

Understanding World and South African Trade in Services

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Abstract

Services trade has become a significant component of world trade and has been given more academic profile since its inclusion in the Uruguay Round of GATT trade talks. However, the paucity of academic work means that services trade is still poorly understood and lacks significant statistical analysis. This research begins by analysing the characteristics of different service types using South African output, capital, employment and wage data. This demonstrates that consumer services tend to be labour-intensive while producer and community/social services tend to be capital- and skill-intensive. Then IMF balance of payments data and World Bank output data for all world regions is used to calculate the cause of growth in services trade, the product structure of traded services and the export and import performance of countries from different regions and development stages. It is found that producer services account for almost 2/3's of traded services followed by consumer services with around 30%. Industrial countries dominate services trade to a far greater extent than goods trade yet this dominance is diminishing due to the growing share of the Asian developing economies. Further analysis of service trade patterns finds that although traditional trade theory and its extensions account for much of what is observed, it needs to be augmented by the strong influences of geographical proximity, policy distortions and the level of other trade and investment that a country engages in.

A mix of IMF and SARB data is used to construct a service trade data set for South Africa which complies with the new IMF BPM5 definitions. This data reveals the poor performance of South African service exports which have been stunted to a large degree by sanctions and geographic isolation from the large growth regions of the world. A closer inspection of the product mix reveals that exports are dominated by the labour-intensive travel sector with particularly poor performance within the business services sector. Imports are dominated by the capital-intensive transportation sector. A regional breakdown of trade reveals the dominance of trade with the African and European regions - signs of the importance of regional proximity and trade and investment links in services trade.

Introduction

Historically, trade in services is probably the most neglected topic in international economics. The reason for this has been its low share of total world trade, the sparse and poor quality data, and the general difficulty in analysing the services sector as a whole. The latter is reflected in the fact that the service sector's role in economic development is still poorly understood and has also suffered from a lack of economic analysis.

Interest in services trade started in the early 1980's when discussions around the Uruguay Round of trade talks began. It was the industrial nations, specifically the USA, which placed services on the agenda for trade talks. They realised that their economies were increasingly being dominated by the service sector and it was an area in which they had definite comparative advantage. Therefore, to balance the market penetration achieved by developing countries in manufactured goods, they felt that they should have market access in the highly protected service sector. Despite considerable reservations by developing countries, services trade was placed on the Uruguay agenda for trade talks and the General Agreement on Trade in Services (GATS) was established. It is this that has sparked some limited academic work on services trade. However, the continuing lack of data and difficulty in analysis has meant that services trade still remains under-researched.

The purpose of this thesis is to contribute to the understanding of world and South African services trade through a more statistical approach to service trade analysis. Much of what has been written on services trade has been the result of anecdotal economics which has helped to permeate many economic untruths. It is hoped that the analysis that follows can provide a sound statistical base for further research and policy around services trade.

The first chapter lays the foundation for the analysis of services trade. It begins by discussing the definition of services and how services differ from goods. It then assesses how these differences might impact on the application of standard economic theory to the services sector. Once the definitional issues are resolved, the chapter then explores the issues surrounding the actual measurement of services in the economy. It highlights some of the major problems experienced in getting an accurate measure of services output and productivity. The most important contribution of the first chapter to the literature on the services sector, is the statistical assessment of the economic

characteristics of the different components of the services sector. This is performed using the South African data and examines the human skill content, labour and capital productivity, capital-labour ratios and income elasticity of the sectors. This provides a sound basis for further analysis and the challenging of generalised and anecdotal characterisation of the services sector which appears in much of the literature. In particular, this is used in later analysis of what service products are traded and why certain countries perform better than others in services trade.

The second chapter concentrates on the world structure and trends in services trade. It begins by addressing the important question of what actually constitutes trade in services. In particular, it tackles the question of whether to include foreign direct investment or not. It then moves on to look at some practical problems involved in measuring services trade. The second section of the chapter examines the size and growth of world trade in services. A significant contribution to the literature within this section is the statistical analysis of the sources of trade growth between increased tradeability and increased output growth. This provides much needed empirical evidence to help in resolving the debate over the causes of services trade growth. The third section of this chapter takes a close look at the product structure of world services trade. The only reason one is able to do this, is the recent move by the IMF to a more detailed classification of services trade within balance of payments data. The section breaks down the share of different service items along the lines of the new IMF classification. The unique contribution of this section is the detailed breakdown of business services trade based on a sample of developed and undeveloped countries. The final section of the chapter examines the country structure of world services trade. In order to perform an adequate analysis of the distribution of trade shares, the section begins by discussing whether traditional and 'new' trade theory is applicable to the services sector. Armed with some insights from this exercise, the section then proceeds to calculate and analyse the structure of services trade on a regional and development status basis. The contribution of this section lies in the numerous detailed tables compiled from raw IMF balance of payments statistics and the additional insights into the influences on the international distribution of services trade and why certain regions have performed better than others.

The third chapter is devoted to South African trade in services. The entire chapter represents a significant contribution to the literature as no such detailed analysis has yet been performed for South Africa. The initial discussion centres around constructing an accurate data set for South Africa which complies with the new IMF definitions of services trade. This is achieved using a mix of IMF and

South African Reserve Bank data. This lays the foundation for an accurate analysis of South African services trade. The second section of this chapter takes the data set and analyses the size and growth of South African services trade over time. Of considerable interest is the calculation of the sources of export growth and import penetration for South African services trade. The third section takes a closer look at the product structure of South African services trade. In addition to the shares of different products, the trends in the trade in these products are analysed. The exception is the detailed breakdown of business services where data inadequacies prevent such an analysis. Data also presented a problem when attempting to present the regional structure of South African service exports and imports in the fourth section of the chapter. These problems are somewhat overcome with the creative use of proxies and qualitative information which provide a reasonably accurate picture of the regional structure of trade. The last section of the chapter tries to place South Africa's service export performance in international perspective. This is achieved by comparing them with the service exports of similar countries in South America, Asia and Europe. This is particularly insightful and paves the way for some speculation of the potential comparative advantages and future performance in service trade for South Africa.

Finally, conclusions to the thesis are drawn and a bibliography presented.

Chapter 1

Definition, Measurement and Characteristics of Services

The first chapter seeks to clarify precisely what is understood to be services and their economic characteristics. All too often in economic discussions of the services sector, different analysts have a differing understanding of what activities are included in the services sector and what the characteristics of these services are. The first section looks at the strict definition of a service and asks the question whether conventional economic theory can be applied to the services sector. It then proceeds to examine the implications of this definition for the measurement of services in the economy and some of the associated problems. In the second section, the emphasis shifts to understanding what are the economic characteristics of different service types. It splits services into consumer, producer and community/social services, and proceeds to discuss each individually. This is an important basis for analysing trade patterns in the second and third chapters.

1.1 Defining and Measuring Services

The process of defining what are services and their characteristics is an important process for two reasons. Firstly, from a theoretical basis, it needs to be understood whether there are any fundamental differences between goods and services which may render certain economic principles useless in the analysis of services. Secondly, from an empirical perspective, a strict definition of services is required for a common approach to the practical problem of measuring services in the economy.

