a country's share of product exports in the world's total exports of that product, Balassa (1965) also developed the index to measure revealed comparative advantage (RCA), thereby identifying whether a country has a sufficient share in trade to gain a comparative advantage.

The early comparative advantage theories did not view services any differently to products and mostly found that the determinants of comparative advantage in products were the same as for services (Hindley & Smith, 1984; Deardorff, 1985). They were of the opinion that different products may have different characteristics but that the basic principle of comparative advantage would still apply.

2.2.2 Neo-classical trade theory

The basis for the neo-classical phase in trade theory was initiated by the developments by Heckscher-Olin. In the 1930s, the Heckscher–Ohlin trade theory, which was an extension of Ricardo's Theory of Comparative Advantage, was published and in essence, this theory states that a country's international trade patterns are determined by its available levels of factors of production. Thus, a country will specialise in the goods that are more suited to its ability to produce. If a country has more capital available, the country will produce and export more capital-intensive products, such as motor vehicles and capital equipment. If a country has more labour available and less capital, the country would produce and export more labour-intensive products, such as maize and sugar (Appleyard & Field, 1992; Lindert & Pugel, 1996). The theory was based on two products, two countries and two factors of production, namely labour and capital. Perdakis and Kerr (1998) found that this theory became one of the most popular theories used by international trade theorists.

Ram (1987) found that the basic neo-classical theory lean towards the positive influence that exports can have on economic growth in terms of increased specialisation and comparative advantage, providing greater economies of scale owing to the increase in market size, more effective use of capacity and the introduction of technological improvements and changes. The theory is based on the assumption that products and services can be treated equally and that most services are only inputs into the production chain or are non-tradable. Therefore no special assumptions were made for the services sector.

2.2.3 Other trade theories

Two other significant trade theories were developed in the late twentieth century. The first was Staffan Linder's Spill-Over Theory, from which Linder concluded that a country that has a large domestic demand for a product would produce enough of the product to eventually "spill-over" into another market internationally. He also stated that nations with similar

demands will develop similar industries and trade with each other, and each will differentiate its products (Appleyard & Field, 1992; Van Marrewijk *et al.*, 2007).

Michael Porter also developed a theory in the 1980s, which became known as the competitive advantage theory. In essence, this theory states that a country will trade in goods in which it has a competitive advantage, which is the goods that give the customers greater value than the country's competitors do (Porter, 1990). A competitive advantage can exist if the country can produce the product at a lower cost or with more desirable benefits to the consumers than competing products. A country's ability to compete will depend on a variety of factors, such as having the necessary factors of production, efficient links to its supportive industries, a range of reliable suppliers, and an efficient business operation and exporting strategy. This theory gave rise to the large amount of work done on product differentiation and intra-industry trade (Salvatore, 2001).

Linder's Spill-Over Theory and Porter's Theory of Competitive Advantage gave rise to the latest theories. These new trade theories will be discussed in the following section.

2.2.4 New trade theories

Economists found that most countries in the modern world import and export goods and services, even if they are similar to goods and services produced locally (Krugman & Obstfeld, 2009; Salvatore, 2001). Many of the earlier trade theories were not able to explain this phenomenon. Thus, the new trade theories were developed to explain this. The new trade theories are based on the concept that countries can trade even if comparative advantage is absent. The majority of trade takes place between countries that have similar resources and similar products, which is known as intra-industry trade (Krugman & Obstfeld, 2009). The concept of intra-industry trade is based on the effect of increasing returns to scale. "Returns to scale" is described as the technical property of production that examines the change in output due to a proportional change in all the inputs. Therefore, if output increases by more than the proportional change in input, increasing returns to scale occurs. If producers expand their products into new markets, an increased return to scale can be achieved and a lower production cost will lower prices for the consumer and a larger variety of products will be made available (Brühlhart, 1995).

The new trade theories account for the fact that most trade amongst industrialised nations entails trade in similar products and the neo-classical trade theories were not able to

accommodate intra-industry trade. An extension of these theories is the new economic geography theory, which seeks to explain the geographical clustering or concentration of economic activity and the influence of this on the region's export activities (Krugman & Obstfeld, 2009).

Other research has also investigated the appearance of multinational corporations that do not fit into traditional trade theories (Van Marrewijk *et al.*, 2007). These companies have developed an increasingly large share in world production, investment and trade flows. Most foreign direct investment (FDI) occurs when these companies form mergers and acquisitions within the same industry. These mergers and acquisitions will most likely occur within countries with similar economic conditions, while national companies will dominate countries that are distinctly different in size or factor endowment.

It is possible to link theories on multinational corporations to the trade in services, with the view that the parent companies own knowledge-based assets that they transfer or export to subsidiary companies in other countries (Markusen, 1995). These multinational companies usually trade in knowledge-based assets (for example, providing the subsidiary with a workable marketing plan or production plans) and goods and production inputs sometimes accompany the trade of these knowledge-based assets.

While many of the trade theories incorporate both products and services, some researchers have attempted to formulate theories to explain the factors that determine services trade. According to Hill (1977), services are different to products because of the way in which they are exchanged. His study demonstrated that the provider of the services must move to the location of the consumer of the services, or vice versa. This indicates that trade in services requires the proximity of the supplier and the buyer. Therefore, factors such as distance place an additional cost or cost burden on certain modes of services supply. This phenomenon is referred to as the "proximity burden" (Christen & Francois, 2010).

However, with technological changes came newly developed methods to supply services electronically and the proximity burden became irrelevant in some instances. Bhagwati (1984) studied this change and found that trade in services may increase owing to the incentive to splinter the production chain geographically. This is termed "fragmentation" in the more recent literature (Francois & Hoekman, 2010). Fragmentation in turn leads to changes in the pattern of trade as more of the "production" activities for both product inputs and services are outsourced to lower-cost/lower-wage sources.

Given the above studies, it is evident that the trade theories on services are very limited and that only a few researchers have formulated theories that are directed specifically at services. The following section will provide a broad overview on other literature on services.

2.2.5 An overview of the literature on services

According to Markusen, Deardorff and Irwin (2005), most of the literature up to the late 1980s aimed only at defining services and services trade, which proved to be a difficult task owing to the complicated nature of services (see section 2.3). The focus moved towards creating an international classification system for services and this resulted in the formulation of the WTO's GATS in the 1990s. This also acted as the platform for countries to identify the barriers that were experienced in trade in services and through the GATS process, WTO member countries were urged to open their markets for services trade. As a result, member countries made commitments regarding the trade in services to indicate the openness of their markets for the different services. The GATS platform also gave rise to the various modes of supply through which each service can be traded (see section 3.4.1).

The global drive to open markets for services initiated two areas of research. The first area of research focused on the advantages and disadvantages that liberalisation of services trade could hold for countries, and the reasons that countries should commit to opening their markets under the GATS (Mattoo, 1998; Hodge & Nordås, 2001; Hodge, 2001; Copeland, 2002; Steuart & Cassim, 2005). These studies have served to inform governments of the potential source of revenue that the services sector holds for their economies. Increasing services exports thus became a method by which to enhance economic performance (Daniels, 2000).

The second area of research focused on the different methods of measuring trade barriers to services (Warren & Findlay, 1999; Brown & Stern, 2000; Dee, 2001; Deardorff & Stern, 2008). This area of work was initiated by the pioneering work of Hoekman (1996), as well as Hardin and Holmes (1997), and was continued in different directions of measurement (see section 5.2.3.2). The different measurement techniques were developed in order to find a means of opening markets for services and providing trade negotiation platforms for governments. Dee (2001) is of the opinion that research should move the focus of services to the "negotiating priorities" in order to maximise the final benefits, as the services sectors plays a major role in most countries and the risk of incorrect policy formulation can be significant.

Parallel to this research was also an investigation into the internationalisation process of services in order to establish differences between the process for services and that of products and what services companies need in order to internationalise successfully. Vandermerwe and Chadwick (1989), Erramilli (1990), Braga (1996), Roberts (1999), Samiee (1999) and Cuadrado-Roura (2010), for example, directed their research away from the macro-economic focus of most of the other researched company-specific issues and trends in the internationalisation process of services. These studies focused on the different market entry methods that service sectors use and the various factors that have an influence on the exports and internationalisation behaviour of services companies. Most of these studies found that the process of exports and internationalisation of services companies is different to manufacturing companies because services are delivered in a different way. Many services companies do not own large amounts of capital goods and do not produce high-value physical goods. Therefore, exporting services entails a different process to exporting goods (Ekeledo & Sivakumar, 2003).

As services exports differ so significantly from product exports, it raises the question of whether governments, in their attempt to increase export figures, should support services in exactly the same way as products. Governments perform export promotion activities in order to create more opportunities for exports and therefore increase trade figures (Gillespie & Riddle, 2004). If exports of products and services differ greatly, then the export promotion activities and instruments of governments should effectively allow for these differences.

The study focuses specifically on the manner in which the South African government should structure its export promotion activities to promote services export by reviewing the guidelines in the literature and by determining what other countries are doing in this regard (see sections 4.2, 4.3 and 4.4). The objective of this is to identify export opportunities for the services sector that can be used by the government to maximise the benefit that the country could gain from increased exports in services. Before this can be detailed, it is important to understand the nature of services. For this reason, the definition of “services” will be considered in the following section.

2.3 A standard definition of “services”

In the economic literature, there has not been a widely accepted definition of “services” owing to the nature of the services sector. The services sector consists of various kinds of

services pertaining to very different markets and this makes it difficult to define “services” as a whole (Fieleke, 1995; McLachlan, Clark & Monday, 2002).

Traditionally, “services” were defined as the “residual” economic sector (ASR, 2007). Under this definition services consists of all economic activities other than mining, manufacturing, and agriculture, forestry and fishing. Therefore, services were defined by what they are not, or in economic terms any activity that forms part of the tertiary sector. However, Wolfe (1955) already debated the various definitions of the primary, secondary and tertiary sectors and suggested that some of the services that are included in the typical descriptions of the tertiary sector also form part of the primary and secondary sectors as support services. For practical purposes, the South Africa Reserve Bank (SARB) differentiates the three sectors in its reports as follows (SARB, 2010).

- Primary sector:
 - agriculture, forestry and fishing;
 - mining and quarrying;
- Secondary sector:
 - manufacturing;
 - electricity, gas and water supply;
 - construction (contractors); and
- Tertiary sector:
 - wholesale and retail trade, catering and accommodation;
 - transport, storage and communication;
 - finance, insurance, real-estate and business services;
 - community, social and personal services.

Other traditional definitions of services assume that the services sector produces “non-tradable” goods (Francois, 1990; Grönroos, 1999). This assumption is based on the idea that services require direct and physical interaction between the producer and the user. An example of the interaction between producer and user is a hairdresser cutting a client’s hair. The service is performed immediately; therefore, the producer and the user interact directly with no delay (Oyewole, 2001). Policymakers thus did not view services as an integral part of the economy and associated services with the informal sector of the economy, which consists of part-time and low-skilled jobs.

Gallouj (1998) refers to services as the world of those who are said to produce nothing useful. In historic times, priests and servants provided services, and in more recent times services were considered only basic and informal in nature such as pizza delivery services and the services offered by sales representatives. Even the services of consultants and professors were included in this view (Gallouj, 1998).

The perception of services changed as the important role of services became more evident. Services have been found to include a very broad range of economic activities and are normally described as “intangible” or something that cannot be stored (Kostecki, 1999). Services are thus broadly defined as products that cannot be seen or touched, for example banking, tourism, or telecommunication services (Marchetti, 2007).

Services play a crucial role as a support industry to the manufacturing and other sectors. Warren and Findlay (1999) describe “services” as an economic activity that adds value to another “economic unit” or product. For example, financial services and transportation services are crucial to the manufacturing process and to the exports of products.

Howells (2000) is of the opinion that services should not be regarded merely as supporting but as an industry on its own. For instance, the banking sector acts as a support service to many other sectors, but the banking sector in itself is also a tradable service and produces a “product” of its own (Daniels, 2000). Therefore, a service can serve as support for a product that is being exported, and the same service could be exported to the same or a different market.

McLachlan *et al.* (2002) summarise the common features of services as follows:

- intangibility or immaterial (anything sold to a buyer that cannot be “dropped on your foot”), for example telecommunication networks or education;
- non-storability and non-transferability, for example travel, consulting services or hair cuts that cannot be stored in a container or warehouse, and cannot be physically transferred or resold to another buyer; and
- direct interaction between the producer of the service and the consumer, for instance a sporting match is “consumed” as it is “produced”.

Under the GATS Agreement, “services” is officially defined as follows (WTO, 1994):

- (a) ‘Services’ includes any services in any sector except services supplied in the exercise of governmental authority;
- (b) ‘a service supplied in the exercise of governmental authority’ means any service that is supplied neither on commercial basis, nor in competition with one or more service suppliers.

The *Manual on Statistics of International Trade in Services* (MSITS) published by the United Nations (UN), WTO, European Commission, International Monetary Fund (IMF) and OECD defines “services” as (UN, 2002):

“There is a group of industries, generally classified as services industries that produce outputs that have many of the characteristics of goods, i.e. those concerned with the provision, storage, communication and dissemination of information, advice and entertainment in the broadest sense of those terms [...] that can be traded like ordinary goods. Whether characterized as goods or services, these products possess the essential characteristic that they can be produced by one unit and supplied to another, thus making possible the division of labour and the emergence of markets.”

The definition of “services” mainly depends on the function of the service in a specific transaction, whether the service itself is traded or if the service acts as support to another trade transaction. Therefore, the same service can be classified differently. The notion of classifying services into categories that defines their nature evolved in the 1980s. The various methods of classification will be discussed in more detail in the next section.

2.4 The classification of services

There have been various classification schemes of services in the literature. Four of these methods will be discussed in this section.

2.4.1 Hard and soft services

The first classification scheme is the differentiation between hard and soft services. Hard services are those that require limited or no local presence by the producer and of which consumption is separate from production. The services can be used at any time after having been “produced”, for example architectural design, education, life insurance and music. In contrast, soft services are those that require the presence of the producer and for which

production and consumption occur simultaneously, such as food services, health care, laundry and hotel services (Erramilli, 1990).

2.4.2 Consumer and producer services

The second classification scheme categorises services into consumer services and producer services with reference to the different sectors that will typically use such a service (McLachlan *et al.*, 2002). Consumer services are those sold to the final consumer directly for his/her personal use, for example, entertainment services or personal services such as hairdressing and beauty treatments. Producer services are those provided to the producer of goods or services as a support service, such as cleaning, communication, financial, computing and other business services (Francois, 1990). Therefore, a producer service is a support service to the producer throughout the process of production.

However, with this classification scheme there is some overlap in classification of services, as some sectors may match the description of both classifications, for example banking services are a consumer service to individual users but are also a producer service to companies in the manufacturing sector.

2.4.3 General Agreement on Trade in Services classification of services

The third classification scheme is that provided by the GATS in 1991 and is the most commonly used classification scheme of services. The GATS was agreed to during the Uruguay Round of the World Trade Organization (WTO) multilateral trade negotiations and came into force in 1995 (WTO, 2005). The GATS is the first multilateral agreement to cover world trade in services and it established a framework of rules governing the conduct of trade in services globally. It is supported by a number of commitments undertaken by member countries of the WTO in specific services sectors, which prevent members from changing any domestic laws that could establish barriers to entry for services traded (WTO, 1994; Chang, Karsenty, Mattoo & Richtering, 1998; WTO, 2005). An example of the commitments made by member countries is explained in section 5.2.3.2.1.

The GATS Agreement provided a services classification scheme by which services are divided into twelve main sector classifications. This scheme groups services together according to similarity in function. The twelve main sectors are (WTO, 1991):

- business services;
- communications services;
- construction and related engineering services;
- distribution services;
- educational services;
- environmental services;
- financial services;
- health-related and social services;
- tourism and travel-related services;
- recreational, cultural and sporting services;
- transport services; and
- other services not included elsewhere (n.i.e.).

These sectors are then further divided into 160 sub-sectors by differentiation with the various services sectors. For example, the first classification for business services is further divided into the following (WTO, 1991):

- professional services (with an additional eleven sub-sectors);
- computer and related services (with five more sub-sectors);
- research and development services (with three sub-sectors);
- real estate services (with two sub-sectors);
- rental/leasing services with operators (with five sub-sectors); and
- other business services (with twenty sub-sectors).

The next classification is for communications services, which is then also divided into sectors and sub-sectors. This method is followed for all twelve main services classifications. (The complete list of the various sectors and sub-sectors as classified by the WTO is given in Appendix A).

The sector classification according to the GATS has helped to identify the various sectors involved more clearly when describing the services sector. It is clear that services cannot be viewed as the informal sector of producers as was the case in the traditional economic literature (as discussed in section 2.3). Therefore, the role of services is a far more integral part of the overall economy of a country and needs to be recognised by governments as such.

Another classification scheme was developed with the goal to aid the collection of services data, the Extended Balance of Payments Services (EBOPS) classification scheme, as developed by the UN, OECD, Eurostat and the IMF (UN, 2002). This classification scheme will be described in the following section.

2.4.4 Extended Balance of Payments Services Classification

The UN, OECD, Eurostat and the IMF collaborated in 1996 to compile a more detailed classification scheme for services than what was published in the fifth edition of the *Balance of Payments Manual* (BPM5). The list was named the EBOPS Classification and was intended for use by member countries in order to record transactions between residents and non-residents in a more detailed manner (UN, 2002).

The EBOPS Classification allows data to be collected in the format that is required by the GATS. The various services sectors are divided into eleven main sectors and each of these are broken down into sub-sectors and even sub-sub-sectors in some instances, for example other business services (section 9, Appendix B). This system provides 61 sub-sub-sectors and is the most detailed classification scheme for reporting data. (The full EBOPS Classification is provided in Appendix B.)

The various classification schemes have aided the uniform classification of collected data on trade in services.

2.5 Conclusion

The objective of this chapter was to provide the theoretical background to this study. The importance of international trade has become the focus of much research, as an increase in exports brings about economic growth for countries. This is also the reason that many governments are actively involved in promoting exports in order to increase trade figures.

In recent years, the importance of trade in services has increased substantially, as the services sector grew to 70% of global GDP in 2007. Therefore, the various trade theories were briefly evaluated in section 2.2 in order to determine the manner in which these relate to and have been applied to the services sector. This section also reviewed the trade theories that have been developed specifically for services in section 2.2.4 and provided an overview on the existing literature on services in section 2.2.5.

It was found that services trade differs greatly from product trade owing to the nature of services. This raised the question of whether the South African government should use the same export promotion instruments it uses for products. This study therefore sought to determine the manner in which the South African government should structure its export promotion instruments and strategies in order to maximise the benefit that the country could gain from trade in services. An initial step in determining this was to provide a clear understanding of what is meant by the services sector. To this end, section 2.3 provided a summary of different definitions of “services” as given in the literature. This section established that defining “services” is very difficult, as there are many different sectors, each with their own characteristics. Furthermore, it was found that it is not possible to define “services” according to the specific activities involved, as some services sectors provide a service to other sectors in addition to trading the service itself.

The difficulty of defining “services” gave rise to the notion of classifying services according to similar characteristics. The various classification schemes were briefly explained in section 2.4. The most well-known classification scheme is the GATS classification of services, as explained in section 2.4.3. Another commonly used classification scheme is the EBOPS Classification developed by the UN, IMF, Eurostat and OECD, as explained in section 2.4.4.

The following chapter will provide an in-depth view of the role that services trade play both internationally and in South Africa. This is necessary, because it is important to understand the reason why the South African government should intervene in the exports of services and include it in their export promotion activities. This will lead to Chapter 4, which will focus on the export promotion of services, establishing guidelines from the literature and the activities of international organisations.

CHAPTER 3

THE ROLE OF SERVICES TRADE INTERNATIONALLY AND IN SOUTH AFRICA

3.1 Introduction

Services play an important role in the growing global economy and account for the majority of production and employment in most industrialised countries (McLachlan *et al.*, 2002). It was established in the previous chapter that the services sector has no clear definitions (see section 2.3) and, at best, classification schemes were created to group services sectors according to similar characteristics (see section 2.4). Therefore, it is necessary to understand the role that services play in the global economy. The important role of services in economies has led to the global drive for liberalisation.

Liberalisation of services globally holds benefits for both developed and developing countries. Clements-Hunt (2004) claims that the technology that allows companies in developing countries to deliver services to foreign export markets will also enable foreign providers to deliver services to the local economy. Thus, domestic services companies need to formulate strategies to compete within a global context, even if they do not export themselves.

The main objective of this chapter is to contribute to a better understanding of the role that trade in services plays internationally and in South Africa. The chapter will discuss growth of international trade in services in section 3.2. It will also discuss the barriers experienced in trading in services internationally in section 3.3, as well as various problems experienced by governments and policymakers in collecting data on services and the measurement and recording of services data in section 3.4. The benefits of liberalising services trade and the international organisations involved in the liberalisation of services trade will be considered in sections 3.5 and 3.6. The role of services in the South African economy and its trade in services will be discussed in sections 3.7 and 3.8.

3.2 The growth of international trade in services

World trade in services has increased dramatically in recent years. The total exports of services globally amounted to USD 3.4 billion in 2009, constituting 22% of total world exports. The average growth rate of services exports has been 7.6% per year since 1980 (UNCTAD, 2010). The continued growth in internationalisation of services is expected and it has been predicted that by 2020 services trade will constitute more than 50% of world trade (Clements-Hunt, 2004).

Developing countries accounted for 25% of global exports in services in 2004, mostly originating in the growing Asian economies, such as India, China and Hong Kong (Mayer, 2005). The 2007 Trade Map data shows similar statistics (ITC, 2010a).

Services no longer just add value to a product in a trade transaction according to Lusch, Vargo and O'Brien (2007). They claim that trade in the last few decades has not only been about the product but also about the seller applying certain competencies or abilities to the product for the benefit of the buyer, thereby also benefiting themselves. Therefore, in general, trade has become a service exchanged for another service, and the product is only the method by which these services are transferred. Therefore, companies have changed their trade and marketing approaches towards a "services-dominated" perspective, and have moved away from the traditional "goods-dominated" perspective. During this process, companies, especially multi-national companies, have started to notice the benefits of outsourcing certain business functions to countries where labour costs are less expensive or where certain expertise are concentrated (Lusch *et al.*, 2007).

Francois and Hoekman (2010) on the other hand state that governments should move away from the traditional manufacturing industries and focus on the services that can provide differentiation in their economies, which in turn can expand employment and economic growth. According to Hocking and McGuire (1999), the dramatic growth in services trade in their study was mostly due to the increased tradability of services, which was accompanied by reduced economic distances, which in turn was brought about by the development of the Internet and information technology. Increased demand worldwide and greater services standardisation also played a major role.

Technology has made a considerable difference to the way in which many services are delivered. A large number of services can now be traded via information-based technology

without the provider and user being in physical contact with each other. According to Francois and Hoekman (2010) the large services markets in many countries has been driven by changes in information technology, and this provides scope for more cross-border trade in services. Telecommunications make it possible that some services can be provided on-line, or via the Internet, where there is no direct contact between the services supplier and the consumer (Van Marrewijk, Stibora & De Vaal, 1996). Hence, there is the possibility of developing these sectors in developing countries for the cost benefits associated with large companies. The top fifty services exporting countries in 2009 are shown in Table 3.1 below.

Table 3.1: Top fifty services exporting countries

RANK	COUNTRY	2009*	RANK	COUNTRY	2009*
1	USA	497,870,016	26	Turkey	33,218,000
2	UK	233,340,000	27	Chinese Taipei	30,920,000
3	Germany	231,260,000	28	Thailand	30,164,900
4	France	143,470,000	29	Poland	28,945,000
5	China	129,549,000	30	Malaysia	27,932,552
6	Japan	128,340,000	31	Brazil	27,728,300
7	Spain	122,912,000	32	Finland	25,702,200
8	Italy	102,637,000	33	Portugal	22,774,000
9	Ireland	96,795,600	34	Israel	21,872,700
10	Netherlands	93,359,800	35	Egypt	21,519,800
11	Singapore	90,920,400	36	Czech Republic	20,314,200
12	Hong Kong, China	86,363,368	37	Hungary	18,235,700
13	India	86,255,256	38	Macao, China	17,131,872
14	Belgium	81,280,800	39	Lebanon	16,883,500
15	Switzerland	70,472,000	40	Mexico	15,423,300
16	Sweden	61,248,600	41	Ukraine	13,859,000
17	Luxembourg	61,150,800	42	Indonesia	13,778,800
18	Canada	59,077,100	43	Morocco	12,500,100
19	Republic of Korea	58,512,800	44	South Africa	12,010,300
20	Denmark	54,891,800	45	Croatia	11,890,000
21	Austria	53,146,200	46	Kuwait	11,348,000
22	Russian Federation	41,656,700	47	Argentina	10,906,700
23	Australia	41,396,516	48	Philippines	10,101,000
24	Norway	38,196,400	49	Cyprus	9,883,760
25	Greece	37,788,600	50	Romania	9,755,000

* Unit: USD in thousands at current prices

Source: ITC (2010a)

The table shows that there are very few developing countries amongst the top 25 services exporting countries. Many developing countries only start featuring from the 26th position and

Fourie (2008) is of the opinion that most of these countries only perform well because of their travel services sector (tourism). Therefore, much still needs to be done for developing countries to increase and diversify their services exports in other sectors.

In order to overcome this scenario, developing countries could instigate growth in services trade in various ways. Some business functions of multinational companies could be moved to developing countries where labour costs are lower. This will then attract FDI to these markets, which in turn could lead to increased economic growth (Barreto, 2008).

Mattoo and Stern (2008) found that the growth in services trade in developing countries has shown faster growth rates than developed countries. Their share in world exports of services increased from 14% between 1985 and 1989 to almost 20% between 1998 and 2002. The same study shows that most developing countries supply services via cross-border sales (mode 1 of the GATS), tourism (mode 2 of the GATS), and movement of services providers abroad (mode 4 of the GATS). Services companies in developing countries also do not invest in other markets by establishing foreign affiliates or subsidiaries according to mode 3 of the GATS.

Oyewole (2001) developed a shift share projection model with which he was able to predict the average exports of services for developing countries. According to his results, total services exports from developing countries are likely to increase at an average growth rate of 10% after 2010. For developing countries to be able to achieve a 10% or more rate of growth annually, a major shift of focus needs to take place in governments and in the private sector. Initiatives need to be undertaken to make this growth potential a reality in the various sectors of the services sector.

In order to do so, research in many areas needs to be conducted to inform governments and the private sector, for example the restrictions that exist in services trade. There are many restrictions to services trade globally. Most of these are related to restrictions imposed by governments, but also to a lack of training and awareness of companies. The restrictions most relevant to this study are outlined in the following section.

3.3 The restrictions experienced in trade in services

There are many restrictions to trade in services for companies and government institutions, as the nature of services differs greatly from products. Companies that provide services abroad face restrictions when entering into foreign markets where the governments wish to protect their local industries from high levels of competition. Most of the restrictions implemented by these governments are discriminatory in nature (Hoekman, 1996; Stern, 2000), usually taking the form of price-based instruments, strict standards, licensing and procurement procedures, and discriminatory access to distribution networks. Government restrictions generally relate to public monopoly structures, such as telecommunications services and railroads, or an oligopolistic market structure found in financial services, transportation and other professional services (Hoekman, 1996).

There have been attempts to collect information on these restrictions, but this is difficult, as they take a non-tariff barrier form and are difficult to quantify. Fieleke (1995) found that most of the restrictions are justified on the basis of national welfare, security, health and safety, and these barriers mainly obstruct cross-border movement of suppliers and consumers (mode 1 and 2 of the GATS). He uses an example of suppliers that are not allowed to travel to their consumers owing to the limits on the quantity of workers allowed into a country on temporary contracts.

Other restrictions experienced in international trade of services include the following (Baker *et al.*, 1998; Grönroos, 1999; Samiee, 1999; Langhammer, 2000):

- Most services companies are very small with limited resources and are unable to establish international credibility in order to be considered competitive.
- Services companies tend to be smaller in nature and some are only able to supply in the demand in the domestic markets.
- Companies have too little knowledge about exporting and therefore do not attempt it.
- Language and cultural differences are perceived as barriers to trade.
- Some services engage government departments and these departments do not focus on the international arena and therefore lack the necessary expertise, for example the water and energy provision of governments usually focus on the domestic markets only.
- There are limits on international transmission of data, also known as transnational data flows (TDF). For example, in 1998, the European Union's (EU) TDF laws took

effect, by which the transmission of data pertaining to EU citizens sent to countries whose laws do not offer the same level of protection is forbidden, and

- In many cases, the WTO countries have simply ignored their commitments (see section 3.6) on liberalisation and have merely labelled them as “indefinite” or to be attended to in future negotiations.

Other restrictions on services trade are due to the lack of accurate data on services trade, which affects the accuracy of decision-making and formulation of strategies by companies and governments. As bilateral trade data is not available, market selection is difficult. It is also difficult to measure government restrictions, as they do not take the form of tariffs.

Developing countries, in particular, have shown various structural deficiencies, which adds to the increase of barriers in an attempt to protect uncompetitive local industries (Hodge, 1997). The methods with which services trade data are measured and recorded, especially in developing countries, also pose problems. If data is measured incorrectly it could lead to misinterpretation of the restrictions on services trade. This will be discussed in more detail in the following section.

3.4 Difficulties in the measurement and recording of services data

In the process of developing economic-growth strategies, most governments in developing countries have moved away from import substitution strategies, where extensive trade barriers are used to protect domestic industries from import competition. These countries have started to move more towards an export-led growth strategy, which is outwardly oriented and focuses on promoting growth through the exports of goods and services (Marin, 1992; Jordan & Fiona, 1998; Carbaugh, 2008).

Traditionally, services were viewed as a domestic “product” produced only for use by the participants in the local economy (Grönroos, 1999). It has however been determined in recent years that services have a far more important role in the economic growth of countries and that services contribute to job creation, economic and trade diversification, economic development and ultimately economic growth (Francois, 1990; Kay, Pratt & Warner, 2007; Marchetti, 2007).

Countries can no longer only focus on developing their manufacturing industries in order to promote growth in manufactured products. Services can assist in providing an infrastructure

that enables companies to export and grow. Services as a “product” in itself should also be developed and exported with the same effort as manufactured goods (Mayer, 2005).

Owing to a lack of awareness, many services companies do not record their services correctly. Many companies are not aware that services are seen as exports, as services are often linked to the exports of goods, for example finance and insurance, and the statistics of these services are recorded incorrectly (Rienstra, 2005; Marchetti, 2007). Many services are also included in a package for their buyers so that they offer more than a product to their buyers. The accompanying services increase the value of the product, such as training and after-sale services. The trade data on these transactions is captured as a whole and therefore the services trade itself is not recorded separately. The same problem arises with regard to the data for intra-corporate trade in services, as many companies do not have the data infrastructure in place to capture this data (Clements-Hunt, 2004).

The measurement of the data on trade in services of one country with another country for statistical purposes is complicated owing to the intangible nature of services. The modes of supply according to the GATS provided a possible solution, as will be discussed in the section that follows.

3.4.1 General Agreement on Trade in Services: Modes of supply

The GATS Agreement identified four modes of supply, which represent the different forms in which an international trade transaction in services can take place. Services can be classified and measured by the location in which the supply of the service takes place. Therefore the idea is that the data on services trade be captured in this format, whereby the different trade restrictions can be linked to the mode in which the service is provided.

The modes of supply are summarised in Table 3.2 (derived from WTO, 1994; Hoekman, 1996).

Table 3.2: General Agreement on Trade in Services: Modes of supply

MODE OF SUPPLY	SUPPLIER PRESENCE	CRITERIA
Mode 1: Cross-border supply	Services supplier is not present within the importing country	The exporter of the services provides the service to the importer without leaving the exporting country
Mode 2: Consumption abroad	Services supplier is not present within the importing country	The exporter of the services provides the service to the importer in the exporting country
Mode 3: Commercial presence	Services supplier is present within the importing country	The exporter provides the services to the importer by establishing a commercial presence in the importing country
Mode 4: Presence of natural person	Services supplier is present within the importing country	The service is exported by a natural person that enters the importing country to deliver the service

Source: Author's interpretation of WTO (1994); Hoekman (1996)

To summarise Table 3.2, the services supplier becomes more directly involved in the target market with the progression of the modes from 1 to 4. This also implies an increase in risk for the exporter. The modes of supply are explained below.

- **Mode 1: Cross-border supply**

Mode 1 includes services transactions such as consultancy, distance training or Internet-provided services. For example, when a company e-mails a market research report or an architectural drawing to another company abroad, only the service itself crosses the border and no service supplier is physically involved (Clements-Hunt, 2004; WTO, 2005).

- **Mode 2: Consumption abroad**

Mode 2 involves the actual movement of the consumer or end user of the services, for example tourists or a visiting businessperson to the exporting country. These consumers literally consume services within the exporting country's market. The GATS Agreement also state that an activity such as a ship repair abroad, where only the property (ship) of the consumer moves to the exporting country, is also covered in mode 2 (WTO, 2005).

- **Mode 3: Commercial presence**

Mode 3 entails the establishment of a company from one country in the territory of another in the form of joint ventures, partnerships, representative offices and branches, for example a temporary construction project office. This mode refers especially to any financial and professional services (WTO, 1994; Chang, Karsentry, Mattoo & Richter, 1998).

This third mode of supply is different in nature to the traditional understanding of international trade where a product or service is traded from the producer to the consumer. Sapir and Winter (1994) explain this mode of supply as related to permanent factor movements, which in turn means FDI or labour migration. Therefore, FDI plays a crucial role in international services transactions, and Nicoletti, Golub, Hajkova, Mirza and Yoo (2003) find that when governments structure policies on FDI, the services sector needs to be integrated in the policy structures.

- **Mode 4: Presence of natural persons**

Mode 4 requires the presence of natural persons, which is where the provider/supplier of the services travels from his/her country to supply services in another country. An example is an engineer who is transferred temporarily to a foreign branch of the parent company. Another example is foreign consultants or the employees of a foreign services supplier being sent abroad to fulfil a services contract (WTO, 2005; Chang *et al.*, 1998).

The modes of supply are similar to the traditional methods of market entry discussed in the literature, where exporting companies move from no involvement in the target market to indirect and direct exporting, then to forming joint ventures, and eventually to creating sole ventures and licensing agreements (Argarwal & Ramaswami, 1992; Andersen, 1997).

The purpose of the modes of supply is therefore to ease the measurement of, and the reporting on, the various services sector activities, especially trade activities.

Despite all the changes in the measurement and recording of the data on services, changing the mindset of governments and private sector is still crucial. Francois and Hoekman (2010) found that governments do not apply these new methods correctly when collecting data and that they find shifting their focus from a “product view” of the world to a wider view of trade strategies and export promotion instruments challenging. Francois and Hoekman (2010)

suggest that governments should shift their focus more towards the services sectors to find new potentially comparative advantages for their economies.

Francois and Hoekman (2010) also suggest further research to investigate the interaction amongst specific services sectors and the modes of supply. For example, accounting services are provided mostly through modes 3 and 4, whereas health services can be provided through all modes of supply, and these interactions can determine which policies are relevant to which services sectors and which policies provide barriers to trade in services. This is another reason that it is important to investigate export promotion of services in more depth, as will be done in Chapter 4. Most of the services of the services sectors can be delivered by all four modes of supply in one form or another. The export promotion instruments of a country should aim to differentiate amongst the different modes of supply for each services sector, and therefore have four different strategies for each sector to address the issues involved in each. This will be explored in Chapter 7 in more detail.

Despite the development of the modes of supply and the resulting benefits they hold for trade promotion organisations, the problem of data quality and availability still places limitations on the activities they can perform. There are various problems in the measurement of trade in services and some of these will be discussed in the following section.

3.4.2 Measuring trade in services

While the manner in which services are delivered is defined by the modes of supply, as explained in section 3.4.1, the difficulties regarding the measurement of services have remained. If services are measured and recorded correctly, it is possible to gain information on the size of services trade in comparison with total trade in a country and the contribution services trade plays in the overall GDP of a country. Owing to the nature of the services, however, many services are not recorded correctly.

In the health services sector, for example, many patients travel to other countries to undergo health-related surgery owing to lower prices. Many of these health services are not recorded as an export of health services, but as part of tourism as the patient is only recorded as a tourist entering the country. The purpose of his/her visit is not captured (Barreto, 2008). Another example is services used as inputs to the production process, such as an iPod sold

by Apple but produced in Asia by a variety of companies. When Apple pays these companies for their services it might be documented as an import of either goods or services, depending on the nature of the contract between the various parties (Feenstra, Lipsey, Branstetter, Foley, Harrigan, Jensen, Kletzer, Mann, Schott & Wright, 2010).

The correct measurement of services trade becomes difficult to record in developing countries. Many developing countries do not record their balance of payment figures according to the latest IMF guidelines (see section 3.4.3) and therefore the statistical quality of the reported figures is questioned (Barreto, 2008). Many companies do not record their specific services transactions in their financial statements correctly, and this is the largest source of information for the statistical compilation of balance of payment data. Some companies do not specify certain services that they have delivered, as they may form part of an overall project or product export process. This may occur because companies sometimes bundle their products and services together in a package in order to provide a unique offer to the final buyer (Horn & Shy, 1996). Maurer, Marcus, Magdeleine and D'Andrea (2008) found that there is a lack of bilateral and multilateral trade data for services and there is no geographical allocation of the types of services supplied and demanded by each country. This poses a problem when performing analytical work on services trade.

Despite the difficulties of measuring trade in services, there have been attempts at improving the recording systems of services trade globally. This has been undertaken by various international organisations, such as the WTO, the World Bank and the IMF, and the work done by these organisations has assisted in developing a better understanding of the role of services in the world economy.

It has been established that services trade has been growing at a faster rate than merchandise trade in recent years (Kay *et al.*, 2007; Gabriele, 2004; Mattoo & Stern, 2008). For this reason the recording and measurement of trade in services must become more accurate. The IMF therefore changed the method in which balance of payments data needs to be collected and this will be discussed in more detail in the following section.

3.4.3 Balance of payments recordings according to the International Monetary Fund

Balance of payments statements report any economic activity between a country and the rest of the world during a specific period. Until the end of 2009, all balance of payments

entries were recorded according to the BPM5 developed in the 1990s. The eleven main services sectors that need to be reported on are given below (IMF, 1993).

- **Transportation**

Transportation includes freight and passenger transportation by all modes of transportation and other related distribution services, including the rental of transportation equipment with operating crew.

- **Travel**

Travel includes goods and services acquired from an economy by non-resident travellers for business and personal purposes during their visit to the specific economy. Students and medical patients are also treated as travellers.

- **Communications**

Communications services constitute any communication transactions between residents and non-residents, including postal, courier and telecommunications services.

- **Construction services**

Construction services cover construction and installation projects that are performed on a temporary basis in another economy abroad. This does not include work performed by a foreign affiliate branch.

- **Insurance services**

Insurance services entail insurance cover provided to non-residents by local insurance companies and vice versa, which includes freight insurance, direct insurance (life and non-life), as well as re-insurance services.

- **Financial services**

Financial services include financial intermediation services and auxiliary services conducted between residents and non-residents, including commissions and fees for letters of credit,

lines of credit, leasing services, foreign exchange transactions, credit services, brokerage services, underwriting services, services surrounding hedging instruments, financial market regulatory services and security custody services.

- **Computer and information services**

Computer and information services involve transactions between residents and non-residents relating to hardware consultancy, software implementation, and information services such as data processing, as well as maintenance and repair of computer and related equipment.

- **Royalties and licensing fees**

Royalties and licensing fees include receipts by exporters and payments by importers for the authorised use of intangible, non-produced, non-financial assets and proprietary rights such as trademarks, copyrights, patents, processes, techniques, designs, manufacturing rights, franchises and licensing agreements.

- **Other business services**

Other business services are those provided by residents to non-residents and vice versa and involves trade-related services, operational leasing services, and miscellaneous business, professional and technical services.

- **Personal, cultural and recreational services**

Personal, cultural and recreational services cover audiovisual and cultural services provided by residents to non-residents and vice versa. These include motion pictures, radio and television programmes, as well as musical recordings. This area also includes services associated with libraries, museums, and other cultural and sporting activities.

- **Government services not included elsewhere**

Government services not included elsewhere refers to all services associated with government-related sectors or international and regional organisations not included in any of the other service items.

The BPM5 guidelines indicate that the eleven services sectors outlined above are to be recorded under the current account, which records the broad inflows and outflows of an economy. The recording of these transactions have to be based on the double-entry system, according to which two entries with equal value must be recorded for each transaction (a debit and a credit entry) and where any transaction is only recorded once the “economic value” has been created, transformed, exchanged, transferred or extinguished (IMF, 1993; UN, 2002).

Transactions in the services sectors are usually recorded when the services are delivered or received, or in some cases there may be pre-payments or post-payments for services such as freight, insurance and port services. The BPM5 holds certain limitations for the GATS, especially regarding the modes of supply (as described in section 3.4.1). For example, under mode 3 of supply (commercial presence through investment) affiliates are normally established abroad to perform certain tasks in a specific market. These transactions are however recorded in the balance of payments of the host country, as these affiliates are viewed as entities in the host country. Therefore, their sales of services are not recorded in the balance of payments of their home country (UN, 2002). Another example concerns mode 4 of supply (movement of natural persons), according to which individuals who live abroad for one year or more are regarded by BPM5 as residents of the foreign country. Therefore, their transactions are not included in the balance of payments of their home country.

In 2009, the IMF finalised the sixth edition of the *Balance of Payments Manual* (BPM6) and published it officially in 2010 (IMF, 2009). The manual makes extensive changes to the method in which countries collect and report services data. The BPM6 seeks to accommodate the substantial information needs of governments, research institutions and analysts. The manual is based on the classifications provided by the MSITS (UN, 2002). The MSITS breaks services down into what is known as the EBOPS Classification, as was discussed in section 2.4.4.

The BPM6 adopts the EBOPS Classification and requires countries to report their balance of payments data in a new format. The areas in which data have to be reported have been changed to the following (IMF, 2009):

- manufacturing services on physical inputs owned by others;
- maintenance and repair services n.i.e.;
- transport;
- travel;

- construction;
- insurance and pension services;
- financial services;
- charges for the use of intellectual property n.i.e.;
- telecommunications, computer and information services;
- other business services;
- personal, cultural and recreational services; and
- government goods and services n.i.e..

These areas are much more specific to certain services sectors and the collection of the data will need to be more specific as well. The new manual also stipulates that manufacturing operations that are undertaken by a company that does not own the physical goods involved and that is paid a fee by the owner of the goods to perform a certain function in the production process should be regarded and thus treated as a service.