1.1.1 Definition of Services and Implications for Economic Analysis

Definition of Services

The most widely accepted definition of services was developed by T.P. Hill in his seminal article "On Goods and Services" published in 1977¹. Prior to this no strict definition of services existed and in theoretical discussions services were often loosely defined as being 'immaterial goods'. This effectively implied that services had all the same economic qualities as goods if not the same physical qualities². Hill defined services in the following way:

"A service may be defined as a change in the condition of a person, or of a good belonging to some economic unit, which is brought about as the result of the activity of some other economic unit, with the prior agreement of the former person or economic unit."

and he argued further that

*"...the consumption of a service must take place simultaneously with its production."*³

In contrast, Hill defines a good as:

*"...a physical object which is appropriable and, therefore, transferable between economic units."*⁴

These definitions point to three fundamental properties of economic services. These are:

- with services, unlike goods, nothing physical is transferred between agents but rather a change in the condition of the consumer occurs. This change in condition can be physical (e.g. motor vehicle repair) or not (e.g. the mental change brought about by education),
- services in the economy are defined as taking place between two separate economic units implying that internal labour or capital services are not included in the measurement of the services sector in the economy, and

¹ Hill, T.P. (1977), 'On Goods and Services' in *Review of Income and Wealth*, vol. 23, pp. 315-338. Note that Hill's definition is used as the definition of services in the Palgrave Dictionary of Economics.

² Hill, T.P. (1977), pp. 315. Hill attributes this non-definition to Marshall.

³ Hill, T.P. (1977), pp. 318-9

⁴ Hill, T.P. (1977), pp. 317

- as consumption must take place simultaneously with production, services cannot be stored like goods. This also implies that there must be some interaction between the producer and the consumer for delivery of a service.

Although the definition is generally accepted, it has had some criticism. The mostly widely quoted criticisms are that a) technology has enabled certain services to be stored, making simultaneous production and consumption unnecessary, and b) technology has also reduced the need for personal interaction⁵ with many services⁶. A frequent example of the storage issue is the storing of 'musical services' or information on electronic media such as compact disc or computer discs. However, the storage of such services on a medium which can be exchanged like a good, effectively makes them a good. It is correct that these goods do then contain services, but this is no different to almost all goods produced. For example, a motor vehicle contains design services, engineering services, marketing services, etc. In the question of personal interaction, it should be noted that the definition implies some form of interaction but it does not explicitly state that interaction needs to be of a personal nature, hence permitting technology to alter the way persons interact.

Implications for the Economic Analysis of Services

If the Hill definition of a service is accepted as sound, then it needs to be asked whether the differences between goods and services described are sufficient to render some basic economic principles useless when applied to the services sector. Hill, himself, argues that because services cannot be transferred or stored, "...models of pure exchange economics of a Walrasian type in which existing goods are traded between economic units are quite inapplicable and irrelevant to services"⁷.

Under a pure exchange economy of a Walrasian type, each economic agent is given some existing set of goods and preferences. The goods are then exchanged amongst the agents in accordance with their preferences in an attempt to make everyone better off. However, as Varian (1992: 314) points out, "the concept of a good considered here is very broad. Goods can be distinguished by time, location, and state of world. Services, such as labor services, are taken to be just another kind of good". The only condition placed on a 'good' for inclusion in the model is that there must be a

⁵ For the remainder of this thesis, personal interaction is defined as the interaction between persons in each others physical presence.

⁶ See Bhagwati (1984) for commentary on both criticisms.

⁷ Hill, T.P, (1977), pp. 318

market for the 'good' in which a price can be determined. This implies that the 'good' must be desirable, can be exchanged and cannot be a free good. Services provided within the economy are definitely desirable, not free and can be exchanged in so far as service can be provided in return for other goods or services from other economic agents. They therefore appear to satisfy all these conditions placed on them for inclusion in the model. Hill's concern that the service cannot be transferred or stored has implications for the existence of a secondary market in services only⁸. It does not influence the fact that services can be exchanged for another good or service, raising the utility of the consumer and making them better off. The lack of a secondary market in services may however influence any multi-period adjustment process.

Taking the issue further, the only requirements placed on proving the existence of a Walrasian equilibrium in a pure exchange economy is that the allocation of 'goods' is feasible and that each economic agent is making an optimal choice from their given budget⁹. The feasibility of allocation condition only requires that the sum of 'goods' allocated does not exceed actual supply. The optimal choice condition requires that each agent has a definite set of preferences and cannot be made better off with an alternative allocation given their budget constraint. These requirements, and hence equilibrium, will automatically be satisfied if the above conditions of a desirable 'good' which is not free and can be exchanged are satisfied. As services fulfil these requirements, a pure exchange economy which includes services will reach equilibrium.

Moving beyond pure exchange economies, services need to be examined within the production sphere. The basic principles of producer theory are that the firm is a profit-maximiser, it uses a range of factor inputs in an optimal manner that minimises costs, and that production experiences diminishing marginal returns. It can safely be assumed that service firms also wish to maximise profits (at least those within the private sector) and that they must use the same range of factor inputs as goods firms. It is only the existence of diminishing returns that can and has been contested for the services sector. However, the evidence for such a general dismissal has been based on anecdotal evidence. Increasing returns has been mainly attributed to high technology services (such as software development and telecommunications services) or a number of services where high technology is used (such as financial services). For example, once software has been developed, modern technology allows the reproduction of that software to be almost costless, hence allowing

⁸ By not being able to store a service or recreate the knowledge to provide that service, the recipient is unable to resell that service at a later date.

⁹ Varian, H.R. (1992), pp. 317-326

output to experience increasing returns to scale¹⁰. However, the existence of increasing returns as a phenomena has also mostly been associated with modern technological sectors and the generation of such knowledge. As Krugman (1990:7) points out, "...the most important sources of increasing returns in practice probably lie in dynamic economies of learning and R&D". If the analysis is extended to the whole range of service industries such as education, health, business services, travel, etc., then diminishing returns can be seen to hold. This implies that firms will optimise profits and welfare by marginal cost pricing which will produce an upward sloping supply curve. This in turn allows the interaction with demand and the determination of an equilibrium. Note that the applicability of consumer theory to services follows from the above discussion of pure exchange economies which shows that consumers have a set of preferences and that services are 'desirable' and hence offer utility. It can safely be assumed that the consumers experience diminishing marginal utility for services as well as goods.

Therefore, if the basic characteristics of services do not alter these fundamental principles of economic theory, then it must be concluded that basic microeconomic theory applies to services as well as goods. The differences between goods and services pointed out by Hill will create some differing analytical results, but the same economic theory can be used to perform the analysis. Some examples of differing analytical results may be:

- the simultaneity of production and consumption will increase the asymmetric information problems in services markets. This source of market failure will require state intervention or better contracts to prevent misrepresentation by producers,
- the need for interaction between consumers and producers will dramatically reduce the international tradeability of many services in comparison to goods¹¹,
- no secondary market for services can exist as services cannot be transferred or stored.

¹⁰ See Business Week, 6 march 1995, for an example of this phenomena and how it influences the market

¹¹ This is empirically demonstrated in table 3 in section 2.2

1.1.2 Measurement of Services

The Measurement of Services

There are two approaches that can be used when attempting to measure the value of services in the economy. One method would be to examine the value of all service activities in all production processes throughout all sectors of the economy. Another would be to measure the value of output from economic units whose final output is predominantly the provision of a service. If the purpose of measurement is to examine the changing nature of the production process then the former will be used. If, however, the purpose of the exercise is to examine the performance of different economic sectors, then the latter is the correct method. In addition, taking the strict Hill definition of a service, then a service only exists if it takes place between two separate economic units, implying that internal labour or capital services are not included in the measurement of services in the economy.

By adopting this approach, the changing organisation of production in the economy will have some influence on the value of each economic sector. For instance, if a service which was previously performed in-house was now outsourced by a firm¹². In this instance there is a statistical increase in the value of services produced in the economy and decrease in the value of goods produced, when in actual fact no real output change has occurred. This problem is most prominent in business services but also occurs in other service sectors¹³. However, this measurement problem is endemic to all economic sectors and not just services. In all sectors over history, changes in the vertical integration and dis-integration of firms have had a statistical, but not real, influences on sectoral output. When dealing with any time series data over a significant period of time, the changing organisation of production and how it may influence measurement must be taken into account. What is necessary is to determine the direction and the overall size of this trend.

¹² For example, if a motor vehicle manufacturer reconstitutes their internal design unit as a separate company.