The improvement of the recording of services data will better assist researchers in understanding the scope of services trade, which will also assist in better policy- and decision-making by governments and trade promotion organisations. As countries develop strategies to liberalise their markets for services, they wish to do so with a proper set of data and information in mind. In the past, many governments protected their local services sectors, as these services were mostly provided by public entities or monopolies (Francois & Hoekman, 2010). However, as the domestic markets for services changed and included more competition, countries have realised the need for trade in services, to benefit their local service providers as well as their consumers. Therefore, these countries have realised the benefits of liberalisation of services trade, as will be discussed in the following section.

3.5 Benefits in liberalising services trade

It is due to many of the restrictions experienced in the services sector that various organisations are seeking to promote services liberalisation and the removal or reduction of these restrictions. The liberalisation of trade in services holds many economic benefits for a country. Hertel (2000) performed a study on the welfare impact of liberalisation in developing economies and economies in transition. He found that trade liberalisation in agriculture, manufacturing and services showed a welfare gain of almost USD 350 billion in 2005, of which developing countries contributed 42%. He also found that developing countries gain more from trade liberalisation than high-income or developed countries.

Marchetti (2007) analysed the participation of developing countries in the GATS negotiations, seeking to prove that protectionism of local services sectors can be costly for these countries. The study shows that countries should liberalise entry into business and infrastructure services, as these services form part of the various inputs into production of goods and services. The study also highlights that these countries face the challenge of not only liberalising trade in services, but also planning liberalisation agreements with other countries in such a way that these also contribute positively to their economic policy and a sustainable long-term process of reform in trade activities.

Nielson and Taglioni (2004) found that the most significant benefits of services liberalisation for countries could be derived from the increased competitiveness and efficiency it brings to the domestic market for services. When experienced foreign competitors enter the domestic market, the local services companies have to improve the way in which they do business in order to compete with the new competition in the market.

Many institutions are advocating that governments need to become actively involved in liberalising their services sectors by implementing assistance programmes to the services sector to help services companies address the various challenges and to gain market entry (ITC, 2008). Several international organisations provide assistance to the services sectors in countries and trade promotion organisations, through training and other assistance programmes. The following section will discuss four of these organisations.

3.6 International organisations involved in the liberalisation of services trade

Various organisations worldwide are involved in creating an open trade market globally for services and seeking to reduce or remove the various obstacles to services trade. These organisations are involved at various levels, either with companies, governments or private entities, to change the way in which trade in services takes place.

Several international organisations have been involved in this process, as they are substantially influential regarding policy and training owing to country membership, amongst other significant relationships. These prominent international organisations will shortly be discussed in this section, and a description of the organisation itself and the role it plays in global services trade will be given. Many other organisations exist in countries that work only on the development of that specific country's services trade, and several governments have divisions within their own departmental structures that focus on the promotion of that

country's services exports. Greater focus will be given to these institutions and their activities in the following chapter. The following section will discuss four of the prominent international organisations that play a significant role in services trade globally.

3.6.1 World Trade Organization

The WTO was established in Geneva, Switzerland, in 1995. In short, the WTO is “a place where member governments go, to try to sort out trade problems they face with each other” (WTO, 2007:7). In essence, the purpose of the WTO is to establish the rules of trade amongst the various member nations and assist them in dealing with trade disputes. The work within the WTO is based on the facilitation of the negotiations amongst the member countries, which in turn help with the liberalisation of trade. These negotiations are then captured in an official WTO agreement and signed by the countries involved.

These agreements are essentially contracts signed by the various governments and by signing these agreements, governments commit to keeping their trade policies in accordance with these agreements. The overall goal of these contracts is to assist exporters and importers to gain easier access to international markets and to conduct their business with fewer obstacles (WTO, 2007).

The WTO is based on a trading and tariff agreement implemented in 1948 known as the GATT, which provides trading rules for member countries. These rules facilitate lower tariffs amongst member countries on imported goods, and by the 1980s these rules were expanded to cover non-tariff barriers, as well as areas such as services and intellectual property (WTO, 2007).

These rules are all based on a number of basic principles. The first is the most-favoured-nation treatment principle, which states that countries within the WTO may not discriminate against their trading partners and if they implement the lowering of a specific tariff or duty for one country, they have to do the same for all WTO members. The second principle is the national treatment principle, which states that once a product has been imported into a country, it has to be treated equally to other locally produced products. The same applies to trademarks, copyrights and patents (WTO, 2007).

The services sectors were also included in the negotiations from the beginning of the 1990s and the first agreements on some services sectors were established in 1996. This resulted in

an annexure to the GATT, better known as the GATS. The GATS was developed in response to the rapid growth of the services economy and focuses mainly on developing a framework of rules and market-access commitments amongst member countries (WTO, 2007).

The GATS Agreement covers all services that are traded internationally, for example banking, telecommunications, professional services and tourism. The agreement also defines the four modes of supply by which services can be traded globally, as discussed in section 3.4.1. The most favoured nation (MFN) principle also applies to the services sector and states that if a country allows foreign competition in a sector, the same opportunities must be given to services providers from all other WTO member countries (WTO, 2007).

The same principle applies to services in the manufactured goods sector within the GATT, in the sense that countries negotiate on opening markets to certain services sectors and then agree to certain commitments. These commitments are made at sector level by WTO member countries and the commitments are captured in schedules that provide the extent to which market access is given, as well as any restrictions that governments may impose on a certain sector. For example, a country may only provide a limited number of licences to foreign banks in the financial services sector and this is captured as a “commitment” and will apply to all WTO member countries (see section 5.2.3.2.1 for an example of the commitments). One of the benefits of the GATS is that it enforces transparency in the various services sectors and governments are forced to publish any laws and regulations promulgated for certain sectors (WTO, 2007).

The WTO has various projects currently running on the services sector to assist countries to open their markets further and enter into new agreements, as this is an ongoing process. The WTO also recognises the problems experienced by countries in measuring and recording statistical information on services and thus holds continuous discussion and investigation into methods by which member countries can improve on these issues (WTO, 2007). The WTO therefore plays a major role in the current and future trade in services internationally and has already made significant contributions to the services sector in general.

3.6.2 Organisation for Economic Co-operation and Development

The OECD is a forum for countries that work together to address economic, social and governance challenges of globalisation. Member countries are provided with a platform to compare policy experiences, seek answers to common problem areas and to identify good practices and co-ordinate policies. Exchanges amongst OECD governments originate from information and analysis that is provided by a secretariat in Paris, France (OECD, 2008).

The overall objective of the OECD is to help governments initiate growth and fight poverty through financial stability, trade and investment, technology, innovation, entrepreneurship and development co-operation. In recent years, the OECD has moved its focus beyond the thirty member countries to offer expertise and experience to more than 100 developing and emerging market economies (OECD, 2008). At the G8 summit held in June 2007, the OECD provided a platform for an active dialogue between some of the emerging economies (Brazil, China, India, Mexico and South Africa).

As part of the many OECD directorates, the Trade and Agriculture Directorate focus on services trade (OECD, 2007). This Directorate of the OECD has performed several studies in which it demonstrates that opening up trade in services would benefit both developed and developing countries, and the gains from liberalising services trade are substantially greater than those of liberalising trade in goods (OECD, 2007). Therefore, the OECD, in co-operation with the United Nations Conference on Trade and Development (UNCTAD), is assisting WTO members in managing the GATS negotiations in order to benefit from the opening of their services markets.

In assisting countries in the trade of services, the OECD arranges several workshops annually for specific services sectors, and provides several publications and reports on the promotion of services trade. In addition, the OECD statistical portal provides trade data on services for their member countries, and aims to provide data on additional countries as it becomes more readily available (OECD, 2008). Therefore, the OECD too plays an important role in the international trade in services.

3.6.3 International Trade Centre

The International Trade Centre (ITC) is an organisation that works in partnership with the WTO and the UNCTAD and sets its main goal as assisting developing countries to achieve

sustainable development through exports by focussing on competitiveness (ITC, 2007). The ITC has helped to enable small business export success in developing countries by providing trade development programmes to the private sector, trade support institutions and governments. The main goal is to help small businesses, through training and providing them with tools, to help themselves to be successful at exporting.

The ITC claims to provide five different business services, which are (ITC, 2007):

- assistance to ensure that business interests and priorities are included in national trade policies;
- assistance to governments and policymakers in developing successful export development strategies;
- development of trade support institutions in countries;
- provision of trade data, information, analysis and related capacity building to businesses; and
- development of tools and services to assist businesses to be more competitive in their export activities.

Within the functions that the ITC provides, it focuses on training, tools and development for various sectors, one of which is a division that focuses on the trade of services. The Trade in Services section of the ITC is a technical assistance programme that seeks to promote the export of services by providing trade support institutions, governments and businesses with training kits, workshops and networks (ITC, 2007).

The Services Trade section of the ITC aims to fulfil the following objectives (ITC, 2008):

- to increase awareness of the potential to export services;
- to include services in the national export strategies of countries;
- to build capacity amongst services sector associations and other trade support institutions to deliver training to small businesses;
- to establish networking and trade by creating web portals for beneficiary countries and organising regional meetings;
- to increase participation of developing countries in the WTO's GATS negotiations; and
- to enhance the skills of women entrepreneurs in the services sector to export their services.

The ITC provides information on services trade, GATS, the WTO and other services-related issues on their website, through training workshops, and several publications available for use by exporting businesses, trade support institutions and governments. The work of the ITC in developing countries assists the development of their services exports and creates an awareness of the services sector and the importance of this industry for economic growth and development (ITC, 2008).

3.6.4 International Centre for Trade and Sustainable Development

The International Centre for Trade and Sustainable Development (ICTSD) was established in Geneva in 1996 to contribute to a better understanding of development and environmental concerns in the context of international trade. As an independent non-profit and non-governmental organisation, the ICTSD engages with a broad range of parties in discussions on trade and sustainable development (ICTSD, 2008).

The ICTSD facilitates interaction between policymakers to help trade policy become more supportive of sustainable development. These interactions help the various parties understand each other's interests and priorities in order to achieve their common objective of sustainable development.

As part of the various programmes and issues that the ICTSD addresses, the organisation also has a separate Services Programme, which focuses on trade in services, labour mobility and sustainable development. The aim is to empower policymakers in developing countries through information, capacity building and research to influence the international services trading system in order to increase the total trade flow in services sectors and advance the goal of sustainable development (ICTSD, 2008).

The ICTSD routinely undertakes country-specific research projects on trade in services, which provides these countries with information on improving and developing their services trade for further economic growth. The ICTSD has also made several publications on the promotion of services trade available to governments.

The WTO, OECD, ITC and ICTSD are four of the major organisations that play a role in the increase of awareness and the correct measurement of services trade data. These organisations all aim to liberalise world trade in services and are of the view that the advantages of liberalisation far outweighs the disadvantages. This is one of the reasons that

South Africa should also place greater focus on the services sector and attempt to increase exports of services. The following section will discuss the role that the services sector has played in the South African economy in recent years.

3.7 The role of services in the South African economy

A growing services sector is important for the overall performance of a country's economy and for the welfare of its citizens. The growth opportunities in the services sector offer the economy benefit such as job creation, stronger productivity growth and higher income generation. A more productive services sector also underpins improved performance of other sectors, especially manufacturing, since the services sector also serves as support to these sectors (Mayer, 2005).

The importance of services in the South African economy has also grown considerably in recent years. It plays an important role as support input to the manufacturing sector and is becoming one of South Africa's significant export sectors (Steuart & Cassim, 2005). The services sector affects many sectors in South Africa's domestic economic activities and important consideration should be given to the role it has played in the GDP of South Africa. This will be discussed in the following section.

3.7.1 The contribution of services to GDP in South Africa

South Africa has shown a real economic growth rate of between 3 and 5% over the last decade (SARB, 2010). Goods and services both make a significant contribution to South Africa's GDP. The contribution each sector in the economy has made to GDP over a five-year period between 2005 and 2009 is shown in Table 3.3 below (SARB, 2010).

Table 3.3: Sector values of South Africa's GDP

SECTOR	2005*	2006*	2007*	2008*	2009*
Primary sector	143,394	177,652	217,339	275,691	278,518
Agriculture, forestry and fishing	37,402	45,351	60,370	65,612	66,049
Mining and quarrying	105,992	132,301	156,969	210,079	212,469
Secondary sector	330,669	357,606	402,139	458,085	466,749
Manufacturing	259,101	274,502	303,788	338,802	329,166
Electricity, gas and water supply	33,010	36,946	41,729	47,140	53,133
Construction	38,558	46,158	56,622	72,143	84,450
Tertiary sector	927,004	1,037,061	1,173,669	1,324,253	1,436,787
Wholesale and retail trade, catering and accommodation	195,012	215,831	238,910	271,774	290,957
Transport, storage and communication	139,472	153,775	163,833	188,382	206,271
Finance, insurance, real estate and business services	295,504	339,311	405,527	449,545	473,720
Community, social and personal services	297,016	328,144	365,399	414,552	465,839
Gross value added	1,401,067	1,572,319	1,793,147	2,058,029	2,182,054

* Unit: R in millions at current prices

Source: SARB (2010)

In this table, South Africa's GDP data is divided into the three main sectors, namely the primary, secondary and tertiary sectors. The services sectors form part of the tertiary sector of the economy. From the figures in this table, it is clear that the tertiary sector contributed two-thirds to South Africa's total GDP. It is important to note that the tertiary sector also includes government services to the community (included in the community, social and personal services sector), which is made up mainly of government-owned or national monopolies.

The figures of Table 3.3 are shown as percentages of the total GDP in Table 3.4 below. The tertiary sector has contributed an average of 65% to the GDP of South Africa over the five-year period from 2005 until 2009. Therefore, it is evident that the services play a significant role in the economy of South Africa.

Table 3.4: Sector shares of South Africa's GDP

SECTOR	2005*	2006*	2007*	2008*	2009*
Primary sector	10.23	11.30	12.12	13.40	12.76
Agriculture, forestry and fishing	26.08	25.53	27.78	23.80	23.71
Mining and quarrying	73.92	74.47	72.22	76.20	76.29
Secondary sector	23.60	22.74	22.43	22.26	21.39
Manufacturing	78.36	76.76	75.54	73.96	70.52
Electricity, gas and water supply	9.98	10.33	10.38	10.29	11.38
Construction	11.66	12.91	14.08	15.75	18.09
Tertiary sector	66.16	65.96	65.45	64.35	65.85
Wholesale and retail trade, catering and accommodation	21.04	20.81	20.36	20.52	20.25
Transport, storage and communication	15.05	14.83	13.96	14.23	14.36
Finance, insurance, real estate and business services	31.88	32.72	34.55	33.95	32.97
Community, social and personal services	32.04	31.64	31.13	31.30	32.42
Gross value added	100.00	100.00	100.00	100.00	100.00

* Unit: %

Source: SARB (2010)

It is evident from the above tables that the contribution of the tertiary sector (or services sector) to GDP far exceeds the contribution of the other sectors of the economy. However, GDP is not the only relevant indicator in the measurement of the value of services in the South African economy. It is also important to investigate the role of the services sector in employment in South Africa. This will be evaluated in the following section.

3.7.2 Employment in the services sector

Employment has declined consistently over the past decade in mining, manufacturing and agriculture. The services sector is the only sector that has made a significant contribution towards creating employment in the 1990s and 2000s (Steuart & Cassim, 2005). The most recent data that is available is displayed in Table 3.5 below, which shows the number of employees in each economic sector in the third quarter of 2010. (This data was extracted from the Labour Force Survey performed by Statistics South Africa (STATSSA, 2010).

Table 3.5: Share of employment (third quarter 2010)

SECTOR	NUMBER OF EMPLOYEES	EMPLOYEE SHARE*
Agriculture	640,000	4.90
Mining	303,000	2.30
Manufacturing	1,713,000	13.20
Services (total of all below)	10,317,000	79.60
Electricity, gas and water supply	99,000	
Construction	1,076,000	
Wholesale and retail trade, catering and accommodation	2,947,000	
Transport, storage and communication	773,000	
Financial, insurance and business services	1,625,000	
Community, social and personal services	2,678,000	
Private households	1,119,000	
TOTAL	12,973,000	100.00

* Unit: %

Source: STATSSA (2010)

According to Table 3.5, the services sector made the largest contribution to South Africa's total employment, constituting 79.6%. The largest commercial services sectors during this period were wholesale and retail trade, financial services and construction.

It has been demonstrated in this section that the services sector contributes significantly to the South African economy with regard to GDP and employment. Some of these services sectors are also becoming more tradable and can make an even more significant contribution to exports from South Africa. The following section will focus on the international trade of services from South Africa and highlights some figures to show its role in the overall imports and exports of the country.

3.8 South African trade in services

As an open economy, South Africa trades both goods and services internationally. South Africa is becoming a major exporter of services, specifically to the African region and in sectors such as finance, construction and business services (Steuart & Cassim, 2005).

Measuring trade in services is very difficult, as was discussed in section 3.4. The most detailed trade data for services is published by the ITC (2010a) in the form of a breakdown of the data reported for each country according to the EBOPS Classification (see Section

4.4). For South Africa this breakdown is shown in table 3.6 for 2005 and 2009 in order to demonstrate the growth in exports over this period.

Table 3.6: Exports of goods and services for South Africa compared with the world

EBOPS CODE	EXPORTS BREAKDOWN PER SECTOR	WORLD		SOUTH AFRICA	
		2005*	2009*	2005*	2009*
205	Transportation	576,899,968	703,500,032	1,533,220	1,378,590
236	Travel	534,900,000	854,300,032	7,516,130	7,624,450
245	Communications services	58,456,124	77,862,159	193,000	208,670
249	Construction services	51,938,618	82,354,149	34,550	46,540
253	Insurance services	48,079,538	76,408,957	124,310	223,230
260	Financial services	166,306,350	234,296,206	534,350	715,090
262	Computer and information services	108,337,835	142,021,406	109,390	245,240
266	Royalties and licensing fees	149,171,148	179,672,516	45,300	47,730
268	Other business services	622,559,351	779,906,415	837,120	1,083,610
287	Personal, cultural, and recreational services	28,338,549	35,104,259	113,820	72,800
291	Government services n.i.e.	65,352,054	59,454,346	258,910	364,380
TOTAL SERVICES EXPORTS		2,571,665,408	3,361,405,184	11,300,100	12,010,300
TOTAL GOODS EXPORTS		10,366,866,432	12,367,690,752	46,991,048	53,863,892

* Unit: USD in thousands

Source: ITC (2010a)

Table 3.6 above shows that the services exports for many of the sectors in both the world and in South Africa grew extensively between 2005 and 2009 and some sectors more than doubled in value, for example construction, insurance, and financial services. This growth occurred despite the global financial crisis in 2008 and 2009. The only two sectors that seemed to have decreased in export value during this time period is the transportation sector (EBOPS code 205) as well as the personal, cultural and recreational services (EBOPS code 287). Although it is unclear exactly why this decrease occurred, it is very likely that it is linked to the effect of the global crisis on trade and economic well-being in general. Due to the crisis, the exports of goods decreased from South Africa and this would directly affect the exports of transportation services. Also due to the financial impact on households, it would explain the decrease in the exports of personal and cultural services.

On average, services exports contributed 24% to total world exports and in South Africa services exports contributed 19% to total exports and formed almost a quarter of total exports when including total goods exports from the world as well as South Africa. Therefore, the contribution of services exports in South Africa is similar to world exports of services. However, the industry contribution to services exports in South Africa is skewed in

comparison with world exports of services. The services sectors that contributed the most to South Africa exports over the five-year period were travel (63%), transportation (11%), and business services (9%). In the world export figures for services, the different sector contributions are more balanced. Travel contributed 25%, transportation 21% and other business services 23% to total services exports. This indicates that South Africa should focus on diversifying services exports into other services sectors that have potential.

South Africa can greatly benefit from diversifying its services exports to other services sectors such as communications services; construction; insurance and computer services. As part of the services trade liberalisation process, the South African government needs to investigate the manner in which to increase services exports in all the different services sectors in order to become a more significant participant in the world market. This will assist in addressing the problem raised by Hausmann and Klinger (2008) that states South Africa's government needs to diversify exports in South Africa to non-resource-based sectors.

Steuart and Cassim (2005) reviewed the South African trade in services and found that there was no government policy in place that was directed at the services sector specifically. Discussions with the DTI in Pretoria in October 2009 confirmed that there is no services export promotion strategy in the South African framework and that this is in the process of being developed (Le Roux, 2009). In order to assist the DTI in establishing such a strategy, a review of the export promotion literature and other countries' practices and efforts in this regard was necessary. The following chapter will thus focus on the export promotion of services and will review several EPOs globally to identify guidelines that could be used for South Africa.

3.9 Conclusion

The objective of this chapter was to evaluate the trade in services internationally. The chapter thus evaluated the growth of international trade in services in section 3.2. The main restrictions that companies and governments experience with regard to services trade were discussed in section 3.3. Difficulties regarding the measurement and recording of services trade data was explained in section 3.4. In this section, the GATS modes of supply that were developed to classify services sectors according to the method with which they deliver their services were discussed. These modes are similar to the traditional market entry strategies that manufacturing companies use. Researchers have also found that it is important to understand the interaction amongst the different services sectors and the mode of supply

that each sector uses. The chapter continued by reviewing the IMF's changes regarding trade in services data in the balance of payments recordings with regard to its BPM6 in section 3.4.3.

Thereafter, the benefits of services trade liberalisation were considered in section 3.5 and four of the most important organisations involved in liberalising trade in services were discussed in section 3.6. The WTO, OECD, ITC and ICTSD are globally involved in the efforts to liberalise trade in services and help governments realise the importance of trade in services. This importance is a reason behind South Africa's need to evaluate its trade in services as well as to identify certain means with which to increase its services exports.

The role of the services sector in the South African economy was investigated in section 3.7. In 2009 the services sector contributed approximately 70% of South Africa's GDP and that 79% of the labour force was employed in the services sector. In addition, it was shown that world exports of services constituted 24% of total world exports between 2005 and 2009, while services exports in South Africa contributed 19% to total exports during the same period. Therefore, the services sector's contribution to total exports in South Africa is on par with world figures, but South Africa's exports of services are mainly in the travel sector (63%), while world exports of services are spread more equally amongst the various services sectors. Therefore, it is important for South Africa to diversify its services exports into other services sectors that hold potential for growth.

There is no government export promotion policy in South Africa for the services sector specifically and possible export promotion strategies should be investigated that could assist in increasing the total exports of services. Services export promotion strategies should also help to diversify the range of services that are exported from South Africa.

The following chapter will present the literature review conducted on export promotion in seeking guidelines on specific instruments and strategies in order to formulate an export promotion strategy for the export of services in South Africa. In addition, the chapter will discuss what has been done by other countries to promote their services exports. The chapter will then consider what South Africa has done in this regard.

CHAPTER 4

OVERVIEW OF EXPORT PROMOTION OF SERVICES IN SELECTED COUNTRIES

4.1 Introduction

Chapter 3 indicated that services trade in South Africa has not been sufficiently diversified and that there is a need to increase the country's export of services. In order to do so, an export promotion policy regarding services is required. This in turn will require guidelines for an export promotion strategy for services. In order to establish these, it was necessary to review the literature with regard to what guidelines exist and the export promotion strategies and efforts of other countries.

It is thus the objective of this chapter to report on guidelines in the literature and determine how these could guide South Africa's export strategy for services. Export promotion literature will be provided in section 4.2 in order to establish basic export promotion guidelines, while export promotion guidelines for services in particular will be explored in section 4.3. Once these guidelines have been determined, the actual export promotion activities of countries active in this regard will be discussed in section 4.4, with the objective of this informing export promotion of services in South Africa. Finally, the current export promotion activities of the South African government will be discussed in order to determine which export promotion activities are focused on the services sector.

4.2 General export promotion guidelines in the literature

Export promotion organisations only arose in the early 1900s and these organisations only became popular globally in the 1960s (Lederman, Olarreaga & Payton, 2006). They aim to stimulate exports by a variety of export promotion instruments. These instruments assist companies in marketing their products more successfully in other countries (Gillespie & Riddle, 2004). Export promotion organisations provide various services to companies, such as market research and development, training, financial assistance, product and market information, as well as access to export promotion instruments such as trade fairs and missions, newsletters and export seminars (Valodia, Goode & Macheke, 2002).

Successful export promotion should ultimately lead to export market diversification and provide a more balanced export platform in the country (Martincus & Carballo, 2008). Export promotion is not always successful, as many promotion instruments only focus on increased profitability within specific companies or industries by establishing one or only a few international transactions (Czinkota & Ricks, 1981). Furthermore, they are generally not focused on increasing export activities over the long term. Export promotion is only deemed successful if total export activities within a country have significantly increased as a result of the support provided by promotion instruments. Export promotion instruments and activities can take on many forms.

Seringhaus and Botschen (1991) identified some of the activities that a government promotion agency could perform, which includes creating awareness of various export opportunities, providing access to export advice and expertise, assisting with the export process and planning, and providing financial support programmes. Czinkota (2002) classifies the main export promotion activities that a government promotion agency could perform into three groups. Firstly, export promotion is done through knowledge or information transfer, which includes counselling, training and manuals for exporters. These are directed towards new or potential exporters, as well as current exporters who wish to expand their current export activities and enter into new markets. Secondly, export promotion is done through the subsidisation of export companies and their activities abroad. This can be done through direct financing options or indirect involvement from government by reducing tax rates or offering special licensing agreements. Thirdly, export promotion is done through reducing barriers to trade. This could entail local barriers to trade, such as licensing or permit requirements, as well as negotiations abroad for decreased barriers such as tariffs.

Van Aarde (2007) performed a study on export promotion agencies in South Africa. In this study she compiled a table, based on Ahmed, Mohammed, Johnson and Meng (2002) and the DTI (2007), in which the various stages of export involvement within companies are linked to the methods of export promotion at each stage. This table is reproduced below.

Table 4.1: A summary of export promotion instruments

STAGES OF EXPORT INVOLVEMENT				
Type of company:	Non-exporter	New exporter	Expanding exporter	Continuing exporter
Companies' needs:	To be made aware of export opportunities	To determine the feasibility of exporting	To select the most promising markets and entry modes	To improve existing export operations
Export promotion programme focus				
Motivational:	Advertising local seminars	Seminars	Sector-specific assistance	Sector-specific assistance
		Export bulletin		
		Export newspaper		
		Sector-specific assistance		
Informational:		Market reviews	Market visits	Export seminars
		Custom market research	Export seminars	Export newsletters
		Primary export marketing research scheme	Primary export marketing research scheme	FDI research scheme
			Export newsletters	
			FDI research scheme	
Operational:		Trade missions	Trade fairs	Trade fairs
		Financing	Trade missions	Foreign buyer visits
		Insurance	Financing	Sales offices
		Outward-selling trade missions	Insurance	Financing
		National pavilions	Outward-selling missions	Insurance
			Individual exhibitions	Outward-selling missions
			National pavilions	Inward investment missions
			Outward investment recruitment missions	
			Inward buying trade missions	

Source: Van Aarde (2007)

From Table 4.1, it is clear that export promotion instruments are only effective when applied to the right types of companies for their specific circumstances. A new exporter and an expanding exporter need more assistance from EPOs than an exporter that is well established (referred to as a “continuing exporter” in Table 4.1). These instruments are good

guidelines for structuring export promotion activities and can be applied to any sector, depending on its needs.

Given the different promotion instruments that can be applied, it has been found that some of these activities are not always effective. Trade promotion organisations appear to lack good leadership teams, sufficient funding, and knowledgeable employees and have begun to move away from being focused on industry needs (Czinkota, 2002; Lederman *et al.*, 2006).

Martincus and Carballo (2008) investigated export promotion activities in developing countries and conducted a case study on Peru. The main recommendation made in this study was that trade promotion organisations should focus mainly on diversifying the range of products exported and the markets to which products are exported. This could lead to a more diversified export growth.

Spence (2003) studied export promotion programmes in the UK and found that companies that had diversified their export markets sufficiently achieved higher rates of success. The same study also suggests that trade missions should be considered as a regular part of a companies' export marketing plans, but that the use of trade missions should be to target new foreign markets and to use government assistance in the early stages of market development. This links to the study performed by Cuyvers (2004), in which it was suggested that export promotion instruments should be aimed at identifying potential export opportunities for companies in various sectors. Unfortunately, most EPOs face the difficulty of deciding upon the allocation of their scarce resources and the manner in which to provide the most efficient service to all sectors within a country's economy (Cuyvers *et al.*, 1995).

In a study of the exporting activities of small and medium-sized enterprises in Finland and government involvement in the promotion of these exports, Korhonen, Luostarinen and Welch (1996) found that government organisations are more outwardly-focused to develop exports. Therefore they tend to give less attention to inward business development in local industry, which implies that many potential future exports are not developed. The study also suggests that EPOs should perform many of the traditional export promotion activities but allocate more time to creating new opportunities for new exporters.

Price (2006a) found that the market intelligence and research provided by most EPOs are too general and too superficial and for this reason of little use to exporters. This study

suggests that EPOs need to build databases of potential customers and markets and should focus on maintaining a business focus when seeking to enter new markets. He suggests that networking and trade missions should focus directly on the target sector and not local politicians and academics, which tends to be the case.

The issue that arises is establishing a database of where the demand lies and then determining the manner in which to manage the database in such a way that it could hold an unlimited amount of information. Price (2006b) suggests that EPOs only focus on a few countries and a few specific sectors. They should not attempt to perform marketing in all countries for all sectors, as this approach is ineffective, with no long-term returns. He also suggests that promotion strategies need to be developed through which EPOs can establish where the market opportunities for specific sectors exist and form strategies based on these findings.

This study focuses on the services sector owing to its dramatic increase in trade in recent years and the benefits it holds for a country's economy. Therefore, the following sections will focus on the services sector and it will identify guidelines for the export promotion of services in particular. The following section will discuss guidelines in the literature with regard to specific services sector export promotion instruments and policies that could be used by the South African government. The guidelines for services could be combined with the relevant export promotion instruments in Table 4.1, in order to structure export promotion strategies for South Africa.

4.3 Export promotion guidelines for services

According to the ITC the main challenge when exporting services is to convince foreign buyers to use a service from a source they have never used before or heard of. Usually the services provided by new services companies are used by means of referrals or recommendations and services companies that do not have a well-known reputation are avoided. This is where EPOs need to play a role in establishing credibility for services companies in foreign markets (ITC, 2010c).

According to Clements-Hunt (2004), all developing countries investigated in her study exported on average sixty services to more than thirty different markets, but most of the governments in these countries are unaware of the growing trade. Accordingly, she suggests

that governments should aim to capitalise on the growing opportunities for services (Clements-Hunt 2004).

The ITC suggests that a successful EPO should select priority services sectors in which the country may have a competitive edge, sufficient capacity in the sector to support increased exports and a sector in which there may be potential for synergy amongst the services (ITC, 2010c). Planned export promotion instruments should then focus on the solutions that these services companies can offer to the foreign customers, especially in the form of bundles, for example a project consortium that includes architecture, engineering and construction. The ITC suggests the use of export promotion instruments, which could include participation in global trade events, sector-specific trade missions and cross-sector trade missions, partnering events, media tours, incoming missions from target markets, networking with investors and missions to international financial institutions (which would focus on sectors that could deliver the projects requested by these institutions).

The Consultancy Development Centre (CDC, 2006) evaluated the export promotion of specific services sectors in India. The study suggests that export promotion instruments for this sector be categorised into four groups, which includes creating market understanding by means of field-based studies, organising trade missions in target countries, assisting with focused marketing projects and providing quality assurance for services companies to enhance their reputation. The same could be applied to most services sectors in general.

The two studies above (CDC, 2006; ITC, 2010c) are the only available literature that could be found on the export promotion of services specifically. Most of the literature on export promotion refers to products and services together and therefore it is necessary to investigate the export promotion practices in other countries to identify their current practices regarding the export promotion of services. This should assist in developing guidelines for South Africa's export promotion of services. The following section will review what has been done in certain selected countries.

4.4 Export promotion of services in selected countries

The objective of this section is to evaluate the export promotion practices in certain selected countries in order to determine guidelines for South Africa with regard to its export of services. India, Chile, Canada, the USA, Malaysia and Australia were selected, as they

actively promote services as a sector. The order of the countries relates to the scope of their activities surrounding services.

4.4.1 Export promotion of services in India

India was selected for investigation, as this is the only country that has an official government export promotion council for services. The Ministry of Commerce and Industry in India (MOCII) recognises the importance of services to the Indian economy. Between 2000 and 2008, the total exports of services from India contributed 33% to the total exports of products and services (UNCTAD, 2010). India's export figures for the main services sectors in 2008 are displayed in Table 4.2 below.

Table 4.2: India's exports of services in 2008

SERVICES SECTOR	EXPORT VALUE IN 2008*
Computer and information services	49,378,900
Other business services	20,426,400
Travel	11,831,900
Transportation	11,317,800
Financial services	4,058,950
Communications services	2,422,970
Insurance services	1,548,160
Construction services	721,940
Personal, cultural and recreational services	707,190
Government services n.i.e.	386,800
Royalties and licence fees	147,820
Total services	102,949,000

* Unit: USD in thousands

** Figures for 2009 were not available at the time of this study.

Source: ITC (2010a)

This table shows that computer and information services contributed 48% to the total services exports of the country and therefore plays a crucial role in Indian trade. Unfortunately, there is no data available to indicate its specific trading partners per services sector. Other business services, the next largest sector of services export (which contributed 19% to the total amount of services exports), include all merchant and trade-related services, operational leasing services, and all other business, professional and technical services not indicated elsewhere. (UNCTAD, 2010; ITC, 2010a).

According to Gordon and Gupta (2004), the rapid growth of the services sector in India in the 1990s had shown scope for further growth and that the services sector would play an increasingly important role in the Indian economy. Therefore the MOCII set up an export promotion council specifically for services in 2004 to address this issue (Exim policy of India, 2003). The objective of the Services Export Promotion Council (SEPC) is to do the following (Exim policy of India, 2003):

- to identify opportunities in key markets for specific services and to develop market-access programmes for these opportunities;
- to co-ordinate with major sector participants to do intensive brand building and marketing in target markets;
- to make interventions regarding policies, procedures and bilateral and multilateral issues in order to open markets for services.

India's Foreign Trade Policy, which are being implemented from 2009 until 2014 (MOCII, 2009), observes that it is important for the country to diversify its export products and markets through a diversity of incentive schemes. The SEPC of India was mandated by government to promote the exports of the following services sectors (SEPC, 2011):

- health-care services;
- educational services;
- entertainment services;
- consultancy services;
- architectural and related services;
- distribution services;
- accounting, auditing and book-keeping services;
- environmental services;
- maritime transport services;
- advertising services;
- marketing research and public-opinion polling services;
- printing and publishing;
- legal services; and
- hotel and tourism-related services.

The SEPC promotes these sectors by means of a variety of export promotion instruments, including market studies, organised visits by services companies to explore export opportunities in different markets, seminars and conferences in India and abroad, trade fairs

and exhibitions and by working closely with services sectors to create a positive image for Indian services. They also channel financial assistance to services sectors and develop action plans for the export promotion of services.

The SEPC is one of the only EPOs in the world that specifically focuses on the promotion of services exports and Indian services exporters should benefit greatly from the assistance of this council in future. This is a good example for the South African government of the benefits of establishing an institution that focuses exclusively on the enhancement of services exports.

4.4.2 Export promotion of services in Chile

Price (2006a) investigated the export promotion activities globally. In this report, he identified Chile, together with Australia, New Zealand, South Korea and Taiwan, as having one of the most successful EPOs globally. Therefore, Chile was also selected for investigation in this study regarding its export promotion activities for services.

Chile has seen an average growth of 11% in GDP over the last decade, with a GDP in 2008 of USD 169 billion (UNCTAD, 2010). In the same year, services exported amounted to USD 10 billion, which made up only 5% of the GDP for that year. A breakdown of services exports for Chile in 2008 is provided in Table 4.3 below.

Table 4.3: Chilean exports of services in 2008**

SERVICES SECTOR	EXPORT VALUE IN 2008*
Transportation	6,380,387
Travel	1,756,563
Other business services	1,752,446
Insurance services	265,800
Communications services	169,587
Personal, cultural and recreational services	110,580
Government services n.i.e.	109,123
Computer and information services	99,127
Royalties and licensing fees	63,644
Financial services	47,195
Total services	10,754,453

* Unit: USD in thousands

**Figures for 2009 were not available at the time of this study.

Source: ITC (2010a)

From this table, it is evident that transport was Chile's largest export industry in 2008, as it constituted 59% of the total services exports. This figure indicates that transport is very important to Chile's services exports. Travel was the second largest export industry, contributing 16% to the total services exports of the country, followed closely by other business services. Unfortunately, there is no data available to indicate which countries are the main trading partners of both these sectors.

Chile has been one of the significant supporters of liberalisation of trade in services globally and has entered into many agreements with neighbouring and European countries. It also claims to have an investment-friendly regulatory environment, as well as stable labour market conditions (ProChile, 2007).

ProChile is the organisation in control of export promotion activities in Chile. The organisation is the trade commission of Chile and is managed by the government. In November 2000, this organisation teamed up with the Coalition of Chilean Service Exporters (an industry association) to improve services trade with the rest of the world actively. They work together in the negotiation processes entailed in the liberalisation of services, export promotion of services sectors, and training of local services sectors (ProChile, 2007).

The country has had various reforms in services trade in recent years, which has led to an increase in services trade such as consultation specifically regarding pension funds, health sector issues, as well as government reform issues (ProChile, 2007). The services sector has been viewed as one of the few sectors that should receive government assistance within negotiation processes and in 2004 ProChile created a Department of Services within its structures. The department has employed staff with knowledge of the problems and issues in this sector. The specific services sectors that experience the same issues are combined into one large negotiations process and, this enables government to address their problems simultaneously.

Chile's Department of Services undertakes specific activities such as business matching, sector-specific courses, participation in sector-specific trade fairs and missions, as well as conferences and workshops (ProChile, 2007). It also provides specific sector-related target market information with target market visiting programmes and establishing contacts in the target market. Therefore, the services sector receives great promotional attention and is viewed as one of the country's key export sectors.

The example of Chile demonstrates again that specific sector-related activities for the export of services are necessary and South Africa should focus on developing export promotion activities for services specifically. From the Chilean example, the export promotion of services in South Africa could be done by establishing a separate department within the current EPOs to focus specifically on services. It might not be necessary for South Africa to establish an organisation such as the SEPC in India as this would entail large capital outlays and resources that may not currently exist (section 4.4.1).

4.4.3 Export promotion of services in Canada

Canada was selected as an example of a developed country, as its EPOs has very extensive methods when it comes to selecting specific market opportunities for products. The exports of both goods and commercial services have grown by an average of 8% annually over the past decade, and the services sector plays a crucial role in the Canadian economy (WTO, 2008a). Employment in the services sector in Canada has also increased, almost three out of every four employees are employed in the services sector and 90% of all new jobs created are in the services sector. The Canadian services sector also employs more educated workers than other sectors. For example, almost 20% of workers in the services sector have tertiary education (DFAIT, 2009).

Canada has a stable economy that has shown steady growth patterns over the past decade. The total real GDP has grown by an average of 3% (UNCTAD, 2010). Services constituted 72% of Canada's GDP and 12% of the country's exports in 2008 (EDC, 2008a). In 2008, the total exports of goods from Canada amounted to about USD 455 billion, which was still almost seven times as much as services exports in the same period. In the same year Canada was the eighteenth largest exporter of services in the world (as was shown in Table 3.1.) Canada's export figures for the main services sectors in 2008 are given in Table 4.4 below.

Table 4.4: Canadian exports of services in 2008**

SERVICES SECTOR	EXPORT VALUE IN 2008*
Other business services	17,893,996
Travel	15,121,013
Transportation	11,818,011
Computer and information services	4,620,075
Insurance services	3,579,737
Royalties and licensing fees	3,418,386
Financial services	3,109,756
Personal, cultural and recreational services	2,332,083
Communications services	2,294,559
Government services n.i.e.	1,676,360
Construction services	249,531
Total services	66,114,448

* Unit: USD in thousands

**Figures for 2009 were not available at the time of this study.

Source: ITC (2010a)

The table above shows that other business services was the largest export sector for the Canadian services economy, contributing 27% to the total services exports of the country. Travel constituted 23% of total services exports and was thus the second largest export sector.

The Canadian services exports are less dependent on the US market than goods exports and its services sector is the fastest growing sector that exports to other markets besides the USA. The statistics show that between 1990 and 2004 commercial services exports to Brazil grew by 23.5% annually and to China by 16% (DFAIT, 2009). The top twenty importing countries for services exported from Canada in 2007 are shown in Table 4.5 below (the data available is not complete for 2008 and 2009).

Table 4.5: Top twenty importing countries for Canada's services

IMPORTERS	IMPORTED VALUE IN 2007*
USA	35,393,560
UK	4,073,316
Africa not elsewhere specified	1,684,964
Germany	1,641,236
Bermuda	1,557,499
France	1,518,422
Switzerland	1,477,484
Europe (not elsewhere specified)	1,427,242
Japan	1,208,597
Barbados	1,105,322
China	996,464
Hong Kong, China	937,849
Republic of Korea	728,508
Australia	696,874
Mexico	629,885
Netherlands	610,346
Ireland	486,602
Greece	423,335
Chinese Taipei	374,023
Italy	372,162
Total	57,343,690

* Unit: USD in thousands

Source: ITC (2010a)

The table shows that during this period the USA imported 54% of Canada's services and is therefore still its main trading partner in comparison with the other countries. The next largest importer is the UK, which imported 7.1%.

Canada's services trade is much more diversified than its trade in goods, with less than 60% being exported to US markets, 18% exported to the EU and 24% exported to the rest of the world (CSC, 2009). The Canadian Services Coalition (CSC) found that over 86% of services companies in Canada are small and medium-sized enterprises, employing less than fifty people (CSC, 2009).

There are three major institutions involved in trade in services in Canada, namely the Department of Foreign Affairs and International Trade Canada (DFAIT), Export Development Canada (EDC) and the CSC. Each of these institutions will be outlined in the following

sections in order to explain the role they play in trade in services in Canada and the export promotion thereof.

4.4.3.1 The Department of Foreign Affairs and International Trade Canada

The DFAIT is part of the Canadian government system and it has a team available to assist with exports, investment abroad and any other market intelligence. It also assists exporters in assessing their market potential (DFAIT, 2009). The DFAIT publishes an electronic system with market reports that provides an analysis of various sectors, goods and services by country or region. These reports provide in-market information regarding the economic state of the country, competitors in each sector, information about the sector clients/end users, access barriers or problems experienced in each sector, as well as contact information (DFAIT, 2009).

Within the department, there are approximately twenty working groups that are involved in sector issues regarding trade in services. The working groups provide specific consultation with stakeholders and analyse the Canadian objectives and priorities in their respective services sectors. These groups range from audiovisual services to distribution services and transport services. The department also has horizontal working groups that focus on broader aspects such as commercial presence, development issues, domestic regulation, the movement of persons and the provision of assistance to small and medium-sized enterprises at various levels (DFAIT, 2009).

The department is directly involved with the services sector associations and also sets annual goals for both goods and services that are aimed at specific markets and specific sectors. The criteria for selection are not clear. It is clear however that it views the services sector as an important part of the Canadian economy, as it plays such a large role in both employment and economic growth (DFAIT, 2009).

4.4.3.2 Export Development Canada

Export promotion in Canada is managed by EDC. This corporation is owned by the government of Canada and it aims at facilitating the international business activities of Canadian companies. Export Development Canada provides a range of services, such as financial support, risk management, building partnerships and creating awareness of export opportunities (EDC, 2008a).

The organisation acknowledges the problem that Canada faces in improving its trade figures. Canadian competitors are penetrating markets at a faster rate than Canadian companies are and this is a major cause for concern for the EDC (EDC, 2008a). It recognises that Canadian companies need to target new opportunities in markets that are beyond their traditional, developed markets (EDC, 2008a). As part of its assistance to companies to achieve this, it has created an online scientific-based tool, which it refers to as the Trade Opportunities Matrix (TOM). The EDC still performs traditional export promotion activities, but this system is meant to assist potential exporters in identifying new markets that can be explored.

The TOM is an empirical tool that provides an analysis of the most attractive markets for Canadian exporters (EDC, 2008b). The TOM uses statistics on the economies and industries of 69 countries and ranks them according to their potential for business for 44 industries. Therefore the TOM system ranks the sectors that show the most potential for Canadian exporters and the ranking system is based on certain economic and industrial criteria. The economic criteria are GDP growth, economic and political risks, exchange rates and the Canadian FDI stock. The industrial criteria applied are the size of the domestic market, Canadian comparative advantage, the country's import dependency and Canada's market presence. The data is then filtered and ranked according to country and sector.

This tool has proved to be highly efficient in calculating potential export markets or opportunities for products. However, there is no such system for the services sector. Therefore, no system is available to assist services companies in identifying potential export markets.

4.4.3.3 The Canadian Services Coalition

The CSC is a private organisation that is based on membership of services sector companies. The Canadian Chamber of Commerce serves as secretariat to the CSC. The CSC is concerned with opening markets for Canadian services sectors worldwide and reducing any trade barriers (CSC, 2009). It is involved in many free trade agreement negotiations to create better opportunities for services sectors. For example, the coalition is involved in the Canadian WTO GATS negotiations. The organisation was also involved in arranging a global services summit in 2009. Members are provided with regular sector information and assistance.

The Canadian example demonstrates that a privately managed EPO is also an option for South African circumstances. The DTI in South Africa would need to establish a close working relationship with such an organisation.

The following section will also briefly outline the activities surrounding export promotion of services in the USA, Malaysia and Australia, as these countries are also active in developing strategies for their services sectors.

4.4.4 Export promotion of services in other countries

Various other countries have realised the importance of services exports and the promotion thereof. Export promotion of services in the USA, Malaysia and Australia is discussed in this section.

The USA does not have any specific services export promotion instruments or policies in place. However, in March 2010 a press release announced the launch of the National Export Initiative (NEI) for the USA (Obama, 2010). The objective of the NEI was to assist in meeting the government's goal of increasing exports to more than double over a five-year period. The NEI was to establish an Export Promotion Cabinet that would address the issues raised by the NEI. One of the issues raised was the need to develop a framework for the promotion of services trade, as well as an export promotion policy and export promotion tools.

Another country that is promoting their services is Malaysia. The Malaysian External Trade Development Corporation (MATRADE) has a division that has recently become involved in export promotion of Malaysian services and focuses specifically on the major services sectors in the country, such as construction and engineering, education, health care, and information and communications technology (MATRADE, 2010). Export promotion instruments for each services sector are mainly international trade fairs, special marketing missions for the specific sector or even together with related services sectors, and trade and investment missions for the specific sector. The MATRADE website provides programme details for current trade fairs, expositions and marketing missions in which specific services sectors can participate. This is a very user-friendly method of keeping services companies informed.

In Australia, the services export promotion has been mainly managed by the private-sector organisation known as the Australian Services Roundtable (ASR). It is composed of a

number of senior sector representatives from all the services sectors (ASR, 2011). The mission of the ASR is to secure a place in the global services economy for Australia's services sectors. It provides market information and training to services companies and channels funds towards these companies. The ASR is involved in policy negotiations in order to liberalise domestic and international markets for Australian services, and is especially concerned with lowering barriers to the growth of the services sectors and their international competitiveness. The ASR holds workshops for services sectors, provides networking opportunities and holds annual Services Summits, at which issues can be raised and addressed between government parties and business leaders.

The examples of the various efforts by the countries discussed in section 4.4 regarding the export promotion of services serves to demonstrate that it is important that the South African government become involved in promoting the export of services and in the services sector in general. As evident from the Indian, Chilean and Canadian examples, it is possible to establish a separate organisation that only focuses on the export promotion of services (see section 4.4.1) or else to establish a department within the current EPO that focuses only on services (see section 4.4.2). It may even be possible to work together with private-sector shareholders to establish a privately managed organisation that promotes trade in services in South Africa (see section 4.4.3.3).

The organisation responsible for the export promotion of services in South Africa could use many of the same tools as mentioned in section 4.4. These include identifying key markets for specific services sectors and developing market-access programmes (see section 4.4.1), providing market studies and market information (see section 4.4.2), assisting in building the image of South African services abroad, holding workshops on the various aspects of services trade (especially for new exporters) and providing financial assistance for export activities (see section 4.4.2). This organisation could also develop a tool similar to the one developed in Canada (see section 4.4.3.2) to identify the most attractive markets for services. This tool would be similar to the DSM model that was previously discussed in this study (see section 1.2.2 and 4.5.3).

The most important goal of such an organisation should be to be actively involved in the trade negotiations process, which could decrease barriers to trade in services. The organisation could ensure that the needs of private sector stakeholders are met by negotiating for what is most urgently needed in the market.

The following section will investigate what the South African government is currently doing regarding export promotion in general. In section 3.7, it was confirmed that there are currently very few services-specific activities within the DTI of South Africa, but it may be possible to use some of the existing instruments in use by the DTI and adapt them to the export promotion of services specifically.

4.5 Export promotion in South Africa with special reference to services

This section will provide a brief overview of the export promotion activities in South Africa that is provided by both by the private sector and by the government. South Africa's export councils, industry association and EPO are introduced below.

4.5.1 Export councils and industry association

There are several export councils and industry associations in South Africa that focus on the product and services sectors. These organisations are mostly managed by the private sector and focus on aiding the specific sectors in terms of access to market information, technical assistance and assistance to small and medium-sized enterprises in entering the global market. These export councils and industry associations work in partnership with the DTI of South Africa in addressing global market issues (DTI, 2009a).

Within the existing set of export councils and industry associations, very few are concerned with the services sector. The only councils for the services sectors are the following:

- **The South African Electrotechnical Export Council** is a public–private partnership that focuses on developing the exports of the following services sectors: electrical engineering, electronics, telecommunications, information technology and business services (SAEEC, 2011). It undertakes sector missions and offers funding, training and networking opportunities.
- **The Built Environment Professions Export Council** focuses on business professionals in architecture, engineering, quantity surveying and project management (BEPEC, 2011). It assists in securing market access for its members and facilitating access to international funds.
- **The South African Federation of Civil Engineering Contractors** focuses specifically on the activities of the civil engineering sector (SAFCEC, 2011). The association provides training to members, as well as links to funding and market information.

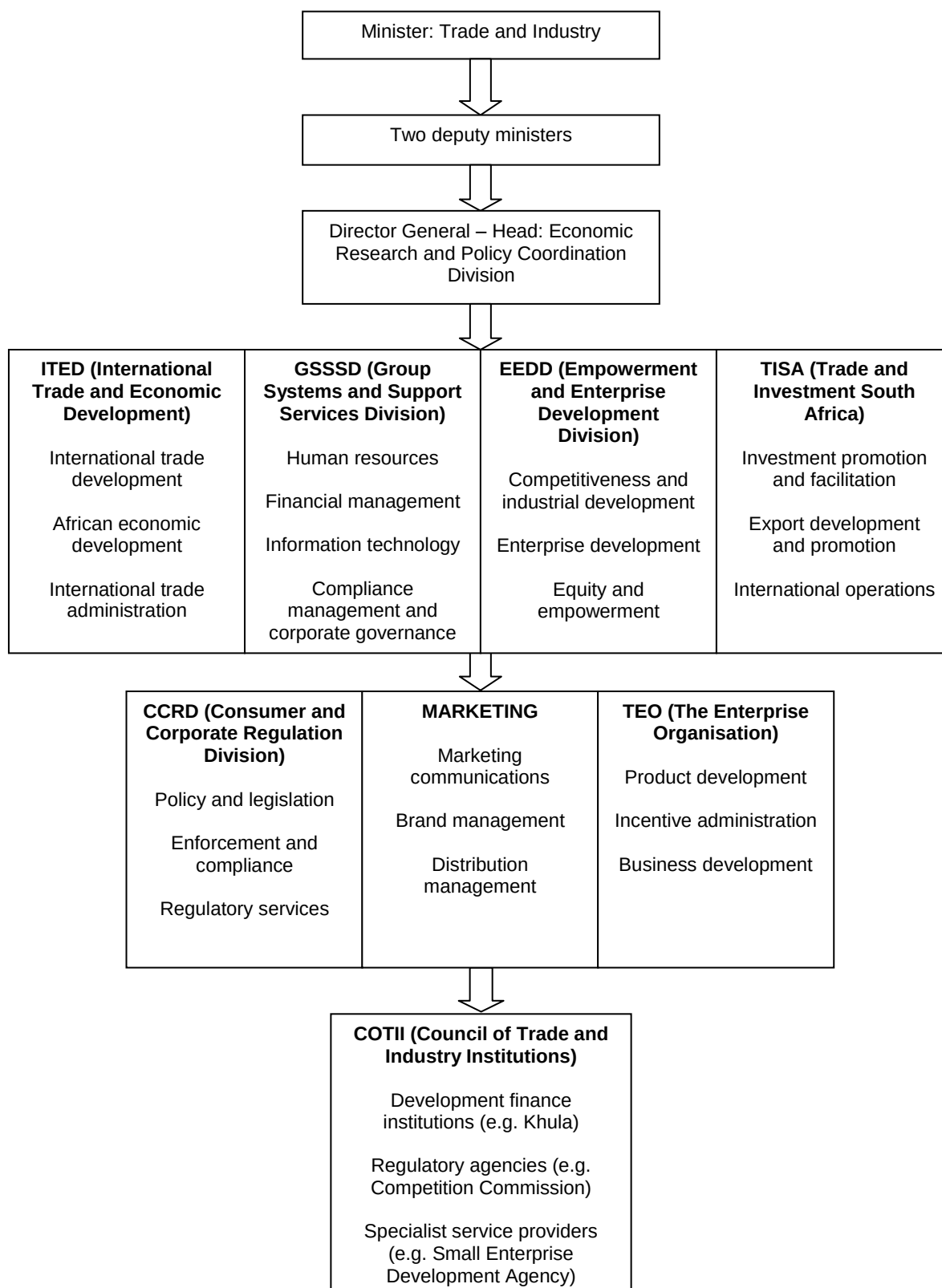
- **South African Music Exports** focuses only on the music sector, specifically musicians, composers, publishers, promoters and music managers (SAMEX, 2011). The association focuses mainly on participation in international events and distributing South African music globally.

4.5.2 Government institutions involved in export promotion in South Africa

Within the public sector of South Africa, the DTI acts as the national government EPO. There are also various provincial EPOs that act in co-operation with the DTI such as the trade promotion organisations in each of the eleven provinces.

The structure of the DTI is set out in Figure 4.1 below. (The figure is based on information gathered from the DTI website (DTI, 2011) and information provided by an official at the DTI). The International Trade and Economic Development (ITED) and Trade and Investment South Africa (TISA) divisions are two of the four main units within the DTI that are involved in international trade issues.

Figure 4.1: Structure of the Department of Trade and Industry in South Africa



Source: Adapted by author from DTI (2011)

Within the ITED division of the DTI, there is a directorate for trade in services, which is mainly involved in trade policy and negotiations for services. These officials are involved in the GATS negotiations and the goal of this directorate is to open foreign markets for trade in services for South Africa. This study was initiated in 2008 and after discussions with the directorate in 2009 and 2010, it became clear that there was no strategy in place regarding services negotiations (Du Plooy & Sooklal, 2010). Before negotiations take place, the officials would normally contact the main participants in the services sector and enquire whether they have any requests. Other than this method, these officials have no other information available before entering into the negotiations process. They are mostly unaware of the trade barriers that they will encounter and are therefore not able to address these issues accordingly.

The TISA division acts in co-operation with South African exporters and its aim is to increase trade for South Africa. It is also responsible for investment promotion and facilitation, export development and promotion, as well as international trade operations. The export promotion instruments that are being provided by TISA are divided into four types of activities, namely country-image building, export support services, marketing and market research and publications (DTI, 2010a).

The export promotion sub-directorates within the DTI comprise of the following priority areas (DTI, 2010b):

- Resource-based industries:
 - agro-processing;
 - chemicals;
 - metals;
- Manufacturing industries:
 - aerospace, rail and marine;
 - automotives;
 - arts and crafts;
 - capital equipments;
 - clothing, textiles, leather and footwear; and
- Services:
 - electro technical;
 - tourism;
 - television and film.

These different units focus only on export promotion of their specific sectors and offer market intelligence, facilitate exports by matching exporters with foreign buyers, and channel funding towards these companies. The above breakdown shows that the services sector involvement is very limited and only addresses three sub-sectors, namely electro technical, tourism, and television and film.

From the information available on the export councils (section 4.5.1) and promotion units within the DTI (see above), the export promotion of services is limited to only a few specific sectors. No information was available to indicate the reason behind why only these specific sectors receive export promotion support. From the examples in selected countries in section 4.4, it became clear that South Africa needed to view the services sector as a whole and strategically develop export promotion instruments for all the services sectors, including the identification of export opportunities. One method could be by establishing a services export promotion unit that works closely with industry to promote and increase services exports.

The TISA division has been involved in the development of South Africa's National Export Strategy to align with the larger aims of the DTI (DTI, 2006). There are specific sections within the TISA division that focus on various regions in the world such as Asia, Europe and the USA, and these sections assist various sectors by providing financial support via the Export Marketing and Investment Assistance Fund, in-market support, trade-lead facilitation, matchmaking and market intelligence (DTI, 2009a). This is done through instruments such as trade pavilions, missions, trade fairs, regional hubs, in-store promotions and export publications.

One of the strategies identified within the National Export Strategy (DTI, 2006) for the period 2006 to 2009 was to prioritise markets for exports. The capacity within the DTI to assist companies in participating in the international economy is limited and therefore TISA aimed to use a scientific selection process in order to identify priority markets and opportunities for various sectors on which it can focus its limited capacity (DTI, 2006). This is because the DTI's current export promotion activities are directed randomly at a variety of sectors and countries and the result do not necessarily ensure increase in overall exports. Hausmann and Klinger (2008) stated that South Africa's government are not aware of potential opportunities and what barriers can be expected for each of the potential opportunities.

In order to achieve the goal of promoting the exports of South African products successfully, a DSM was developed for the DTI in South Africa (see section 1.2.2). This model aims to identify specific export opportunities for South African products in specific markets. The DSM will be explained in more detail in the following section. The aim is to investigate whether a similar tool can be developed for the services sector in order for the DTI to make more scientific-based decisions regarding its export promotion activities.

4.5.3 Decision support model for products

Cuyvers *et al.* (1995) developed a DSM in order to provide the Belgian EPO with a scientific model on which to base its export promotion activities. The objective of the DSM was to provide a list of potential export opportunities in the world market and to use this information to develop priority promotion activities for the EPO. This process works similarly to that of the EDC's TOM system (see section 4.4.3.2) by process of eliminating the markets for products that show no potential based on a variety of economic factors and identifying a list of possible export opportunities.

The model was deemed highly successful in identifying potential product/market combinations that the Belgian EPO should pursue. The same model was applied to Thailand in 1996 and again in 2004 to assist the EPO in Thailand to identify a set of products and markets on which to focus its activities (Cuyvers, 1997; Cuyvers, 2004).

This model was adapted for South African products in 2007 (Viviers & Pearson, 2007) and further refined in 2009 and 2010 (Steenkamp *et al.*, 2009; Viviers *et al.*, 2009; Viviers *et al.*, 2010) for the DTI in South Africa. The refinements for the South African model included the use of the Harmonized Commodity Description and Coding System (HS) six-digit level trade data (instead of the SITC four-digit data that was used originally); adapting the market accessibility (MA) calculation in the third filter to include South Africa's production capacity; as well as calculating potential export values for each of the identified export opportunities in the last filter.

The DSM for South Africa begins with a list of 240 countries and all products at an HS six-digit level. Through a sequential filtering process, it decreases all possible export opportunities for South Africa to a final list of 66 705 country/product combinations (Steenkamp *et al.*, 2009; Viviers *et al.*, 2010).

As suggested by Cuyvers *et al.* (1995), the DSM is not designed to be used as the only decision-making tool by the DTI, but rather to provide statistical data, which should be complemented by current market information, as well as domestic supply and production data. The model enables the DTI to formulate a strategy in which the scientific results of the DSM combined with the econometric gravity model also used by the DTI can be combined with real-time intelligence for their final market selections for export promotion activities. This then provides a list of realistic export opportunities for products in specific markets. However, this is only applied to products, which leaves a gap for a similar model for services.

The DSM is based on the assumption that all world markets have potential export opportunities for products and therefore all markets enter a filtering process by which the most attractive product/country combinations are identified. The model is based on a study by Walvoord (1983), in which he suggested that relevant information enter a filtering process by which less attractive opportunities are identified and removed, thereby supplying a list of the most promising opportunities.

The DSM applies four filters in its process. The first filter of the DSM was applied to 240 countries to identify markets that lack sufficient potential growth based on commercial risk, political risk and general macro-economic indicators. Markets with high risk were eliminated from the list of potential markets. The second and third filters assessed information at product-level in order to eliminate products and matched markets that do not achieve certain predetermined cut-off values. Various factors were assessed in these two filters including import growth, import market size, barriers to entry and market concentration (Steenkamp *et al.*, 2009; Viviers *et al.*, 2010). The fourth filter was not an elimination filter but rather sorted the results from the third filter according to the market characteristics in a set cell-structure. The results were also sorted according to sector, country and region and the final set of product/market combinations were identified for the South Africa economy that the DTI could use when compiling its medium-term goals for promotion activities (Viviers *et al.*, 2010). The methods for each of the filters for the South African DSM, as it was applied to the South African context (Steenkamp *et al.*, 2009; Viviers *et al.*, 2010), will be discussed in the following sections.

4.5.3.1 Filter 1 of the decision support model for products

The aim of the first filter was to identify a list of preliminary countries that would show opportunities for South African products. This filter was then separated into two sub-filters, namely filter 1.1 and 1.2.

Filter 1.1 assessed the political and commercial risk that a South African exporter would face in the foreign country under investigation. The credit risk ratings that are published by the Belgian public credit insurance agency – Office National du Ducroire (ONDD) – was used, as this rating takes into account various macro-economic factors, such as current-account deficit as a percentage of GDP, external debt services as a percentage of export earnings, stock of foreign debt, and past and future changes in these parameters. The OECD ratings system is also based on the ONDD rating system (Steenkamp *et al.*, 2009; Viviers *et al.*, 2010).

For the DSM, the country risk profiles for 240 countries (see Appendix C) were used as published by the ONDD (2009). The ONDD data breaks risks down into commercial risks and political risks. The data gives a rating on a scale of 1 to 7 for political risk in each country, with 1 indicating low political risk and 7 indicating very high political risk in the specific country. The data also gives a rating on a scale of A, B or C for commercial risk, where A indicates low commercial risk and C indicates high commercial risk. These ratings for each country were converted in the DSM to a score from 1 to 10 and these values were used to calculate a compounded risk rating for each country. The commercial and political risk scores were then weighed equally for all the 240 countries and a pre-determined cut-off value was used to eliminate those countries that had a total risk score higher than the cut-off value. The cut-off value was selected based on the criteria for that specific report but can be changed depending on the user's requirements. The markets with the least potential within the group of 240 were eliminated if they exceeded the cut-off value for the risk ratings. A total of 209 countries' risk scores were below the cut-off value and could be considered for further analyses in filter 1.2. Of these 209 countries, only 196 could be used in the next stage of filter 1 owing to insufficient data (Viviers *et al.*, 2010).

Filter 1.2 used the 196 countries from filter 1.1 and evaluated macro-economic indicators to determine whether these markets were sizable or had been growing sufficiently in the short and long term. According to Cuyvers *et al.* (1995) and Cuyvers (2004), the GDP and GDP per capita would indicate whether a country's economy is too small or does not show

sufficient potential for growth and would therefore not be deemed a viable market to which to export. The nominal GDP and GDP per capita, as well as GDP and GDP per capita growth rates, were used.

The cut-off values were determined by using the following calculation from the model developed for Belgium (Cuyvers *et al.*, 1995).

$$x = \bar{X} - \alpha\sigma_x$$

Where:

$\bar{X}$ = average of X (z-score indexes for all sectors and countries);

σ_x = standard deviation of X ;

α = a factor determined in such a way that small changes in its value only marginally affect the number of services/country combinations eliminated.

As the α -value increased, the number of countries eliminated decreased evenly and the cut-off was at the point at which there was a clear break in the number of countries eliminated (Cuyvers *et al.*, 1995; Cuyvers, 2004; Steenkamp *et al.*, 2009).

Countries were selected to continue if the following applied (Cuyvers *et al.*, 1995; Cuyvers, 2004; Steenkamp *et al.*, 2009):

$$X_j \geq x$$

In other words if a country's risk rating was greater than or equal the cut-off value, it continued to the next filter. If it fell below the cut-off value, the country was eliminated. Based on these calculations in the South African DSM, 101 countries complied with all the set criteria and continued to the second filter of the DSM (Viviers *et al.*, 2010).

4.5.3.2 Filter 2 of the decision support model for products

The aim of the second filter of the DSM was to determine possible export opportunities for South Africa based on import data that would indicate market potential. Therefore for this filter, Steenkamp *et al.* (2009) and Viviers *et al.* (2010) used the same methods as applied in the DSM model designed for Belgium and Thailand by Cuyvers *et al.* (1995) and Cuyvers (1997; 2004).

Filter 2 used product export and import data at an HS code six-digit level, as published by the ITC for 2003 to 2007. For this filter, the RCA for South Africa was used to determine a cut-off value for each product group (SITC four-digit level data was used in the South African model). The assumption was made that if South Africa would have been relatively specialised in a particular product ($RCA > 1$), then the selection of markets showing the most potential could be less strict than if South Africa was not specialised in the product ($RCA < 1$). Therefore, in order to take the degree of specialisation in exports of South Africa for a product group into account, the model defined a scaling factor as follows (Willemé & Van Steerteghem, 1993; Cuyvers *et al.*, 1995; Cuyvers, 1997; Cuyvers, 2004):

$$S_j = 0.8 + \frac{1}{(RCA_j + 0.85e^{(RCA_j - 0.01)})}$$

Where:

S = scaling factor;

RCA = revealed comparative advantage;

J = exporting country.

The properties of the scaling factor are as follows (Willemé & Van Steerteghem, 1993; Cuyvers *et al.*, 1995; Cuyvers, 1997; Cuyvers, 2004):

$$S_j = 2 \text{ for } RCA = 0$$

$$S_j = 1 \text{ for } RCA = 1$$

$$S_j = 0.848 \text{ for } RCA = 2$$

$$S_j = 0.8 \text{ for } RCA = \infty$$

This scaling factor was then used to determine whether the market for a specific product group j in a specific country i would be deemed sufficient. This would have been the case if:

$$g_{ij} \geq G_{world,j}$$

Where:

g_{ij} = the growth of imports of product group j by country i

$G_{world,j}$ = the total imports of the world of product group j

Therefore, the cut-off value for import growth of product group j was calculated according to the same method used by Willemé and Van Steerteghem (1993):

$$g_j = G_{world,j} \times S_j \text{ if } G_{world,j} > 0 \quad \text{and} \quad g_j = G_{world,j} \div S_j \text{ if } G_{world,j} < 0$$

The model then further considered import data for each product group in the countries identified in the first filter in order to determine whether the country showed sufficient short- and long-term growth or a sufficient import market size. Countries were then categorised according to their potential short-term growth, long-term growth and market size by allocating a value of 1 to a product/country combination if any of these criteria were met. If more than one of these three criteria were met, a product/country combination was allocated a higher classification than a product/country combination that showed growth in only one of these.

For each of these criteria, a cut-off value was selected in order to determine which product/country combination showed sufficient size and growth, and which should be eliminated. Cuyvers *et al.* (1995) assumed that the cut-off value could be less strict for a product sector within which the exporting country has gained expertise or specialisation. Therefore, the cut-off values depended on the Specialisation Index or RCA index according to Balassa (1965).

The various product/country combinations were then grouped into seven categories according to the number of 0 or 1 values that appeared for each. The categories used are shown in Table 4.6, based on an example for a product/country classification in the DSM for products.

Table 4.6: Categories of product/country combinations in filter 2

CLASSIFICATION	SHORT-TERM MARKET GROWTH	MEDIUM-TERM MARKET GROWTH	RELATIVE MARKET SIZE
0	0	0	0
1	1	0	0
2	0	1	0
3	0	0	1
4	1	1	0
5	1	0	1
6	0	1	1
7	1	1	1

Source: Cuyvers et al. (1995)

The values of 0 and 1 for each market characteristic were then assessed and if a product/country combination showed either sufficient relative market size or high import growth rates over the short term and long term, then these product/country combinations qualified to enter into the following filter. Therefore, services/country combinations that fell into categories 3 to 7 were selected to continue to the next filter for further analyses (Steenkamp *et al.*, 2009; Viviers *et al.*, 2010). In this way, a list of 12 755 product/country combinations continued to filter 3 in the model, as they showed sufficient market size in combination with short- or long-term growth, or all three (Steenkamp *et al.*, 2009).

4.5.3.3 Filter 3 of the decision support model for products

The third filter of the DSM eliminated product/country combination based on market access (MA) for South African exporters. This filter evaluated two sets of criteria, namely the degree of market concentration in filter 3.1, and import restrictions or market access in filter 3.2 (Steenkamp *et al.*, 2009; Viviers *et al.*, 2010).

For filter 3.1, market concentration was used as an indicator of the potential easiness in entering the specific product/country combination with South African exports. Market concentration was calculated by applying the Herfindahl–Hirschman Index, according to which a specific country's export of a product to a specific market is compared with that market's total imports of the product. The assumption was made that if an import market were highly concentrated, it would be more difficult for South African exporters to enter that market (Steenkamp *et al.*, 2009; Viviers *et al.*, 2010).

Market accessibility in filter 3.2 was then measured by using five different variables, namely distance to market, shipping cost, the World Bank's Logistics Performance Index (LPI), average applied tariffs and the frequency ratio of non-tariff barriers (Steenkamp *et al.*, 2009; Viviers *et al.*, 2010). These variables were weighted according to their impact on MA, as each variable has a different level of impact on potential exports. Tariff and non-tariff barriers weighed 40%, shipping cost weighed 30%, LPI weighed 20% and distance to market weighed 10% (Steenkamp *et al.*, 2009). This measure was different from the method used by Cuyvers *et al.* (1995) and Cuyvers (1997, 2004). In the models for Belgium and Thailand, the revealed absence of trade barriers was used, that is if the neighbouring countries to Belgium were not exposed to trade barriers in a specific market, then it was assumed that Belgium would also not be exposed to any trade barriers in the same market. Contrary to Belgium and Thailand, South Africa lacks neighbouring countries with which export performance at a product level could be compared and therefore the revealed absence of trade barriers as a variable could not be used.

In filter 4, a country/product combination could be used for further investigation if either of the two criteria in filters 3.1 and 3.2 were met. A total of 12 695 product/country combinations continued to filter 4 (Steenkamp *et al.*, 2009).

4.5.3.4 Filter 4 of the decision support model for products

The fourth filter of the DSM did not eliminate any product/country combinations, but rather ranked the combinations according to the number of opportunities within a market, the number of opportunities for each product group, and they were clustered according to region (Steenkamp *et al.*, 2009; Viviers *et al.*, 2010). The final list of realistic export opportunities was grouped into different cells, identifying the type of opportunity that exists, as is shown in Table 4.7 below. The cells group the export opportunities according to market position and characteristics, as well as South Africa's current market share in each market.

The DTI could use these cell classifications of the results of the model to determine which appropriate export promotion instruments would apply to each case, depending on the market growth and current market share of the local industry. The cells would determine whether a defensive or offensive export promotional approach would be necessary.

Table 4.7: Cell classification for the results of the DSM

MARKET CHARACTERISTICS	EXISTING MARKET SHARE OF COUNTRY X			
	Relatively small	Intermediately small	Intermediately high	Relatively high
Large product market	Cell 1	Cell 6	Cell 11	Cell 16
Growing (short- & long-term) product market	Cell 2	Cell 7	Cell 12	Cell 17
Large product market (short-term import growth)	Cell 3	Cell 8	Cell 13	Cell 18
Large product market (long-term import growth)	Cell 4	Cell 9	Cell 14	Cell 19
Large product market (short- & long-term import growth)	Cell 5	Cell 10	Cell 15	Cell 20

Source: Cuyvers et al. (1995); Cuyvers (2004)

According to Viviers *et al.* (2010), the export promotion tools linked to each cell structure vary from an offensive approach to a defensive approach. In other words, for a market that shows large imports and large growth but South Africa's share in that market is very low, an offensive approach should be followed by government to gain a market share. The defensive approach is useful for markets in which the South African market share is already large and no costly export promotion activities are necessary.

The results of the DSM can also be linked to the company needs in its different stages, as shown in Table 4.1. According to this table, the expanding exporter's main needs are to select the most promising export markets and the DSM provides just that. Therefore, the model enables EPOs to assist expanding exporters in fulfilling this need and to provide the necessary instruments to maximise their outputs from potential exports.

It is important to note that in the various versions of this model in Belgium, Thailand and South Africa, the focus has been on identifying realistic export opportunities for *products*. The DSM provides a basis upon which South Africa can expand its export activities in sectors and target markets that show the highest potential.

This study commenced in 2008 and investigated the need for a similar model for services in the South African context. The ITED officials that attended the DSM training workshop on

4 October 2010 were of the opinion that the development of a similar model for services would assist them greatly when formulating services negotiation strategies in the future (Du Plooy & Sooklal, 2010). The study thus developed a draft model.

The DSM model cannot be applied in exactly the same manner to services as it was done for products, mainly owing to the different nature of services and the limited trade data for services. There is very little bilateral trade data available for most of the developing countries around the world, including South Africa. However, it was possible to develop a model with services-specific variables in each filter. This is the first model of its sort for the services sector specifically. The following chapter will discuss the development of this model for services in South Africa.

4.6 Conclusion

The objective of Chapter 4 was to establish guidelines on the promotion of exports in order to form guidelines for an export promotion policy for South Africa. The chapter first reviewed the literature on export promotion in order to establish general guidelines in section 4.2. It was found that sector-specific approaches could be the most beneficial if focused on increasing exports in the long term, as well as increasing export diversity in the economy. Table 4.1 provided the various instruments that could be utilised by an EPO when assisting exporters in various stages of development. These instruments also apply to services.

The literature on the export promotion of services specifically was reviewed in section 4.3 and it was found that the greatest barrier companies face is exporting to markets in which they have no established reputation and that EPOs should be involved in assisting these companies with advertising, participation in trade fairs and trade missions. Export promotion organisations could also provide quality assurance to services companies, which would help to establish their reputation with new buyers.

Export promotion activities globally were evaluated in section 4.4 in order to establish what other countries are doing to promote the exports of services. The examples from different countries discussed in this section highlight the fact that the South African government needs to realise the importance of becoming involved in the promotion of services exports. Examples from India, Chile and Canada show that it is possible to establish a separate organisation that only focuses on the export promotion of services (see section 4.4.1) or else to establish a department within the current EPO that focuses only on services (see section

4.4.2). It may even be possible to work together with private-sector shareholders to establish a privately managed organisation that promotes trade in services in South Africa (see section 4.4.3.3).

The organisation responsible for the export promotion of services in South Africa could use many of the same tools as was explained in section 4.4. These include identifying key markets for specific services sectors and developing market-access programmes (see section 4.4.1); providing market studies and market information (see section 4.4.2); assisting in establishing the reputation of South African services abroad; providing workshops on the different aspects of services trade (especially to new exporters) and providing financial assistance to companies for their export activities (see section 4.4.2). This organisation could also develop a tool similar to the one developed in Canada (see section 4.4.3.2) to identify the most attractive markets for services. This tool would be similar to the DSM model previously explained (see section 1.2.2).

The most important role of such an organisation could be active involvement in the trade negotiations process, in seeking to decrease barriers to trade in services. The organisation could seek to ensure that the needs of private industry stakeholders are met by negotiating for what is most urgently needed in the market.

The export promotion activities in South Africa were evaluated in section 4.5 and it was found that there are a limited number of industry associations and export councils that are focused on the services sector. The DTI in South Africa is the government institution responsible for export promotion and, within the DTI structure, the ITED and TISA divisions are involved in services (see section 4.5.2). The ITED division is involved in the trade negotiations processes in order to open markets and lower barriers for South Africa services. It was found that the ITED division negotiates with very limited information and they are not very effective. It performs most of South Africa's export promotion activities. From the available information on the export councils (section 4.5.1) and promotion units within the DTI (section 4.5.2), the export promotion of services is limited to only a few specific sectors. The reason why these specific sectors were the only sectors to receive export promotion support was unclear. From the examples of selected countries in section 4.4, it became clear that South Africa needed to view the services sector as a whole and strategically develop export promotion instruments for all the services sectors. It is also necessary to determine export opportunities for services. This can be done by establishing a services export promotion unit that works closely with industry to promote and increase services exports.

The TISA division has been involved in the formulation of a strategy for the DTI to prioritise markets for South African exports. The DTI has limited capacity and cannot assist all companies in all services sectors to promote their exports. Therefore, a need was identified for a scientific selection process by which realistic export opportunities can be identified for products.

A DSM has been developed for the South African situation to identify export opportunities for products in South Africa. The model was explained in more detail in section 4.5.3. It was found that a similar model could be developed for services in South Africa in order to identify export opportunities for services specifically. These results could then be used in the development of an export promotion strategy for services in South Africa. Recommendations regarding such a strategy will be made in Chapter 7.

The following chapter will develop a methodology for a similar selection model for services in South Africa by adapting the criteria and methodology of some of the filters. This model will provide a list of export opportunities for South African services that the DTI can use in the export promotion of services.

CHAPTER 5

DEVELOPING THE METHODOLOGY FOR AN EXPORT OPPORTUNITIES MODEL FOR SERVICES IN SOUTH AFRICA

5.1 Introduction

In the previous chapter, it was determined that the export promotion activities for services in South Africa are very limited and there is need for a more focused approach. As part of TISA's export promotion activities the DSM model was developed to identify export opportunities for products in specific markets so that the export promotion activities of the DTI could be more focussed (see section 4.5.3).

The objective of this chapter is to report on the development of a similar model for services. This study will refer to the model for services as the EOM for services, in order to distinguish it from the former versions of the model. The application of the methodology of the DSM to a similar model for services in South Africa will be explained in section 5.2. The data available for the EOM for services will be detailed in section 5.3.

5.2 Applying the methodology of the DSM to services in South Africa

This section will evaluate the methodology of the DSM for products in explaining the development of a similar model for services. The objective was to create a model that would take the existing data on services and through the use of a filtering system eliminate less potential export markets in order to determine the most promising export markets for South Africa's services sectors. An EOM for services will assist the DTI in making informed decisions and developing effective export promotion strategies.

The basis of the DSM for products is the four filters by which countries are first eliminated and thereafter certain product/country combinations (see section 4.5.3). The same principle was applied to services, but with adjustment to the methodology of the filters, firstly owing to limited data availability; and, secondly, owing to the nature of services and the modes by which they are delivered (see section 3.4.1). This section will explain the methods that were used in each filter for the EOM for services.

5.2.1 Filter 1 of the export opportunities model for services

The first filter of the DSM for products is focused on macro-economic data at country level. This was applied to services in exactly the same manner as products, as this filter only uses country-level data. In this filter it was important to take a country's economic growth and size in terms of GDP and GNP per capita, as well as political and economic risks into account, as these factors could point towards possible importer payment problems in the destination market for both products and services. Therefore, when developing the EOM for services, the same methodology used in filter 1 of the DSM for products was used (see section 4.5.3.1). The results of applying this method for filter 1 will be discussed in section 6.2.

5.2.2 Filter 2 of the export opportunities model for services

The aim of the second filter of the DSM for products was to analyse all products that could be exported to the countries that continued from filter 1 and to determine whether these products showed export potential based on import demand, or the size and growth of imports (see section 4.5.3.2). This filter also incorporated South Africa's RCA of each product to determine whether South Africa would be able to compete.

The data used for this filter was import data for all the countries that continued from filter 1 at product sector-level, as well as export data for the world and South Africa at sector-level. This data for services is available from the ITC; therefore, the second filter of the EOM for services used the same methodology as the DSM for products. The results of the second filter of the EOM for services will be discussed in section 6.3.

5.2.3 Filter 3 of the export opportunities model for services

The third filter of the DSM for products evaluated MA for South African products by evaluating market concentration, as well as market barriers (see section 4.5.3.3). Filter 3.1 calculated the market concentration for each product/country combination that continued from filter 2, according to the Herfindahl–Hirschman Index. Filter 3.2 used five different variables to determine MA, namely distance to market, shipping cost, the LPI, average applied tariffs and the frequency ratio of non-tariff barriers. These variables were combined into one index. If a product/country combination's score fell within both cut-off values for filters 3.1 and 3.2, it continued to the next filter.

In developing the EOM for services, the calculations for filters 3.1 and 3.2 were not possible, because the services data that were available showed only a country's imports and exports of each services sector to the world (see ITC, 2010a; UNCTAD, 2010). There is no bilateral market data available for all countries, i.e. the countries from which a specific sector imported services and to which markets a specific sector exported its services. This makes it impossible to calculate the Herfindahl–Hirschman Index for market concentration.

However, for services it was possible to calculate market concentration differently. The total imports of a service could show the level of openness in a market. For example, if country A imports 80% of the services used in the market, then one could assume that the market is relatively open for imports of that service. Therefore, by weighing the total imports of services in a market to the total local demand for services one could identify the level of market concentration.

The variables that were applied to measure MA in filter 3.2 (see section 4.5.3.3) could also not be applied to services. The first variable, distance to market, is not a relevant factor for all services sectors, as many services are provided electronically, for example. The second variable, shipping cost, is also irrelevant, other than for evaluating the travel fees of agents to other markets or tourists to destination markets (mode 2 of the GATS). The third variable, the LPI, evaluates participating countries according to various criteria, namely customs authorities and processes, infrastructure, international shipments, logistics competence, tracking and tracing, costs of domestic logistics and timeliness. These criteria are mostly not applicable to services either. The fourth variable, average applied tariffs, is also not applicable to services.

However, there was a different method that could be used to determine MA, which is measuring the trade barriers for services. Trade barriers for services mostly take the form of non-tariff barriers such as prohibitions, quantitative restrictions and government regulations (see section 3.3). Quantifying these non-tariff barriers for services made it possible to create an MA index as filter 3.2 for the EOM for services. The literature shows there are various ways to quantify the barriers to trade in services. The following sections will explain the new methodology used for filters 3.1 and 3.2 in the EOM for services.

5.2.3.1 Identifying a methodology for filter 3.1 for the export opportunities model for services

As explained in the previous section, it is not possible to calculate the market concentration for services in a specific market using the Herfindahl–Hirschman Index, as the trade data for services are not available on a bilateral basis for all countries. Some countries, such as European and North American countries, report their trading partners at a services-sector level and by trading partner, but this is not done by all countries. Therefore, the limited amount of bilateral trade data available could not be used in a model that aims to assess all countries and all services sectors as potential exports. The type of data used thus had to be consistent for all countries.

However, it was possible to create a proxy for market concentration by calculating the trade openness of a country. Yanikkaya (2003) reviewed the literature on trade openness and found that there are many definitions for “trade openness”, and many methods to calculate it, depending on the problem to be solved. The most recent meaning of the term “trade openness” is similar to the term “free trade”, which describes a trading system in which all trade distortions have been eliminated (Yanikkaya, 2003). Therefore, many trade openness calculations are based on imports or exports as a percentage of GDP. The concept is similar to the DSM for products, in which a market with a low market concentration for a product is viewed as open for trade, or one with no trade distortions.

For the purposes of the EOM for services, the term “openness for services imports” (OSI) is used to describe the level of access to the market based on the ratio of imported services to the total services used in the specific market. This proxy should be a guideline to demonstrate whether a market is easy to access. The assumption is that if a country has high imports of services in relation to the total use or demand of services in the market, then the market is relatively open and there is scope to export services to that market. However, if a country has low imports of services in relation to the total use or demand of services in the market, then it is assumed that the market produces many services locally and the market is not very open or easily accessible to trade. Therefore, it would be more difficult to enter the market with new services exports.

The assumption has its limitations, as high imports of services in a market could still mean that the services in that market are imported only from one or two large suppliers, which means the market is still very concentrated and difficult to access. However, owing to the

lack of bilateral data, it is not possible to determine the number of exporters that supply a specific market and the data currently available cannot prove otherwise.

The data used for this filter was derived from the UNCTAD *Handbook of Statistics* in which a breakdown is provided for each country's GDP (UNCTAD, 2010). The 2007 trade data (from Trade Map) was then added for total imports and exports per sector, as this data is broken down into the correct form.