¹³ For example, Grubel (1989) argues that one of the reasons for the growth of services in Canada has been the increasing participation of woman in the economy which has meant the commercialisation of housework. This commercialisation means that household services are included in national accounting while previously they were not when performed by the housewife.

By adopting this approach to the measurement of services in the economy, the following one-digit standard industrial classification (SIC) sectors are said to be included in the services sector:

- *SIC 6 - Wholesale and retail trade; repair of motor vehicles, motor cycles and personal and household goods; hotels and restaurants*
- *SIC 7 - Transport, storage and communication*
- *SIC 8 - Financial intermediation, insurance, real estate and business services*
- *SIC 9 - Community, social and personal services*

The only one-digit SIC sector to be controversially excluded from the services sector is the construction industry (SIC 5). In many ways construction can be considered a service as no prior storage of a construction end-product is possible (which forms part of Hill's definition). For this reason many feel that construction is part of the service sector and in fact the General Agreement on Trade in Services (GATS) included construction services in the agreement covering the liberalisation of services. However, standard national accounting practice dictates that construction is excluded from the services sector and placed under the secondary sector along with manufacturing (SIC 3) and utilities (SIC 4). The reason for this can again be linked to Hill's definition of a service. Firstly, the definition states that "a service may be defined as a change in the condition of a person, or of a good...". Construction does not involve merely some small change to a good or person but rather the complete creation of a physical product. Secondly, only a good can be transferred in ownership from one economic entity to another. In construction, the completed product can be transferred in ownership from one economic entity to another which makes it a good and not a service. However, the apparently conflicting classifications between GATS and national accounting practices are in fact compatible, because the international aspect of construction usually only includes project management, engineering and financing services¹⁴. When so defined these services are classified as business services (SIC 8) under national accounting practices¹⁵.

¹⁴ See the detailed listing of services under GATS as presented in Hoekman (1995)

¹⁵ These can fall under either 8814 - business and management consultancy activities, or 882 - architectural and engineering activities and related consultancy.

Practical Measurement Issues

Even if it is known which activities in the economy should be measured, a number of these service activities offer unique measurement problems¹⁶. Some of the most important measurement issues are:

- *Government services* - the standard approach to measuring national output through the value of sales cannot be applied to a range of government services in which there is no market and hence no market price (e.g. administration). In this instance the value of production is proxied by the costs of production. This will be misleading because if the delivery of the service is highly inefficient then the value of output is over-estimated and if delivery is efficient then the value of output may be under-estimated. Aside from making output measures unreliable, it also impacts on economic measures in which output is used - for instance productivity measures;
- *Intermediation services* - for intermediation services, which include wholesale and retail trade as well as financial intermediation, the value of production is estimated by the margins on sales. This approach is flawed in that the same productive effort may be required to sell two products of varying price and yet the value of the sale will differ due to constant percentage margins;
- *Unit measurement* - across all services there is no one common unit of measurement by which to describe output (e.g. hours, margins, distance, etc). This limits the extent to which comparisons between different service sectors can be made. However, within each service category there does exist some unit measure which can be used to perform economic analysis;
- *Aggregation* - although the standard industrial classification has a sufficient level of disaggregation, the actual collection of data on services involves a far higher level of aggregation than amongst goods. This makes detailed analysis of specific sub-sectors extremely difficult and so non-governmental surveys must be relied upon for accurate disaggregated data;
- *Other standard measurement problems* - a number of other standard measurement problems exist which are also applicable to goods production. These include a) quality changes being reflected in price changes which serves to increase the price deflator and hence underestimate output, and b) the rapid birth and death of firms making accurate extrapolation between census years difficult (a particular problem in South Africa where census years for service sectors are less frequent than for manufacturing).

¹⁶ See Siniscalco, D (1989) for a detailed analysis of problems in the measurement of output and productivity in the services sector.

Despite these obvious shortcomings, services data may still prove to be useful. Firstly, many of these problems (such as the measurement of government and intermediation services) are consistent over time which makes inter-temporal analysis feasible. Secondly, the methodology for collecting services data appears to be consistent between nations making international comparisons feasible (this is due to international standards for the presentation of national output and trade data). Lastly, macroeconomic analysis is still possible with data collected from a central government source. Anything more detailed would require additional fieldwork.

1.2 Characterising the Services Sector

The services sector makes up a large component of any economy and total world output. Statistics show that in 1994 approximately 63% of world output was in the services sector¹⁷. Further, for some countries services comprised over 70% of economic output¹⁸. In addition, as noted under measurement issues, the services sector includes an incredibly diverse array of activities covering four one-digit SIC codes. It is therefore not useful to characterise and analyse such a large and diverse sector as a homogeneous group, and attempts to do so has led to a number of economic untruths being permeated about services in general. For example, conventional wisdom stresses the low productivity and low capital intensity of services. In order to perform some useful macroeconomic analysis of the services sector, it is necessary to sub-divide the services sector into closely related groups displaying similar economic characteristics.

A number of ways of classifying services has been used over time including the SIC method. The most popular is to split services into producer (or intermediate) services and final demand services¹⁹. However, services displaying public good qualities (such as defence or administration) should be separated due to this differentiating characteristic. Grubel (1989) moves in this direction by using the categories consumer services, producer services and government services. However, the category government services is not useful because it is based on ownership criteria and not product characteristics. Also, the services it includes will vary by country depending on the interventionist

¹⁷ This is calculated using the World Bank World Development Report 1996 and the United Nations Statistical Yearbook 1995. A tabular representation of services output shares by development status and region appears in section 2.2.

¹⁸ In the USA services accounted for 71% of output in 1994. Sourced from the World Bank World Development Report 1996.

¹⁹ For example, this is used by Unctad (1984), Bhagwati (1987) and Francois & Reinert (1995) to name but a few.

tendencies of different states. Therefore, it is felt that the most logical split is to group services into consumer, producer and community/social services. The definition of each is:

- *Consumer services* - these are the final demand services which would include entertainment and leisure services (e.g. restaurants & hotels), wholesale & retail traders, and personal services (e.g. hairdressers, laundries & domestic services). In terms of measurement, these would cover SIC category 6 (wholesale and retail trade; repair of motor vehicles, motor cycles and personal and household goods; hotels and restaurants) and components of SIC category 9 (the personal services component);
- *Producer services* - these are intermediate input services which would include distribution services (e.g. transport & storage), financial services (e.g. finance and insurance), communication services and business services (e.g. marketing, design, legal & accounting services). In terms of measurement, these would cover SIC category 7 (transport, storage and communication) and SIC category 8 (financial intermediation, insurance, real estate and business services);
- *Community/Social services* - these are public-orientated services which are usually, yet not necessarily, provided by government. These would include public administration and defence activities, educational services, health services, sanitation and membership organisations (e.g. trade unions, religious groups & political organisations). In terms of measurement, these would make up the major component of SIC category 9 (community and social services).

In order to paint a picture of the characteristics of each of these service sectors, some key economic indicators for each sector need to be constructed, such as the capital-labour ratio, labour productivity, capital productivity and skill content. Unfortunately, the task of doing this for world output is too enormous and so the indicators that appear in *table 1* were constructed using South African data. Also included are the same measures for the primary and secondary sectors in order to make some useful comparisons. Obviously, the characteristics of each sector may differ by country depending on a) the overall capital intensity of production in the economy as a whole and b) the size and mix of different activities within each aggregate sector. However, the comparative trend between sectors should be similar to that of South Africa as the relative influence of factors like the overall capital intensity of production in the country are eliminated. *Table 1* includes measures for the labour skill content (proxied by average monthly wage), labour productivity, capital productivity, and the capital-labour ratio (measured as rands of capital per employee and rands of capital per rand of labour). A discussion of the characteristics of each type of services grouping follows.