In order to determine the number of services used or demanded in a market, the number of services produced locally was calculated. This was done using the UNCTAD GDP data published for each country. These figures are broken down into agriculture, industry and services (which is further divided into wholesale, retail trade, catering and accommodation; transport, storage and communication; and other services activities). Therefore, in order to determine the total number of services used or demanded within the market, the total number reported for the services sector was used, and is referred to as "services produced" (SP).

Therefore, in order to calculate the total services used or demanded (SD) within the market, the following calculation was made:

$$SD_j = SP_j + Z_j - X_j$$

Where:

j = importing country/market;

SD = services demanded by the importing country;

SP = services produced by the importing country;

Z = services imported;

X = services exported.

Thereafter, it was necessary to determine the ratio of imported services to the total services demanded to determine trade openness. This calculation was made as follows:

$$OSI_j = \frac{Z_j}{SD_j}$$

Where:

j = importing country/market;

OSI = openness for services or demand for services in the importing country;

Z = services imported;

SD = services demanded by the importing country as calculated for SD_j above.

These calculations were made at a services-sector level. The UNCTAD data was divided into three sectors, while the import and export data of the ITC was reported in 61 sub-sectors. Therefore, the sub-sectors of the ITC data were aggregated into the three sectors of the UNCTAD data. The OSI was then calculated and the resulting percentage of trade openness was allocated to each of the corresponding 61 sub-sectors to keep the data consistent for the model.

The result of the OSI_j calculation was a list of percentages of market openness for services for each of the services/country combinations that continued from filter 2. These results were then analysed and a cut-off value was determined in a similar manner to what was done for filter 1 (see section 4.5.3.1) in order to determine which services/country combinations were sufficiently “open” to continue to the next filter. The results of the application of the newly developed filter 3.1 will be discussed in section 6.4.1. The following section will discuss the methodology developed for filter 3.2 for the EOM for services.

5.2.3.2 Identifying a methodology for filter 3.2 for the export opportunities model for services

Deardorff and Stern (2008) identified two barriers that apply to services different from barriers to products. These are regulations that apply to entry of new companies versus their operations, and regulations that are non-discriminatory versus discriminatory (that is governments favouring domestic companies to foreign companies). They also found in their study that measures of trade barriers for both goods and services could be direct or indirect. Direct measures usually imply the analysis of a policy or practice, such as import quotas or regulations. Indirect measures use observation discrepancies between actual economic performance and what would be expected were trade liberalised or “free” (Deardorff & Stern, 2008).

In relating these direct and indirect measures to services, Deardorff and Stern (2008) found that direct measures of barriers to trade in services usually imply the incorporation of information about market-access barriers in order to construct an index of restrictiveness that can then be compared across different countries. Indirect measures are also possible but are seldom used because of the different nature of services versus products.

The various methods that have been used by different researchers to determine both direct and indirect measures of market-access barriers can be grouped into frequency measures, price-based measures, quantity-based measures, gravity-model estimates and financial-based measures (Warren & Findlay, 1999; Deardorff & Stern, 2008). These measures will subsequently be discussed.

5.2.3.2.1 Frequency measures

Hoekman (1996) was one of the first researchers to develop a method to quantify the barriers to trade in services, known as frequency measures. As part of the GATS Agreement, participating countries list their individual schedules for all services sectors in which they are prepared to make commitments, and any barrier that they wish to still apply to a part thereof (see section 3.6.1). These schedules of commitments are available from the WTO (2009). Examples of typical GATS commitments are provided in Table 5.1.

Table 5.1: Example of a schedule of General Agreement on Trade in Services commitments

SECTOR OR SUB-SECTOR	MODE OF SUPPLY	LIMITATIONS ON MARKET ACCESS	LIMITATIONS ON NATIONAL TREATMENT
Horizontal commitments (across all sectors)	Cross-border supply (mode 1)	None	None, other than tax measures that result in differences in treatment with respect to R&D services
	Consumption abroad (mode 2)	None	Unbound for subsidies, tax incentives, and tax credits
	Commercial presence (FDI – mode 3)	Maximum foreign equity stake is 49%	Unbound for subsidies, under a specific law, approval is required for equity stakes over 25%; new investment that exceeds a specific amount
	Temporary entry of natural persons (mode 4)	Unbound, except for the following: Intra-corporate transferees of executives and senior managers; specialist personnel subject to economic-need test for stays longer than one year; services sellers (sales people) for up to three months	Unbound, except for categories of natural persons referred to in the market-access column
Specific commitments (for specific sector, e.g. legal)	Cross-border supply (mode 1)	Commercial presence required	Unbound
	Consumption abroad (mode 2)	None	None
	Commercial presence (FDI – mode 3)	25% of senior management must be nationals	Unbound
	Temporary entry of natural persons (mode 4)	Unbound, except as indicated in horizontal commitments	Unbound, except as indicated in horizontal commitments

Source: Hoekman (1996); WTO (2009)

Similar commitments to the ones shown in Table 5.1 are made by all the WTO member countries for those services sectors in which they are prepared to make commitments. For each sector in which a country makes commitments, it has to specify one of the following three entries (Hoekman, 1996; WTO, 2009):

- **None:** This indicates that a country commits not to place any limitations on market access or national treatment for a specific sector/mode of supply combination. National treatment indicates that treatment of a foreign supplier is no less favourable than that of domestic services and services providers.
- **Bound with restrictions:** This indicates that a country sets a specific restriction on that specific sector, and this restriction is listed in its schedules of commitment.

- **Unbound:** No commitment has been made for a particular sector/mode of supply combination.

These commitments provide an indication of market-access barriers to various services sectors and Hoekman (1996) used these to quantify barriers to access for services. He developed a weighting method by which he examined all the GATS schedules of all member countries and allocated a value to each commitment as follows (Hoekman, 1996):

- **None:** This indicates that a country is completely “open” to trade in the specific service sector. Therefore, **a value of 1** was allocated for each “none” commitment made.
- **Bound with restrictions:** This indicates that a country has made specific commitments and thus the sector is “open” for trade except for specific situations. Thus, **a value of 0.5** was allocated for each “bound with restrictions” commitment made.
- **Unbound:** This indicates that a country is not willing to make commitments for a specific sector and is therefore completely blocked to trade in that sector (Hoekman, 1996). Consequently, **a value of 0** was allocated for each “unbound” commitment.

These values were allocated so that all the commitments by each country could be added together in order to provide a total value. The assumption was that the higher the total value, the greater the extent of MA, that is the more liberal the country was towards services trade, resulting in frequency measures of market access (Hoekman, 1996). It is important to note that this methodology provides an indication of the relative degree of restriction, and should not to be taken literally as an indicator of *ad valorem* tariff equivalents.

The maximum possible number of commitments was defined as 620 (calculated as 155 sub-sectors for services multiplied by four modes of supply). The second indicator was the “average coverage” of the schedule defined as the arithmetic weighted mean of the scale factors allocated to each cell (0 for unbound, 0.5 for bound with restrictions and 1 for no restrictions). The third indicator provided the share of no-restriction commitments in a member’s total commitments relative to the 155 possible sectors of the GATS classification list (Hoekman, 1996).

According to Brown and Stern (2000), the main limitation of this method is that it may be misleading owing to the assumption that if a country does not make commitments for a sector or states the sector as “unbound” which means the sector is completely inaccessible.

They argue that this may not necessarily be true, as it may mean that the country has domestic regulations that open the sector for trade. They also note that the different types of restrictions are given equal weightings and are not distinguished according to the economic impact each may have.

Hardin and Holmes (1997) expanded on Hoekman's model in order to eliminate some of the above-mentioned limitations. They confined their calculations to FDI restrictions to the services sectors in the selected countries. They identified five types of barriers to FDI and each was weighted based on the economic impact it may have had on the total economy. The five barriers to FDI were identified as restrictions on entry, establishment, control, management, and operations. For example, they would give a greater weight to a policy that would completely exclude foreign equity than to a policy that would allow foreign equity of between 50 and 100%.

The weightings allocated to each by Hardin and Holmes (1997) assumes that fewer restrictions are not necessarily more indicative of the openness of the economy, as one restriction could be a complete ban on specific foreign ownership. They allocated a value of 1 to countries that have a complete ban on foreign ownership. They also allocated a value of 1 if there is a complete ban on freight ownership, stringent approval, management or operational restrictions. A country that applies no restrictions was allocated a value of 0 and one that only uses a notification process was allocated a value of 0.5. Thereafter, in order to deal with situations in which foreign ownership limits apply only to investment in existing companies, the different weightings were halved, that is a value of 0.5, 0.25 or 0 was allocated (Hardin & Holmes, 1997).

For the purposes of their study, they found the GATS schedules alone to be insufficient. The data they required was taken from sources such as the *APEC Guide to Investment Regimes*, individual action plans of each country, together with the country schedules of commitments published in the GATS (Hardin & Holmes, 1997). For sub-sectors not scheduled in the GATS commitments and for which no restrictions were listed in either of the other sources, a value of 0 was allocated.

Nicoletti, Scarpetta and Boylaud (2000) developed an alternative to the methods used by Hoekman (1996) and Hardin and Holmes (1997). Their study applied factor analysis to the schedule data from the GATS and other sources. By doing this, they were able to distinguish

between the barriers that vary the most from their data, and they were able to apply larger weights to these.

Deardorff and Stern (2008) also described a different approach by which they did not construct an index, but the scores created for each barrier were used separately in an empirical analysis. They found however that the scores may be interrelated and therefore the influence of each on a specific variable may be impossible to determine.

Other frequency measures have been developed for specific services sectors, such as Mattoo (1998), who analysed market access for financial services. Another example is McGuire (1998), who investigated the access barriers for Australian financial services, Marko (1998) developed a similar model for telecommunications services, and McGuire, Schuele and Smith (1999) developed indices for market access for maritime services.

Deardorff and Stern (2008) found that frequency measures and indexes of restriction were useful for identifying the types of barriers and the relative degrees of protection that are given to services sectors across countries. They found that the compilation of such indexes is an important first step. The next step involves assessing the economic effects of maintaining or eliminating market-access barriers. The different methods that have been used for the next step will be explained in the following sections. It is therefore a possibility to use the frequency measures in filter 3.2 of the EOM for services in order to build an index of the level of protection or market access for a specific service in a specific market.

5.2.3.2.2 Price-based measures

The lack of bilateral services trade data caused other researchers to raise the question of whether it was possible to construct price-based or quantity-based measures of services barriers that could then be used to assess the costs and benefits of removing access barriers quantitatively (Brown & Stern, 2000). The theory behind price-based measures is that if a market has no market-access barriers then it would be competitive and prices would be expected to approach a company's long-term marginal cost. If there are market-access barriers, there will be a wedge between price and marginal cost (Warren & Findlay, 1999).

Many studies have been performed to evaluate this possibility. Kalirajan, McGuire, Nguyen-Hong and Schuele (1999) created a two-stage econometric technique to calculate the net interest margins for 694 national and state commercial banks in selected economies. They

were able to distinguish between barriers to establishment and to ongoing operations for foreign and domestic companies.

The general approach has been to combine other data together with the results of an index of restrictiveness and thereby estimate the effects of barriers to services econometrically. These methods require not only data on barriers themselves, but also prices and determinants of prices for services, which could prove difficult if more than one services sector is evaluated (Deardorff & Stern, 2008).

Similar research to this study was undertaken by Warren and Findlay (1999) and they found that the limitation of the analysis of margins of prices over costs is the propensity of protected companies to extract monopoly rents in the form of inflated costs rather than excess margins. The problem lies also in the data limitations that make it difficult to deflate costs by producing a world's best practice cost function.

Both these studies found that specialised knowledge of specific sectors is essential when designing a framework for price-based measures for market-access barriers to services and that it works best when applied in studies that focus on specific sectors. Therefore, this method could only be applied to the EOM for services if the prices for all services in all markets could be obtained.

5.2.3.2.3 Quantity-based measures

Another approach has been to combine quantity estimates, rather than prices, with the results of an index of restrictiveness into a quantity equation. The results can provide an indication of the effects of trade barriers on quantities, which in turn can be converted into an effect on prices, using an estimated price elasticity of demand (Deardorff & Stern, 2008).

Warren (1999) assessed the quantitative impact of market-access barriers for the telecommunication services sectors of 136 countries. He created tariff equivalents in the form of price wedges by combining quantitative estimates of the effects of removing market-access barriers with an estimate of price elasticity of demand for telecommunication services.

These methods were very difficult to apply to the EOM for services, as the data necessary for these calculations is not sufficient for all services sectors and countries. Therefore it was necessary to explore other methods as well.

5.2.3.2.4 Gravity-model estimates

Francois (1999) attempted to compare overall levels of services trade barriers across countries. He used the gravity model, as this model relates bilateral trade volumes to the incomes of trading partners, and the distance between them. He applied the gravity model to bilateral services trade data for the USA and its major trading partners. He included independent variables such as per capita income, GDP, distance between trading partners, and a Western Hemisphere dummy variable. The differences between actual and predicted imports were assumed to indicate the level of market-access barriers. He was therefore able to estimate tariff equivalents with this information.

The limitation of this method for the EOM for services was that it is applied to bilateral trade data for services only for specific countries, namely the USA and its trading partners. Deardorff and Stern (2008) found that the methodology used by Francois (1999) deviates from the original method of the gravity model. The original gravity model applies to total trade, and not trade in individual sectors. Therefore, Deardorff and Stern (2008) criticise the use of this model because if it were applied to all sectors across all countries, one would have to assume that all countries have equal capacity to produce in a sector, which eliminates the role of comparative advantage.

As part of the DTI's export promotion activities, as was explained in section 4.3, it also applies a gravity model in order to identify export opportunities for products. The gravity model was designed to analyse the trade potential for each product sector in South Africa. The objective of this model is to predict trade flows and to determine priority markets (DTI, 2004). The gravity model used by the DTI was derived from the traditional trade gravity model, and is expressed mathematically by an equation. The various functions used in this equation are the total exports from South Africa to another country, the income and per capita of both countries, the geographical distance between the countries, the exchange rate between the two countries, an index of infrastructure in each country, as well as the rate of protection for exports of the specific sector. The size of the economies of both countries is represented by the GDP and the population size in each country (DTI, 2004).

Within the analyses for each sector, this potential trade equation (gravity equation) is considered in combination with the RCA, as well as current intra-industry trade. The use of this model is therefore only possible if bilateral trade data is available for each sector. Unfortunately, bilateral and multilateral trade data for services is only available for a few countries and, in order to use this method in the EOM for services, bilateral services trade data would be necessary for all countries in all services sectors. Therefore, this method could not be used for the model developed in this study.

5.2.3.2.5 Financial-based measures

Another measurement method is discussed in Hoekman (2000), which calculates the financial data on gross operating margins by sector and country. This is used as an indication of the effects of government policies on company entry and conditions of competition. High margins may indicate relative profitability across sectors and between countries, and this may provide insight about the relative size of existing market-access barriers. He was able to create a list of average gross operating margins of services companies listed on the national stock exchanges across ten different services sectors by country/region. Given the scope of this study, it was however not possible to apply this method, as there was not sufficient data available for services to calculate gross operating margins across all sectors and for all countries.

5.2.3.3 Selecting the methodology for filter 3.2 for the export opportunities model for services

In the previous sections, the various methods for calculating trade barriers for services, that is MA, were discussed. The different methodologies discussed were frequency measures (section 5.2.3.2.1), price-based measures (section 5.2.3.2.2), quantity-based measures (section 5.2.3.2.3), gravity-model estimates (section 5.2.3.2.4) and financial-based measures (section 5.2.3.2.5). The aim of the filter 3.2 of the EOM for services is to determine the level of MA for services in the form of an index in order to determine which services/country combinations have an acceptable level of MA. For this purpose, the first method of frequency measures (see section 5.2.3.2.1) was the most applicable for this model. Frequency measures are an effective method by which a country's total commitments to the GATS Agreement can be quantified in order to measure its level of MA or barriers in a percentage form (based on the total number of commitments that can be made). Therefore, for the purposes of the EOM for services the frequency method was used for filter 3.2.

This method was therefore applied to each of the services sectors for each country that continued from filter 2. A calculation can be made of the maximum number of commitments a country can make for each sector, assuming that if a country made the maximum number of commitments, the market for that specific services sector had no trade restrictions or was completely accessible.

For each of the countries continuing from filter 2, the total number of commitments was then evaluated for each sector and a scale value of 0, 0.5 or 1 was applied according to the method by Hoekman (1996). This was done for each country for commitments to market access and national treatment for each of the four modes of supply. Therefore, for each sector, one set of commitments had to be made, with a minimum of four commitments to market access and four commitments to national treatment. For some sectors, more than one set of commitments could be made, according to the WTO sector breakdown, which differs from the EBOPS code breakdown, leading to some sectors having eight, sixteen or more maximum number of commitments that could be made. The WTO sector classifications and the EBOPS code sector classifications were manually matched in order to keep the data in the same format for processing (see Appendix A for WTO classifications and Appendix B for the EBOPS Classification).

For each country, the commitments to market access and national treatment, respectively, were calculated at a sector level and then compared to the total or maximum number of commitments that could be made per sector. These two percentages then formed the level of trade openness under each sector and the average of the two percentages was used to determine the total level of openness or market access. Therefore, the total level of MA was calculated as follows (author's own formula):

$$MA_j = Average \left(\frac{LOMA_j}{LOMA_t} \right) + \left(\frac{LNT_j}{LNT_t} \right)$$

Where:

MA = market access;

j = importing country;

t = total/maximum number of commitments that could be made for the sector;

LOMA = total score for limitations on market access according to the GATS commitments;

LNT = total score for limitations on national treatment according to the GATS commitments.

For the set of results a cut-off value was determined in a similar manner as was done for filter 1 (see section 4.5.3.1) in order to determine which services/country combinations were sufficiently accessible (with low barriers) to continue to the next filter. This resulted in a complete list of each country's market access score at sector level in a percentage form, which was then used in conjunction with the results from filter 3.1 to eliminate the list of services/country combinations that were least accessible. The results of filter 3.2 for the EOM for services will be discussed in section 6.4.2. The final selection for filter 3 will be explained in the following section.

5.2.3.4 Combining the results of filters 3.1 and 3.2 into a final filter 3

Filters 3.1 and 3.2 provided two sets of data that the study could further analyse. Filter 3.1 provided a percentage of OSI according to a country's import data for services (see section 5.2.3.1), and filter 3.2 provided a percentage of MA for services according to a country's GATS schedule of commitments to open its borders to trade in services (see section 5.2.3.3).

In filter 3.1, a cut-off value was determined by applying the same method as explained in section 4.5.3.2. By applying the cut-off value to the dataset, the least "open" services/country combinations were eliminated and the same was done in filter 3.2. As was done for the DSM for products, in the EOM for services the two sets of results were combined and, in order to continue to filter 4, a services/country combination had to fulfil the criteria of both filters 3.1 and 3.2. The results of this application will be discussed in section 6.4.3.

The services/country combinations that did not fulfil both sets of criteria were deemed to be too closed for trade, or their barriers too high. Therefore, only the services/country combinations that fulfilled both sets of criteria continued to filter 4.

5.2.4 Filter 4 of the export opportunities model for services

The fourth filter of the EOM for products used the final results of the third filter and grouped the resulting product/country combinations into cells according to their market size and growth, as well as South Africa's market share. The results were also ranked according to the number of opportunities within a market, the number of opportunities for each product, and regional clusters (see section 5.2.4). This was done in a similar manner to the DSM for products.

Even though South Africa's market share was not available, a type of classification could also be done for services. A different cell classification was developed by which the services/country combinations were grouped according to their market size or growth (according to calculations from filter 2), as well as their level of market OSI (according to filter 3.1) and MA (according to filter 3.2). These cell classifications are shown in Table 5.2 below.

Table 5.2: Cell classification for the export opportunities model for services

MARKET SIZE	LOSI* & LMA [‡]	LOSI* & HMA [§]	HOSI [†] & LMA [‡]	HOSI [†] & HMA [§]
Large services market (3)	Cell 1	Cell 6	Cell 11	Cell 16
Short-term & long-term import growth (4)	Cell 2	Cell 7	Cell 12	Cell 17
Large services market & short-term import growth (5)	Cell 3	Cell 8	Cell 13	Cell 18
Large services market & long-term import growth (6)	Cell 4	Cell 9	Cell 14	Cell 19
Large services market, short-term & long-term import growth (7)	Cell 5	Cell 10	Cell 15	Cell 20

* LOSI is a market with low OSI in comparison with the average of all the services/country combinations that continued from filter 3.1;

† HOSI is a market with high OSI in comparison with the average of all the services/country combinations that continued from filter 3.1;

‡ LMA is a market with low market access in comparison with the average of all services/country combinations that continued from filter 3.2;

§ HMA is a market with high market accessibility in comparison with the average of all services/country combinations that continued from filter 3.2.

The rows in the cell classification indicate the size of the import market according to the calculations from filter 2. Therefore, this indicates whether the opportunity falls in a large services/market, a market that is growing over the short term and long term, a market that is large in size and is growing over the short term, a large market that is growing over the long term, or a large market that is growing in the short and long term. The last cell classification

is the optimal opportunity for exports, as there is growing opportunity within an already large market.

The columns in the cell classification are divided according to the MA that was calculated in filter 3. Therefore, the optimal combinations lie in the fourth column in markets in which the markets are easily accessible or are very open. It is also important to note that columns 2 and 3 are interchangeable, as both have one positive and one negative value.

Export promotion activities can be formulated according to the cell classifications in the EOM for services, and this can be used to identify targeted export promotion activities for services according to market characteristics. The results of this filter will be explained in section 6.5.

5.3 Data available for the export opportunities model for services

The ITC provides data on trade in services that is divided into the services sectors according to the EBOPS Classification by the UN (section 2.4.4). The data is available on the ITC's Trade Map database (ITC, 2010a). The ITC calculations are based on data and statistics from Eurostat, UN, WTO and the IMF (ITC, 2010a). The services data of the ITC is available for 194 countries at sub-sector level according to the EBOPS Classification. This is the only data set available with such a detailed services sector breakdown per country.

The limitation of the ITC data is that the ITC cannot guarantee the accuracy of the data. Some countries report data for only a sub-sector but do not break it down into further sub-sub-sectors. For the purposes of filter 2 of the EOM for services, it was necessary to have this data broken down into the sub-sub-sectors. Therefore, estimations were made of the average ratio of each sub-sub-sector as part of the total sub-sector. Thus, the average percentages were used to break down the reported sub-sector data of some countries into sub-sub-sector values.

An example to illustrate this is the following: if a country's data does not differentiate between the different transport modes, for example for sea transport, the data is not broken down into the three sub-sub-sectors, namely passenger, freight and other. For example, the transportation data for Australia shows only the total for sea transport (EBOPS code 206) as USD 5 838 billion for the year 2007. This figure is not broken down into the sub-sub sectors of passenger, freight and other sea transport. However this broken-down figures is necessary for the purposes of the model. Therefore for all countries that the sub-sub sector

values for passenger, freight and other sea transport was available, the average of the sub-sub-sectors was calculated for each sub-sub sector. Therefore it was calculated that passenger transport contributes on average 1% to the total sea transport exports, freight transport contributes on average 72% and other transport services contribute on average 27% to the total sea transport figure. These percentages were then used to breakdown the sea transport figure for Australia into the sub-sub sectors according to the percentages calculated. For example for Australia the USD 5 838 billion was allocated to each sub-sub sector according to the 1%, 72% and 27% allocation as calculated above. This type of estimation was done for one or more sub-sectors in 36 countries that had missing values on sub-sub sector value.

With the changes to the methods of the collection of balance of payments data in the new version of the IMF (as was explained in section 3.4.3), the data reported by each country might be more accurate in the near future and this would mean that the calculations of the different filters could be enhanced to incorporate new data. However given the available data a EOM for services was applied, as will be discussed in the next chapter.

5.4 Conclusion

This chapter aimed to determine whether the DSM for products, as explained in section 4.5.3, could be applied to the trade data for services in order to identify realistic export opportunities for services from South Africa to the world market. The four filters of the DSM for products were evaluated and it was found that the methodologies for the first and second filter could be used in a similar manner for the EOM for services, but applied to services trade data.

The third filter had to be adapted, as bilateral data for services was not available. Therefore, a new method was constructed for filter 3.1 to determine the market OSI and for filter 3.2 to determine the MA by constructing frequency indexes for each country's GATS commitments at a sector level. The objective was to identify which services/country combinations were the most accessible and the combinations that fulfilled the criteria of both filters 3.1 and 3.2 could continue to filter 4. The results of filter 3 were then used in filter 4 and categorised according to the newly developed cells classification method, as discussed in section 5.2.4, in order to develop specific export promotion approaches for each type of market that can be used in the development of a goal-driven services sector strategy to lead the export promotion activities for services in South Africa.

The results of the EOM can be combined with the different companies' needs, as they enter their different stages (see Table 4.1). This table shows that expanding exporters' main needs are to select the most promising export markets and the EOM provides EPOs with a method to provide expanding exporters with these markets. The necessary export promotion instruments based on the level of development of the exporter (see Table 4.1) can then be allocated correctly to maximise the number of exports to the markets identified by the EOM. The results of the applied EOM for services will be discussed in the following chapter.

CHAPTER 6

APPLICATION OF THE NEWLY DEVELOPED EXPORT OPPORTUNITIES MODEL FOR SERVICES IN SOUTH AFRICA

6.1 Introduction

In the previous chapter, the methodology for the EOM for services was explained. The objective of the EOM for services is to produce a list of services/country combinations that show the most potential for South Africa's services exports. This model could inform the services export promotion of the DTI in South Africa and could contribute to the development of a services export strategy. This would assist the South African government in developing similar export strategies as were found in the selected countries reported on in section 4.4. This is the only model that currently exists in South Africa to identify export opportunities for services specifically and therefore the EOM makes a significant contribution to the field of services export promotion.

This chapter will present the results of the EOM for services after the methodology for the filters identified in Chapter 5 had been applied to the available data on services. Data from the ITC (section 5.3) was applied to the newly developed EOM for services. The results of the EOM for services will be discussed in the following sections.

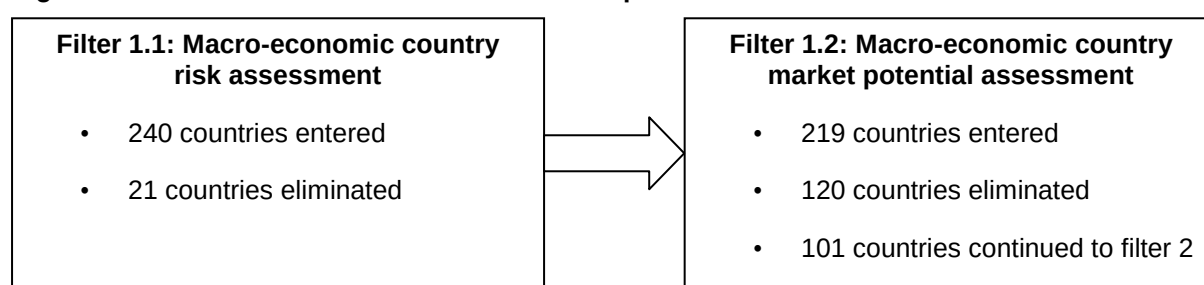
6.2 Application of filter 1 of the export opportunities model for services

In filter 1, the same methodology as used in the DSM for products was applied to the EOM for services (see section 5.2.1). (The 240 countries that entered this filter are given in Appendix C.) For the 240 countries, the first part of filter 1, referred to as filter 1.1, analysed the political and commercial risk ratings according to the ONDD. All the ratings were converted to a score ranging from 1 to 10 for each country and thereafter a cut-off value was determined. The cut-off value calculation was done as explained in section 4.5.3.1. The most appropriate cut-off value was selected at a point in the data set where there was a sudden break in the data. If there was more than one of these points, the final selection of cut-off value depends on the extent of the stringency of the analysis in the specific filter. In this filter, a total of 219 countries' risk scores were above the selected cut-off value and could be

considered for further analysis in filter 1.2. Therefore 21 countries were eliminated (these are indicated in Appendix C).

Filter 1.2 used the results from filter 1.1 and evaluated the macro-economic indicators to determine whether these markets were sizable or have been growing sufficiently in the short and long term. Owing to unavailable macro-economic data, only 193 of the 219 countries could be analysed in filter 1.2. The same methodology was used as explained in section 4.5.3.1 and, based on these calculations, 101 countries continued to the next filter. (The final list of countries that continued from filter 1 to filter 2 is given in Appendix D.)

Figure 6.1: Countries selected in filter 1.1 to pass to filter 1.2



6.3 Application of filter 2 of the export opportunities model for services

The aim of this filter was to assess all possible services/country combinations for the 101 countries that continued from filter 1 and to eliminate those that were the least interesting in terms of short- and long-term growth, as well as market size (see section 5.2.2). Therefore, this filter assessed the sector-level data for each country. Data was extracted from the ITC Trade Map database for the 101 countries for the 61 sub-sectors for the period 2003 to 2007. This period was used because the same period was used in the DSM for products and therefore the results were easily comparable. The services data available was only up until 2008 and for only a few countries until 2009 at the time of this study (ITC, 2010a). Two countries, Turkmenistan and Uzbekistan, had no data available and had to be eliminated. The data used in this filter was the imports of the 99 countries for each of the 61 services sectors as a proxy for market size. Therefore, 6 039 combinations entered this filter.

For each country, the three criteria had to be calculated. Firstly, for short-term growth, services import data from 2006 to 2007 for the 99 countries was used. Secondly, for long-term growth, services import data from 2003 to 2007 for the 99 countries was used. Lastly for relative import market size, services import data for 2007 was used and a ratio was

determined according to the imports of country i for services sector j , in comparison with the total imports of all countries in the model for the services sector. South Africa's RCA was also taken into account.

For each of these criteria, a cut-off value was determined in order to identify which services/country combination showed sufficient size and growth, and which was to be eliminated. A value of 0 or 1 was assigned to each services/country combination for each of the three criteria (short-term growth, long-term growth and market size) based on the cut-off values determined. The various services/country combinations were then grouped into seven categories according to the number of 0 or 1 values assigned to each (see Table 4.6).

If a services/country combination showed either sufficient relative market size or high import growth rates, it was grouped into categories 3, 4, 5, 6 or 7, and it could continue to the following filter.

An example of this classification is shown in Table 6.1 below. The example is based on the calculations made for the transport sector in Austria (selected randomly for demonstration purposes).

Table 6.1: Example of filter 2 selection for the transport sector in Austria

EBOPS CODE	SUB-SECTOR	SHORT-TERM GROWTH	LONG-TERM GROWTH	MARKET SIZE	CATEGORY
207	1.1.1 Sea transport – passenger				0
208	1.1.2 Sea transport – freight	X	X		4
209	1.1.3 Sea transport – other		X		2
211	1.2.1 Air transport – passenger				0
212	1.2.2 Air transport – freight				0
213	1.2.3 Air transport – other		X		2
215	1.3.1 Other transport – passenger				0
216	1.3.2 Other transport – freight				0
217	1.3.3 Other transport – other				0
218	1.4 Space transport	X	X	X	7
220	1.5.1 Rail transport – passenger				0
221	1.5.2 Rail transport – freight	X		X	5
222	1.5.3 Rail transport – other				0
224	1.6.1 Road transport – passenger				0
225	1.6.2 Road transport – freight			X	3
226	1.6.3 Road transport – other			X	3
228	1.7.1 Inland waterway transport – passenger			X	3
229	1.7.2 Inland waterway transport – freight			X	3
230	1.7.3 Inland waterway transport – other	X		X	5
231	1.8 Pipeline transport and electricity transmission				0
232	1.9 Other supporting and auxiliary transport services	X		X	5

The table above shows the growth rates and import sizes classified as categories 0, 1, 2, 3, 4, 5, 6 or 7. As an example, the import data for sea freight transport (EBOPS code 208) showed sufficient growth in the short term and long term, but not a sufficiently large market; therefore, this sector was classified as category 4. Another example is the data for rail freight transport (EBOPS code 221), where the import data showed sufficient short-term growth and a sufficient market size, and was therefore classified as category 5. Only the sectors that were classified in categories 3 to 7 continued to the next filter, as they showed a sufficient combination of growth and size (see section 4.5.3.2).

After applying this process to the 6 039 services/country combinations that entered the filter, three countries were eliminated completely, as they showed no export potential based on import growth or size. These countries were Bahamas, Bhutan and Brunei. A total of 96 countries showed possible export potential in at least one services sector or more. Finally, 1 843 services/country combinations of the original 6 039 combinations showed possible export potential and continued to filter 3.

Figure 6.2: Countries selected in filter 2 to pass to filter 3

Filter 2: Possible export opportunities based on market size, short-term growth and long-term growth • 101 countries entered • 2 countries eliminated owing to insufficient data • 6 039 services/country combinations entered (99 countries x 61 sectors) • 1843 service/country combinations continue
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6.4 Application of filter 3 of the export opportunities model for services

As was discussed in section 5.2.3, a new filter 3 for the EOM for services had to be constructed owing to the nature of services and the trade data available. The results of filters 3.1 and 3.2 of the EOM for services will be explained in this section.

6.4.1 Application of filter 3.1 of the export opportunities model for services

The aim of this filter was to create an index of market concentration or trade openness for the 1 843 services/country combinations that continued from filter 2. By using the methodology explained in section 5.2.3.1, a list was compiled of the percentage of market OSI for each combination. An example of the calculations is given in Table 6.2 (Austria was again randomly selected for demonstration purposes).

Table 6.2: Calculating trade openness for services imports using the United Nations Conference on Trade and Development three-sector level data for Austria

SECTOR	GDP SERVICES (LOCAL DEMAND)*	SERVICES IMPORTS*	SERVICES EXPORTS*	TOTAL SERVICES DEMANDED*	OSI
Wholesale, retail trade, catering and accommodation	56,362,971	10,553,352	18,698,310	48,218,013	0.22
Transport, storage and communications	21,243,777	20,966,775	21,929,841	20,280,711	1.03
Other activities	149,474,593	15,067,991	21,926,081	142,616,503	0.11

* Unit: USD in thousands

Source: Author's own calculations based on UNCTAD (2010)

The example given in the table above illustrates the calculation of OSI by dividing the services imported by a country by the total services demanded. This provided a proxy for trade openness in the target market, with the assumption that the higher the levels of OSI, the more open the market will be for imports of that service. This was calculated for the GDP data available from the UNCTAD as shown in Table 6.2.

The results for each of the three main sectors according to the UNCTAD data were then re-allocated to each of the corresponding 61 sectors that were used in this model (see section 5.2.3.1 for a detailed explanation). The results were then assessed and a cut-off value was determined to identify the services/country combinations that did not show sufficient market OSI to continue to the next filter. By applying the same method that were used in filter 1 to determine the cut-off value (see section 5.2.3.1), an average and the standard deviation were calculated. The average for filter 3.1 was 0.369598 and the standard deviation was 0.719328. An alpha of 0.44 was selected as the most appropriate cut-off value, as this was where there was a significant break in the data set. Therefore, the cut-off value for market OSI was 0.0503093. Using this cut-off value, 961 services/country combinations had an OSI percentage above 0.0503093 and were selected to continue to the final selection of filter 3.

Figure 6.3: Countries selected in filter 3.1 to pass to the final selection of filter 3

Filter 3.1: Level of market OSI	
	• Ratio of total imports to total local demand at a sector level
	• Cut-off value of 0.0503093 selected
	• 961 combinations selected

6.4.2 Application of filter 3.2 of the export opportunities model for services

The aim of filter 3.2 was to determine the level of import restrictions or barriers prominent in each of the 96 markets for each of the 1 843 services/country combinations that showed potential for exports in filter 2. As explained in section 5.2.3.3, a new methodology was constructed for this filter by creating a MA index from the GATS commitments of each member country. The GATS commitments at a sector level for each country were allocated a score of 0, 0.5 or 1 and the total scores for each sector were calculated. This was then compared with the maximum number of commitments that could be made at a sector level. By applying this method to each of the 1 843 services/country combinations, a list of MA was calculated in a percentage form.

For the countries that are not WTO members and do not make any commitments, a proxy for market access had to be calculated in order to compare them with the other countries. There were eleven countries that are not members of the WTO and therefore for these countries, the average commitments of the countries in its region were used to create a proxy for market access for each sector. The assumption was that if the neighbouring countries are all relatively open or accessible to services trade, then that specific country should be as well. This method is not the most accurate, but there are no alternative measures of market access that are comparable with the frequency measures used for this model (see section 5.2.3.2). In addition, it is important to note that the EU countries submit a joint set of commitments and therefore the set of commitments was given the values as explained in section 5.2.3.3 and then the same set of values was used for each of the EU countries.

The results for all services/country combinations were then assessed and a cut-off value was determined in order to identify the services/country combinations that did not show sufficient market access to be able to continue to the next filter. By applying the same method as used in filters 1 and 3.1 to determine the cut-off value, an average and the

standard deviation was calculated. The average was 0.202468 and the standard deviation was 0.251445. An alpha of 0.4 was selected as the most appropriate cut-off value and the final cut-off value for market access was 0.101890.

It is important to note that the cut-off value selected for both filters 3.1 and 3.2 will depend on the level of stringency desired by the end user. If the EPO has very limited resources and wants the end results to be a small manageable list of export opportunities, the cut-off values can be set more strictly. In this case, 666 services/country combinations had a market access value above 0.101890 and thus continued to the final selection of filter 3.

Figure 6.4: Countries selected in filter 3.2 to pass to the final selection of filter 3

Filter 3.2: Level of market accessibility • Trade barriers as per GATS schedule of commitments for each country at sector level • Cut-off value of 0.101890 selected • 666 combinations selected
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The two sets of results for filters 3.1 and 3.2 were combined into one set of results. The final filter 3 selection will be explained in the following section.

6.4.3 Application of final filter 3 of the export opportunities model for services

From filters 3.1 and 3.2, two sets of data were available for further analysis. According to the methodology used in the DSM for products (see section 5.2.3.4), a services/country combination had to fall within the cut-off values of both filter 3.1 and filter 3.2 in order to continue to filter 4. The same method was followed so that the results could be comparable with the DSM for products. The stringency of the criteria depend on the availability of resources, as the fewer the resources available for promotion of the prioritised services/country combination, the stricter the criteria will be. Therefore, it may be possible to change this section of filter 3 to allow a services/country combination to continue to filter 4 if it only complies with one of the two sub-filters, instead of both.

The 961 services/country combinations from filter 3.1 and the 666 services/country combinations from filter 3.2 were compared and if a services/country combination was selected by both filters, it continued to filter 4. The following countries were eliminated as no potential export opportunities were identified: Bahrain, Bangladesh, Brazil, Colombia,

Dominican Republic, Israel, Jordan, Macao, Malta, Mexico, Mongolia, Peru, Qatar, Sri Lanka, St. Kitts and Nevis, Tanzania, Trinidad and Tobago, Turkey, and Uruguay. It is important to note that these countries could not continue to filter 4, as their levels of market access in both filters 3.1 and 3.2 were insufficient. Therefore, 578 services/country combinations were selected to continue to filter 4. Filter 4 is not an elimination filter and only summarises the results of filter 2 and 3. This will be discussed in the following section.

6.5 Application of filter 4 of the export opportunities model for services

No further services/country combinations were eliminated in this filter. The 578 services/country combinations were grouped into cells that differentiate the opportunities according to market size and growth (filter 2), as well as market-access characteristics (filter 3). The results were also clustered according to sector, country and region to identify the main regions and sectors that show export potential for South Africa's services. The results will be discussed in the following sections.

6.5.1 Cell classifications of services/country combinations

The aim of the cell classifications (see section 5.2.4) is to provide a method by which the results of the EOM for services can be used in order to differentiate amongst the different export promotion strategies. The cell classification (see Table 5.2) groups the services/country combinations according to their market size or growth (according to filter 2), as well as the level of market OSI (according to filter 3.1) and MA (according to filter 3.2). The results are shown in Table 6.3 below, in which the cell classification of the results is according to the number of opportunities selected in the EOM for services.

Table 6.3: Cell classification based on the number of opportunities

MARKET SIZE	LOSI & LMA	LOSI & HMA	HOSI & LMA	HOSI & HMA
Large services market (3)	Cell 1 52	Cell 6 88	Cell 11 25	Cell 16 16
Short-term & long-term import growth (4)	Cell 2 69	Cell 7 74	Cell 12 41	Cell 17 26
Large services market & short-term import growth (5)	Cell 3 30	Cell 8 42	Cell 13 9	Cell 18 8
Large services market & long-term import growth (6)	Cell 4 7	Cell 9 14	Cell 14 8	Cell 19 3
Large services market, short-term & long-term import growth (7)	Cell 5 31	Cell 10 16	Cell 15 7	Cell 20 12
TOTAL	189	234	90	65

The rows in the cell classification of the table above indicate the size of the import market according to the calculations in filter 2. This indicates whether the opportunity falls in a large market, a market that is growing over the short term and long term, a market that is large in size and growing over the short term, a large market that is growing over the long term, or a large market that is growing in the short and long term. The last cell classification indicates the optimal opportunity for exports, as there is growing opportunity within an already large market.

The columns in the cell classification are divided according to the MA calculated in filter 3. Therefore, the optimal combinations for export promotion lie in the fourth column, where the markets are easily accessible. It is also important to note that columns 2 and 3 are interchangeable, as both have one positive and one negative value.

According to Table 6.3, the largest number of export opportunities for South African services lie in cell 6, where the markets are large in size. In cell 6, the services/country combinations have a low OSI but high market access in comparison with the average of all the services/country combinations. Therefore, while a market may be a large services importing market, the exporter needs to consider whether the market openness issues are acceptable for its specific situation. Therefore, EPOs should be involved in the process of increasing the

market for imports by creating a positive brand/image for South African services in such a market.

The total number of opportunities per services sector does not indicate the size of the market, which is important in deciding whether it is worth seeking to penetrate such a market. A market may show high numbers of realistic export opportunities for a service but the value of the opportunities may be very small. Therefore, in order to create a proxy for the market size, the total import demand for each sector was calculated for 2007. This figure is the total imports for that services sector in the market, which shows whether it is a large market. For the EU countries, the intra-EU services trade data was taken out of the total imports for each country, as many of these countries might show high imports (but this is mostly from other EU countries). These markets are less inaccessible to South African exporters. These figures did not take into account South Africa's share in each market, as bilateral trade data for services is not yet available. However, these figures should give an indication of whether the market is worth entering from an export perspective. These potential values are shown in Table 6.4 below.