Table 1: A comparison of defining economic characteristics for different economic sectors in South Africa (1995)

SIC Category	Avg. Monthly Wage (Rands) ¹	Labour Productivity (Rands) ²	Capital Productivity (Rands) ³	K-L Ratio (rands of capital per employee)	K-L Ratio (rands of capital per rand of labour)	Income Elasticity
Primary Sector	1,130	35,800	300	119,700	8.9:1	0.70
Agriculture	376	22,010	328	67,040	14.9:1	0.24
Mining	2,185	55,220	284	194,130	7.4:1	0.99
Secondary Sector	2,800	70,000	430	161,700	4.8:1	1.08
Manufacturing	2,970	71,290	538	132,500	3.7:1	1.05
Utilities	5,661	249,260	158	1,576,410	23.2:1	1.60
Construction	1,677	33,580	1,875	17,900	0.9:1	0.83
Services Sector	3,160	60,900	270	223,000	5.9:1	1.12
Consumer services ⁴	2,000	42,000	730	57,200	2.4:1	0.86
Producer services ⁵	5,050	128,000	210	600,600	9.9:1	1.18
Community/social services ⁶	3,500	45,700	200	222,400	5.3:1	1.37
Total Economy	2,730	55,730	296	188,110	5.7:1	

Notes:

¹ The CSS calculation of average monthly wage for SIC category 9 excludes domestic workers and therefore the figure in the table is calculated by giving an average wage of R400 p/month to the estimated 620 000 domestic workers in this category.

² Labour productivity is measured by the GDP contribution per employee

³ Capital productivity is measured by the GDP contribution per unit of capital, where 1 unit of capital = R1,000

⁴ Consumer services are calculated using SIC category 6 and the personal and entertainment services included under SIC category 9

⁵ Producer services are calculated by combining SIC categories 7 and 8

⁶ Community/social services are calculated by excluding the personal and entertainment services included under SIC category 9

Sources: Wage data from the CSS Labour statistics and the Saldru Living standards survey;

Employment data from the Development Bank of Southern Africa and the Saldru Living standards survey;

GDP and fixed capital stock data from the Reserve Bank Quarterly Bulletin.

1.2.1 Consumer Services

Consumer services can be characterised as follows:

- *relatively low skill requirements* - if average monthly wages are an accurate reflection of skill requirements, then consumer services have the third lowest skill requirements after agriculture and construction;
- *highly labour intensive* - the capital-labour ratio for consumer services is the second-lowest in the economy after construction whether measured by rands of capital per employee or per rand of labour. The rands of capital per employee is approximately one third of the economy average and about one-tenth of that required by producer services;
- *low labour productivity* - consumer services record the third lowest labour productivity levels after agriculture and construction. GDP contribution per employee is about 60% that of manufacturing and only a third of the same figure for producer services;
- *high capital productivity* - capital productivity, as measured by GDP contribution per unit of capital, is second-highest after construction and more than two times the economy average. This is really a reflection of the low capital requirements and high labour intensity of the industry;
- *income inelastic* - consumer services have an income elasticity measure of 0.86, making it an income inelastic sector. It is also the third lowest measure of income elasticity after agriculture and construction.

In many ways the consumer services sector has the characteristics of the primary sector of the economy, namely that it is labour-intensive with low labour productivity, it has low skill levels and has income inelastic demand. These characteristics are hardly surprising considering that a large part of this sector is made up of traders and personal services (such as domestic workers) where the skill content of the work is relatively low and the capital requirements needed to launch a business are minimal. What may be surprising for many economists is the income inelastic nature of consumer services which contradicts conventional wisdom. The reason for this apparent contradiction is that different components of the consumer services sector respond differently to income changes. Travel and entertainment services are very definitely income elastic while personal services and trade are income inelastic. The overall income elasticity of the sector then depends on the share of each component and hence the level of development.

When countries are relatively underdeveloped, income levels are low and unemployment levels high, the consumer services sector will be dominated by personal services and trade. The low capital and skill requirements and the low barriers to entry make these sectors one of the few options for the urban unemployed and the unskilled. This explains why there is a relatively large consumer services sector in LDC's where the fledgling manufacturing sector is unable to absorb the growing urban population. The share of travel and entertainment services will be low due to low income levels. However, as development occurs and incomes rise, the relative size of trade and personal services will tend to diminish and the share of travel and entertainment services to increase. This is partly because of the increase in travel and entertainment services in response to growing incomes, and partly due to the decline of personal services and petty trade. Growing opportunities in the economy will cause large numbers of workers to move out of the low paying personal services and petty trade, and into better paid economic sectors (including travel and entertainment services). This is much the same as the migration process from agriculture to industry described in development theory. In addition, demand for these services tends to diminish as consumer durables replace the need for personal services in many households and rising average wages make these services relatively less affordable²⁰. As the trade and personal services dominate this sector in South Africa, the resulting elasticity for the entire sector is income inelastic.

This fundamental difference between these two components of consumer services is also informative for the development process. The role of petty trade and personal services can create low value work and alleviate policy in the early stages of development yet they are not a long term development option. Any development strategy should try to create employment in the income elastic components, namely travel and entertainment services. These services are also attractive options in order to create sustainable employment and income growth because they still maintain the advantages of high labour intensity and low skill and capital requirements. This explains why many developing countries are viewing international tourism as a far easier means than manufacturing in leading the development process and generating foreign exchange, jobs and income²¹.

²⁰ It is widely accepted that wage changes in the entire consumer services sector are not linked to productivity increases but to the average rising wage levels in the economy as a whole. This is because productivity levels tend to be relatively stagnant in this particular service sector (as one economist remarked 'a waiter walks as fast today as he did in 1800'). The implication of this is that these services will become relatively more expensive over time and hence experience diminishing demand where the price effect dominates the income effect.

²¹ See Gearing et al (1976) chapter 2

1.2.2 Producer Services

Producer services can be characterised as follows:

- *High skill requirements* - average monthly wages in the producer services sector are the second highest after utilities and are almost double the economy average. This confirms that producer services are relatively skill and knowledge intensive;
- *highly capital intensive* - producer services are highly capital intensive which contradicts the conventional wisdom that services are labour intensive. The rands of capital per employee are more than three times the economy average and almost five times that of manufacturing;
- *high labour productivity* - again contrary to conventional wisdom, producer services demonstrate the second highest labour productivity rate in the economy after utilities. The GDP contribution per employee is almost twice that of the manufacturing sector and more than twice the economy average;
- *low capital productivity* - despite the high capital intensity of producer services, capital performs relatively poorly and capital productivity levels are the third lowest in the economy after utilities and consumer/social services. The productivity level is about 40% of the manufacturing sector;
- *income elastic* - the producer services sector is income elastic with an elasticity measure of 1.18. This is the third highest after utilities and community/social services and compares favourably to a manufacturing figure of 1.05;

The producer services sector represents that component of total services which are seen as the next phase in the development process after manufacturing and which represent a growing proportion of an industrial country's GDP. In many ways they are one step up from manufacturing as they are more skill intensive, more capital intensive, yield greater labour productivity and are more income elastic than manufacturing. Hence they offer greater opportunities for income growth (through higher labour productivity and income elasticity) and offer comparative advantages to the more developed countries with considerable amounts of accumulated skills and capital. However, the growth of this sector is in part dependent on the changing nature of the manufacturing sector in industrial countries and in part an independent growth path.

The changing nature of manufacturing influences producer services in the following manner:

- *changing products* - changes in the range of products manufactured and nature of competition within the manufacturing sector have led to more technology-intensive production. This has resulted in a greater service component in the manufacturing process (e.g. research and design, information systems, etc) and a decrease in the proportion of workers directly transforming products,
- *changing organisation* - the increasing complexities of these services, and attempts by firms to focus on their core competencies, has led to an increased externalisation (or out-sourcing) of these services. This has led to a statistical increase in services production even though no real increase has occurred.