Table 6.4: Cell classification based on the import demand

MARKET SIZE*	LOSI & LMA	LOSI & HMA	HOSI & LMA	HOSI & HMA
Large services market (3)	Cell 1 160,084,540	Cell 6 158,688,749	Cell 11 39,355,027	Cell 16 49,050,145
Short-term & long-term import growth (4)	Cell 2 13,655,732	Cell 7 37,829,747	Cell 12 11,167,786	Cell 17 4,422,767
Large services market & short-term import growth (5)	Cell 3 14,389,582	Cell 8 102,435,938	Cell 13 10,099,651	Cell 18 30,670,944
Large services market & long-term import growth (6)	Cell 4 12,288,370	Cell 9 28,136,120	Cell 14 8,746,579	Cell 19 1,622,176
Large services market, short-term & long-term import growth (7)	Cell 5 56,530,626	Cell 10 62,007,274	Cell 15 4,101,128	Cell 20 38,691,540
TOTAL	256,948,851	389,097,827	73,470,171	124,457,572

* Unit: USD in thousands

In this instance, the cell with the largest value for potential exports is cell 1, in which the markets are large in size but market openness for services and market access is low in comparison with the average of all the services/country combinations. Other cells with equally substantial import values are cell 6, and cell 8. Cell 6 indicates large service importing markets with high market access but low OSI. Cell 8 indicates large service importing markets that also have growth in the short term, combined with low OSI and high market access.

The cell classifications can be used by the DTI in South Africa and other EPOs to develop export promotion strategies for each column and each cell, as each of these classifications may need a different approach. The different export promotion strategies should also be linked to the export promotion instruments that are applicable to the stage of the exporter's development (see Table 4.1). Further recommendations will be discussed in Chapter 7. The results of the EOM will be further discussed according to services sector, country and region in the sections that follow.

6.5.2 Results per services sector

The final 578 services/country combinations of the EOM can be grouped according to services sub-sectors based on the number of opportunities in each sector. The top twenty services sub-sectors identified in the model to have the highest number of opportunities are shown in Table 6.5.

Table 6.5: Top twenty services sectors with the highest number of opportunities

EBOPS CODE	SUB-SECTOR	NUMBER OF OPPORTUNITIES*
241	2.2.1 Travel personal – health-related	39
243	2.2.3 Travel personal – other	38
238	2.1.1 Travel business – expenditure by seasonal and border workers	29
242	2.2.2 Travel personal – education-related	29
239	2.1.2 Travel business – other	27
247	3.2 Communications services – Telecommunication services	19
213	1.2.3 Air transport – other	16
211	1.2.1 Air transport – passenger	15
251	4.2 Construction services – construction in the compiling economy	15
278	9.3.2 Advertising, market research and public-opinion polling	15
225	1.6.2 Road transport – freight	14
891	8.1 Franchises and similar rights	14
209	1.1.3 Sea transport – other	13
285	9.3.7 Services between affiliated enterprises, n.i.e.	13
897	10.2.3 Other personal, cultural and recreational services	13
212	1.2.2 Air transport – freight	12
222	1.5.3 Rail transport – other	12
263	7.1 Computer services	12
275	9.3.1.1 Legal services	12
280	9.3.4 Architectural, engineering and other technical services	12

* Number of opportunities refers to the number of countries to which a service sector has potential to export (e.g. personal health-related travel can potentially be exported to 39 countries).

The table above shows that health-related travel/tourism (EBOPS code 241) is the services sector with the highest number of potential export opportunities for South Africa. This is followed by other travel sectors (EBOPS codes 243, 238, 242 and 239), and telecommunication services (EBOPS code 247).

Table 6.5 also demonstrates the potential for diversification of services exports in South Africa. In section 3.8, it was found that approximately 75% of South Africa's exports of services lie in the travel and transportation sectors. The results of the EOM for services show that there is potential for diversification into the export of communications services (EBOPS code 247), construction services (EBOPS code 251), advertising, market research and public-opinion polling services (EBOPS code 278), franchises and similar rights (EBOPS code 891), computer services (EBOPS code 263), legal services (EBOPS code 275), and architectural, engineering and other technical services (EBOPS code 280). The significance of these export opportunities is more evident when the potential export value for each services sector is added. This is because the number of opportunities per service sub-sector

is not an indication of the size of the potential markets, which is important in deciding whether it is worth seeking to penetrate these markets (see section 6.5.1). The sector results are presented in Table 6.6 in value terms, i.e. the services sub-sectors that have the highest potential export value based on total import demand.

Table 6.6: Top twenty services sectors with the highest value of opportunities

EBOPS CODE	SUB-SECTOR	NUMBER OF OPPORTUNITIES	TOTAL IMPORT DEMAND IN 2007*
243	2.2.3 Travel personal – other	38	250,780,485
208	1.1.2 Sea transport – freight	10	103,264,056
239	2.1.2 Travel business – other	27	59,934,743
211	1.2.1 Air transport – passenger	15	34,497,114
209	1.1.3 Sea transport – other	13	30,418,609
277	9.3.1.3. Business and management consultancy and public relations services	10	26,423,556
285	9.3.7 Services between affiliated enterprises, n.i.e.	13	24,466,759
251	4.2 Construction services – construction in the compiling economy	15	22,735,754
213	1.2.3 Air transport – other	16	20,633,456
278	9.3.2 Advertising, market research and public-opinion polling	15	18,499,281
891	8.1 Franchises and similar rights	14	18,354,752
247	3.2 Communications services – telecommunication services	19	18,099,223
242	2.2.2 Travel personal – education-related	29	17,715,945
280	9.3.4 Architectural, engineering and other technical services	12	16,234,796
225	1.6.2 Road transport – freight	14	15,348,593
263	7.1 Computer services	12	14,560,542
279	9.3.3 Research and development	10	14,505,544
284	9.3.6 Other miscellaneous business, professional and technical services	5	14,059,510
212	1.2.2 Air transport – freight	12	12,671,646
892	8.2 Other royalties and licensing fees	2	11,719,157

* Unit: USD in thousands

In the table above, the sub-sectors with the highest export opportunities in value are different to those in Table 6.5, as this table now includes the total import demand in the potential markets. In Table 6.6, other personal travel (EBOPS code 243) has the highest value of potential exports, followed by sea freight transport (EBOPS code 208) and some other travel and transport sectors (EBOPS codes 239, 211 and 209). Some sectors, such as business and management consultancy (EBOPS code 277) and research and development (EBOPS

code 279), now fall in the top twenty-sector category, while they were not in terms of number of opportunities (Table 6.5). The personal health-related travel services sector (EBOPS code 241) was the highest export opportunity according to number of opportunities in Table 6.5, but according to potential export value, it does not fall in the top twenty sectors.

Table 6.6 once again shows opportunities for services export diversification away from the travel and transportation sectors, as was discussed in section 3.8. The following sectors hold high export potential and should be explored by the South African EPO: business and management consultancy and public relations services (EBOPS code 277), construction services (EBOPS code 251), advertising, market research and public-opinion polling (EBOPS code 278), franchises and similar rights (EBOPS code 891), telecommunication services (EBOPS code 247), architectural, engineering and other technical services (EBOPS code 280), computer services (EBOPS code 263), research and development (EBOPS code 279), and other business and professional services (EBOPS code 284).

It is interesting to note in both tables that travel services still have the highest export opportunities for South Africa. This may seem to contradict the statement in section 3.9 that South Africa should diversify its exports to other services sectors. However it is important to note that the figures above do not indicate how much of these services are already exported and it is very likely that a large amount of the opportunities for travel services exports are already utilised, since the South African government has driven the travel sector immensely in the past few years. However, one can also argue that there is further scope to export more travel services and some researchers may even argue that South Africa should specialise in the travel sector and add more value to that sector. It is the author's opinion that this should not be the case and that export diversification spreads the export base and would generate a higher return.

These findings can contribute to a possible export promotion strategy according to which specific sectors can be selected for export promotion focus. These recommendations will be discussed in more detail in Chapter 7.

6.5.3 Results per country

The EOM results can also be sorted according to country in order to show the countries with the most realistic export opportunities for South Africa. The top twenty countries with the highest number of realistic export opportunities are shown in Table 6.7 below.

Table 6.7: Top twenty* countries according to number of potential export opportunities

COUNTRY	NUMBER OF OPPORTUNITIES
Spain	27
UK	27
Italy	25
Russia	25
Germany	22
Singapore	22
Belgium	21
Netherlands	20
Sweden	20
Canada	17
Serbia	17
France	15
South Korea	15
Kazakhstan	13
Austria	12
China	12
Denmark	11
Georgia	11
Hong Kong	10
Saudi Arabia	10

*The complete list of services export opportunities per sector is available from the author.

In this table, Spain, the UK and Italy are the markets with the highest number of export opportunities. It is interesting to note that the USA is not in the top twenty for number of export opportunities. The USA was in position 56 because it only had export opportunities for two services sectors. The other sectors did not have potential in the USA owing to very low market openness for services as according to filter 3.1. Furthermore, the services sectors that showed potential in the USA in filter 3.1 were not the same as in filter 3.2. As both filters 3.1 and 3.2 criteria had to be met to continue to filter 4 (see section 5.2.3.4), only two sectors complied with these criteria.

The ranking of the countries changes when the potential import values are added, as is shown in Table 6.8. Again the total import values of each export opportunity in each country were calculated and indicate a proxy for the total potential import value into each country.

Table 6.8: Top twenty countries according to value of potential exports**

COUNTRY	NUMBER OF OPPORTUNITIES	TOTAL IMPORT DEMAND IN 2007*
China	12	87,604,802
Germany	22	71,568,399
UK	27	57,586,919
South Korea	15	54,285,200
Canada	17	51,256,635
Japan	4	47,865,345
Russia	25	47,276,296
Singapore	22	42,730,539
Saudi Arabia	10	36,241,082
France	15	30,895,729
Spain	27	26,634,870
Italy	25	26,115,755
Netherlands	20	25,016,667
Hong Kong	10	24,750,000
Romania	6	22,209,526
Malaysia	7	22,185,290
Australia	7	21,075,122
Norway	8	20,642,030
Ireland	8	13,862,473
Sweden	20	11,699,233

* Unit: USD in thousands

** The complete list of services export opportunities per country is available from the author

From the table above, China, Japan, South Korea and Hong Kong have moved much higher on the list of potential export opportunities when reviewing the potential export value. Therefore, even if a country such as Serbia has a high number of export opportunities for services – seventeen sectors – the value of the potential exports of these sectors is not very high. The DTI should consider whether these opportunities are worth using valuable capacity to expand exports for these sectors to Serbia.

This table also demonstrates again that the Asian countries offer South Africa higher export opportunities according to their total value of imports of services. The Asian market and the European market hold the highest value of export opportunities for services and these are the markets that should receive the greatest focus with regard to export promotion.

The country results can also be arranged according to regions, which more clearly identify the areas that should receive focus from South African EPOs, such as the DTI. This will be done in the following section.

6.5.4 Results per region

The EOM results can also be ranked according to region in order to identify the regions with the highest realistic export opportunities for services from South Africa. The total number of opportunities per region and the total value of services imports per region are given in Table 6.9. The UN macro-regions (UN, 2010b) were used for these purposes (as is given in Appendix E).

Table 6.9: Regional distribution of results

SUB-REGION	MAIN REGION	NUMBER OF OPPORTUNITIES	TOTAL IMPORT DEMAND IN 2007*
Caribbean	Latin America	7	56,309
Central America	Latin America	2	758,090
Eastern Africa	Africa	1	282,400
Eastern Asia	Asia	41	214,505,347
Eastern Europe	Europe	63	72,399,922
Middle Africa	Africa	2	261,550
Northern Africa	Africa	2	391,823
North America	North America	21	59,270,475
Northern Europe	Europe	97	112,780,181
Oceania	Oceania	13	24,229,920
South America	Latin America	10	6,612,300
South-Central Asia	Asia	19	12,413,208
South-Eastern Asia	Asia	48	68,455,352
Southern Europe	Europe	93	62,257,510
Western Africa	Africa	10	600,157
Western Asia	Asia	45	59,960,357
Western Europe	Europe	104	148,739,521

* Unit: USD in thousands

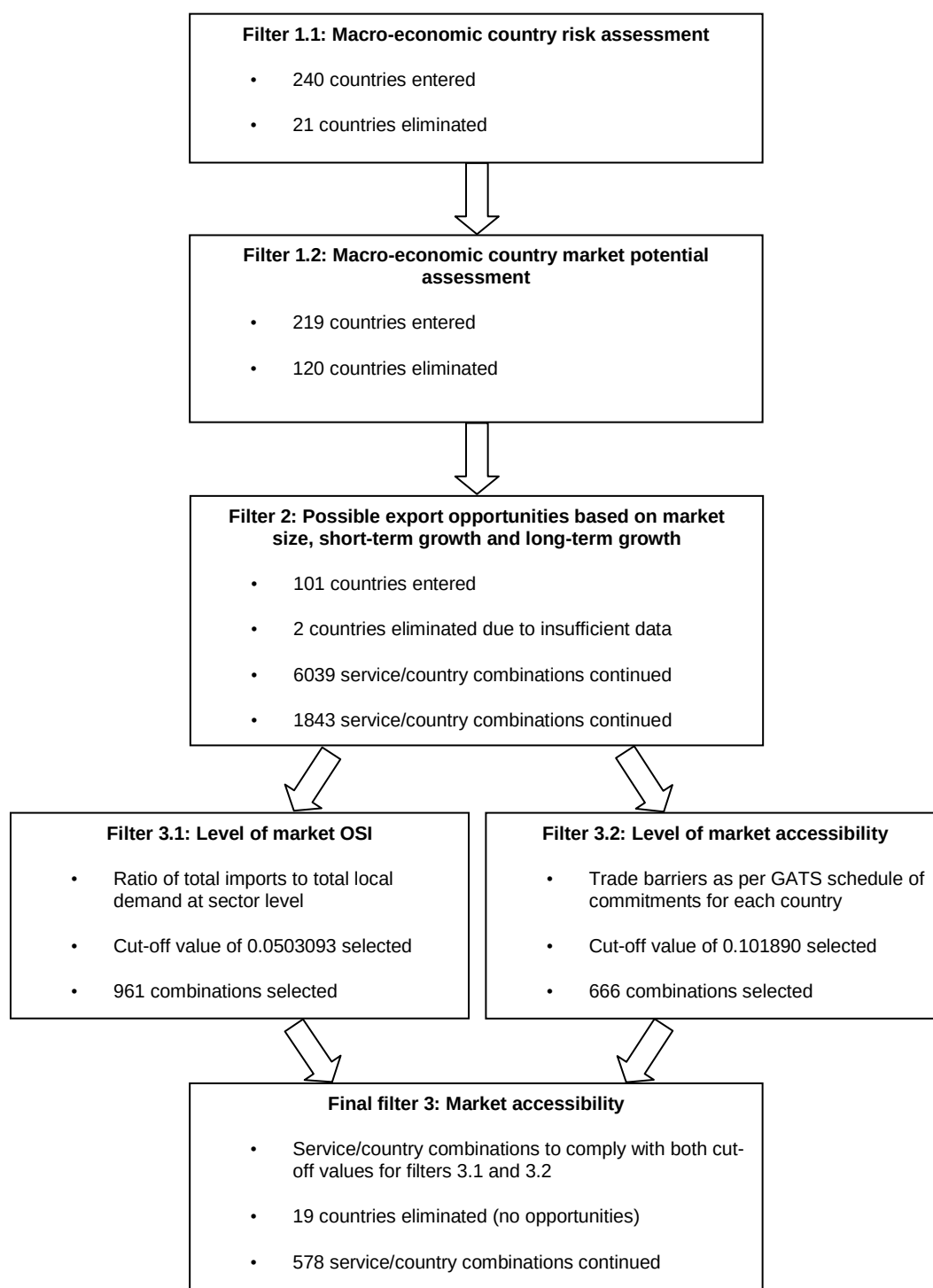
From the table above, it is clear that Western, Northern and Southern Europe show the highest number of export opportunities for South African services. Eastern Asia, Western Europe and Northern Europe have the highest total import demand for services. It is interesting to note that 80% of the export opportunities in North America are in Canada.

The results of the EOM for services can greatly influence the method by which the DTI makes decisions in future regarding export promotion. The results can also be used to determine the specific promotion strategy that is best suited to each sector, country and region. These recommendations will be discussed in Chapter 7.

6.6 A summary of the filters of the export opportunities model for services

The EOM for services was developed in order to have a systematic process by which the DTI in South Africa and exporters can identify services/country combinations that show realistic export opportunities. It is important to note that this model is dependent on the quality of data input and the available data on barriers and accessibility. The model provides for the first time a scientific basis upon which the end user can make informed decisions on market selection issues for services specifically. The results will also depend on the stringency required by the end user in each filter. If the user is stricter in the selection with cut-off values in each filter, the final list of realistic export opportunities will be smaller but will contain opportunities that have fewer restrictions. A flow chart summarising the filters is shown in Figure 6.5 below.

Figure 6.5: Sequence of filters in the export opportunities model for services



The resulting list of 578 services/country combinations from filter 3 was then used in filter 4 to cluster into cell classifications according to market characteristics. These results could be used to construct export promotion strategies for each column and each cell according to its characteristics. This will be explained in more detail in Chapter 7.

6.7 Conclusion

This chapter explained the results of the EOM for services applied according to the methodology described in Chapter 5. The trade data from the ITC was used, as it breaks down import and export data into 61 sub-sub-sectors for each country.

The first filter of the EOM for services (section 6.2) analysed the economic and political risks, as well as GDP and GDP per capita data for 240 countries. After applying filters 1.1 and 1.2, 101 countries were selected to continue to the second filter of the model. These countries were selected if their economic growth and country risk levels were sufficient. Two countries had no export data and therefore 99 countries could continue to the next filter. A total of 6 039 services/country combinations (99 countries x 61 sectors) were selected to continue to filter 2.

The second filter of the model (section 6.3) evaluated the import data in the short term and long term for the 99 countries across 61 services sectors and eliminated those opportunities that did not show potential import growth in the short term or long term, or both, and had an insufficient import market size. Three countries were eliminated, as they showed no potential for exports in any sectors. Therefore, 1 843 services/country combinations were selected to continue to filter 3.

In filter 3.1, a country's market OSI was used as a proxy for market concentration (see section 6.4.1). For each sector, the value of total imports was compared with the total import demand in that market. The results were then assessed and a cut-off value was determined to identify the services/country combinations that did not show sufficient market OSI. A total of 961 services/country combinations had an OSI percentage above the cut-off value and could continue to the final selection of filter 3.

In filter 3.2, the GATS commitments of each country was analysed and used as a proxy for MA (section 6.4.2). For each sector, the number of commitments made was compared with the maximum possible number of commitments and a percentage of market access was calculated. This was done by using the frequency measures explained in section 5.2.3.2.1 and building an index of MA for each sector in the services/country combinations that continued from filter 2. The results for all services/country combinations were then assessed and a cut-off value was determined to identify the services/country combinations that did not

show sufficient market access. A total of 666 services/country combinations had a market-access percentage above the cut-off value and could continue to the final selection of filter 3.

The two sets of results for filters 3.1 and 3.2 were compiled into one set of results and the final filter 3 selections were made (section 6.4.3). A services/country combination had to fulfil the criteria set in both filters 3.1 and 3.2 to be selected to continue. Therefore, a total of 578 services/country combinations were selected to continue to filter 4.

The 578 services/country combinations can be viewed as the export opportunities that show the most potential for South Africa's services. In section 6.5, the results were then analysed in filter 4. The results were clustered into cells that classify the opportunities according market size and growth, as well as market OSI and market access. These cell classifications can be used to develop export promotion strategies for the South African EPOs by developing a different approach for each cell and each column (see section 6.5.1). This will be discussed further in Chapter 7.

The results were also grouped according to the services sectors that show the highest export opportunities, as well as countries and regions. Health-related travel/tourism (EBOPS code 241) has the highest number of potential export opportunities for South Africa (see section 6.5.2). This is followed by other travel sectors (EBOPS codes 243, 238, 242 and 239), as well as telecommunication services (EBOPS code 247). However, having a large number of export opportunities does not necessarily mean that the potential export values are sufficiently high to pursue the market actively.

Therefore, when the same results were ranked according to the total import demand in the potential markets, the ranking changed and the following sectors showed the highest export opportunities: other personal travel (EBOPS code 243), followed by sea freight transport (EBOPS code 208) and some other travel and transport sectors (EBOPS codes 239, 211 and 209). Some sectors such as business and management consultancy (EBOPS code 277) and research and development (EBOPS code 279) were then included in the top twenty sectors. These results can be used when developing strategies with which to diversify South Africa's exports of services, as was explained in section 3.7.

The results of the EOM were also ranked according to the countries in which the highest number of opportunities was identified (section 6.5.3). Spain, the UK and Italy were the markets with the highest number of export opportunities. The ranking changed when the

potential import values were incorporated into the ranking, and China, Japan and South Korea moved higher up the list of potential export opportunities according to the value of the potential import demand in these export opportunities. Interestingly, the USA was not included in the top 20, as only two export opportunities were identified in this market. The main reason for this was the HMA barriers in the USA as identified in filters 3.1 and 3.2.

The results of the EOM were ranked according to regions in order to determine a broader sense of where the export opportunities for services for South Africa lie (section 6.5.3). According to this analysis, Western, Northern and Southern Europe show the highest number of export opportunities for South African services. However, according to the total import demand for services, Eastern Asia, Western Europe and Northern Europe show the highest export potential. Therefore, Asia moved up significantly in the ranking and this region shows the highest value of potential import demand for South Africa's services.

One contribution of this study is the construction of a new methodology for filters 3 and 4. The EOM for services provides a method by which the DTI and other EPOs in South Africa can assess the total world market for services and identify the most promising export markets for the different services sectors. This provides a scientific basis for decision-making and analyses the world's potential services markets in an objective manner.

The results of the cell classifications can be used to identify export promotion strategies according to the target market's characteristics. The results per sector and region are also useful in identifying a strategic plan to diversify South Africa's exports of services. These possible export promotion strategies for South Africa's services will be discussed in the following chapter.

CHAPTER 7

AN ANALYSIS OF THE EXPORT OPPORTUNITIES MODEL FOR SERVICES AND COMPARISON WITH THE DECISION SUPPORT MODEL FOR PRODUCTS

7.1 Introduction

In the previous chapter, the results of the EOM for services were discussed. This model offers a method by which export opportunities can be scientifically calculated for South Africa's services. These opportunities can be used in the compilation of an export promotion strategy for the services sector in South Africa in order to increase export growth of services and diversify services exports.

This chapter aims to analyse the results of the EOM for services in more detail and make policy recommendations for the DTI in South Africa. Recommendations will be made based on the results for the services sector, as well as a comparison between the DSM for products and the EOM for services. The results of the EOM for services will be analysed in section 7.2. The DSM for products and the EOM for services will be compared in section 7.3.

7.2 An analysis of the results of the export opportunities model for services

The objective of this section is to analyse the results of the EOM for services alongside the relevant literature and practices to provide possible guidelines on the export promotion of services in South Africa. In section 3.8, it was found that South Africa's exports of services mostly fall within the travel sector (63%) and therefore South Africa's exports of services need to be diversified into other sectors. The DTI in South Africa does not have an existing strategy for the promotion of the export of services (see section 4.5) and, according to the findings of sections 4.3 and 4.4, it is important for South Africa to focus specific export promotion activities on services sectors in order to increase the exports of services in these sectors. The export promotion practices in selected countries were analysed in section 4.4 and, from this, the need for South Africa to create an organisation or unit within the current structures that would focus only on the export promotion of services was identified. This organisation could perform various functions, one of which could be to diversify the exports of services into other services sectors. This could be done by incorporating the results of the EOM for services. The following sections will make recommendations based on the results.

7.2.1 Recommendations according to the cell classifications

The first set of export promotion recommendations result from the two cell classifications in Tables 6.3 and 6.4, in which the results of the EOM for services were classified according to market characteristics. The rows of the cell structure show the size of the import markets, varying from large services markets to growing services markets. The majority of the export opportunities fell in rows 1 and 2. The first row indicates that the potential markets are already large in size and show very little additional extension/growth. However, these markets are settled and the demand for the services is constant. The second row shows markets that have been growing in the short term and long term. These are also very good markets to enter owing to the growing demand for these services in these markets.

The columns in the cell classifications indicate the extent to which these large and growing markets are easy to enter. The first column indicates markets with a low MA. These markets require intervention by government to reduce barriers to entry. South Africa's EPOs should be involved in these markets to negotiate easier access for South Africa's services companies. The second column shows markets that have low market openness for services, as they import very little in comparison with domestic supply of the services. This is a great barrier for exporters, as this indicates that the domestic companies in these markets are very competitive. Therefore, South Africa's EPOs should be involved in assisting South African companies in identifying means of ensuring they are very competitive before entering these markets. The services provided by the South African companies have to be at the same competitive level as the domestic companies in that market, with similar price ranges and the same quality services, if not better. The third column indicates markets with high openness for services in terms of exports but which are difficult to access owing to stringent policies. Here South Africa's EPOs should ensure that they are involved in the negotiations processes to lower these barriers and ease access into these markets. The fourth column shows markets that need very little export promotion intervention. These are markets with high openness for services and HMA. South African companies should have no trouble entering these markets themselves and may only need some assistance if they are new exporters and have very little export experience (see Table 4.1).

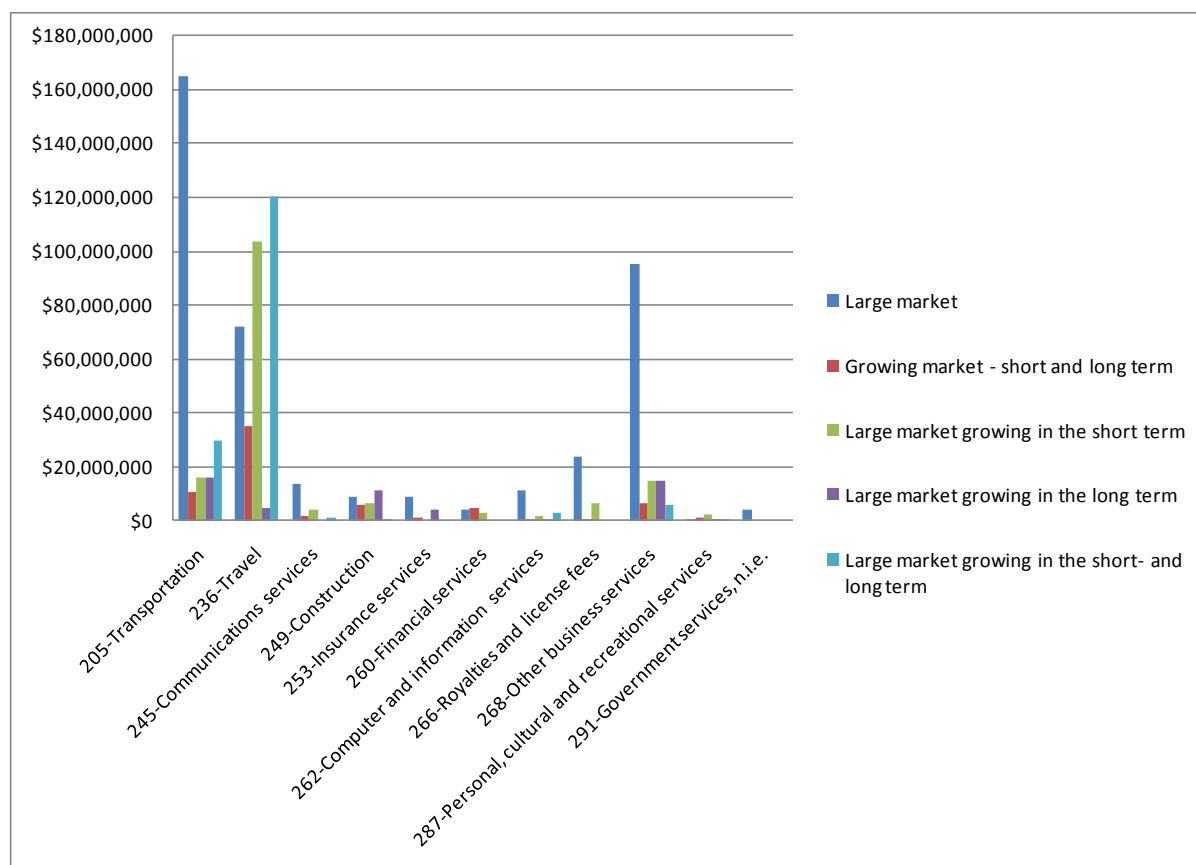
7.2.2 Recommendations according to sector, country and regional results

Export diversification of the services sector can also be done by analysing the results of the EOM per sector, country and region and including the results in further export diversification strategies for the services sector. The results are summarised in this section and some recommendations are made accordingly. The top twenty results per sector in section 6.5.1 showed that there are a large number of opportunities for the following sectors: communications services (EBOPS code 247), construction services (EBOPS code 251), advertising, market research and public-opinion polling services (EBOPS code 278), franchises and similar rights (EBOPS code 891), computer services (EBOPS code 263), legal services (EBOPS code 275), and architectural, engineering and other technical services (EBOPS code 280).

The same results ranked according to potential import demand in the markets changed slightly and, according to this ranking, the following sectors have export potential: business and management consultancy and public relations services (EBOPS code 277), construction services (EBOPS code 251), advertising, market research public-opinion polling (EBOPS code 278), franchises and similar rights (EBOPS code 891), telecommunication services (EBOPS code 247), architectural, engineering and other technical services (EBOPS code 280), computer services (EBOPS code 263), research and development (EBOPS code 279), and other business and professional services (EBOPS code 284).

When one considers the opportunities according to total import demand per sector in Table 6.6, the opportunities are widespread between large markets and growing markets. The spread of opportunities is shown per sector in Figure 7.1 below.

Figure 7.1: Services export opportunities per sector in different markets



The figure above summarises the sector results and shows that transportation (EBOPS code 205), travel (EBOPS code 236) and other business services (EBOPS code 268) hold the largest export opportunities for South Africa. Most of these opportunities are located in large services markets and travel (EBOPS code 236) has opportunities in large markets that show growth in the short and long term. However, for the purposes of export diversification, sectors such as communication (EBOPS code 245), construction (EBOPS code 249), insurance (EBOPS code 253), financial (EBOPS code 260), royalties and licensing fees (EBOPS code 266), and other business services (EBOPS code 268) also have relatively high export potential.

These results were separated into country and regional listings in sections 6.5.3 and 6.5.4. The countries with the highest number of opportunities were situated in Western, Northern and Southern Europe show the highest number of export opportunities for South African services. When sorting these opportunities according the total import demand of each opportunity, Eastern Asia, Western Europe and Northern Europe show the highest export opportunities for South African services. It is interesting to note that 80% of the export

opportunities in North America are in Canada. Therefore, export promotion strategies should focus on increasing services exports to the Eastern Asian region and the European region.

The export promotion of services should also focus on the different modes of supply through which each service could be offered. This will be explained in more detail in the next section.

7.2.3 Export promotion instruments per mode of supply for South African services

The results of the EOM were clustered into sectors, countries and regions, which can be used in conjunction with the GATS modes of supply for each sector to construct sector- and region-specific export promotion strategies. For example, the construction services sector was identified as having high export potential according to the number of opportunities and the total import demand in these countries. When exporting construction services, it is usually done in the form of a project consultant or company entering a foreign market and managing a construction project in that market, such as the construction of an airport, hotel or dam. According to the different modes of supply of the GATS (see Table 3.2), such construction services would fall into the fourth mode of supply. This would mean that the export promotion of these services would need to be done by ensuring the construction companies in South Africa are aware of these opportunities and can tender for these projects competitively. South African EPOs should also assist these companies in advertising their services in these markets by attending trade fairs and missions and arranging sector-specific, industry-organised visits between potential suppliers and users/importers of the same services in the country in which the demand lies.

Another construction example involves services being performed within the South African market (that is mode 2 of the GATS). For example, a foreign company wishes to construct a hotel in Johannesburg, South Africa, and uses a local construction company to complete the project. These services require a different approach, as these do not entail the exporter actually leaving the country. Therefore, EPOs should arrange organised visits between interested users/importers and potential suppliers in South Africa to show the interested importers previous work done by the specific construction companies. This would help to build their reputation and establish a trustworthy relationship.

The same method should be followed when reviewing all the export opportunities from the EOM for services. Each sector that holds export potential can deliver these services by

means of different modes and each mode of supply would have its own criteria for export promotion. This should be incorporated into a sector-specific export promotion strategy.

The following section will provide a comparison between the DSM for products and the EOM for services and will provide export promotion policy recommendations for the combination of both products and services.

7.3 Comparison between the decision support model for products and the export opportunities model for services

In order to develop a successful national export promotion strategy for South Africa, the results for both products and services should be incorporated. A combined view of both models will show the regions in which South Africa has the highest export potential for both products and services. Francois and Hoekman (2010) found that services can be traded on their own, but also perform input functions where they assist international transactions through transport, telecommunication and financial services. Therefore, the export promotion of South Africa's products and services should be combined in an effort to export not only a raw or manufactured product, but also the supportive services, that is export a combined package of products and services.

The results of the DSM for products was obtained from the research report provided by the North-West University to the DTI in 2010 (Viviers *et al.*, 2010), as well as the authors of the same study. The regional distribution was allocated according to the UN world macro-regions (UN, 2010b; as shown in Appendix E). The first comparison is given in Table 7.1 below, in which the top twenty product/country combinations from the DSM for products are compared with the top twenty services/country combinations from the EOM for services.

Table 7.1: Top twenty product/country and services/country combinations ranked according to the total export potential value*

RANKING	TOP PRODUCT/COUNTRY COMBINATIONS FROM THE DSM FOR PRODUCTS		TOP SERVICES/COUNTRY COMBINATIONS FROM THE EOM FOR SERVICES	
	Country	Product	Country	Service
1	USA	870323 – Automobiles, spark ignition engine of 1500–3000 cc	China	208 – Sea transport – freight
2	USA	710239 – Diamonds (jewellery) worked but not mounted or set	UK	243 – Travel personal – other
3	Japan	270112 – Bituminous coal, not agglomerated	Japan	208 – Sea transport – freight
4	Canada	870323 – Automobiles, spark ignition engine of 1500–3000 cc	China	243 – Travel personal – other
5	USA	271011 – Aviation spirit	Canada	243 – Travel personal – other
6	Hong Kong	710239 – Diamonds (jewellery) worked but not mounted or set	Russia	243 – Travel personal – other
7	India	710231 – Diamonds (jewellery) unworked or simply sawn, cleaved	Saudi Arabia	243 – Travel personal – other
8	Japan	260300 – Copper ores and concentrates	Germany	243 – Travel personal – other
9	UK	270799 – Coal tar distillation products n.i.e.	Romania	243 – Travel personal – other
10	USA	940190 – Parts of seats	France	243 – Travel personal – other
11	USA	760110 – Aluminium unwrought, not alloyed	South Korea	208 – Sea transport – freight
12	UK	710231 – Diamonds (jewellery) unworked or simply sawn, cleaved	South Korea	243 – Travel personal – other
13	Germany	271011 – Aviation spirit	Hong Kong	243 – Travel personal – other
14	India	270119 – Coal except anthracite or bituminous, not agglomerate	Australia	243 – Travel personal – other
15	China	260300 – Copper ores and concentrates	Norway	243 – Travel personal – other
16	Singapore	271011 – Aviation spirit	China	277 – Business and management consultancy and public relations services
17	USA	711011 – Platinum unwrought or in powder form	South Korea	209 – Sea transport – other
18	Australia	870323 – Automobiles, spark ignition engine of 1500–3000 cc	Japan	211 – Air transport – passenger
19	Israel	710231 – Diamonds (jewellery) unworked or simply sawn, cleaved	Singapore	243 – Travel personal – other
20	USA	750210 – Nickel unwrought, not alloyed	Japan	209 – Sea transport – other

* A full list of results is available from the author on request.

The top product/country combinations from Table 7.1 are mostly allocated in the USA, the UK, Japan and India, whereas the top services/country combinations are mostly allocated in

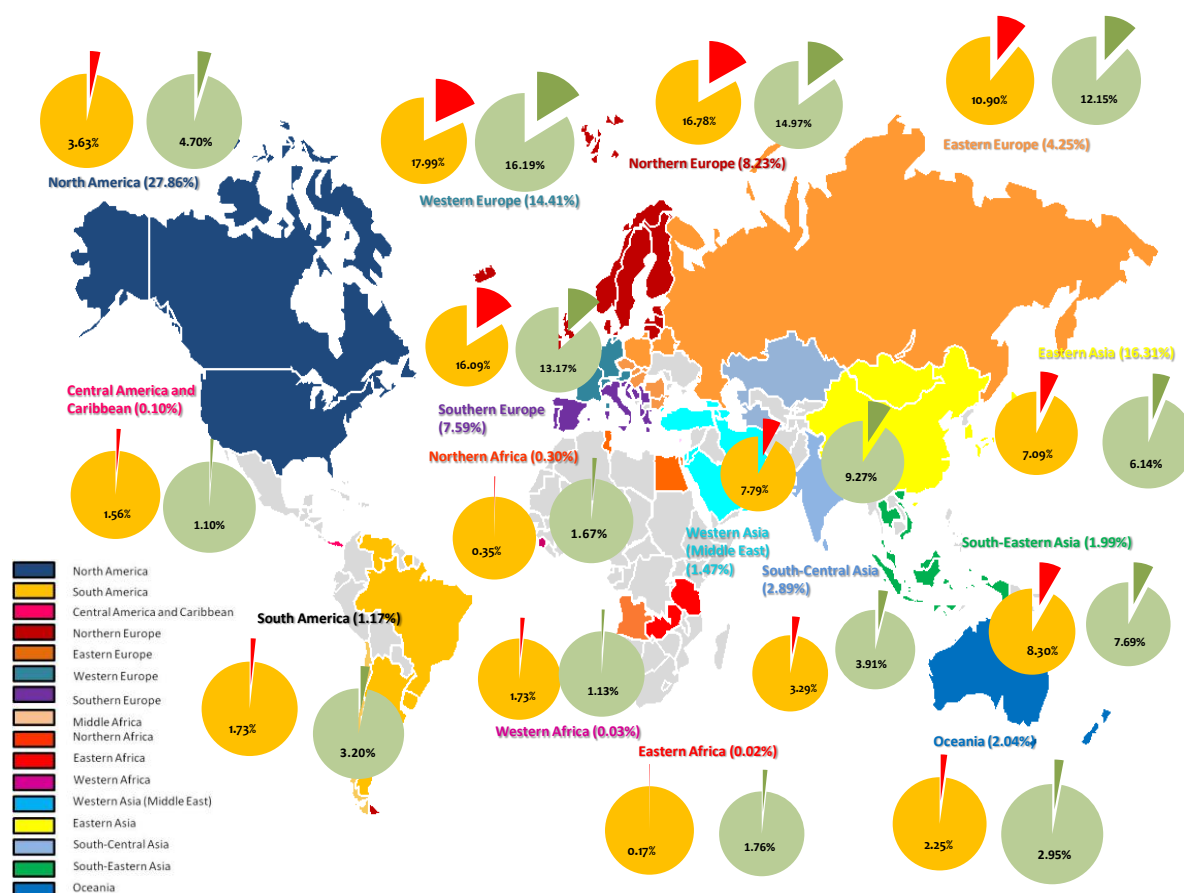
China, Japan and South Korea. Despite these differences, the combinations are useful for developing specific export promotion strategies for each region in the world.

The table above also shows that travel and transport are the only main services sectors that are in the top twenty results for services. Therefore, even though South Africa already experienced high number of exports of the travel sector (see section 3.8), there is scope for further growth, depending on the supply capacity in South Africa. For the purposes of further diversification of services exports, the extensive list of results shows export opportunities in many other sectors, such as financial services, communication, construction and computer services. Therefore, these sectors will also have to receive attention in the formulation of export promotion strategies.

The location of the number of export opportunities for products (Viviers *et al.*, 2010) is compared with the number of export opportunities for services in each region in Figure 7.2. The green pie charts show the percentage values that the number of export opportunities for products constituted of the total number of product opportunities. The yellow pie charts show the percentage values that the number of export opportunities for services constituted of the total number of services opportunities. The percentages in brackets for each region indicates the share of the countries' GDP that were selected in that region to the total world GDP (GDP figures for 2007 was used). This was done to create a better understanding of the distribution of the potential export opportunities. For example, in considering the pie charts for North America, 4.7% of the total number of opportunities for products was located in this area, whereas 3.63% of the total number of opportunities for services was located in this area. This region's contribution to GDP was 27.86%, which is very high in comparison to the number of potential export opportunities.

According to this comparison, the regional distribution of potential export opportunities for both products and services are similar. Both the European and Asian regions show the highest number of opportunities, specifically in Southern, Western, Northern and Eastern Europe, and in Eastern and South-Eastern Asia.

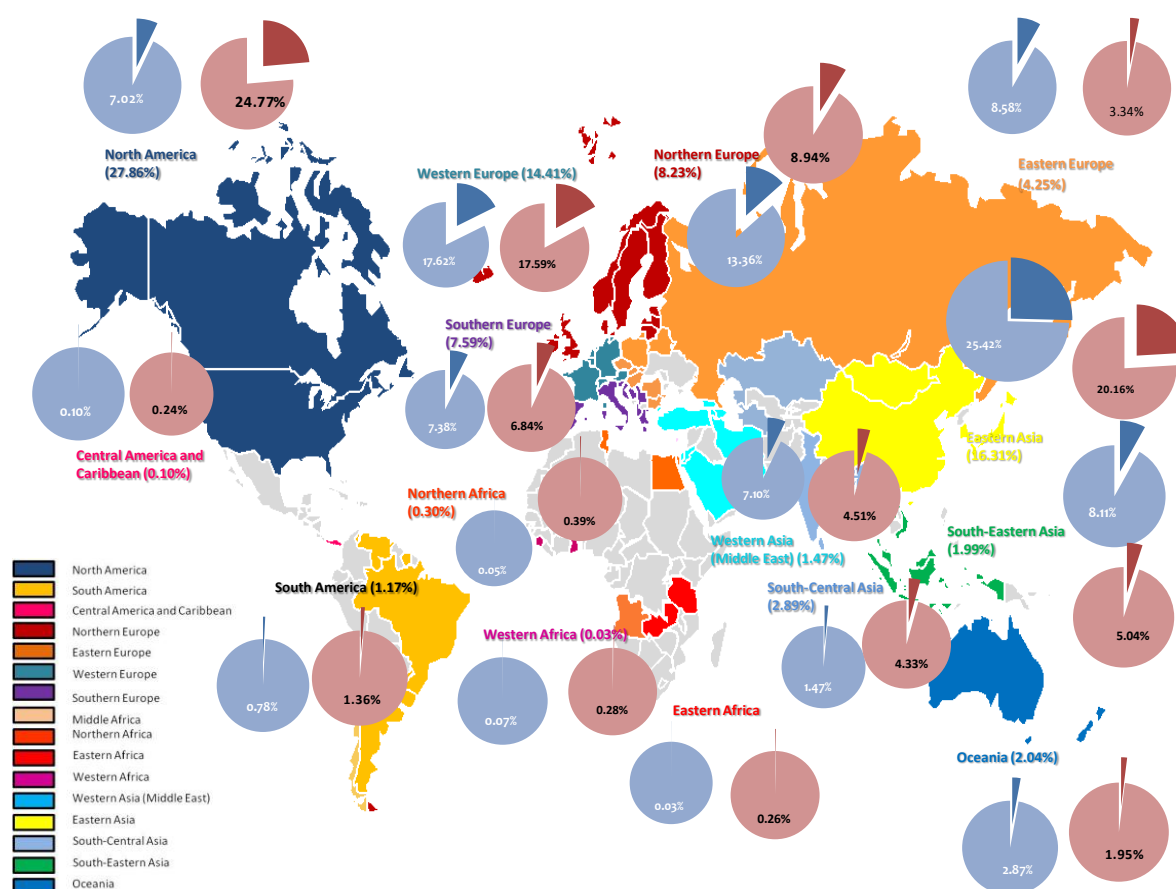
Figure 7.2: Number of export opportunities for products and services



A similar comparison can be made for the potential value of export opportunities for products and services in each region. In the DSM for products, a potential export value was calculated for each export opportunity (Viviers *et al.*, 2010). In the EOM for services, the total import demand was used as a proxy for the potential export value. These figures were not calculated in the exact same manner, but both methods provided a proxy for the market size based on imports. This comparison is shown in Figure 7.3 below.

In the figure, the dark red pie charts show the total potential export value of products in each region in relation to the total number of potential product exports. The blue pie charts show the total potential value of services exports in each region in relation to the total number of potential services exports.

Figure 7.3: Export opportunities for products and services per potential value



In the figure above, the regional distribution of both products and services is again similar, except for the North American region, where 24.77% of the potential export value for products is in North America, whereas for services only 7.02% of the potential export value is in North America. The low value for services is due to the USA not having large export potential values for services, whereas for products this was not the case. The figure clearly demonstrates that the Asian and European markets hold the greatest value for South Africa's exports of both products and services. Eastern Asia and Western Europe hold approximately 40% of the export potential for both products and services. The figure also indicates that the potential export values for the export opportunities are closely related to the region's shares in world GDP.

It is very interesting to note that in both models the countries in the Southern African region were eliminated in filters 1, 2 and 3 and, therefore, no export opportunities were identified in the region for either products or services. This should be investigated further in future research, as will be explained in Chapter 8.

The following section will compare the results for each region for the DSM for products and the EOM for services in more detail in order to determine whether the product and services sectors are complementary (that is the services are supportive of product exports) and can be promoted together in each region. If this is possible, it would offer a method to combine export promotion effectively for both products and services. The comparisons will be done on the main sectors for products and services to provide a broad overview of the region. Sub-sector studies could also be done in future research should more detail is necessary. (A complete list of the countries that are included in each region is available in Appendix E. The countries that were included in the results in each region in both the DSM for products and the EOM for services are compared in Appendix F.)

7.3.1 Regional comparison: America

The potential export opportunities for products and services in America are shown in Figures 7.4 and 7.5 below, respectively. These opportunities are shown according to potential export value for products and total import demand value for services.

The figure shows that the product sectors with the highest export potential in the American region are transportation (HS 86–89), stone/glass (HS 68–71) and metals (HS 72–83). These opportunities exist mostly in the North American region. For services, the travel sector (EBOPS code 236) and the communication sector (EBOPS code 245) show the highest export value, which exist mostly in Canada.

Figure 7.4: Product export opportunities in America

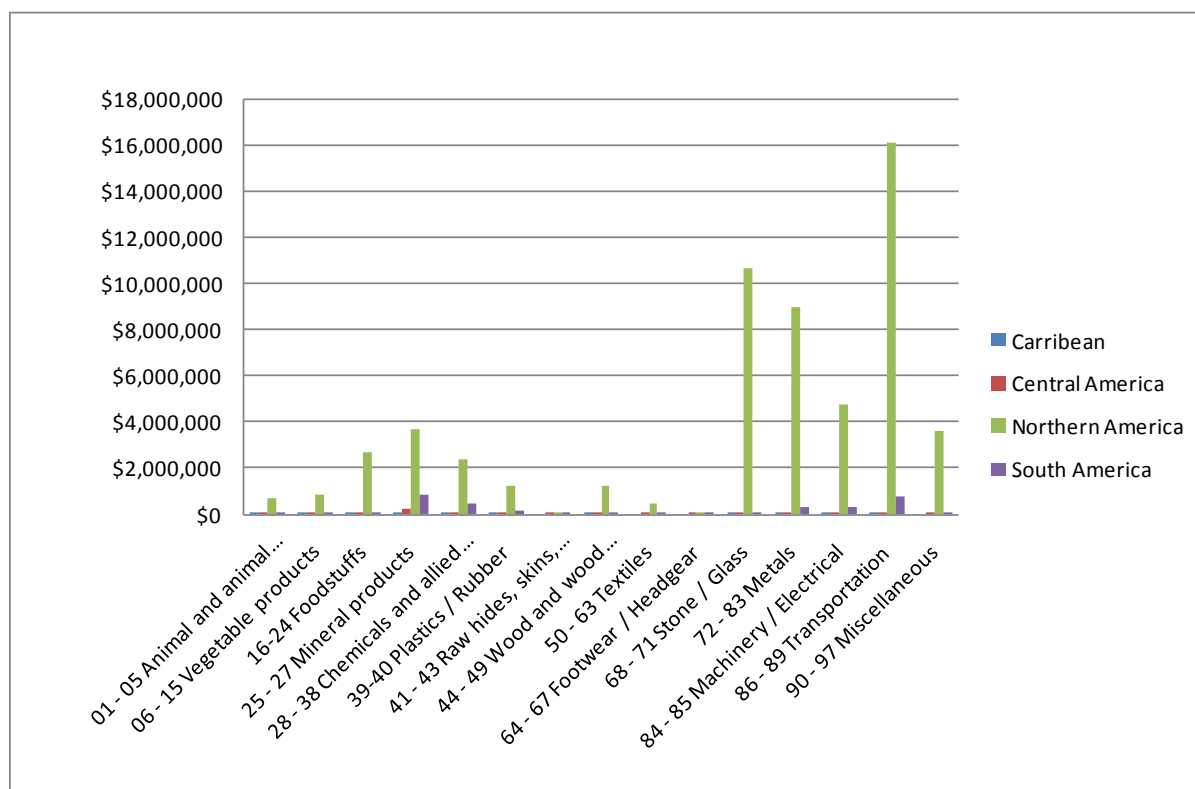
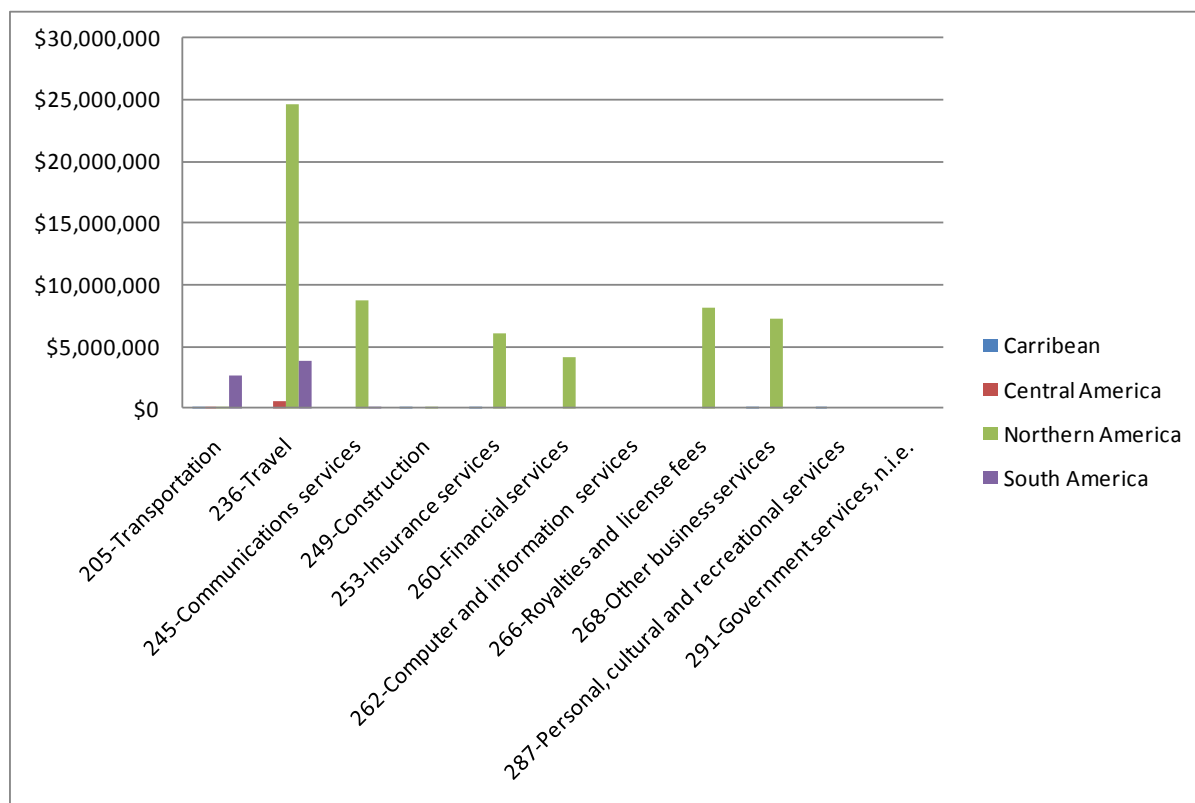


Figure 7.5: Services export opportunities in America



The results of the DSM for products are compared with the results of the EOM for services in more detail in Table 7.2 below, which provides an overview of the potential export value for the Caribbean, Central America, North America and South America.

Table 7.2: Export opportunities for products and services in America*

MAIN PRODUCT SECTOR	CARIBBEAN	CENTRAL AMERICA	NORTH AMERICA	SOUTH AMERICA
01–05 Animal and animal products	564	866	721,738	12,314
06–15 Vegetable products	166	6,647	811,543	17,980
16–24 Foodstuffs	87	7,855	2,699,566	50,405
25–27 Mineral products	41,513	250,964	3,689,959	821,931
28–38 Chemicals and allied industries	1,655	13,232	2,392,654	457,844
39–40 Plastics/rubber	246	9,065	1,259,675	166,296
41–43 Raw hides, skins, leather and furs	0	109	113,650	587
44–49 Wood and wood products	2,838	5,856	1,200,048	62,495
50–63 Textiles	0	893	467,076	41,242
64–67 Footwear/headgear	0	28	7,370	92
68–71 Stone/glass	111	2,067	10,708,125	86,699
72–83 Metals	19,827	46,154	8,994,622	318,819
84–85 Machinery/electrical	8,161	23,531	4,759,468	288,295
86–89 Transportation	48,375	67,565	16,121,857	788,941
90–97 Miscellaneous	0	888	3,623,881	37,692
Total	123,543	435,720	57,571,232	3,151,632
MAIN SERVICES SECTOR	CARIBBEAN	CENTRAL AMERICA	NORTH AMERICA	SOUTH AMERICA
205 – Transportation	3,210	126,100	172,190	2,581,000
236 – Travel	0	631,990	24,690,703	3,854,300
245 – Communications services	0	0	8,764,327	177,000
249 – Construction	51,860	0	128,390	0
253 – Insurance services	624	0	6,096,949	0
260 – Financial services	0	0	4,064,942	0
262 – Computer and information services	0	0	0	0
266 – Royalties and licensing fees	0	0	8,157,797	0
268 – Other business services	440	0	7,195,177	0
287 – Personal, cultural and recreational services	176	0	0	0
291 – Government services, n.i.e.	0	0	0	0
Total	56,309	758,090	59,270,475	6,612,300

* Unit: USD in thousands

Table 7.2 shows that there are high export opportunities for both products and services in North and South America. For products, transportation (HS codes 86–89), stone/glass (HS codes 68–71), metals (HS codes 72–83), and mineral products (HS codes 25–27) have the

highest export potential value in North and South America. These sectors could be combined with the following services sectors: communications services (EBOPS code 245), insurance services (EBOPS code 253), financial services (EBOPS code 260), and other business services (EBOPS code 268).

In South America, there are only three services sectors that have export potential: transportation (EBOPS code 205), travel (EBOPS code 236), and communication (EBOPS code 245). The travel services sector relates to tourism and should be promoted as a sector on its own. However, transportation and communications services serve as support services to product exports and can be combined with export promotion of products. From the results, the product sectors with the highest value of export opportunities are mineral products (HS codes 25–27) and transportation (HS codes 86–89). The transportation product sector refers to transportation equipment and automotive parts, while the transportation services sector refers to transportation of passengers and freight, as well as auxiliary services in the transportation and logistics sector.

In reviewing the specific sub-sector results from the EOM for services for South America, it is evident that the only transportation sector that has export potential in this region is the sea freight transport sector (EBOPS code 208). Therefore, it may be possible to combine the export promotion efforts of the transportation product sector with the sea freight transport services sector from South Africa to South America.

7.3.2 Regional comparison: Europe

In Figures 7.6 and 7.7 below, the results from the DSM for products are compared with the results from the EOM for services in the European region. From these figures, it is evident that the Western and Northern European regions have the highest value in export opportunities for both products and services. The product sectors with the highest value of export opportunities are mineral products (HS codes 25–27) and metals (HS codes 72–83). For services, travel (EBOPS code 236), transportation (EBOPS code 205) and other business services (EBOPS code 268) show the highest export values.

Figure 7.6: Product export opportunities in Europe

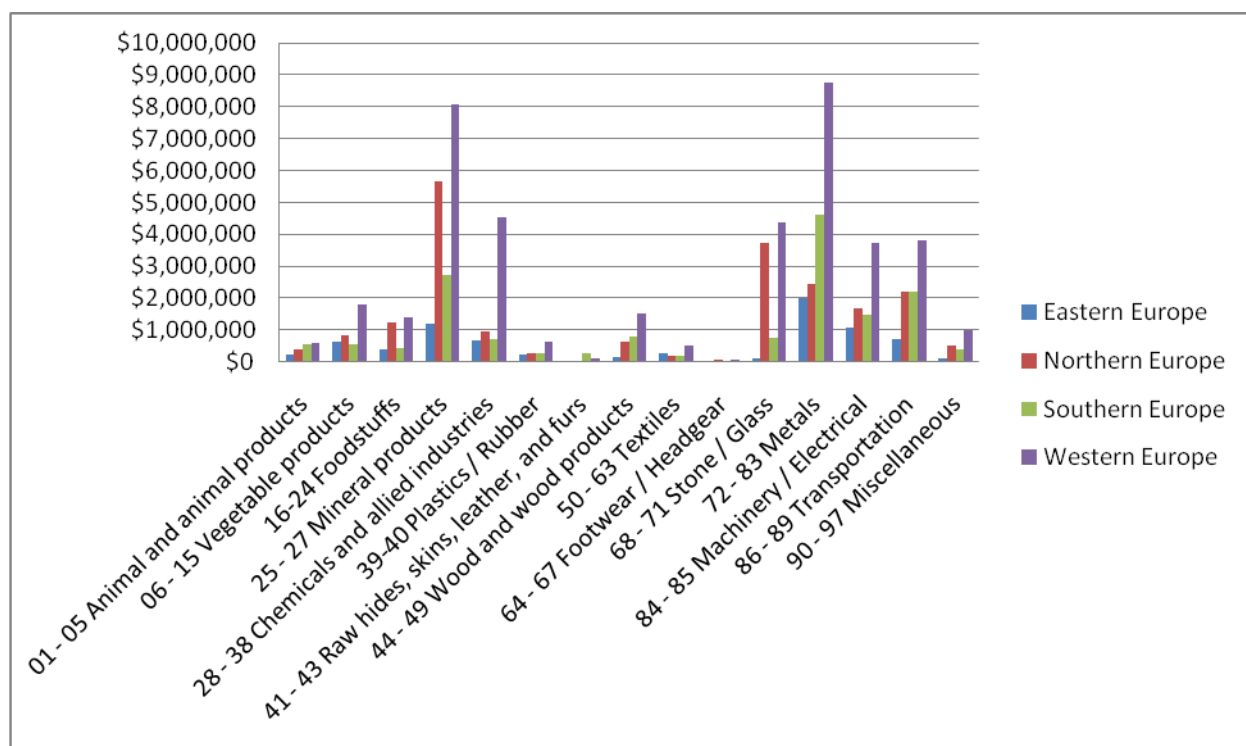
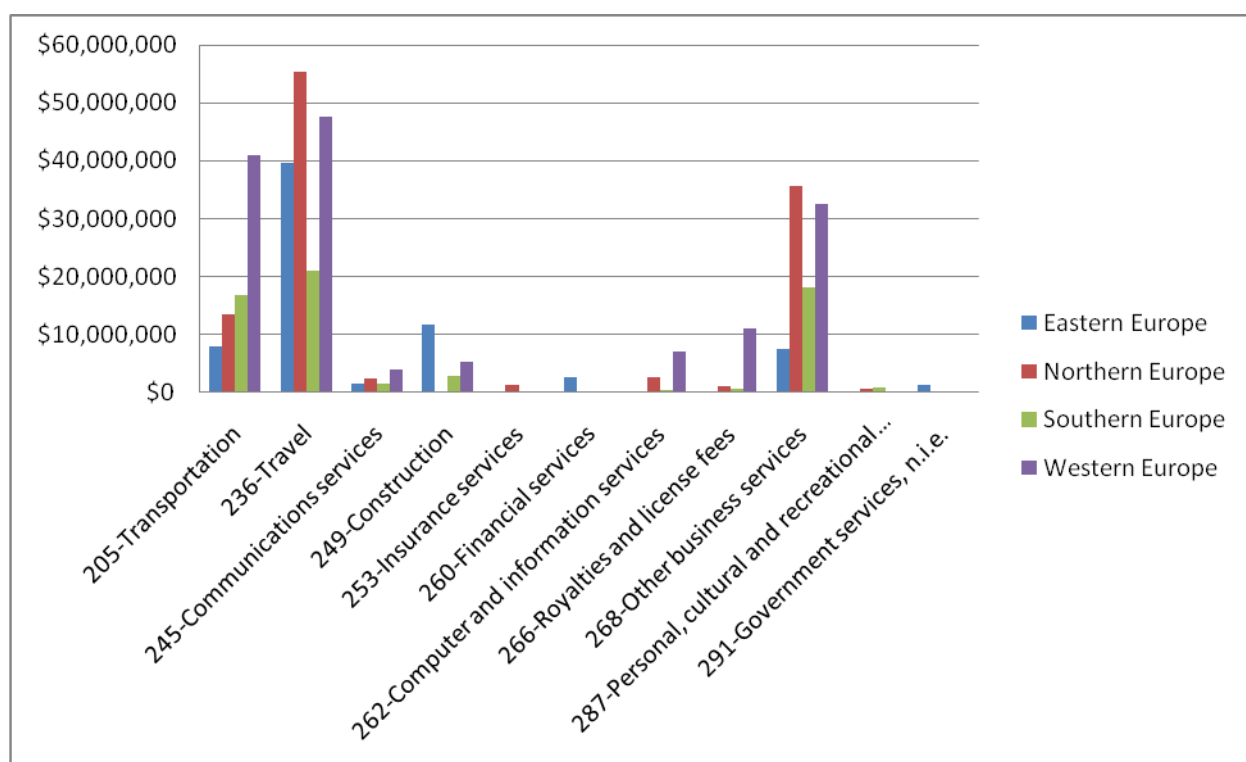


Figure 7.7: Services export opportunities in Europe



The comparison of products and services export opportunities is shown in more detail in Table 7.3. The table also shows that both results demonstrate that the largest value of export opportunities is in Northern and Western Europe.

Table 7.3: Export opportunities for products and services in Europe*

MAIN PRODUCT SECTOR	EASTERN EUROPE	NORTHERN EUROPE	SOUTHERN EUROPE	WESTERN EUROPE
01–05 Animal and animal products	223,113	393,185	533,749	599,642
06–15 Vegetable products	620,623	826,607	543,240	1,811,980
16–24 Foodstuffs	396,138	1,219,034	444,870	1,412,359
25–27 Mineral products	1,212,793	5,646,188	2,742,327	8,066,194
28–38 Chemicals and allied industries	658,583	965,318	724,153	4,538,266
39–40 Plastics/rubber	223,952	269,652	257,951	629,253
41–43 Raw hides, skins, leather and furs	5,628	42,669	251,252	99,221
44–49 Wood and wood products	156,014	626,378	784,331	1,510,181
50–63 Textiles	254,435	177,600	199,039	526,221
64–67 Footwear/headgear	3,390	51,408	3,793	82,226
68–71 Stone/glass	120,191	3,720,692	740,748	4,363,199
72–83 Metals	2,013,127	2,429,136	4,629,750	8,745,658
84–85 Machinery/electrical	1,090,050	1,672,050	1,478,815	3,712,709
86–89 Transportation	694,764	2,212,711	2,183,642	3,796,263
90–97 Miscellaneous	92,375	524,883	389,918	991,461
Total	7,765,176	20,777,511	15,907,578	40,884,833
MAIN SERVICES SECTOR	EASTERN EUROPE	NORTHERN EUROPE	SOUTHERN EUROPE	WESTERN EUROPE
205 – Transportation	7,864,623	13,426,559	16,906,423	40,943,109
236 – Travel	39,668,933	55,476,347	21,014,430	47,591,105
245 – Communications services	1,460,911	2,434,621	1,561,924	4,054,616
245 – Construction	11,617,524	261,373	2,851,289	5,270,984
253 – Insurance services	23,681	1,209,867	949	0
260 – Financial services	2,649,067	11,659	40,638	0
262 – Computer and information services	202,001	2,648,563	413,920	7,125,469
266 – Royalties and licensing fees	11,247	1,052,772	552,253	11,127,709
268 – Other business services	7,396,719	35,725,680	18,161,951	32,439,011
287 – Personal, cultural and recreational services	128,226	532,739	753,734	187,518
291 – Government services, n.i.e.	1,376,990	0	0	0
Total	72,399,922	112,780,181	62,257,510	148,739,521

* Unit: USD in thousands

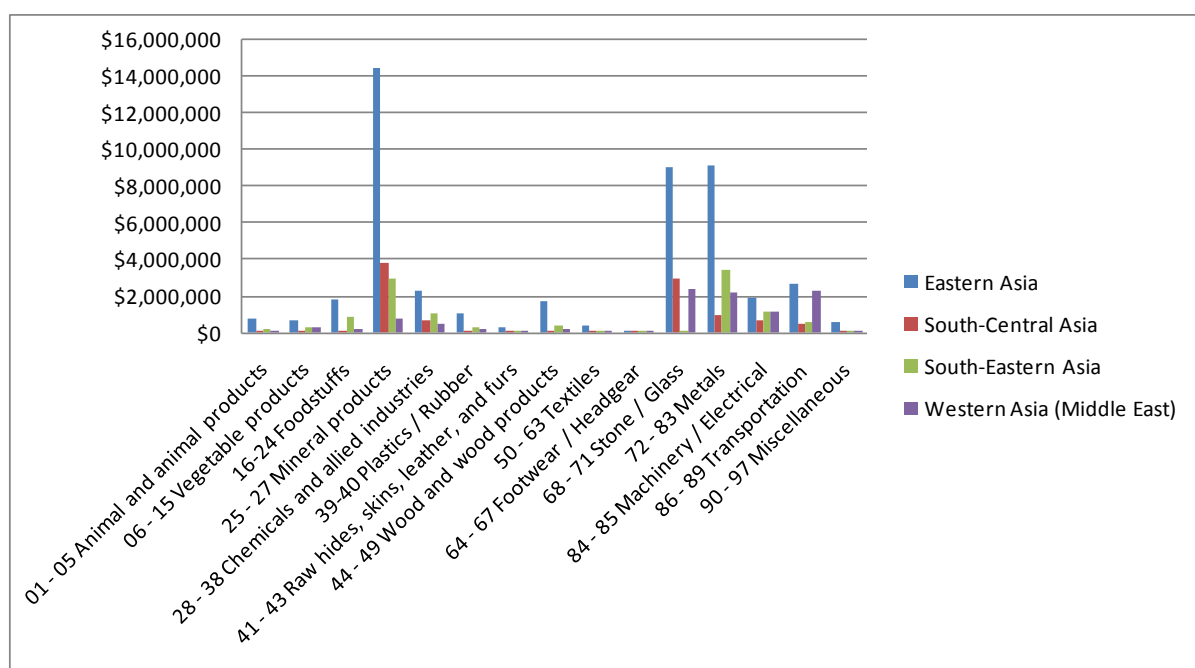
For products, the sectors that show the most potential are mineral products (HS codes 25–27), chemicals (HS codes 28–38), stone/glass (HS codes 68–71), and metals (HS codes

72–83). In the services results, transportation (EBOPS code 205) and other business services (EBOPS code 268) have the highest export potential, followed by travel (EBOPS code 236). In Eastern and Western Europe, the construction services sector (EBOPS code 249) also has high export potential and, in Northern and Western Europe, the computer services sector (EBOPS code 262) has a relatively high export potential.

7.3.3 Regional comparison: Asia

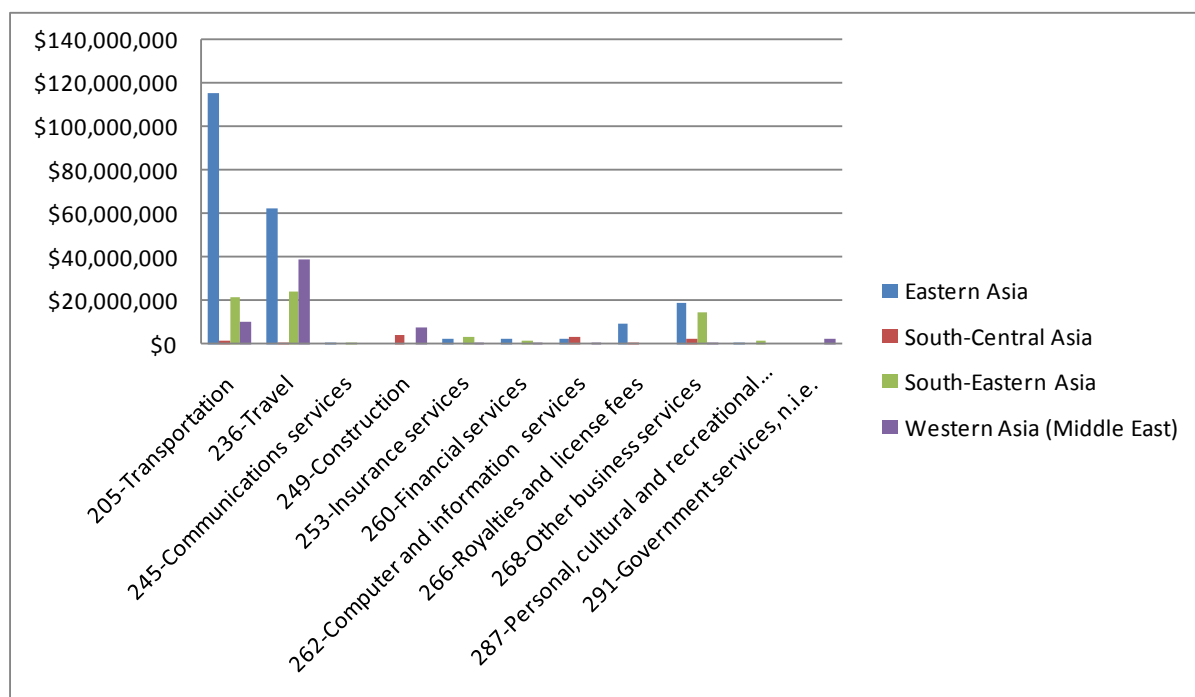
The export opportunities for products and services are shown in Figures 7.8 and 7.9 below. From these figures, it is evident that Eastern Asia holds the highest value of export opportunities for both products and services.

Figure 7.8: Product export opportunities in Asia



For products, the sectors that hold the highest value of export opportunities in Asia are mineral products (HS codes 25–27), stone/glass (HS codes 68–71), and metals (HS codes 72–83). For services, the sectors with the highest export potential are transportation (EBOPS code 205) and travel (EBOPS code 236).

Figure 7.9: Services export opportunities in Asia



These results are also shown in more detail in Table 7.4 below. Eastern Asia holds very high value export opportunities for mineral products (HS codes 25–27), stone/glass (HS codes 68–71), and metals (HS codes 72–83). For services, transportation (EBOPS code 205) holds the greatest export potential in Eastern Asia and this is mainly in the sea freight transportation sector, based on the results of the EOM for services. In addition, other business services (EBOPS code 268), insurance (EBOPS code 253), financial services (EBOPS code 260), and computer services (EBOPS code 262) have export potential in several different regions in Asia. Therefore, these sectors can be combined with the above product sectors in export promotion efforts in this region.

Table 7.4: Export opportunities for products and services in Asia*

MAIN PRODUCT SECTOR	EASTERN ASIA	SOUTH-CENTRAL ASIA	SOUTH-EASTERN ASIA	WESTERN ASIA (MIDDLE EAST)
01–05 Animal and animal products	792,083	2,031	217,855	102,350
06–15 Vegetable products	625,165	69,368	330,429	246,148
16–24 Foodstuffs	1,856,257	26,584	842,681	193,405
25–27 Mineral products	14,503,746	3,810,563	2,993,920	804,682
28–38 Chemicals and allied industries	2,324,090	695,911	1,071,147	454,713
39–40 Plastics/rubber	1,099,400	77,087	283,817	235,434
41–43 Raw hides, skins, leather and furs	275,058	8,331	73,802	34,508
44–49 Wood and wood products	1,684,930	112,450	380,985	175,367
50–63 Textiles	383,684	127,416	127,643	99,883
64–67 Footwear/headgear	4,178	782	548	5,842
68–71 Stone/glass	9,007,741	2,945,015	86,556	2,392,907
72–83 Metals	9,113,640	958,689	3,464,487	2,175,528
84–85 Machinery/electrical	1,891,323	682,355	1,138,005	1,139,928
86–89 Transportation	2,687,352	524,621	607,594	2,317,423
90–97 Miscellaneous	601,286	22,695	90,761	100,323
Total	46,849,933	10,063,898	11,710,230	10,478,441
MAIN SERVICES SECTOR	EASTERN ASIA	SOUTH-CENTRAL ASIA	SOUTH-EASTERN ASIA	WESTERN ASIA (MIDDLE EAST)
205 – Transportation	115,310,445	1,600,363	21,485,805	9,867,340
236 – Travel	62,328,500	352,312	23,861,961	38,721,841
245 – Communications services	739,000	0	901,670	0
245 – Construction	0	4,352,110	0	7,792,920
253 – Insurance services	2,308,238	0	3,525,387	572,486
260 – Financial services	2,807,000	0	1,756,450	138,890
262 – Computer and information services	2,441,274	3,535,340	0	4,190
266 – Royalties and licensing fees	9,153,970	17,823	0	0
268 – Other business services	18,882,000	2,555,260	14,928,569	13,080
287 – Personal, cultural and recreational services	534,920	0	1,995,510	0
291 – Government services, n.i.e.	0	0	0	2,849,610
Total	214,505,347	12,413,208	68,455,352	59,960,357

* Unit: USD in thousands

7.3.4 Regional comparison: Oceania

The potential value of export opportunities in Oceania is compared in Table 7.5 below. In this region, the transportation sector (HS codes 86–89) shows great export potential for products, as does the transportation services sector (EBOPS code 205). The other product

sectors with high export potential in Oceania are chemicals (HS codes 28–38), metals (HS codes 72–83) and machinery/electrical (HS codes 84–85). For services, the only other sectors that have high export potential are travel (EBOPS code 236) and construction (EBOPS code 249). These product and services sectors could be combined in export promotion efforts to this region.

Table 7.5: Export opportunities for products and services in Oceania*

MAIN PRODUCT SECTOR	OCEANIA
01–05 Animal and animal products	42,274
06–15 Vegetable products	78,478
16–24 Foodstuffs	112,445
25–27 Mineral products	111,928
28–38 Chemicals and allied industries	574,269
39–40 Plastics/rubber	221,762
41–43 Raw hides, skins, leather and furs	7,387
44–49 Wood and wood products	96,363
50–63 Textiles	14,969
64–67 Footwear/headgear	267
68–71 Stone/glass	132,612
72–83 Metals	336,972
84–85 Machinery/electrical	295,405
86–89 Transportation	2,367,865
90–97 Miscellaneous	139,621
Total	4,532,617
MAIN SERVICES SECTOR	OCEANIA
205 – Transportation	7,108,272
236 – Travel	16,745,878
245 – Communications services	0
245 – Construction	322,080
253 – Insurance services	0
260 – Financial services	0
262 – Computer and information services	0
266 – Royalties and licensing fees	0
268 – Other business services	0
287 – Personal, cultural and recreational services	53,690
291 – Government services, n.i.e.	0
Total	24,229,920

* Unit: USD in thousands

The results of the DSM for products and of the EOM for services in Oceania are presented in Figures 7.10 and 7.11 below.

Figure 7.10: Product export opportunities in Oceania

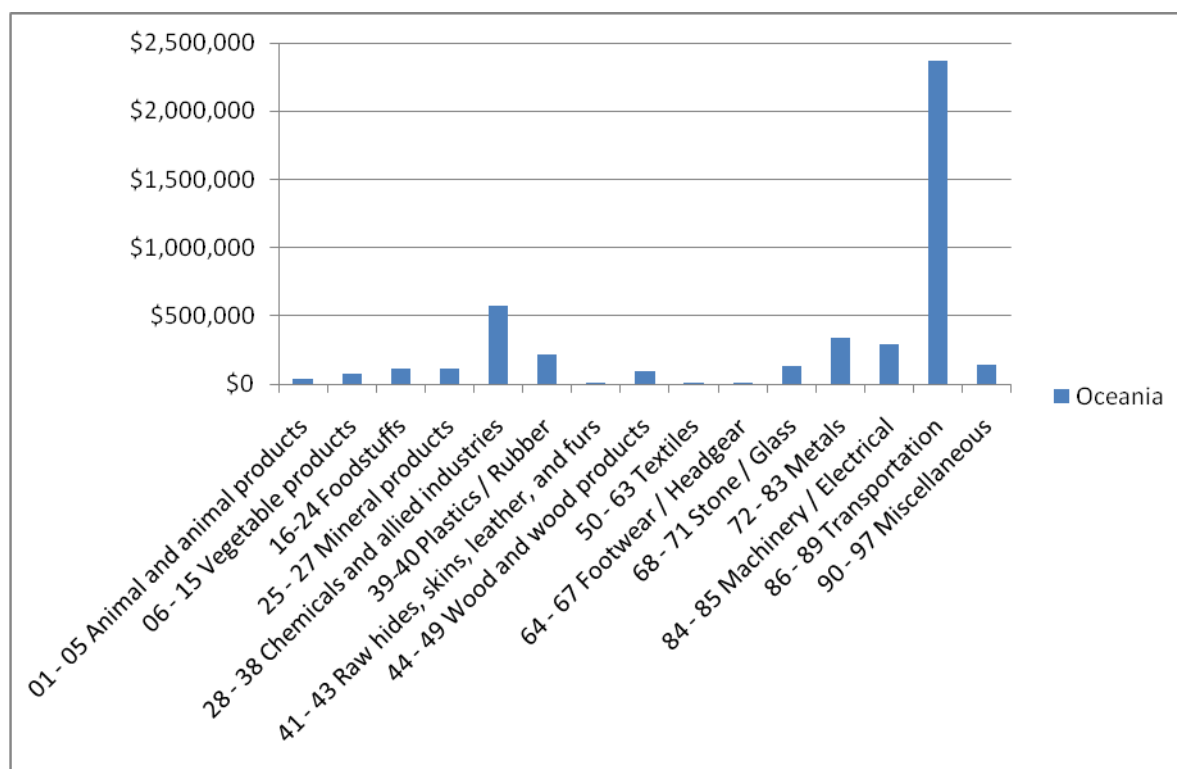
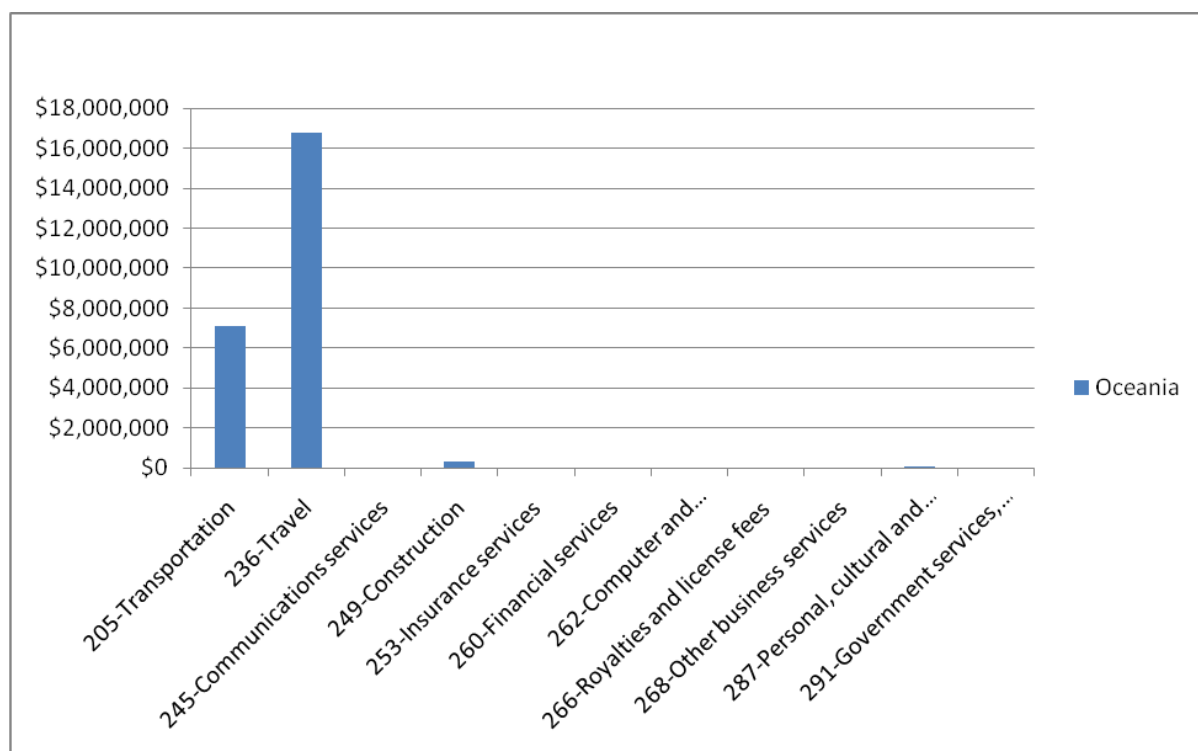


Figure 7.11: Services export opportunities in Oceania



7.3.5 Regional comparison: Africa

Table 7.6 on the following page presents the results of the potential export value for both products and services in Africa. In comparing this table to the previous regions, it is evident that the total export values are much lower in the African region than in other regions. Most of the product sectors show export potential, but the values are very low. The services sectors that hold export potential in Africa are limited to only a few sectors in each African region, which is also limited to very few countries.

According to Table 7.6, the following product sectors have relatively high export potential in Africa: mineral products (HS codes 25–27), chemicals (HS codes 28–38), metals (HS codes 72–83), machinery (HS codes 84–85), and transportation (HS codes 86–89). For services, the following sectors hold some export potential in Africa: travel (EBOPS code 236), particularly in Western Africa; construction services (EBOPS code 249) in Eastern Africa; and communications services (EBOPS code 245) in Northern Africa.

Table 7.6: Export opportunities for products and services in Africa*

MAIN PRODUCT SECTOR	EASTERN AFRICA	NORTHERN AFRICA	WESTERN AFRICA
01–05 Animal and animal products	2,300	18,845	16,957
06–15 Vegetable products	4,046	9,181	6,378
16–24 Foodstuffs	16,161	34,442	16,366
25–27 Mineral products	28,219	202,885	19,544
28–38 Chemicals and allied industries	149,573	65,062	46,215
39–40 Plastics/rubber	31,724	38,451	1,164
41–43 Raw hides, skins, leather and furs	0	611	0
44–49 Wood and wood products	467	72,498	4,747
50–63 Textiles	2,649	11,718	775
64–67 Footwear/headgear	431	80	0
68–71 Stone/glass	3,489	3,562	1,035
72–83 Metals	181,056	244,837	78,603
84–85 Machinery/electrical	115,808	95,777	57,518
86–89 Transportation	48,474	102,094	373,983
90–97 Miscellaneous	16,525	11,907	18,481
Total	600,922	911,950	641,766

MAIN SERVICES SECTOR	EASTERN AFRICA	MIDDLE AFRICA	NORTHERN AFRICA	WESTERN AFRICA
205 – Transportation	0	0	0	4,560
236 – Travel	0	162,410	8,120	590,080
245 – Communications services	0	0	383,703	0
245 – Construction	282,400	0	0	0
253 – Insurance services	0	0	0	3,428
260 – Financial services	0	0	0	0
262 – Computer and information services	0	0	0	0
266 – Royalties and licensing fees	0	0	0	338
268 – Other business services	0	0	0	0
287 – Personal, cultural and recreational services	0	99,140	0	1,750
291 – Government services, n.i.e.	0	0	0	0
Total	282,400	261,550	391,823	600,157

* Unit: USD in thousands

It is important to note that no export opportunities were identified for the Southern African region as these countries were eliminated in filters 1, 2 or 3, owing to its high risk, insignificant market size or low accessibility. This poses an opportunity for future research into restructuring the models in such a way that these countries are included, especially in the light of South Africa's strategic position in the Southern African Customs Union (SACU).

The results for Africa are summarised in Figures 7.12 and 7.13. It is evident from the figures that the services sectors have limited export potential in this region.