Independent growth in the producer services sector has stemmed from two main sources:

- *new products* - new products have come from either innovation in established producer services (e.g. new financial instruments or insurance products) or through opportunities created by the new informatics technologies (e.g. mobile communication services, Internet products)
- *increased consumer sales* - growing consumption of these services amongst non-industrial consumers as personal incomes rise. In particular, the financial, insurance, transport and communication services have tended to benefit from rising personal incomes.

The producer services sector has tended to be neglected by LDC's because it was felt that producer services were the result of development (the post-industrial society syndrome) rather than a means to development²². However, because of the strong interdependency between the producer services sector and the manufacturing sector, any strategy aimed at improving manufacturing performance must take the development of the producer services sector seriously. Inefficiencies and a lack of sophistication in the producer services sector will influence the competitive performance of manufacturing through increased costs and less sophisticated production. Therefore, producer services should be seen as a means to development of a strong manufacturing base.

²² UNCTAD (1984)

1.2.3 Community/Social Services

Community/social services can be characterised as follows:

- *relatively high skill requirements* - the community/social services has the third highest average monthly wage yet is some way off from the extraordinarily high wages, and by implication skill levels, in utilities and producer services. However, it can be concluded that average skill or knowledge requirements are higher than that of manufacturing;
- *relatively capital intensive* - capital intensity in community/social services, when measured by rands of capital per rand of labour, is slightly below the economy average but approximately one and a half times that of the manufacturing sector. In terms of capital per employee, this sector has requirements slightly above the economy average;
- *low labour productivity* - labour productivity is estimated to be below average for the economy and on a similar level to consumer services - i.e. about 60-65% of manufacturing productivity levels and a third of producer services levels;
- *low capital productivity* - the community/social services has the second lowest capital productivity levels after the utilities sector. Productivity levels are similar to the producer services sector and are approximately 65% of the economy average and 35% that of manufacturing;
- *high income elasticity* - community/social services are very income elastic with an elasticity measure of 1.37. This is second only to utilities.

The most outstanding feature of the community/social services sector is the low productivity of both capital and labour. One possible explanation is that productivity measures do not truly reflect actual productivity in the sector. As outlined earlier, output, and hence productivity, is likely to be underestimated because no market, and hence no market price, exists by which to measure it accurately (as a result input costs are used as a proxy). Another more popular explanation may be that it is a true reflection of the inefficiency within the government sector which performs the majority of these services.

Community/social services is one sector where supply-push factors may be of equal importance as demand factors in determining growth and mix of output. As the vast majority of these services are currently provided by the state, the exact size of this sector will depend almost entirely on the overall budget and priorities of the government of the day²³. In a democratic system, the demand levels and

²³ The budget includes not only tax revenue but also borrowing by the government.

preferences of the consumer for these services should dictate supply as they can be expressed through the voting process for each layer of government. For private provision of these services demand will obviously be expressed directly in the market. However, even in a democratic system, demand preferences may not precisely dictate delivery because a) the bureaucracy are budget-maximisers and b) government revenue will increase above that of the growth in the economy due to factors such as fiscal drag and a progressive income taxation system. Therefore, ultimately the bureaucracy itself will have some influence on the output levels and mix for these services.

Chapter 2

Structure and Trends in World Services Trade

This chapter attempts to provide a comprehensive overview of the world structure and trends in services trade. The first section examines some definitional and measurement issues concerning services trade. This is an important step to interpreting the statistics on trade presented in the remaining three sections of the chapter. Section two examines trends in the size and growth of world services trade over the last 15 years. It also uncovers the forces behind the growth in services trade and makes tentative predictions for its future growth and share in world trade. Section three breaks down services trade to determine what service products are being traded internationally. This is vitally important for both determining which services are more tradeable than others and also understanding why certain nations perform better at services trade than others. The final section begins by asking and answering the question whether traditional trade theories apply to services. Armed with this understanding, it then calculates and analyses the shares of world services trade by development status and region.

2.1 Defining and Measuring International Services Trade

As noted in the first chapter, the definition and measurement of services is not a trivial matter. This section concentrates on the definitional and measurement issues for services trade in order to complement the discussion in the first chapter. These are important as they influence the statistical collection of services trade data and its interpretation. Further, they will influence any multilateral trade negotiations aimed at liberalising this aspect of world trade.

2.1.1 Defining Services Trade

When examining trade in services, there is a need to move away from the conventional idea of trade being only the transportation of a physical product from one country to another. The very nature of services means that there usually needs to be some interaction between the producer and the consumer of the service for a transaction to take place. For this reason, services trade is seen to include three additional transaction types to the one that occurs with goods (namely no movement of both the producer and consumer). All four types of transactions are²⁴:

- *the movement of the producer to the consumer* - for example, a business consultancy team may fly into a country to conduct a short job;
- *the movement of the consumer to the producer* - for example tourism or students studying in another country;
- *the movement of both the producer and consumer* - for example the passenger and freight transport services;
- *no movement of either producer or consumer* - modern informatics technology has enabled long distance interaction between producer and consumer requiring neither to physically move. What moves from one country to another instead of persons may be capital (e.g. for investment purposes), information (e.g. use of intellectual property or electronically stored information) or goods (e.g. for repair or leasing).

A particular service firm will usually not be restricted to any one particular transaction method, but will choose the most appropriate method depending on a number of different factors. These would be based on the intensity of interaction required and the relative transaction costs between different methods (e.g. physical transportation vs telecommunication costs). For example, an architect can draw up a design locally and transmit it to the customer abroad or alternatively decide to temporarily relocate to the customer's country because of the need for close interaction during the design process. Despite the variety of options, it has been suggested that with certain industries, although long-distance interaction may be possible, having a permanent physical presence in a market is a prerequisite in order to establish a significant market presence²⁵. This is partly due to the continued

²⁴ See Sampson & Snape (1985) or Hoekman and Stern (1991)

²⁵ 'Market presence' here is a business presence and not a physical presence. A significant market presence would suggest a significant market share in a country. For discussion on this point see in particular Dunning (1989) and Gray (1989)

importance of personal interaction despite advances in informatics, and partly due to the requirement for local market knowledge²⁶. This makes long-distance servicing of a market a poor substitute for physical market presence in services more than with goods.

This preference or requirement for physical market presence in the international trade of services has caused the question to be raised whether foreign direct investment (FDI) in services industries should be considered as trade in services. This issue may seem like a trivial measurement issue but it has some significant implications. Firstly, the inclusion of FDI in the definition of services trade would result in a broader scope for service trade liberalisation negotiations under the WTO. These negotiations would then need to encompass negotiations on the rules governing FDI which is seen to be a particularly sensitive area for many less developed countries (LDCs). Secondly, the ignoring of FDI means the ignoring of the most significant expression of the internationalisation of services. The World Investment Report 1995, estimates that some 50% of all FDI stock is in the services sector. This implies that in 1993 there was a total FDI stock in services of US\$1,070 billion, generating annual sales of approximately \$2,620 billion. This stock was also growing at a rate of \$110 billion per year. This compares to traditionally recorded services trade of \$1,020 billion for the same year²⁷. Hence, of the total international sales of services, only 28% was through the traditional measurement of trade while 72% was through the sales of foreign affiliates of transnational companies. In comparison, some 59% of international goods sales came from trade and only 41% from the sales of transnational companies²⁸. Therefore, ignoring this component will lead to both a) underestimating the value of the international flow of services and b) unnecessarily limiting trade negotiations to only one small component of the whole international flow of services. This in turn may limit the extent to which the true liberalisation of service sectors occurs.

Despite the obvious case for inclusion of FDI in the calculation of services trade, international standard practice dictates that trade in services be so defined as to not include foreign direct investment in services. International balance of payments convention dictates that international trade occurs "...when goods or services are sold or otherwise exchanged between residents of different countries"²⁹. Affiliates of transnational companies are not considered to be residents of their home

²⁶ Gray (1989)

²⁷ IMF Balance of Payments Statistics 1995

²⁸ This is also calculated using the World Investment Report and IMF Balance of Payments 1995 data. Assuming 50% of all stock, flow and sales of TNCs is from goods, then the total stock of FDI in goods would be \$1,070 billion and total 1993 sales of TNCs in goods would be \$2,620 billion. This compares to the IMF figure for goods trade in 1993 of \$3,740 billion.

²⁹ Ascher & Whichard (1987: pp. 260)

country but residents of the host country³⁰. Therefore sales of these affiliates in their host country is considered to be an exchange between residents of the same country and hence not international trade. Although with goods this definition limits international trade to be the physical movement of products from one country to another, with services these cross-border transactions can involve the movement of people as well as goods, information or capital (as noted above). The temporary movement of a producer to the consumers country or vice versa, does differ from FDI because it is of a temporary nature and is therefore not considered to be a transaction between residents of the same country³¹.

2.1.2 Measurement Issues

The quality and reliability of data on international trade in services is poorer than that of even the services data within the economy. This is partly because of the lack of importance that was previously attached to collecting the data and partly due to the difficulties in collecting trade information. Services are extremely difficult to trace because, unlike goods, they are not physical items which can be controlled at access points into and out of a country. As a result, the main source of data on trade in services is the balance of payments and not customs like goods trade. Hoekman and Stern (1991), isolate the problems with services trade data as the following:

- *Consistency and coverage* - there is a lack of consistency in approach between countries and over time. The level of coverage between countries differs and some countries will not collect data and report certain service items under each category in the balance of payments. As the excluded services may differ by country, consistency is compromised. The consistency problem also exists over time where improved collection techniques can give the impression of an increase in trade even if no such increase actually existed in real terms. This poses problems for inter-temporal comparison;
- *Aggregation* - balance of payments reporting involves a very high level of aggregation of data. As this is the primary source of data for services trade, there is an incredibly high level of aggregation in the reporting of services trade. Currently most countries comply with only the fourth edition of the IMF balance of payments manual which provides only three categories for services trade data. These are transport (split further into passenger, freight and other), travel and other services.

³⁰ IMF definition cited in the IMF Balance of Payments Statistics 1995, pp. xxi

³¹ The strict IMF definition states that this movement is of a temporary nature if it is for less than one year (IMF Balance of Payments Statistics 1995, pp. xxi)

- *Direction of trade* - no international data exists on the direction of services trade. However, within each country it may be possible to get an indication of the direction of trade flows for different service trade items through the use of alternative proxies.

The IMF is trying to address some of the weaknesses of international services trade data by laying down international standards to improve consistency and by increasing the level of disaggregation in the balance of payments reporting. The fifth edition of the IMF Balance of Payments Manual, released in 1993, lays out guidelines for disaggregating each of the three main categories of services trade. Transportation will keep the first level of disaggregation into passenger, freight and other but will add another level whereby each of these items is in turn disaggregated into different types of transport - namely sea, air and other. The travel item will be split into business and personal travel. Finally, the category 'Other services' will be sub-divided to include communication services; construction services; insurance services; financial services; computer and information services; royalties and license fees; other business services; personal, cultural and recreational services, and government services.

The additional number of sub-categories will add depth to future analysis, but the success of this initiative lies in the compliance of countries. As yet only a small number of countries have complied with this outline (South Africa not being one). Further, even amongst those that have complied, the accuracy of data is questioned due to the difficulty in collecting such data. This is reflected in the fact that most of the value of 'other services' is contained in the residual item 'other business services'³². A further problem is that the new guidelines tamper with the broader definition of what constitutes services trade. Specifically it moves labour income out of the services account and into the income account of the balance of payments. The effect of this is to introduce time inconsistencies into the data making inter-temporal analysis inaccurate. Fortunately, the IMF has back-dated these changes to 1985 which provides a reasonable data set. Also, as labour income was separately recorded prior to the introduction of these changes, it is possible to construct a historically consistent data set out of the IMF statistics for the years prior to 1985³³.

³² See the discussion at the beginning of section 2.3

³³ This approach was used to construct the data set used in the remainder of this chapter.

2.2 Size and Growth of World Services Trade

In 1994, world trade in goods and services totalled US\$5,190.1 billion, of which services trade made up 21.2%, or US\$1,100.2 billion (see *table 2* below for details). World trade in services has experienced high growth rates over the past 15 years. The boom years of the 1980's led to services trade growth reaching double digits in the later part of the decade. However, growth did slow in the early 1990's in response to the global recession. These high growth rates have also been consistently more than one percentage point higher than that of goods trade for the past 15 years. This higher growth rates have resulted in services trade taking up an ever larger component of total world trade. Services share of total world trade has increased from 18.2% in 1980 to the present 21.2% in 1994.

Table 2: Value and growth of world trade in goods and services (\$ billions)

	1980	1985	1990	1994
Services				
Value (\$m)	312.7	470.4	853.0	1100.2
Avg. Growth over period		8.2	11.9	6.4
Share of trade	18.2	19.4	20.4	21.2
Goods				
Value (\$m)	1403.9	1955.3	3333.5	4089.9
Avg. Growth over period		6.6	10.7	5.1
Share of trade	81.8	80.6	79.6	78.8

Source: IMF Balance of Payments Statistics Yearbook 1995

The high growth rates of services trade over the past few decades can be attributed to two fundamental sources, namely the high growth of services production world-wide over this period, and the increase in the tradeability of services³⁴. *Table 3* contains calculations of the share of world production and the percentage of production traded for goods and services for 1980 and 1994 in order to shed some quantitative light on this debate. The comparison with goods production and trade is necessary to explain the changing shares and differing growth rates in trade and output.

³⁴ See amongst others Bhagwati (1987) pp. 21-25

Table 3: Share of world production and the percentage of production traded for goods and services (1980 & 1994)

	Goods	Services
Share of World Production		
1980	45	55
1994	37	63
Percentage of production traded ¹		
1980	30.1	5.4
1994	41.1	6.6
Source of Trade Growth ²		
% attributable to increased tradeability	41.4	25.4

¹ Calculated by dividing world exports by total world production

² This is calculated by the formula $100 - ((X_{TS} - X_{1980}) / (X_{1994} - X_{1980}))$ where X_{TS} is the value of world trade that would have occurred in 1994 if the tradeability percentage of 1980 applied, X_{1980} is the value of world trade in 1980, and X_{1994} is the value of world trade in 1994.

Source: Trade data from the IMF Balance of Payments Statistics Yearbook 1988 and 1995

Output data from the World Bank World Development Report 1996 and United Nations Statistical Yearbook 1995

World production of services has grown at an average annual rate of 7.4% during the period 1980 to 1994. In comparison, world goods production has only grown at an average annual rate of 5.2%³⁵. This difference in growth rates has resulted in services increasing its share of world output from 55% in 1980 to 63% in 1994 (see *table 3*). Growth rates well above that of goods production can be attributed to a number of factors, namely:

- *higher income elasticities* - the income elasticities of producer services, community/social services and parts of consumer services are higher than that of manufacturing (as discussed in

³⁵ The growth rates of world production are calculated from country statistics published in the World Bank Development Report 1996 and the United Nations Statistical Yearbook 1995. Note also that goods production covers both the primary and secondary sectors - i.e. SIC codes 1 to 5 inclusive.

section 1.2). Therefore the growth in world output would result in a growing share for these services;

- *link with goods production* - goods production requires a constant proportion of producer services as inputs and therefore producer services growth should at least match that of goods production. In fact, it is increasing due to changes in the organisation and growing complexity of production;
- *statistical growth* - the increasing separation of producer services from goods production, results in a statistical growth in services and statistical shrinkage of goods production³⁶.