Figure 7.12: Product export opportunities in Africa

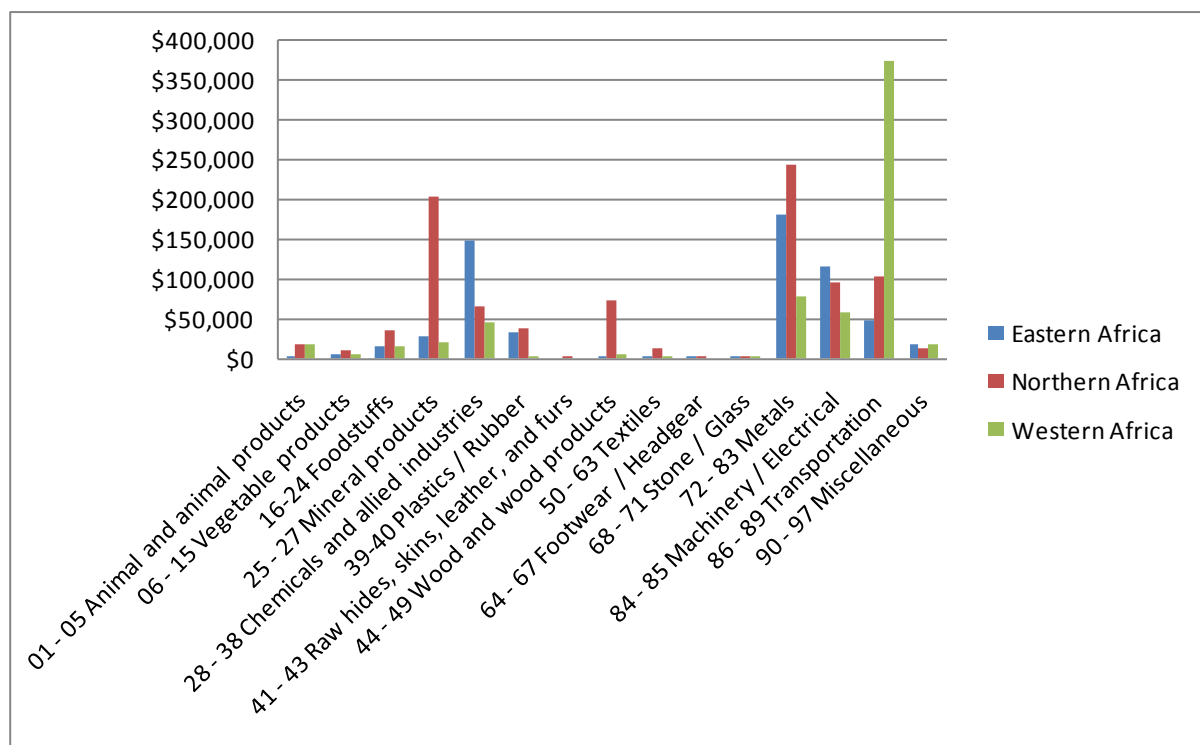
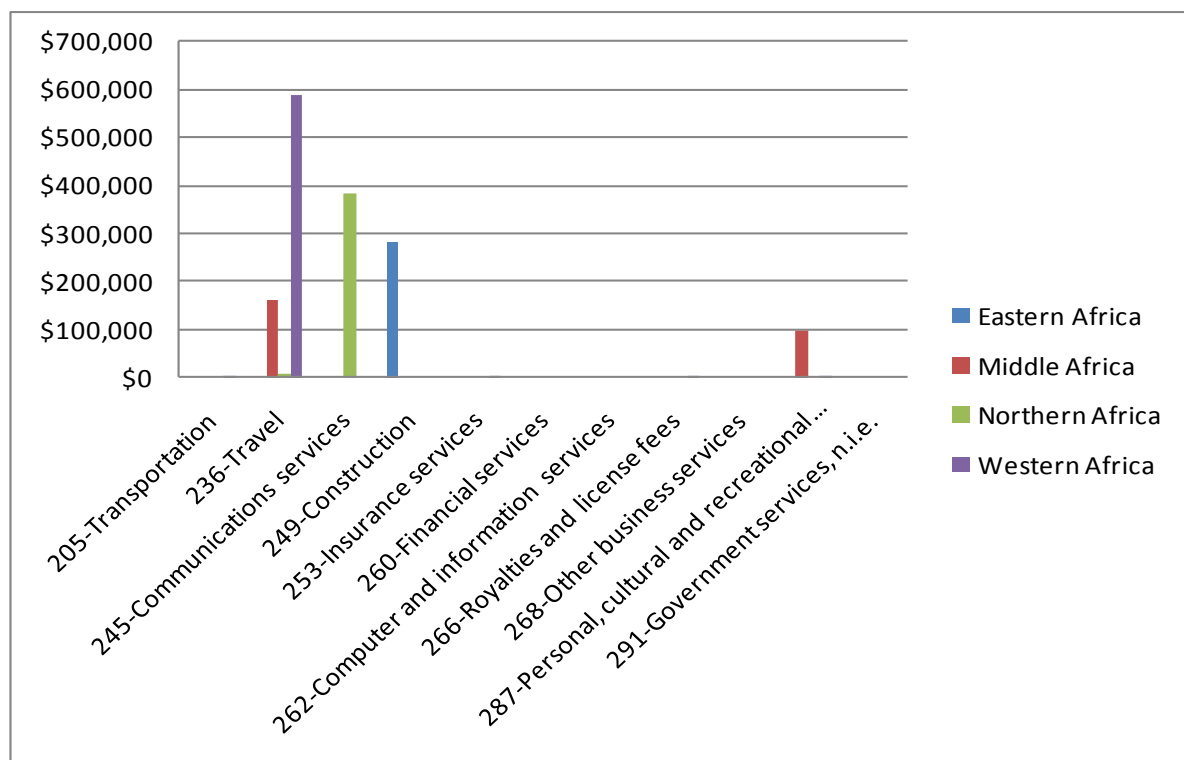


Figure 7.13: Services export opportunities in the African region



7.4 Conclusion

This chapter provided possible guidelines for the export promotion of services in South Africa. Some export promotion guidelines were provided in section 7.2.1 according to the cell classifications of the results for the EOM for services. This was followed by sector-specific export promotion guidelines in section 7.2.2, which can be used to diversify South Africa's exports of services. The top twenty product/country combinations and services/country combinations from both models were identified in Table 7.1. The top product/country combinations are mostly in the USA, the UK, Japan and India, while the top services/country combinations are mostly in China, Japan and South Korea. These combinations, while different, are useful for developing specific export promotion strategies for each region in the world.

The sector results were summarised in Figure 7.1 and from this it was demonstrated that transportation (EBOPS code 205), travel (EBOPS code 236) and other business services (EBOPS code 268) hold the largest export opportunities for South Africa. However for the purposes of the diversification of exports, services sectors such as communication (EBOPS code 245), construction (EBOPS code 249), insurance (EBOPS code 253), financial (EBOPS code 260), royalties and licensing fees (EBOPS code 266), and other business services (EBOPS code 268) also have relatively high export potential. The areas with the highest export potential are the Eastern Asian region and the European region.

Guidelines on incorporating the GATS modes of supply in final export promotion strategies were provided in section 7.2.3. These guidelines should be discussed with the various industry associations and the DTI can then structure an official strategy for the exports of services, as was seen in the example from Chile (Chapter 4).

The results of the DSM for products were compared with the EOM for services according to region and sector in section 7.3. In order to develop a successful national export promotion strategy for South Africa, the results for both products and services could be combined. According to the comparison, the regional distribution of potential export opportunities for both products and services is similar. For both products and services, the European and Asian regions show the highest number and value of opportunities, specifically in Southern, Western, Northern and Eastern Europe, and in Eastern and South-Eastern Asia. The regional distribution of the export potential of both products and services was presented

graphically, showing that Eastern Asia and Western Europe hold approximately 40% of the export potential for both products and services.

The sector results were then separated into regions in order to make a more detailed comparison. The comparison for America demonstrated that there are high export opportunities for both products and services in North and South America. For products, transportation (HS codes 86–89), stone/glass (HS codes 68–71), metals (HS codes 72–83), and mineral products (HS codes 25–27) have the highest potential export value in North and South America. These sectors could be combined with the following services sectors: communications services (EBOPS code 245), insurance services (EBOPS code 253), financial services (EBOPS code 260), and other business services (EBOPS code 268).

The comparison for Europe showed that the greatest potential export opportunities for products are in mineral products (HS codes 25–27), chemicals (HS codes 28–38), stone/glass (HS codes 68–71), and metals (HS codes 72–83). In the services results, transportation (EBOPS code 205) and other business services (EBOPS code 268) have the highest export potential, followed by travel (EBOPS code 236). In Eastern and Western Europe, the construction services sector (EBOPS code 249) also had a high export potential. In Northern and Western Europe, the computer services sector (EBOPS code 262) has a relatively high export potential.

The comparison for Asia demonstrated that Asian markets hold the highest export opportunities for both products and services. Eastern Asia has a very high export potential for mineral products (HS codes 25–27), stone/glass (HS codes 68–71), and metals (HS codes 72–83). For services, the transportation sector (EBOPS code 205), mainly in sea freight transportation, holds the greatest export potential in Eastern Asia. Other business services (EBOPS code 268), insurance (EBOPS code 253), financial services (EBOPS code 260), and computer services (EBOPS code 262) have an export potential in a few different regions in Asia.

The comparison for Oceania showed that the transportation products sector (HS codes 86–89) and the transportation services sector (EBOPS code 205) show great export potential. The other product sectors with high export potential in Oceania are chemicals (HS codes 28–38), metals (HS codes 72–83), and machinery/electrical (HS classification 84–85). For services, the only other sectors that have high export potential are travel (EBOPS code 236)

and construction (EBOPS code 249). These product and services sectors could be combined in export promotion efforts to this region.

The comparison for Africa demonstrated that the following product sectors have a relatively high export potential in Africa: mineral products (HS codes 25–27), chemicals (HS codes 28–38), metals (HS codes 72–83), machinery (HS codes 84–85), and transportation (HS codes 86–89). For services, the following sectors hold some export potential in Africa: travel (EBOPS code 236), particularly in Western Africa; construction services (EBOPS code 249) in Eastern Africa; and communications services (EBOPS code 245) in Northern Africa.

The recommendations and results presented in this chapter could be used in developing regional export promotion programmes and it is important to include the export councils, industry associations and even private companies in order to provide more practical input into the final selection of markets for products and services. Expanding exporting companies will have the greatest need for such information and these are the companies that could provide input into the export promotion strategy for products and services.

CHAPTER 8

SUMMARY AND RECOMMENDATIONS

8.1 Introduction

In chapter 7 the results of the EOM for services were analysed and compared to the results of the DSM for products. The objective of this chapter is to summarise the findings of this study and to make recommendations for future research on the export promotion of services for South Africa. The study will be summarised in section 8.2. Based on the results of the study, policy recommendations will be made in section 8.3. Lastly, future research will be discussed in section 8.4.

8.2 A summary of the study

The objective of this study was to develop a model that can identify potential export opportunities for services in specific countries and using the literature in combination with the results to make recommendations on the export promotion of services. To this end, a literature review was first conducted in the first part of the study.

The first part of the study was aimed at establishing the theoretical background for the study and chapter 2 provided an overview of the international trade theories and how services were incorporated. An overview of the development of international trade theories was thus provided (section 2.2). The objective of this was to identify whether any of the theories explained the role of services in economic growth and trade. Traditional theories were based on the assumption that products and services could be treated equally and that most services are only used as inputs into the production process of manufactured products. However, in the late 1970s, it became evident that the nature of services differs from products due to the way in which a service is exchanged or traded. Several studies were performed on the application of the theory to services (for example Hill (1977) and Bhagwati (1984)), however, studies on trade theories applied specifically to services have been very limited.

More recently the focus of research shifted towards defining and classifying “services”, as well as a global drive to open market access for services. Some research publications

focused on the advantages and disadvantages of services trade liberalisation, and another set of research focused on the measurement of trade barriers to services (section 2.2.5). However, it was found that there is very little literature on the export promotion of services specifically with regard to the role and activities of governments in increasing services exports.

Before the export promotion of services was explored further, it first became important to understand what is meant with the term “services”. Therefore, the various descriptions to define and explain “services” were provided (section 2.3). It was found that the definition of “a service” would depend on the function the service performs and whether the service is traded itself or if it acts as a support to another transaction. Therefore, it is very difficult to establish one definition for all services.

This led to the various classification schemes for services that categorise services sectors that share the same characteristics (section 2.4). There are various classification schemes, but the two most important are those developed by the GATS (see section 2.4.3) and the EBOPS Classification (section 2.4.4). These classification schemes provide methods to record data on services more easily.

The objective of Chapter 3 of this study was to develop an understanding of the role that services play internationally and in South Africa and, for this reason, it focused on international trade in services. It was reported that world trade in services constituted 22% of total world exports in 2009 and that the average growth rate of services exports was 7.6% from 1980 to 2009 (section 3.2). It was shown that very few developing countries were in the top 25 services exporting countries and it was found that this is due to the many problems experienced in world trade internationally (section 3.3).

Many governments impose high levels of restrictions on services trade and, at company level, there is still a lack of awareness of and training on the export of services. Hodge (1997) found that developing countries in particular experience structural deficiencies in government departments, which increases the barriers to trade, as they wish to protect their local uncompetitive industries. Furthermore, the difficulties in measuring and recording trade data on services were explained (section 3.4). The difficulties in measuring and recording trade data on services makes it difficult for research groups and policy makers to understand the scope of trade barriers experienced in services trade and what actions should take place to eliminate these barriers.

The GATS provided the four modes of supply by which services can be traded. The four modes are known as cross-border supply (mode 1), consumption abroad (mode 2), commercial presence (mode 3) and presence of natural persons (mode 4). This was an attempt to aid the measurement of trade in services (section 3.4.1). It was suggested that future research should focus on investigating the interactions amongst specific services sectors and the modes of supply.

Also in seeking to aid the measurement of trade in services, the IMF brought changes to the methods with which services data needs to be recorded in balance of payments figures (section 3.4.3). The changes should improve the data quality for services. The changes made to measuring trade data and ease the recording of data through the modes of supply of GATS, will assist to liberalise world trade in services.

The benefits that liberalisation of services trade holds for countries was explained and it was found that it can have a profound effect on the welfare gain of countries and the domestic competitiveness of service companies (section 3.5). Several international organisations are actively involved in seeking to liberalise the international market for services. The WTO, OECD, ITC and ICTSD are four major such organisations (section 3.6). These organisations aim to provide governments with the knowledge and skills to develop their exports of services and to understand the benefits of services liberalisation.

This was followed by an in-depth investigation into the role that services play in the South African economy (section 3.7). It was demonstrated that services contribute 70% to South Africa's GDP and almost 79% of labour was employed in the services sector between 2005 and 2009. South Africa's exports of services constituted only 19% of the country's total exports during the same period. It was found that the travel sector constituted 63% of the total exports of services and therefore it was suggested that South Africa diversify services exports into other sectors.

Importantly, it was established that there are no government export promotion policies for South Africa's services. This indicated a need to develop export promotion strategies that could assist South Africa in increasing its total exports of services.

The objective of Chapter 4 was to investigate the literature on export promotion in order to establish guidelines for an export promotion policy for services in South Africa. From a review on the literature on export promotion in general, it was found that a sector-specific

approach to export promotion could assist greatly in increasing exports of services. The various instruments that can be applied by an EPO to exporters that are in different stages of development were explained. The same instruments could be used to assist services exporters in South Africa.

The literature review on the export promotion of services found that the greatest export barrier companies face when penetrating potential export markets, is that they do not have an established reputation (section 4.3). Thus, EPOs should be involved in helping companies develop their reputation through advertising, trade fairs and missions, as well as organised visits to potential buyers.

The activities of India, Chile, Canada, the USA, Malaysia and Australia in promoting their services sectors were investigated (section 4.4). It was found that India has established the SEPC, which focuses only on the export promotion of services, and this council is focused on decreasing trade barriers for services and assisting companies to enter new markets. In Chile, the government EPO works with the industry associations to increase services trade. In Canada, there are no specific services promotion activities but the EDC EPO provides a helpful tool called the TOM system, which identifies realistic export opportunities for certain sectors. The USA, Malaysia and Australia have all realised the importance of promoting the exports of their services sectors as well. The USA is currently developing a services policy to stimulate growth in this area. Malaysia has a section of their EPO that only focuses on services and this directorate is involved in export promotion of services to increase export growth. In Australia, the private sector formed the ASR, which actively assists services sectors to overcome barriers to trade and increase exports.

From these findings regarding the activities of other countries, it was recommended that South Africa follow a similar approach for services and establish a separate organisation or a unit within the current structures that would focus only on the export promotion of services. This organisation could seek to create market access for services in South Africa and to identify export opportunities in foreign markets and the organisation could work closely with export councils, industry associations and other private-sector organisations to increase and diversify South Africa's exports of services.

The export promotion activities in South Africa were evaluated and it was found that there are a very limited number of industry associations and export councils that focus on services sectors (section 4.5). The DTI in South Africa as the government EPO has no export

strategy in place for services. A DSM was developed for products and the model identifies the most realistic export opportunities for South African products based on a scientific selection process. The goals of the Trade Policy and Strategy Framework (section 4.5.2) demonstrated that there was a need to identify similar export opportunities for services and discussions with officials at the DTI confirmed its need for an EOM for services.

The DSM for products was investigated in order to evaluate whether a similar model could be developed for services (section 4.5.3). The DSM for products makes use of four main filters that use country- and product-level data to assess market conditions and potential for exports to these markets (section 4.5.3). It was found that a similar model for services could be developed, but because the available data for services was not in the same format as the data used for products, some of the filters had to be adapted.

The objective of Chapter 5 was to explain the methodology of the EOM for services. The major contribution of this study is the development of an EOM for services that identifies export opportunities for South African services. It was found that the first two filters of the DSM for products could be used in the same manner but applied to services data without changing the methodology of the filters. The third and fourth filters of the EOM for services had to be newly developed to provide for the data available on services (sections 5.2.3 and 5.2.4).

The objective of Chapter 6 was to present the results of the applied EOM for services. The first filter of the EOM for services (section 6.2) analysed the economic and political risks (filter 1.1), as well as the GDP and GDP per capita and growth (filter 1.2) data for 240 countries. After applying this filter, 99 countries showed sufficient levels of GDP and GDP growth and low levels of risk and were selected to continue to the second filter. The second filter of the model (section 6.3) evaluated the import data in the short term and long term for 99 countries across 61 services sub-sectors (6 039 services/country combinations). The services/country combinations that did not show sufficient growth in the short term or long term and did not have a sufficient market size were eliminated in this filter and a final list of 1 843 services/country combinations were selected to continue to filter 3.

Filter 3.1 evaluated each market's OSI and this was calculated by comparing the total imports of a sector to the total services demanded in that market. The results were assessed by using a cut-off value and based on this, 961 services/country combinations showed sufficient market OSI.

Filter 3.2 analysed the GATS commitments of each country and created scale values for each sector in order to determine MA for each sector. A cut-off value was determined and if a services/country combination did not fall within the cut-off value its MA was considered too low and these opportunities were eliminated in this filter. This left 666 services/country combinations that could be used in conjunction with the results of filter 3.1 to select the final set of services/country combinations in filter 3. The two sets of results were combined and a services/country combination had to fulfil both the criteria of filters 3.1 and 3.2 to be selected to continue to filter 4. In this manner, 578 services/country combinations continued to filter 4.

The 578 services/country combinations are the export opportunities that hold the highest export potential for South Africa's services. The final set of results of the EOM for services were grouped according to a cell classification that groups the export opportunities according to the characteristics of the different markets in which these opportunities lie (section 6.5). The cell classifications grouped the results according to the market size and growth (from filter 2), as well as the market OSI (filter 3.1) and MA (filter 3.2). Therefore, the optimal combinations lie in the fourth column, where the markets are easily accessible or are very open. It is also important to note that the second and third columns are interchangeable, as both have one positive and one negative value. The cell classifications can then be used to develop export promotion strategies for services.

The results were also grouped according to sector, country and region to make further recommendations. It was found that even though travel services already have high exports it may also have opportunity for further expansion, together with other sectors. However, this is dependent on how much of this figure is already being exported, as it was not possible to determine this. These results can assist the DTI in the process of diversifying the exports of services into sectors that have high export potential. These results can be combined with the export promotion instruments given in Chapter 4 and used to address specific service company needs. Export promotion instruments can then be directed at the sectors, countries and regions with the highest export potential, which would assist the DTI in South Africa to use its limited capacity optimally. The recommendations regarding the use of the results of the EOM for services and the guidelines in the literature were made in Chapter 7 and these recommendations will be summarised in the following section.

8.3 Policy recommendations

The first major policy recommendation is to establish an export promotion strategy that entails establishing a unit within the DTI that focuses only on the export promotion of services, as the services sector differs greatly from the other sectors of the economy and has different needs due to the nature of services trade. This recommendation is drawn from the investigation of the export promotion activities of the selected countries regarding services. The proposed organisation should perform sector-specific export promotion activities such as providing trade fairs, networking opportunities, market information and funding, and undertaking trade missions. This organisation should also identify potential markets for South African services and include export councils, industry associations and other private-sector organisations in the negotiations process to open the identified markets for services.

The first set of results according to the cell classifications (section 7.2.1) provides a market characteristic approach for the export promotion of services. The export opportunities were grouped according to the number of opportunities for each sector and the cell classification for this showed that the highest export potential for South African services is in markets that are large in size and with a HMA (according to filter 3.2 calculations) but low OSI (according to filter 3.1). Therefore, the DTI needs to assist exporters in investigating whether these OSI issues are due to a very concentrated domestic services market that fulfils the needs of the final users. Competing with local companies in the market may be difficult, as these companies already have an established reputation and therefore the DTI can be actively involved in assisting companies in establishing their reputation in different markets.

The sectors that hold high export potential for services can be used to diversify South Africa's export opportunities. It was determined that South Africa already has high exports in travel and transportation and therefore the results of these sectors are not discussed in detail below, although it is still important to explore these opportunities. The services sectors with the highest export potential according to the total import demand in these markets are the following:

- travel (EBOPS code 236);
- transportation (EBOPS code 205);
- business and management consultancy and public relations services (EBOPS code 277);

- services between affiliated enterprises (EBOPS code 285);
- construction services in the importing country (EBOPS code 251);
- advertising, market research and public-opinion polling (EBOPS code 278);
- franchises and similar rights (EBOPS code 891);
- telecommunication services (EBOPS code 247);
- architectural, engineering and other technical services (EBOPS code 280);
- computer services (EBOPS code 263); and
- research and development (EBOPS code 279).

These are the sectors that should receive the greatest focus from EPOs to expand their exports to the potential markets. Export promotion organisations, together with industry, should investigate the regions and countries to which South Africa is currently exporting these services and, if necessary, redirect some of its exports to these markets if it does not already have a presence in these markets. The export promotion instruments applied to these sectors will depend on the mode of supply that is chosen for each, the mode with the highest revenue opportunity, and the specific requirements that are associated with each mode of supply (section 7.2.3).

The results of the EOM sorted according to region demonstrated that the regions with highest export potential for services are in Eastern and South-Eastern Asia, followed by Europe. The following ten countries have the highest export opportunities according to the total import demand and targeted export promotion activities for services companies should focus on making the most of the export opportunities by focussing the South African exports to these countries:

- China;
- Germany;
- UK;
- South Korea;
- Canada;
- Japan;
- Russia;
- Singapore;
- Saudi Arabia; and
- France.

The study also compared the EOM for services with the results of the DSM for products (section 7.3). This comparison resulted in a list of product and service sectors that hold the highest export potential in each region. These results should be used in formulating a national export strategy for both products and services. These results could also be used in trade negotiations, as they provide specific areas that hold potential for expansion.

8.4 Future research

The results of this study hold possibilities for other future research that could be performed. The first recommendation is to investigate the results of the EOM for services in more detail. Sector-specific studies are necessary to determine the supply capacity of industry in order to determine whether the proposed levels of exports are possible. This would assist in establishing possible guidelines for future investment and development within the specific sectors in order to grow the capacity of the sector.

Sector-specific studies could also more clearly define the application of the different modes of supply to each sector and the export promotion tools that would match each mode of supply. Each sector has different requirements and it was not possible to explore these in this study. The results may provide greater specificity regarding sector-specific export promotion strategies.

The second recommendation is to make use of the results of the EOM model for services in bilateral and multilateral trade negotiations, as specific sectors have been highlighted and these could receive special attention in negotiations. Related to this, future research could also explore those opportunities that were eliminated in the third filter of the model owing to low MA. This could assist in identifying the markets in which the trade barriers for specific services are the highest and where trade negotiations are necessary.

The third recommendation is for focused sector-specific studies to determine the current level of exports and the specific trading partners for the different services sectors. This could assist the DTI in achieving its objective of improving the quality and accuracy of trade data and statistics for services. These results could be used to define the model to include South Africa's current exports to specific markets in order to determine its current market share. Current market share indicates whether South Africa is already a significant participant in the specific market and, if this is the case, export promotion does not need to be as intense as in markets in which South Africa's market share is low.

The low levels of export potential for South Africa in Africa offer another area of future research, especially in the Southern African region. The third recommendation is therefore to investigate the reasons why such low export opportunities in Africa exist, specifically at sector level. For example, it was suggested that many countries in the DSM for products were eliminated in the first filter due to high levels of perceived risk in most African countries. In the EOM for services, 42 of the 52 African countries were eliminated in the first filter and no further export opportunities to these countries were considered. Therefore, only 702 product/country combinations were in the final list of export opportunities for South Africa in Africa, with no opportunities in Southern Africa. This appears to be a problem, as South Africa is currently focusing on expanding markets into Africa and developing the regional economy in Southern Africa. The DTI determined that South Africa's trade and investment in Africa is important and could assist in developing mutually beneficial trade relations. There are also many companies that still trade with other African countries, despite the risk levels, as they overcome these by means of insurance, increased prices, different trade contracts, etc.

Therefore, one of the projects completed recently by the North-West University research team for the DTI was to repeat the DSM for products only for the African continent (Viviers *et al.*, 2010). In the African version of the model, the first filter that eliminates countries based on risk and GDP growth was not included, and the model started off with all African countries combined with all product combinations in the second filter. This was done in order to allow more opportunities to enter the filtering process of the second and third filters. The result was a large increase in the number of export opportunities for South Africa on the African continent. Thus, the fourth recommendation is to develop a similar EOM for services to Africa in future, by eliminating the first filter and applying only the second, third and fourth filters to all 52 African countries. This would result in a greater and more detailed list of export opportunities for services in Africa and, based on this, the export promotion into Africa could be more focused.

The fifth recommendation is to adapt the EOM for services for different circumstances and then apply this model to the whole SACU region in order to determine the export opportunities with the greatest potential from this region to the rest of the world. Depending on the availability of data, the model could also be applied to the nine provinces in South Africa to determine the potential export opportunities for each province.

8.5 Conclusion

This study set out with the objective of developing an EOM for South African services in order to assist the EPOs to focus their activities on the services sectors, regions and countries that have the highest potential for export growth. The EOM identified the most realistic export opportunities for South Africa's services and these results can be used to develop a scientifically based export promotion strategy for services in South Africa.

It would be beneficial to develop a unit within the DTI that focus only on the export promotion of services and this unit could address specific trade issues that are experienced by the services community. The results of the EOM for services could be used as a basis for decision-making within the unit.

APPENDICES

Appendix A

Services sector classification list

	SECTORS AND SUB-SECTORS	CORRESPONDING CENTRAL PRODUCT CLASSIFICATION
1.	BUSINESS SERVICES	
A.	Professional services	
a.	Legal services	861
b.	Accounting, auditing and bookkeeping services	862
c.	Taxation services	863
d.	Architectural services	8671
e.	Engineering services	8672
f.	Integrated engineering services	8673
g.	Urban planning and landscape architectural services	8674
h.	Medical and dental services	9312
i.	Veterinary services	932
j.	Services provided by midwives, nurses, physiotherapists and para-medical personnel	93191
k.	Other	
B.	Computer and related services	
a.	Consultancy services related to the installation of computer hardware	841
b.	Software implementation services	842
c.	Data processing services	843
d.	Database services	844
e.	Other	845+849
C.	Research and development services	
a.	R&D services on natural sciences	851
b.	R&D services on social sciences and humanities	852
c.	Interdisciplinary R&D services	853
D.	Real estate services	
a.	Involving own or leased property	821
b.	On a fee or contract basis	822
E.	Rental/leasing services without operators	
a.	Relating to ships	83103
b.	Relating to aircraft	83104
c.	Relating to other transport equipment	83101+83102+83105
d.	Relating to other machinery and equipment	83106–83109
e.	Other	832
F.	Other business services	
a.	Advertising services	871

b.	Market research and public-opinion polling services	864
c.	Management consulting service	865
d.	Services related to management consulting	866
e.	Technical testing and analysis services	8676
f.	Services incidental to agriculture, hunting and forestry	881
g.	Services incidental to fishing	882
h.	Services incidental to mining	883+5115
i.	Services incidental to manufacturing	884+885
j.	Services incidental to energy distribution	887
k.	Placement and supply services of personnel	872
l.	Investigation and security	873
m.	Related scientific and technical consulting services	8675
n.	Maintenance and repair of equipment (not incl. maritime vessels, aircraft or other transport equipment	8861–8866 633+
o.	Building-cleaning services	874
p.	Photographic services	875
q.	Packaging services	876
r.	Printing, publishing	88442
s.	Convention services	87909*
t.	Other	8790
2.	COMMUNICATION SERVICES	
A.	Postal services	7511
B.	Courier services	7512
C.	Telecommunication services	
a.	Voice telephone services	7521
b.	Packet-switched data transmission services	7523**
c.	Circuit-switched data transmission services	7523**
d.	Telex services	7523**
e.	Telegraph services	7522
f.	Facsimile services	7521**+7529**
g.	Private leased circuit services	7522**+7523**
h.	Electronic mail	7523**
i.	Voicemail	7523**

* Indicates that the service specified is a component of a more aggregated CPC item specified elsewhere in this classification list.

** Indicates that the service specified constitutes only a part of the total range of activities covered by the CPC concordance (e.g. voice mail is only a component of CPC item 7523).

j.	On-line information and database retrieval	7523**
k.	Electronic data interchange	7523**
l.	Enhanced/value-added facsimile services, incl. store and forward, store and retrieve	7523**
m.	Code and protocol conversion	n.a.
n.	On-line information and/or data processing incl. transaction proc.	843**
o.	Other	
D.	Audiovisual services	
a.	Motion picture and video tape production and distribution services	9611
b.	Motion picture projection service	9612
c.	Radio and television services	9613
d.	Radio and television transmission services	7524
e.	Sound recording	n.a.
f.	Other	
E.	Other communication services	
3.	CONSTRUCTION AND RELATED ENGINEERING SERVICES	
A.	General construction work for buildings	512
B.	General construction work for civil engineering	513
C.	Installation and assembly work	514+516
D.	Building completion and finishing work	517
E.	Other construction and related engineering services	511+515+518
4.	DISTRIBUTION SERVICES	
A.	Commission agents' services	621
B.	Wholesale trade services	622
C.	Retailing services	631+632
D.	Franchising	6111+6113+6121
E.	Other distribution services	8929
5.	EDUCATIONAL SERVICES	
A.	Primary education services	921
B.	Secondary education services	922
C.	Higher education services	923
D.	Adult education	924
E.	Other educational services	929
6.	ENVIRONMENTAL SERVICES	
A.	Sewage services	9401
B.	Refuse disposal services	9402
C.	Sanitation and similar services	9403
D.	Other environmental services	

7.	FINANCIAL SERVICES	
A.	All insurance and insurance-related services	812**
a.	Life, accident and health insurance services	8121
b.	Non-life insurance services	8129
c.	Reinsurance and retrocession	81299*
d.	Services auxiliary to insurance (including broking and agency services)	8140
B.	Banking and other financial services (excl. insurance)	
a.	Acceptance of deposits and other repayable funds from the public	81115–81119
b.	Lending of all types, incl. consumer credit, mortgage credit, factoring and financing of commercial transaction	8113
c.	Financial leasing	8112
d.	All payment and money transmission services	81339**
e.	Guarantees and commitments	81199**
f.	Trading for own account or for account of customers, whether on an exchange, in an over-the-counter market or otherwise, the following:	
	- money market instruments (cheques, bills, certificate of deposits)	81339**
	- foreign exchange	81333
	- derivative products incl., but not limited to, futures and options	81339**
	- exchange rate and interest rate instruments, incl. products such as swaps, forward rate agreements, etc.	81339**
	- transferable securities	81321*
	- other negotiable instruments and financial assets, incl. bullion	81339**
g.	Participation in issues of all kinds of securities, incl. underwriting and placement as agent (whether publicly or privately) and provision of service related to such issues	8132
h.	Money broking	81339**
i.	Asset management, such as cash or portfolio management, all forms of collective investment management, pension fund management, custodial depository and trust services	8119+**
		81323*
j.	Settlement and clearing services for financial assets incl. securities, derivative products, and other negotiable instruments	81339** or 81319**
k.	Advisory and other auxiliary financial services on all the activities listed in Article 1B of MTN.TNC/W/50, incl. credit reference and analysis, investment and portfolio research and advice, advice on acquisitions and on corporate restructuring and strategy	8131 or 8133
l.	Provision and transfer of financial information, and financial data processing and related software by providers of other financial services	8131
C.	Other financial services	
8.	HEALTH-RELATED AND SOCIAL SERVICES (other than those listed under 1.A.h–j)	
A.	Hospital services	9311
B.	Other human health services	9319
C.	Social services	933
D.	Other health-related and social services	

9.	TOURISM AND TRAVEL-RELATED SERVICES	
A.	Hotels and restaurants, incl. catering	641–643
B.	Travel agencies and tour operators services	7471
C.	Tourist guides services	7472
D.	Other tourism and travel-related services	
10.	RECREATIONAL, CULTURAL AND SPORTING SERVICES (other than audiovisual services)	
A.	Entertainment services (including theatre, live bands and circus services)	9619
B.	News agency services	962
C.	Libraries, archives, museums and other cultural services	963
D.	Sporting and other recreational services	964
E.	Other recreational, cultural and sporting services	
11.	TRANSPORT SERVICES	
A.	Maritime transport services	
a.	Passenger transportation	7211
b.	Freight transportation	7212
c.	Rental of vessels with crew	7213
d.	Maintenance and repair of vessels	8868**
e.	Pushing and towing services	7214
f.	Supporting services for maritime transport	745**
B.	Internal waterways transport	
a.	Passenger transportation	7221
b.	Freight transportation	7222
c.	Rental of vessels with crew	7223
d.	Maintenance and repair of vessels	8868**
e.	Pushing and towing services	7224
f.	Supporting services for internal waterway transport	745**
C.	Air transport services	
a.	Passenger transportation	731
b.	Freight transportation	732
c.	Rental of aircraft with crew	734
d.	Maintenance and repair of aircraft	8868**
e.	Supporting services for air transport	746
D.	Space transport	733
E.	Rail transport services	
a.	Passenger transportation	7111
b.	Freight transportation	7112
c.	Pushing and towing services	7113
d.	Maintenance and repair of rail transport equipment	8868**
e.	Supporting services for rail transport services	743
F.	Road transport services	
a.	Passenger transportation	7121+7122
b.	Freight transportation	7123

c.	Rental of commercial vehicles with operator	7124
d.	Maintenance and repair of road transport equipment	6112+8867
e.	Supporting services for road transport services	744
G.	Pipeline transport	
a.	Transportation of fuels	7131
b.	Transportation of other goods	7139
H.	Services auxiliary to all modes of transport	
a.	Cargo-handling services	741
b.	Storage and warehouse services	742
c.	Freight transport agency services	748
d.	Other	749
I.	Other transport services	
12.	OTHER SERVICES N.I.E.	95+97+98+99

Source: WTO (1991)

Appendix B

Extended Balance of Payments Services Classification

	EBOPS Classification	EBOPS code
1.	TRANSPORTATION	205
1.1	Sea transport	206
1.1.1	Passenger	207
1.1.2	Freight	208
1.1.3	Other	209
1.2	Air transport	210
1.2.1	Passenger	211
1.2.2	Freight	212
1.2.3	Other	213
1.3	Other transport	214
1.3.1	Passenger	215
1.3.2	Freight	216
1.3.3	Other	217
1.4	Space transport	218
1.5	Rail transport	219
1.5.1	Passenger	220
1.5.2	Freight	221
1.5.3	Other	222
1.6	Road transport	223
1.6.1	Passenger	224
1.6.2	Freight	225
1.6.3	Other	226
1.7	Inland waterway transport	227
1.7.1	Passenger	228
1.7.2	Freight	229
1.7.3	Other	230
1.8	Pipeline transport and electricity transmission	231
1.9	Other supporting and auxiliary transport services	232
	<u>Memorandum items*</u>	
	Freight transportation on merchandise, valued on a transaction basis	950
	Sea freight	951
	Air freight	952
	Other freight	858
	Space freight	862
	Rail freight	863
	Road freight	953
	Inland waterway	865
	Pipeline freight	868

2.	TRAVEL	236
2.1	Business	237
2.1.1	Expenditure by seasonal and border workers	238
2.1.2	Other	239
2.2	Personal	240
2.2.1	Health-related	241
2.2.2	Education-related	242
2.2.3	Other	243
	<u>Memorandum items*</u>	
	Expenditure on goods	956
	Expenditure on accommodation and food and beverage services	957
	All other travel expenditure	871
3.	COMMUNICATIONS SERVICES	245
3.1	Postal and courier services	246
3.2	Telecommunication services	247
4.	CONSTRUCTION SERVICES	249
4.1	Construction abroad	250
4.2	Construction in the compiling economy	251
5.	INSURANCE SERVICES	253
5.1	Life insurance and pension funding	254
5.2	Freight insurance	255
5.3	Other direct insurance	256
5.4	Reinsurance	257
5.5	Auxiliary services	258
	<u>Memorandum items*</u>	
	Gross insurance premiums	960
	Gross premiums – life	972
	Gross premiums– freight	974
	Gross premiums– other	976
	Gross insurance claims	961
	Gross claims – life	973
	Gross claims– freight	975
	Gross claims– other direct insurance	977
6.	FINANCIAL SERVICES	260
6.1	Financial Intermediation Services Indirectly Measured (FISIM)	887
6.2	Financial services including FISIM	888

7.	COMPUTER AND INFORMATION SERVICES	262
7.1	Computer services	263
7.2	Information services	264
7.2.1	News agency	889
7.2.2	Other information	890
8.	ROYALTIES AND LICENSING FEES	266
8.1	Franchises and similar rights	891
8.2	Other royalties and licensing fees	892
9.	OTHER BUSINESS SERVICES	268
9.1	Merchanting and other trade-related services	269
9.1.1	Merchanting	270
9.1.2	Other	271
9.2	Operational leasing services	272
9.3	Miscellaneous business, professional and technical services	273
9.3.1	Legal, accounting, management consulting and public relations	274
9.3.1.1	Legal services	275
9.3.1.2	Accounting, auditing, book-keeping and tax consulting services	276
9.3.1.3	Business and management consultancy and public relations services	277
9.3.2	Advertising, market research and public-opinion polling	278
9.3.3	Research and development	279
9.3.4	Architectural, engineering and other technical services	280
9.3.5	Agricultural, mining and on-site processing services	281
9.3.5.1	Waste treatment and depollution	282
9.3.5.2	Other	283
9.3.6	Other	284
9.3.7	Services between affiliated enterprises, n.i.e.	285
	<u>Memorandum items*</u>	
	Merchanting gross flows	962
10.	PERSONAL, CULTURAL, AND RECREATIONAL SERVICES	287
10.1	Audiovisual and related services	288
10.2	Other personal, cultural and recreational services	289
10.2.1	Education services	895
10.2.2	Health services	896
10.2.3	Other	897
	<u>Memorandum items*</u>	
	Audiovisual transactions	894
11.	GOVERNMENT SERVICES, N.I.E.	291
11.1	Embassies and consulates	292

11.2	Military units and agencies	293
11.3	Other	294

* A number of memorandum items are included in the EBOPS listing. These memorandum items are not confined only to services transactions, but also offer additional product information on the transactions that should be recorded. These items provide useful additional information for trade negotiations and analytical purposes, including data quality assessment.