Table 3 shows that the proportion of services production traded has increased marginally since 1980 from 5.4% to 6.6% (this represents a 22% increase). Although significant, this increase compares poorly to goods which increased the proportion of production traded from 30.1% to 41.1% over the same period (this represents a 35% increase). This increased tradeability has been the result of:

- *technological changes* - developments in information and telecommunications technology (informatics) has facilitated easier service transactions internationally. They have also lowered the costs of transactions making international provision more cost-effective. These developments have enabled previously localised services (e.g. legal & medical services) to be traded internationally and facilitated the rapid growth of previously traded services (e.g. insurance)³⁷;
- *trade liberalisation* - some liberalisation of services trade has occurred through the General Agreement on Trade in Services (GATS) that came out of the Uruguay Round of trade talks. In addition, there have also been some big gains for services with increasing liberalisation of trade in a number of regional trade blocs. However, the liberalisation efforts and gains have been small in comparison to goods trade. Hoekman (1995) estimates that of all the service sectors within the GATS framework, only 28% were liberalised in the industrial countries while the figure for developing countries was far less at 6.5%³⁸;
- *internationalisation of production* - the growing internationalisation of production has seen the traditional service providers to transnational companies expanding internationally to service them in other nations;
- *increased proportion of goods traded* - the increase in the proportion of goods traded has led to a similar growth amongst services that are tied to goods trade such as freight transport and

³⁶ Bhagwati (1987) pp. 21-22

³⁷ Bhagwati (1987) pp. 23-5

³⁸ For a detailed assessment of all GATS shortcomings and achievements, see Hoekman (1995)

insurance. However, it is not a one way process and developments in these services have also had a positive impact on the volume of world goods trade (e.g. containerisation in freight industry has lowered the costs of transport and therefore stimulated trade).

Despite the increase in tradability of services, the proportion of world services production that is traded is still incredibly low at 6.6% in comparison to 41.1 % of goods production. This low tradeability of services is the reason why goods continue to dominate trade even though services dominate output.

These statistics also provide an answer to the question of what is the primary source of growth in services trade. Most economists argue that the primary reason for the high growth in services trade is the increasing tradeability of the services sector. However, statistics do not support this hypothesis. Calculations presented in *table 3* reveal that only 25.4% of the growth in services trade from 1980 to 1994 can be attributable to the increased tradeability of services. The remaining three-quarters of the growth is linked to the increase in the world production of services over the same period.

Future Growth

This discussion raises the question whether services will ever become a dominant force in international trade as they have become in world output. It is speculated that services will increase their share of world trade but it will be insufficient to make services more than a marginal aspect of international trade. The factors leading services to increase their share are:

- *liberalisation* - goods trade has dominated the agenda and efforts of previous GATT rounds aimed at liberalising trade. This has helped increase the tradeability of goods to a point which it will be difficult to increase its trade-to-production ratio too much further. Future liberalisation efforts aimed at the services sector should increase the low tradeability of this sector faster than future changes in the tradeability of goods. This will serve to increase the share of services in world trade even if production growth equals that of goods;
- *output growth* - world output of services should continue to increase faster than that of goods despite the already high proportion of world output. As shown in *table 4*, the Asian industrial countries and developing countries in all world regions have a services sector which has a lower share of output than the world average. Therefore there is obviously scope for increasing the

share of services in world output as the world economy continues to grow. This too suggests a growing share of world trade for services even if the tradeability of services does not increase.

Table 4: Share of the services sector in total GDP by development status and region (1980 & 1994)

Category	Services Share of GDP	
	1980	1994
World	55	63
Industrial Countries ¹	60	66
Asia	55	59
Europe	58	65
Americas	64	71
Developing Countries	41	50
Africa	39	50
Asia	34	43
Europe	42	53
Middle East	32	52
Americas	51	57

¹ This classification is taken from the IMF Balance of Payments Statistics. The Asian industrial countries consist of Japan, Australia and New Zealand. The Americas industrial countries consist only of USA and Canada. The European industrial countries consist of Austria, Belgium-Luxembourg, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Source: World Bank World Development Report 1996

The factor restricting the share of services in world trade is low tradeability. The natural low tradeability of services will limit the extent to which its share of world trade can increase following the trends outlined in the previous two points. The continued low tradeability of services, despite liberalisation efforts, are a result of the type of service products that are traded (discussed in detail in the next section). The three dominant areas of trade are tourism, transport and business services. Tourism is very tradeable and a large industry, yet it will never dominate international trade flows. Transport is highly tradeable yet will always remain a constant and small proportion of goods trade. The big growth in world production of services and the hope for increasing tradeability is business services. However, the need for local market knowledge and a physical market presence make foreign direct investment the preferred means of delivering these services internationally. This is

demonstrated by the fact that services have begun to dominate world FDI in a similar manner to their domination of output. The World Investment Report (1995) estimates that services accounted for 50% of FDI in 1994, up from 30% in 1970. Therefore, the combination of these three forces suggest that services will increase their share of world trade but not to the point of threatening the dominance of goods trade.

2.3 Product Structure of World Services Trade

Understanding what services are actually being traded is vitally important. Firstly, it is informative of which services are more tradeable than others by comparing output shares with trade shares.

Secondly, the type of services traded may well assist in explaining why particular countries have performed well in services trade and others not. Thirdly, for countries hoping to expand their service exports, it is useful to understand which services have sizeable markets and high growth rates.

Lastly, it is important to understand which services are of importance when negotiating the liberalisation of services trade. Lengthy negotiations on minor trade items may prove a waste of time unless the barriers to trade are the reason for the low trade share.

Table 5 represents a break down of services trade into a disaggregated form following the guidelines of the fifth edition balance of payments manual of the IMF (BPM5). The shares of sub-sectors of 'business services' are not available for any year prior to 1994 when BPM5 guidelines were first introduced. The exception is the item government services which was recorded separately under the fourth edition balance of payments guidelines. Although most figures represent data from all reporting countries, the shares of the sub-categories under 'business services' have been calculated from a sample of countries only. The sample group was determined purely by which countries had provided complete data sets in line with BPM5. Although this accounted for 55.7% of all exports and 52.8% of all imports, it may have biases as the sample set was not randomly determined. Therefore estimated values may differ slightly from the true values. The data set was more complete for industrial countries where the sample accounted for 67.8% of exports and 65.3% of imports³⁹. For developing countries the sample group only accounted for 18.3% of exports and 18.7% of

³⁹ Countries included were Austria, Belgium-Luxembourg, Germany, Iceland, Italy, Sweden, Netherlands, Portugal, Spain and the USA.

imports⁴⁰. Due to these differences in sample size between developing and industrial countries, the figures were weighted according to their overall share of the category total before calculating the world trade share for each item.

Table 5: Breakdown of world trade shares of service items (1994)

Service Item	Share in 1988	Share in 1994	Avg. Growth 1988-94
Travel ¹	29.1	29.2	8.7
Transport ²	25.6	22.8	6.7
Passenger	21.5	22.7	7.6
Freight	50.0	50.1	6.7
Other	28.5	27.2	5.9
Business Services ³	38.6	43.5	9.7
Communication	n/a	4.2	n/a
Construction	n/a	6.6	n/a
Insurance	n/a	6.5	n/a
Financial	n/a	8.2	n/a
Computers & Information	n/a	0.8	n/a
Royalties & License Fees	n/a	9.4	n/a
Other business services	n/a	61.3	n/a
Personal, cultural, recreational	n/a	3.1	n/a
Government ⁴	6.7	4.5	2.2
Total	100.0	100.0	8.7

¹ Travel includes goods and services acquired from an economy by non-resident travellers for business purposes and personal use during their visits. Travel includes students and medical patients but excludes military and embassy personnel and non-resident workers. It also excludes passenger services which is included under transportation.