Source: UN (2002)

Appendix C

Countries that entered filter 1 in the DSM for products and the EOM for services

(Countries highlighted were eliminated in filter 1.1)

Afghanistan	Djibouti	Libya	Rwanda
Albania	Dominica	Liechtenstein	Samoa (American)
Algeria	Dominican Republic	Lithuania	Samoa (Western)
Andorra	Ecuador	Luxembourg	San Marino
Angola	Egypt	Macau	Sao Tome and Principe
Anguilla (Great-Britain)	El Salvador	Macedonia	Saudi Arabia
Antigua and Barbuda	Equatorial Guinea	Madagascar	Senegal
Argentina	Eritrea	Madeira (Portugal)	Serbia
Armenia	Estonia	Malawi	Seychelles
Aruba (Netherlands)	Ethiopia	Malaysia	Sierra Leone
Australia	Faeroe Islands (Denmark)	Maldives	Singapore
Austria	Falkland Islands (Great Britain)	Mali	Slovakia
Azerbaijan	Fiji	Malta	Slovenia
Azores (Portugal)	Finland	Man (Isle of) (Great Britain)	Solomon Islands
Bahamas	France	Mariana Islands (Northern)	Somalia
Bahrain	French Guiana (France)	Marshall Islands	South Africa
Bangladesh	French Polynesia (France)	Martinique (France)	Spain
Barbados	Gabon	Mauritania	Sri Lanka
Belarus	Gambia	Mauritius	St. Helena (Great Britain)
Belgium	Georgia	Mayotte (France)	St. Kitts & Nevis
Belize	Germany	Mexico	St. Lucia
Benin	Ghana	Micronesia	St. Pierre & Miquelon (France)
Bermuda	Gibraltar (Great-Britain)	Moldova	St. Vincent & the Grenadines
Bhutan	Greece	Monaco	Sudan
BIOT (Chagos) (Great Britain)	Greenland (Denmark)	Mongolia	Suriname
Bolivia	Grenada	Montenegro	Swaziland
Bosnia & Herzegovina	Guadeloupe (France)	Montserrat (Great Britain)	Sweden
Botswana	Guam (USA)	Morocco	Switzerland
Brazil	Guatemala	Mozambique	Syria
Brunei	Guinea	Myanmar	Taiwan
Bulgaria	Guinea-Bissau	Namibia	Tajikistan
Burkina Faso	Guyana	Nauru	Tanzania

Burundi	Haiti	Nepal	Thailand
Cambodia	Honduras	Netherlands	Timor-Leste
Cameroon	Hong Kong (China)	Netherlands Antilles (Netherlands)	Togo
Canada	Hungary	New Caledonia (France)	Tokelau (New Zealand)
Canary Islands (Spain)	Iceland	New Zealand	Tonga
Cape Verde	India	Nicaragua	Trinidad & Tobago
Cayman Islands (Great Britain)	Indonesia	Niger	Tunisia
Central African Republic	Iran	Nigeria	Turkey
Ceuta and Melilla (Spain)	Iraq	Niue (New Zealand)	Turkmenistan
Chad	Ireland	Norfolk (Australia)	Turks & Caicos Islands
Channel Islands (Great Britain)	Israel	Norway	Tuvalu
Chile	Italy	Oman	Uganda
China	Jamaica	Pakistan	Ukraine
Christmas Island (Australia)	Japan	Palau	UAE
Colombia	Jordan	Palestine	UK
Comoros	Kazakhstan	Panama	USA
Congo (Democratic Republic)	Kenya	Papua New Guinea	Uruguay
Congo (Republic)	Kiribati	Paraguay	Uzbekistan
Cook Islands	North Korea	Peru	Vanuatu
Coral Sea Islands (Australia)	South Korea	Philippines	Vatican City
Costa Rica	Kosovo	Pitcairn (Great Britain)	Venezuela
Côte d'Ivoire	Kuwait	Poland	Viet Nam
Croatia	Kyrgyzstan	Portugal	Virgin Islands
Cuba	Lao	Puerto Rico (USA)	Wallis & Futuna (France)
Cyprus (Greek) (South)	Latvia	Qatar	Western Sahara
Cyprus (Turkish) (North)	Lebanon	Reunion (France)	Yemen
Czech Republic	Lesotho	Romania	Zambia
Denmark	Liberia	Russia	Zimbabwe

Source: ONDD (2009)

Appendix D

Countries that continued to filter 2

Albania	Dominican Republic	Mongolia	Tunisia
Angola	Egypt	Netherlands	Turkey
Argentina	Estonia	Netherlands Antilles (Netherlands)	Turkmenistan
Armenia	Finland	New Caledonia (France)	United Arab Emirates
Aruba (Netherlands)	France	New Zealand	UK
Australia	French Polynesia (France)	Norway	USA
Austria	Georgia	Oman	Uruguay
Azerbaijan	Germany	Panama	Uzbekistan
Bahamas	Ghana	Peru	Venezuela
Bahrain	Greece	Poland	Viet Nam
Bangladesh	Hong Kong (China)	Portugal	Zambia
Barbados	Hungary	Qatar	
Belarus	Iceland	Romania	
Belgium	India	Russia	
Bermuda (Great-Britain)	Indonesia	Saudi Arabia	
Bhutan	Iran	Serbia	
Bosnia and Herzegovina	Ireland	Sierra Leone	
Brazil	Israel	Singapore	
Brunei	Italy	Slovakia	
Bulgaria	Japan	Slovenia	
Canada	Jordan	South Korea	
Cape Verde	Kazakhstan	Spain	
Chile	Kuwait	Sri Lanka	
China	Latvia	St. Kitts & Nevis	
Colombia	Lithuania	Suriname	
Costa Rica	Luxembourg	Sweden	
Croatia	Macao	Switzerland	
Cyprus (Turkish) (North)	Malaysia	Tanzania	
Czech Republic	Malta	Thailand	
Denmark	Mexico	Trinidad & Tobago	

Appendix E

World regions used in applying the DSM and the EOM

REGION	SUB-REGION	COUNTRY
Africa	Middle Africa	Angola
Africa	Western Africa	Cape Verde
Africa	Northern Africa	Egypt
Africa	Western Africa	Ghana
Africa	Western Africa	Sierra Leone
Africa	Southern Africa	South Africa
Africa	Eastern Africa	Tanzania
Africa	Northern Africa	Tunisia
Africa	Eastern Africa	Zambia
Asia	Western Asia	Armenia
Asia	Western Asia	Azerbaijan
Asia	Western Asia	Bahrain
Asia	South-Central Asia	Bangladesh
Asia	South-Central Asia	Bhutan
Asia	South-Eastern Asia	Brunei
Asia	Eastern Asia	China
Asia	Western Asia	Cyprus
Asia	Western Asia	Georgia
Asia	Eastern Asia	Hong Kong
Asia	South-Central Asia	India
Asia	South-Eastern Asia	Indonesia
Asia	South-Central Asia	Iran
Asia	Western Asia	Israel
Asia	Eastern Asia	Japan
Asia	Western Asia	Jordan
Asia	South-Central Asia	Kazakhstan
Asia	Western Asia	Kuwait
Asia	Eastern Asia	Macao
Asia	South-Eastern Asia	Malaysia
Asia	Eastern Asia	Mongolia
Asia	Western Asia	Oman
Asia	Western Asia	Qatar
Asia	Western Asia	Saudi Arabia
Asia	South-Eastern Asia	Singapore
Asia	Eastern Asia	South Korea
Asia	South-Central Asia	Sri Lanka
Asia	South-Eastern Asia	Thailand
Asia	Western Asia	Turkey
Asia	South-Central Asia	Turkmenistan

Asia	Western Asia	UAE
Asia	South-Central Asia	Uzbekistan
Asia	South-Eastern Asia	Viet Nam
Europe	Southern Europe	Albania
Europe	Western Europe	Austria
Europe	Eastern Europe	Belarus
Europe	Western Europe	Belgium
Europe	Southern Europe	Bosnia & Herzegovina
Europe	Eastern Europe	Bulgaria
Europe	Southern Europe	Croatia
Europe	Eastern Europe	Czech Republic
Europe	Northern Europe	Denmark
Europe	Northern Europe	Estonia
Europe	Northern Europe	Finland
Europe	Western Europe	France
Europe	Western Europe	Germany
Europe	Southern Europe	Greece
Europe	Eastern Europe	Hungary
Europe	Northern Europe	Iceland
Europe	Northern Europe	Ireland
Europe	Southern Europe	Italy
Europe	Northern Europe	Latvia
Europe	Northern Europe	Lithuania
Europe	Western Europe	Luxembourg
Europe	Southern Europe	Malta
Europe	Western Europe	Netherlands
Europe	Northern Europe	Norway
Europe	Eastern Europe	Poland
Europe	Southern Europe	Portugal
Europe	Eastern Europe	Romania
Europe	Eastern Europe	Russia
Europe	Southern Europe	Serbia
Europe	Eastern Europe	Slovakia
Europe	Southern Europe	Slovenia
Europe	Southern Europe	Spain
Europe	Northern Europe	Sweden
Europe	Western Europe	Switzerland
Europe	Northern Europe	UK
Latin America	South America	Argentina
Latin America	Caribbean	Aruba
Latin America	Caribbean	Bahamas
Latin America	Caribbean	Barbados
Latin America	South America	Brazil
Latin America	South America	Chile

Latin America	South America	Colombia
Latin America	Central America	Costa Rica
Latin America	Caribbean	Dominican Republic
Latin America	Central America	Mexico
Latin America	Caribbean	Netherlands Antilles
Latin America	Central America	Panama
Latin America	South America	Peru
Latin America	Caribbean	St. Kitts & Nevis
Latin America	South America	Suriname
Latin America	Caribbean	Trinidad & Tobago
Latin America	South America	Uruguay
Latin America	South America	Venezuela
North America	North America	Bermuda
North America	North America	Canada
North America	North America	USA
Oceania	Oceania	Australia
Oceania	Oceania	French Polynesia
Oceania	Oceania	New Caledonia
Oceania	Oceania	New Zealand

Source: UN (2010b)

Appendix F

Countries included in each region in the results of the DSM for products and the EOM for services

Sub-region	DSM for products	EOM for services
Caribbean	Barbados Trinidad & Tobago	Aruba Barbados Netherlands Antilles
Central America	Panama	Costa Rica Panama
Eastern Africa	Tanzania Zambia	Zambia
Eastern Asia	China Hong Kong Japan Macao Mongolia South Korea	China Hong Kong Japan South Korea
Eastern Europe	Belarus Bulgaria Czech Republic Hungary Poland Romania Russia Slovakia	Belarus Bulgaria Czech Republic Hungary Poland Romania Russia Slovakia
Middle Africa		Angola
Northern Africa	Egypt Tunisia	Egypt Tunisia
North America	Canada USA	Bermuda Canada USA
Northern Europe	Denmark Estonia Finland Iceland Ireland Latvia Lithuania Norway Sweden UK	Denmark Estonia Finland Iceland Ireland Latvia Lithuania Norway Sweden UK
Oceania	Australia French Polynesia	Australia French Polynesia

	New Caledonia New Zealand	New Caledonia New Zealand
South America	Argentina Brazil Colombia Suriname Uruguay	Argentina Chile Suriname Venezuela
South-Central Asia	Bangladesh Bhutan India Iran Kazakhstan Sri Lanka Turkmenistan	India Iran Kazakhstan
South-Eastern Asia	Brunei Indonesia Malaysia Singapore Thailand Viet Nam	Indonesia Malaysia Singapore Thailand Viet Nam
Southern Europe	Albania Bosnia & Herzegovina Croatia Greece Italy Malta Portugal Serbia Slovenia Spain	Albania Bosnia & Herzegovina Croatia Greece Italy Portugal Serbia Slovenia Spain
Western Africa	Cape Verde Ghana	Cape Verde Ghana Sierra Leone
Western Asia	Armenia Azerbaijan Bahrain Cyprus Georgia Israel Jordan Kuwait Oman Qatar Saudi Arabia Turkey	Armenia Azerbaijan Cyprus Georgia Kuwait Oman Saudi Arabia UAE

	UAE	
Western Europe	Austria Belgium France Germany Luxembourg Netherlands Switzerland	Austria Belgium France Germany Luxembourg Netherlands Switzerland

LIST OF REFERENCES

- AHMED, Z.U., MOHAMED, O., JOHNSON, J.P., & MENG, L.Y. 2002. Export promotion programs of Malaysian firms: an international marketing perspective. *Journal of business research*, 55(10):831–843.
- ANDERSEN, O. 1997. Internationalisation and market entry mode: a review of theories and conceptual frameworks. *Management international review*, 37(2):27–42.
- APPLEYARD, D.R. & FIELD, A.J. 1992. International economics. Boston, MA: Irwin.
- ARGARWAL, S. & RAMASWAMI, S.N. 1992. Choice of foreign market entry mode: impact of ownership, location and internationalisation factors. *Journal of international business studies*, 23(1):1–27.
- ASR see AUSTRALIAN SERVICES ROUNDTABLE.
- AUSTRALIAN SERVICES ROUNDTABLE. 2011. Events. <http://servicesaustralia.co/events/>
Date of access: 13 Apr. 2011.
- BALASSA, B. 1965. Trade liberalisation and revealed comparative advantage. New Haven, CT: Yale University Economic Growth Center.
- BARRETO, E. 2008. The engine of growth for the 21st century: trends and perspectives in services trade. (Paper presented to lecturers and students at the North-West University on 18 August 2008). Potchefstroom, South Africa. (Unpublished).
- BEPEC see BUILT ENVIRONMENT PROFESSIONS EXPORT COUNCIL.
- BHAGWATI, J.N. 1984. Splintering and disembodiment of services and developing nations. *World economy*, 7(2):133–143.
- BRAGA, C.A.P. 1996. The impact of the internationalisation of services in developing countries. *Finance and development*, 33(1):34–37.

BROWN, D.K. & STERN, R.M. 2000. Measurement and modeling of the economic effects of trade and investment barriers in services. (Paper presented at the Research Seminar in International Economics on 24 Nov. 2000, paper no. 453). Ann Arbor.
<http://141.211.144.225/rsie/workingpapers/Papers451-475/r453.pdf> Date of access: 13 Apr. 2011.

BRÜLHART, M. 1995. Scale economies, intra-industry trade and industry location in the “new trade theory”. *Trinity economic paper series*, paper no. 95/4.
<https://www.hec.unil.ch/mbrulhar/papers/tep954.pdf> Date of access: 13 Apr. 2011.

BUILT ENVIRONMENT PROFESSIONS EXPORT COUNCIL. 2011. Built Environment Professions Export Council. <http://www.bepec.co.za/> Date of access: 22 Apr. 2011.

CANADIAN SERVICES COALITION. 2009. Canada at a glance.
<http://www.canadianservicescoalition.com/statistics.htm>. Date of access: 1 May 2011.

CARBAUGH, R.J. 2008. International economics. 11th ed. Mason: Thomson South-Western.

CDC see CONSULTANCY DEVELOPMENT CENTRE.

CHANG, P., KARSENTY, G., MATTOO, A. & RICHTERING, J. 1998. GATS: the modes of supply and statistics on trade in services.
http://tradeinservices.mofcom.gov.cn/upload/2008/08/14/1218701801547_177757.pdf Date of access: 15 Apr. 2011.

CHRISTEN, E. & FRANCOIS, J. 2010. Modes of delivery in services. Linz: Johannes Kepler University of Linz. Paper no. 1008, Jun. <http://econ.jku.at/papers/2010/wp1008.pdf>.
Date of access: 13 Apr. 2011.

CLEMENTS-HUNT, A. 2004. Making the most of a services sector revolution. *International trade forum*, 4:52–55.

CONSULTANCY DEVELOPMENT CENTRE. 2006. Export promotion of consultancy and management services from India. Report prepared for the MOCII, Mar.
http://commerce.nic.in/trade/export_promotion_cms.pdf Date of access: 22 Apr. 2011.

COPELAND, B.R. 2002. Benefits and costs of trade and investment liberalization in services: implications from trade theory. (*In* Curtis, J.M. & Ciuriak, D., eds. Trade Policy Research. Quebec: Minister of Public Works and Government Services, Canada. p. 107–218.) <http://dsp-psd.pwgsc.gc.ca/Collection/E2-211-2002E.pdf> Date of access: 13 Apr. 2011.

CSC see CANADIAN SERVICES COALITION.

CUADRADO-ROURA, J.R. 2010. Internationalisation of services. *Paradigmes*, 4:13–26.

CUYVERS, L. 1997. Export opportunities of Thailand: a decision support model approach. Antwerp: Centre for ASEAN Studies. Paper no. 9, Jan.
<http://webh01.ua.ac.be/cas/PDF/CAS09.pdf> Date of access: 11 Apr. 2011.

CUYVERS, L. 2004. Identifying export opportunities: the case of Thailand. *International marketing review*, 21(3):255–278.

CUYVERS, L., DE PELSMACKER, P., RAYP, G. & ROOZEN, I.T.M. 1995. A decision support model for the planning and assessment of export promotion activities by government export promotion institutions: the Belgian case. *International journal of research in marketing*, 12(2):173–186.

CZINKOTA, M.R. 2002. National export promotion: a statement of issues, changes and opportunities. (*In* Kotabe, M. & Aulakh, P.S., eds. Emerging issues in international business research. Cheltenham: Edward Elgar. p. 123–139.)

CZINKOTA, M.R. & RICKS, D.A. 1981. Export assistance: are we supporting the best programs? *Columbia journal of world business*, 16:73–78, Summer.

DANIELS, P.W. 2000. Exports of services or servicing exports? *Geografiska annaler*, 82B(1): 1–15.

DEARDORFF, A.V. 1985. Comparative advantage and international trade and investment in services. (*In* Stern, R., ed. Trade and investment in services: Canada/US perspectives. Toronto: Ontario Economic Council. p. 39–71.)

DEARDORFF, A.V. & STERN, R.M. 2008. Empirical analysis of barriers to international services transactions and the consequences of liberalization. (*In* Mattoo, A., Stern, R.M. & Zanini, G., eds. A handbook of international trade in services. New York: Oxford University Press. p. 169–220.)

DEE, P. 2001. Trade in services. (Paper delivered at the Conference on Impacts of Trade Liberalisation Agreements on Latin America and the Caribbean, Inter-American Development Bank, 5–6 Nov. 2001). Washington, DC. 25 p.
<http://www.cepii.fr/anglaisgraph/communications/pdf/2001/washington/dee.pdf> Date of access: 13 Apr. 2011.

DEPARTMENT OF FOREIGN AFFAIRS AND INTERNATIONAL TRADE CANADA. 2009. International trade. http://www.international.gc.ca/trade-agreements-accords-commerciaux/index.aspx?lang=eng&menu_id=57 Date of access: 22 Apr. 2011.

DEPARTMENT OF TRADE AND INDUSTRY. 2004. A gravity model for the determination and analysis of trade potential for South Africa. <http://www.dti.gov.za/stats/gravity.pdf> Date of access: 11 Apr. 2011.

DEPARTMENT OF TRADE AND INDUSTRY. 2006. National Export Strategy 2006–2009. Division: TISA. Chief Directorate: Export Development and promotion. Pretoria, Mar. 2006.

DEPARTMENT OF TRADE AND INDUSTRY. 2007. Trade statistics.
<http://www.thedti.gov.za/econdb/raportt/defaulttrap.asp> Date of access: 30 Apr. 2007.

DEPARTMENT OF TRADE AND INDUSTRY. 2009a. Export organisations.
<http://www.dti.gov.za/exporting/exportorganisations.htm> Date of access: 15 Jun. 2009.

DEPARTMENT OF TRADE AND INDUSTRY. 2009b. Regional SDI programme.
<http://www.dti.gov.za> Date of access: 11 Apr. 2009.

DEPARTMENT OF TRADE AND INDUSTRY. 2009c. Export promotion directorate.
<http://www.dti.gov.za> Date of access: 15 Jun. 2009.

DEPARTMENT OF TRADE AND INDUSTRY. 2010a. A South African Trade Policy and Strategy Framework. May. <http://www.dti.gov.za/TPSF.pdf> Date of access: 27 Apr. 2011.

DEPARTMENT OF TRADE AND INDUSTRY. 2010b. Export promotion directorate.
<http://www.dti.gov.za/exporting/resourcebasedindustries.htm> Date of access: 27 Apr. 2011.

DEPARTMENT OF TRADE AND INDUSTRY. 2011. Programmes.
<http://www.dti.gov.za/thedti/programmes.htm> Date of access: 23 Feb. 2011.

DFAIT see DEPARTMENT OF FOREIGN AFFAIRS AND INTERNATIONAL TRADE CANADA.

DTI see DEPARTMENT OF TRADE AND INDUSTRY.

DU PLOOY, K. & SOOKLAL, S. 2010. Discussion at the DSM training session held on 4 October at the DTI campus, Pretoria, South Africa. (Unpublished.)

EDC see EXPORT DEVELOPMENT CANADA.

EKELEDO, I. & SIVAKUMAR, K. 2003. International market entry mode strategies of manufacturing firms and services firms: a resource-based perspective. *International marketing review*, 21(1):68–101.

ERRAMILLI, M.K. 1990. Entry mode choice in service industries. *International marketing review*, 7(5):50–62.

EXIM POLICY OF INDIA. 2003. Export-Import Policy: Indian Foreign Trade Policy 2004-2009. <http://www.eximpolicy.net/clauses/export-promotion-council-for-services.htm> Date of access: 22 Apr. 2011.

EXPORT DEVELOPMENT CANADA. 2008a. 2009–2013 corporate plan summary.
http://www.edc.ca/english/docs/corpplan_2009-2013_e.pdf Date of access: 22 Apr. 2011.

EXPORT DEVELOPMENT CANADA. 2008b. The trade opportunities matrix (TOM): an overview of Canadian export opportunities.
http://www.edc.ca/countryinfo/countryinformation_home.aspx?sLang=e§or=5 Date of access: 12 January 2010.

FEENSTRA, R.C., LIPSEY, R.E., BRANSTETTER, L.G., FOLEY, C.F., HARRIGAN, J., JENSEN, J.B., KLETZER, L., MANN, C., SCHOTT, P.K. & WRIGHT, G.C. 2010. Report on the state of available data for the study of international trade and foreign direct investment. National Bureau of Economic Research. Paper no. 16254, Aug.
http://www.nber.org/papers/w16254.pdf?new_window=1 Date of access: 20 Apr. 2011.

FIELEKE, N. 1995. The soaring trade in “nontradables”. *New England economic review*:25–36, Nov/Dec.

FOURIE, J. 2008. The development and importance of travel service exports from South Africa. (Paper presented at the Trade and Industrial Policy Strategies Annual Forum 2008 – South Africa’s economic miracle – has the emperor lost his clothes? 30–31 Oct.) Cape Town. 22 p. http://www.tips.org.za/files/Forum_08_Fourie_Travel_Service_Exports_US.pdf
Date of access: 11 Apr. 2011.

FRANCOIS, J. 1990. Trade in producer services and returns due to specialization under monopolistic competition. *Canadian journal of economics*, 23(1):109–124.

FRANCOIS, J. 1999. A gravity approach to measuring services protection. Erasmus University. (Unpublished manuscript).

FRANCOIS, J. & HOEKMAN, B. 2010. Services trade and policy. *Journal of economic literature*, 48(3):642–692, Sept.

GABRIELE, A. 2004. Exports of services and economic growth in developing countries. Geneva: UNCTAD. http://www.unctad.org/en/docs//ditctncdmisc20036_en.pdf Date of access: 27 Apr. 2011.

GALLOUJ, F. 1998. Innovation in services and the attendant myths. Oslo: Studies in Technology, Innovation and Economic Policy Group. S14S paper no. 1.

GILLESPIE, K. & RIDDLE, L. 2004. Export promotion organisation emergence and development: a call to research. *International marketing review*, 21(4/5):462–473.

GORDON, J. & GUPTA, P. 2004. Understanding India's services revolution. Washington, DC: IMF. Paper no. WP/04/171, Sept.

<http://www.imf.org/external/pubs/ft/wp/2004/wp04171.pdf> Date of access: 22 Apr. 2011.

GRÖNROOS, C. 1999. Internationalization strategies for services. *Journal of services marketing*, 13(4/5):290–297.

HARDIN, A. & HOLMES, L. 1997. Services trade and foreign direct investment. Canberra: Australian Commonwealth Government, Industry Commission.

<http://www.pc.gov.au/ic/research/information/servtrad/servtrad.pdf> Date of access: 13 Apr. 2011.

HAUSMANN, R. & KLINGER, B. 2008. South Africa's export predicament. *Economics of transition*, 16(4):609–637.

HERTEL, T.W. 2000. Potential gains from reducing trade barriers in manufacturing, services and agriculture. *Federal Reserve Bank of St. Louis review*, 82(4):77–99, Jul./Aug.

HILL, T.P. 1977. On goods and services. *Review of income and wealth*, 23(4):315–338.

HINDLEY, B. & SMITH, A. 1984. Comparative advantage and trade in services. *World economy*, 7(4):369–390.

HOCKING, B. & MCGUIRE, S. 1999. Trade politics: international, domestic and regional perspective. London: Routledge.

HODGE, J.W. 1997. Towards an understanding of world and South African trade in services. Trade and Industrial Policy Strategies, Sept. <http://www.tips.org.za/files/196.pdf> Date of access: 13 Apr. 2011.

HODGE, J.W. 2001. Examining the potential benefits of services liberalisation in a developing country: the case of South Africa. (In Daniels, P.W., ed. Services in the international economy. Oxford: Blackwell. p. 329–345.)

HODGE, J.W. & NORDÅS, H.K. 1999. Liberalisation of trade in producer services – the impact on developing countries. CMI Reports: development studies and human rights. <http://www.cmi.no>. Date of access: 7 January 2009.

HOEKMAN, B. 1996. Assessing the General Agreement on Trade in Services. (In Martin, W. & Winters, L.A., eds. The Uruguay Round and the developing countries. Cambridge: Cambridge University Press. p. 88–124.)

HOEKMAN, B. 2000. The next round of services negotiations: identifying priorities and options. *Federal Reserve Bank of St. Louis review*, 82(4):31–47, Jul./Aug.

HORN, H. & SHY, O. 1996. Bundling and international market segmentation. *International economic review*, 37(1):51–69.

HOWELLS, J. 2000. Innovation and services: new conceptual frameworks. Manchester: Centre for Research on Innovation and Competition. Paper no. 38, Aug. <http://www.cric.ac.uk/cric/Pdfs/DP38.pdf> Date of access: 27 Apr. 2011.

ICTSD see INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT.

IMF see INTERNATIONAL MONETARY FUND.

INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT. 2008. About us. <http://ictsd.net/about/> Date of access: 27 Apr. 2011.

INTERNATIONAL MONETARY FUND. 1993. Balance of payments manual. 5th ed. <http://www.imf.org/external/pubs/cat/longres.cfm?sk=157.0> Date of access: 22 Apr. 2011.

INTERNATIONAL MONETARY FUND. 2009. Balance of payments and international investment position manual. 6th ed. <http://www.imf.org/external/pubs/ft/bop/2007/pdf/bpm6.pdf> Date of access: 22 Apr. 2011.

INTERNATIONAL TRADE CENTRE. 2007. Export strategy design. <http://www.intracen.org/Policy/Export-Strategy-Design>. Date of access: 1 May 2011.

INTERNATIONAL TRADE CENTRE. 2008. Trade in Services section.
<http://www.intracen.org/serviceexport/> Date of access: 5 May 2008.

INTERNATIONAL TRADE CENTRE. 2010a. Trade Map: existing and potential trade.
<http://www.trademap.org/> Date of access: 21 Apr. 2011.

INTERNATIONAL TRADE CENTRE. 2010b. Including services in national export development plans. <http://www.intracen.org/serviceexport/> Date of access: 5 Feb. 2010.

INTERNATIONAL TRADE CENTRE. 2010c. Trade promotion approaches for services exports. <http://www.intracen.org/serviceexport/> Date of access: 5 Feb. 2010.

ITC see INTERNATIONAL TRADE CENTRE.

JORDAN, S. & FIONA, S. 1998. On the export-led growth hypothesis for the little dragons: an empirical investigation. *Atlantic economic journal*, 26(4):353–372.

KALIRAJAN, K., MCGUIRE, G., NGUYEN-Hong, D. & SCHUELE, M. 1999. The price impact of restrictions on banking services. (*In Findlay, C. & Warren, T., eds., Impediments to trade in services: measurement and policy implications. Sydney: Routledge, pp.215-230*).

KAY, D.L., PRATT, J.E. & WARNER, M.E. 2007. Role of services in regional economy growth. *Growth and change*, 38(3):419–442.

KORHONEN, H., LUOSTARINEN, R. & WELCH, L. 1996. Internationalisation of SMEs: inward–outward patterns and government policy. *Management international review*, 36(4):315–329.

KOSTECKI, M. 1999. International trade in services. (*In Hocking, B. & McGuire, S., eds. Trade politics: international, domestic and regional perspective. London: Routledge. pp. 67–78*).

KRUGMAN, P.R. & OBSTFELD, M. 2009. International economics: theory and policy. 8th ed. Boston, MA: Pearson.

LANGHAMMER, R.J. 2000. Developing countries as exporters of services: looking beyond success episodes. Kiel: Kiel Institute of World Economics. Paper no. 992, Jul.
<http://ideas.repec.org/p/kiel/kieliw/992.html> Date of access: 27 Apr. 2011.

LEDERMAN, D., OLARREAGA, M. & PAYTON, L. 2006. Export promotion agencies: what works and what doesn't. World Bank. Paper no. 4044, Nov.
http://siteresources.worldbank.org/INTEXPCOMNET/Resources/Lederman,_Export_Promotion_Agencies_What_Works_and_What_Doesnt.pdf Date of access: 21 Apr. 2011.

LE ROUX, R. 2009. Discussion during the DTI Workshop in October held in conjunction with the North-West University. Pretoria.

LINDERT, P.H. & PUGEL, T.A. 1996. International economics. 10th ed. Chicago, IL: Irwin.

LUSCH, R.F., VARGO, S.L. & O'BRIEN, M. 2007. Competing through service: insights from service-dominant logic. *Journal of retailing*, 83(1):5–18.

MALAYSIAN EXTERNAL TRADE DEVELOPMENT CORPORATION. 2010. Services sector. <http://www.matrade.gov.my/en/malaysian-exporters/services-for-exporters/export-promotion/423-malaysian-services>. Date of access: 22 Apr. 2011.

MARCHETTI, J.A. 2007. Developing countries in the WTO services negotiations: doing enough? (In Bermann G.A. & Mavroidis, P.C., eds. WTO law and developing countries. New York: Cambridge University Press. pp. 82–124).

MARIN, D. 1992. Is the export-led growth hypothesis valid for industrialized countries? *Review of economics and statistics*, 74(4):678–688.

MARKUSEN, J.R. 1995. The boundaries of multinational firms and the theory of international trade. *Journal of economic perspectives*, 9(2):169–189.

MARKUSEN, J.R., DEARDORFF, A.V. & IRWIN, D.A. 2005. Modeling the offshoring of white-collar services: from comparative advantage to the new theories of trade and foreign direct investment. *Brookings trade forum*, 1–34. <http://www.jstor.org/stable/25058761> Date of access: 12 Apr. 2011.

MARTINCUS, C.V. & CARBALLO, J. 2008. Is export promotion effective in developing countries? Firm-level evidence on the intensive and the extensive margins of exports. *Journal of international economics*, 76:89–106.

MATRADE see MALAYSIAN EXTERNAL TRADE DEVELOPMENT CORPORATION.

MATTOO, A. 1998. Financial services and the WTO: liberalization in the developing and transition economies. Geneva: WTO. Paper no. TISD9803.WPF, Mar.
http://www.wto.org/english/res_e/reser_e/ptis9803.pdf Date of access: 13 Apr. 2011.

MATTOO, A. & STERN, R.M. 2008. Overview. (*In* Mattoo, A., Stern, R.M. & Zanini, G., eds. A handbook of international trade in services. New York: Oxford University Press. p. 3–47.)

MAURER, A., MARCUS, Y., MAGDELEINE, J. & D'ANDREA, B. 2008. Measuring trade in services. (*In* Mattoo, A., Stern, R.M. & Zanini, G., eds. A handbook of international trade in services. New York: Oxford University Press. p. 133–168.)

MAYER, M.J. 2005. Trade in services: synthesis of research findings.
<http://www.hsrb.ac.za/Document-1827.shtml> Date of access: 16 Apr. 2011.

MCGUIRE, G. 1998. Australia's restrictions on trade in financial services. Canberra: Productivity Commission. <http://www.pc.gov.au/?a=7852> Date of access: 27 Apr. 2011.

MCGUIRE, G., SCHUELE, M. AND SMITH, T. 1999. Restrictiveness of international trade in maritime services (*In* Findlay, C. & Warren, T., eds. Impediments to trade in services: measurement and policy implications. Sydney: Routledge. pp. 172-188).

MCLACHLAN, R., CLARK, C. & MONDAY, I. 2002. Australia's service sector: a study in diversity. Canberra: Productivity Commission.
http://www.pc.gov.au/__data/assets/pdf_file/0008/8477/assasid.pdf Date of access: 13 Apr. 2011.

MINISTRY OF COMMERCE AND INDUSTRY (INDIA). 2009. Foreign Trade Policy 27 August 2009 – 31 March 2014. <http://dgftcom.nic.in/exim/2000/policy/ftp-plcontent0910.pdf>
Date of access: 22 Apr. 2011.

MOCII see MINISTRY OF COMMERCE AND INDUSTRY (INDIA).

NICOLETTI, G., GOLUB, S., HAJKOVA, D., MIRZA, D. & YOO, K. 2003. Policies and international integration: influences on trade and foreign direct investment. Paris: OECD. Paper 359, April. <http://www.oecd-ilibrary.org/docserver/download/fulltext/5lgsjhvj7x8x.pdf?expires=1303909791&id=id&accname=guest&checksum=FAA72A33FD2100552D61EB1C17B7497D> Date of access: 27 Apr. 2011.

NICOLETTI, G., SCARPETTA, S. & BOYLAUD, O. 2000. Summary indicators of product market regulation with an extension to employment protection legislation. Paris: OECD. Paper 226, Dec. <http://www.oecd-ilibrary.org/docserver/download/fulltext/5lgsjhvj846b.pdf?expires=1303909487&id=id&accname=guest&checksum=19076B8E7E42663D6720C71CC746A4FE> Date of access: 27 Apr. 2011.

NIELSON, J. & TAGLIONI, D. 2004. Services trade liberalisation: identifying opportunities and gains. Paris: OECD. Paper no. 1, Feb. <http://www.oecd-ilibrary.org/docserver/download/fulltext/5lgp3k6bxn7f.pdf?expires=1303370712&id=id&accname=guest&checksum=DB512CD1928F9F5D57E8D96149D8ABA1> Date of access: 21 Apr. 2011.

OBAMA, B. 2010. Executive order: National Export Initiative. <http://www.whitehouse.gov/the-press-office/executive-order-national-export-initiative> Date of access: 22 Apr. 2011.

OECD see ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT.

OFFICE NATIONAL DU DUCROIRE. 2009. Country risk ratings. <http://www.ondd.be/webondd/Website.nsf/TRiskEn?OpenView&StartKey=A&Count=300&Expand=1>. Date of access: 1 May 2011.

ONDD see OFFICE NATIONAL DU DUCROIRE.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT. 2007. Services trade.

http://www.oecd.org/departement/0,3355,en_2649_36344374_1_1_1_1_1,00.html Date of access: 21 Apr. 2011.

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT. 2008. The OECD. <http://www.oecd.org/dataoecd/15/33/34011915.pdf> Date of access: 21 Apr. 2011.

OYEWOLE, P. 2001. Prospects for developing country exports of services to the year 2010: projections and public policy implications. *Journal of macromarketing*, 21(1):32–46.

PERDIKIS, N. & KERR, W.A. 1998. Trade theories and empirical evidence. Manchester, Manchester University Press.

PORTER, M. 1990. The competitive advantage of nations. New York, Free Press.

PRICE, J. 2006a. Trade promotion best practices – part 2: emulating the private sector. <http://www.tpo-net.com/en/Benchmarking/resources.htm> Date of access: 5 Feb. 2010.

PRICE, J. 2006b. Trade promotion best practices – part 1: a question of focus. <http://www.tpo-net.com/en/Benchmarking/resources.htm> Date of access: 5 Feb. 2010.

PROCHILE. 2007. ProChile and the service sector. <http://www.chilexportaservicios.cl/ces/Englisharea/ProChileandTheServiceSector/tabid/2316/Default.aspx> Date of access: 22 Apr. 2011.

RAM, R. 1987. Exports and economic growth in developing countries: evidence from time-series and cross-section data. *Economic development and cultural change*, 36(1):51–72, Oct.

RIENSTRA, D. 2005. Raising awareness can grow trade in services. *International trade forum*, 2:13–15.

ROBERTS, J. 1999. The internationalisation of business service firms: a stages approach. *Service industries journal*, 19(4):68–88.

SAEEC see SOUTH AFRICAN ELECTROTECHNICAL EXPORT COUNCIL.

SAFCEC see SOUTH AFRICAN FEDERATION OF CIVIL ENGINEERING CONTRACTORS.

SALVATORE, D. 2001. International economics. 7th ed. New York: Wiley.

SAMEX see SOUTH AFRICAN MUSIC EXPORTS.

SAMIEE, S. 1999. The internationalization of services, trends, obstacles and issues. *Journal of services marketing*, 13(4/5):319–328.

SAPIR, A. & WINTER, C. 1994. Services trade. (In Greenaway, D. & Winters, L.A., eds. *Surveys in international trade*. Oxford: Blackwell. p. 273–302.)

SARB see SOUTH AFRICAN RESERVE BANK.

SEPC see SERVICES EXPORT PROMOTION COUNCIL.

SERINGHAUS, F.H. & BOTSCHEN, G. 1991. Cross-national comparison of export promotion services: the views of Canadian and Austrian companies. *Journal of international business studies*, 22(1):115–133.

SERVICES EXPORT PROMOTION COUNCIL. 2011. Aims and objectives for which SEPC is established. <http://www.servicesepec.org/> Date of access: 22 Apr. 2011.

SOUTH AFRICAN ELECTROTECHNICAL EXPORT COUNCIL. 2011. Developing the South African electrotechnical industry. www.saeec.org.za/aboutus. Date of access: 22 Apr. 2011.

SOUTH AFRICAN FEDERATION OF CIVIL ENGINEERING CONTRACTORS. 2011. Functional area objectives. http://www.safcec.org.za/index.php?q=con,103,%20Functional_Area_Objectives. Date of access: 22 Apr. 2011.

SOUTH AFRICAN MUSIC EXPORTS. 2011. About SAMEX. http://www.samex.org.za/?page_id=2 Date of access: 22 Apr. 2011.

SOUTH AFRICAN RESERVE BANK. 2010. National accounts. *Quarterly bulletin*, 257, Sept. <http://www.resbank.co.za/Publications/QuarterlyBulletins>. Date of access: 11 Apr. 2011.

SPENCE, M.M. 2003. Evaluating export promotion programmes: UK overseas trade missions and export performance. *Small business economics*, 20(1):83–103.

STATISTICS SOUTH AFRICA. 2010. Quarterly labour force survey, quarter 3, 2010. <http://www.statssa.gov.za/publications/P0211/P02113rdQuarter2010.pdf> Date of access: 11 Apr. 2011.

STATSSA see STATISTICS SOUTH AFRICA.

STEENKAMP, E., ROSSOUW, R., VIVIERS, W. & CUYVERS, L. 2009. Export market selection methods and the identification of realistic export opportunities for South Africa using a decision support model. Arcadia: Trade and Industrial Policy Strategies. Paper no. 3-2009, Nov. http://www.tips.org.za/files/Export_Market_Selection_Methods.pdf Date of access: 11 Apr. 2011.

STERN, R.M. 2000. Quantifying barriers to trade in services. (Paper presented at the Research Seminar in International Economics on 8 Nov. 2000, paper no. 470). Ann Arbor. <http://www.fordschool.umich.edu/rsie/workingpapers/Papers451-475/r470.pdf> Date of access: 16 Apr. 2011.

STEUART, I. & CASSIM, R. 2005. Opportunities and risks of liberalising trade in services: country study on South Africa. Geneva: ICTSD. Paper no. 2, Feb. http://ictsd.org/downloads/2008/04/ip_services_02.pdf Date of access: 13 Apr. 2011.

UN see UNITED NATIONS.

UNCTAD see UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT.

UNITED NATIONS. 2002. Manual on statistics of international trade in services. New York: United Nations.

- UNITED NATIONS. 2010a. Detailed structure and explanatory notes.
<http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=9&Lg=1> Date of access: 16 Apr. 2011.
- UNITED NATIONS. 2010b. World macro regions.
<http://www.un.org/depts/dhl/maplib/maplib.htm>. Date of access: 1 May 2011.
- UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT. 2010. Handbook of statistics. <http://unctadstat.unctad.org/> Date of access: 6 Apr. 2011.
- VALODIA, I., GOODE, R. & MACHEKE, C. 2002. Does South Africa need trade promotion organizations? *Development Southern Africa*, 19(5):719–734.
- VAN AARDE, N. 2007. Export promotion in South Africa: criteria for the evaluation of its success. Potchefstroom: North-West University. (Dissertation – M.Com.)
- VANDERMERWE, S. & CHADWICK, M. 1989. The internationalisation of services. *Service Industries Journal*, 9(1):79–93.
- VAN MARREWIJK, C., STIBORA, J. & DE VAAL, A. 1996. Services tradability, trade liberalisation and foreign direct investment. *Economica*, 63(252):611–631.
- VAN MARREWIJK, C., OTTENS, D. & SCHUELLER, S. 2007. International economics: theory, application and policy. New York: Oxford University Press.
- VIVIERS, W. & PEARSON, J.J.A.P. 2007. The construction of a decision support model for evaluating and identifying realistic export opportunities in South Africa. (Unpublished report prepared for the DTI).
- VIVIERS, W., ROSSOUW, R. & STEENKAMP, E.A. 2009. The sustainability of the DSM for identifying realistic export opportunities for South Africa: 2007–2008. (Unpublished report prepared for the DTI).
- VIVIERS, W., STEENKAMP, E. & ROSSOUW, R. 2010. Identifying realistic export opportunities for South Africa: application of a decision support model (DSM) using HS 6-digit level product data and a newly developed market accessibility index. (Unpublished report prepared for the DTI, Sept).

WALVOORD, W. 1983. Export market research. *Global trade magazine*, May.

WARREN, T. 1999. Quantity impacts of trade and investment restrictions in telecommunications. (In Findlay, C. & Warren, T., eds. Impediments to trade in services: measurement and policy implications. Sydney: Routledge. p. 1-17.)

WARREN, T. & FINDLAY, C. 1999. Measuring impediments to trade in services. Adelaide: Centre for International Economic Studies. Paper no. 99(19), Sept.
<http://www.adelaide.edu.au/cies/papers/9919.pdf> Date of access: 13 Apr. 2011.

WILLEMÉ, P & VAN STEERTEGHEM, D. 1993. Een normatief model voor de planning van exportbevorderende activiteiten van de Vlaamse Dienst voor de Buitelandse Handel. Brussels: Vlaamse Dienst voor de Buitelandse Handel. (Unpublished).

WOLFE, M. 1955. The concept of economic sectors. *Quarterly journal of economics*, 69(3):402–420.

WORLD TRADE ORGANIZATION. 1991. Services sectoral classification list.
http://www.wto.org/english/tratop_e/serv_e/mtn_gns_w_120_e.doc Date of access: 15 Apr. 2011.

WORLD TRADE ORGANIZATION. 1994. GATT 1994: Annex 1B. General Agreement on Trade in Services. http://www.wto.org/english/docs_e/legal_e/26-gats.pdf Date of access: 15 Apr. 2011.

WORLD TRADE ORGANIZATION. 2005. A handbook on the GATS Agreement. Cambridge: Cambridge University Press.

WORLD TRADE ORGANIZATION. 2007. Understanding the WTO.
http://www.wto.org/english/thewto_e/whatis_e/tif_e/understanding_e.pdf Date of access: 15 Apr. 2011.

WORLD TRADE ORGANIZATION. 2008a. International trade and tariff data: statistical database. http://www.wto.org/english/res_e/statis_e/statis_e.htm Date of access: 15 Apr. 2011.

WORLD TRADE ORGANIZATION. 2009. Services database: schedules of commitments.
<http://tsdb.wto.org/default.aspx> Date of access: 15 Nov. 2009.

WORLD TRADE ORGANIZATION. 2010. Trade topics: services.
<http://tsdb.wto.org/default.aspx> Date of access: 3 Mar. 2010.

WTO see WORLD TRADE ORGANIZATION.

YANIKKAYA, H. 2003. Trade openness and economic growth: a cross-country empirical investigation. *Journal of development economics*, 72:57–89.