² Transportation includes freight and passenger transportation by all modes of transportation and other distributive and auxiliary services, including rentals of transportation equipment with crew.

³ Business services includes the sectors outlined in the table. Note that construction services cover project work that is performed abroad on a temporary basis only and does not include the work of foreign affiliates

⁴ Government services includes all services associated with government sectors (such as expenditures of embassies and consulates) or international and regional organisations and not classified under other items.

Source: IMF Balance of Payments Statistics Yearbook 1995

⁴⁰ Countries included were Botswana, Brazil, Cameroon, Czech Republic, Egypt, Ethiopia, Korea, Latvia, Lithuania, Namibia, Slovak Republic, Slovenia and Turkey.

In order to comply with the classification of services derived in chapter one, consumer services are defined as including the travel section only, community/social services as including government services and producer services as including transportation and business services. With this classification, the most noticeable feature of the product breakdown of trade in services is the complete dominance of producer services and the lack of community/social services. Producer services account for 66.3% of services trade, consumer services 29.2% and community/social services only 4.5%. There is some concern amongst economists that because the travel sector can include purchases of goods whilst travelling, its share of total services trade is somewhat over-stated. However, statistics from South Africa reveal that goods purchases only make up a small component of total travel expenditure - typically 3% for business travellers and 6% for tourists⁴¹. Although this may vary by country, one would expect the trend to be similar.

Using this breakdown it is possible to get an impression of the relative tradeability of each of the three types of services. In order to do this, the relative shares of world services output is needed. Unfortunately, there is no estimate of world output share by these particular classifications, but the share of each service type in the South African economy can be used to provide a ball-park figure. In South Africa, consumer services make up 30.5% of total services output, producer services 40.9% and community/ social services 28.6%. The world average will differ from this, but it is not expected to differ significantly as South Africa is a middle income nation and hence may reflect the average. Therefore, it appears that producer services are the most tradeable of all services whilst community/ social services are barely tradeable. In addition, since 1988, producer services have been expanding their share of total services trade, primarily at the expense of community/social services. Consumer services have managed to maintain their share over the period. A closer examination of the different service items may explain this trend.

The low share of community/social services is expected considering both the low tradeability of the sector and more importantly, the small international market for such services. Delivery of most of the community/social services require a physical presence and so are untradable internationally⁴². Examples are health, education, defence, public administration and municipal services such as

⁴¹ Satour (1996:2). Note that these figures apply to tourists and not migrant workers whose expenditures in the host country are included under the travel section. Typically one would expect the expenditure on goods amongst the latter group to be somewhat higher.

⁴² Dunning, J.H (1989) uses the term 'location bound services' to describe the need to have the physical presence of the producer when delivering the service.

sanitation. Although the occasional student or patient can move to another country to receive the service, this cannot occur on a mass scale and so the vast majority of services provided will continue to take place by local providers. Further, these services are primarily provided by the public sector and so only a small private market for such services exists in each country. This obviously then limits the extent to which private providers from other nations can enter the market and so limits the size of international trade. Most of the trade listed under this category consists of the activities of embassies or international organisations⁴³. As these do not expand significantly with economic growth, one expects the share of government services in total trade to diminish even further.

Consumer services, consisting of travel services, are also location-bound services like community/social services. However, that problem is solved by the movement of the consumers to the location *en masse* which makes the sector infinitely more tradeable than consumer/social services. International travel has grown at an incredible 8.7% between 1988 and 1994 enabling it to maintain its share of world services trade. The tourism component of the travel section is income elastic and so has benefited from growing world income. The business travel component has benefited from the growing internationalisation of production and the growth in world trade in goods and business services. It is expected that these trends will continue, enabling travel to maintain or even slightly increase its share of total services trade.

Producer services have been the fastest growing component of services trade. However, its two main categories, transportation and business services, have had very differing fortunes. While passenger services grew at 7.6% from 1988 to 1994, non-passenger transportation grew at only 6.5% in the same period. This ensured that its share of total services trade diminished from 25.6% in 1988 to 22.8% in 1994. The reason for this lower than average growth rate of non-passenger transportation is that its growth is completely dependent on the growth of goods trade. Non-passenger transportation will remain a more or less constant percentage of goods trade and therefore always have a similar growth rate. This simple and irrefutable logic is supported by statistics which show that non-passenger transportation changed only slightly from 4.8% of goods trade in 1988 to 4.7% in 1994. As a result, the growth rate of 6.5% is slightly lower than the 6.9% growth of goods trade over the same period⁴⁴. The growth of passenger transport is of course linked to the growth of the travel industry, both business and personal. Therefore the fortunes of the transport sector are linked to the fortunes of goods trade and travel. If one expects continued strong growth of travel and a

⁴³ See IMF classification cited in the IMF Balance of Payments Statistics 1995, pp. xxv

⁴⁴ These statistics are calculated from IMF International balance of payments statistics.

growth in goods trade that will lag slightly behind that of other services trade, then one can expect the share of transport in total services trade to carry on dropping slightly.

Business services have experienced the highest growth rate of all sectors at 10.7%. This has meant that their share of total services trade has increased from 38.6% to 43.5%. The reason for this component being the star performer in the group is that this sector has been the primary beneficiary of the forces driving the increased production and tradeability of services in the world outlined earlier. In particular:

- business services are the primary beneficiaries of the statistical growth of services (due to the separation of services from manufacturing production) and the close link with increased goods production,
- the informatics technology has had a dramatic impact on the tradeability of business services yet has barely changed the tradeability of the location-bound consumer and community/social services,
- recent efforts at trade liberalisation in services have concentrated on business services. This emphasis on liberalising business services has been as much due to the inability to act in other areas as a particular concerted effort to focus on business services. The travel sector has always been relatively free from trade barriers; community/social services lies in the realm of government service delivery which has been avoided for obvious reasons⁴⁵, and international transportation is already governed by a whole host of bi- and multi-lateral agreements. Therefore business services is all that is left and it also happens to be a significant and fast growing component⁴⁶,
- the growing internationalisation of production has positively affected business service trade.

It can therefore be expected that business services will continue to be the highest growing sector in services trade and will increase its share of total trade.

An analysis of the individual sub-sectors of business services is difficult considering the lack of data for any year before 1994 and concern over the accuracy of the available data for 1994. The concern over the accuracy of the sub-sector data presented in *table 5*, stems from the fact that the component 'other business services' accounts for an unusually large share of total business services. This may be

⁴⁵ Intervention in the operation of the state brings into question the autonomy of the state which is a very sensitive issue.

⁴⁶ See Hoekman (1995) for a good assessment of relative gains in GATS

an accurate figure which reflects the poor selection of different categories or alternatively, it may be that the difficulty in accurately measuring the other categories has resulted in a large residual being dumped in 'other business services', boosting its share of business service trade. The true reason is probably a bit of both. However, if the residual item is ignored then it is noticeable that financial intermediation services (financial and insurance services) make up a very significant component (38%) of what is left. The financial services component can be traced to the development and growth of international capital markets and the internationalisation of business. The insurance component is dominated by freight insurance and therefore reflects the growth in international goods trade. The other surprisingly significant component is royalties and license fees (24% of the non-residual value). These items concern the international sale of technology and their size is a reflection not only of the importance of technology in modern production but also the growth of international technology markets⁴⁷.

2.4 Country Structure of World Services Trade

Now that there is a better understanding of what service products are being traded internationally, the country structure of world services trade can be analysed. The usual approach to an analysis of the patterns of international trade, is to make use of either Ricardian, Heckscher-Ohlin or 'new trade theory' models of international trade. However, the work in this area has been primarily concerned with goods trade. Therefore, before embarking on an analysis of country shares and specialisations in world services trade, the fundamental question of whether these theories apply equally well to services trade must be asked. This question is answered in the first part of this section and the results are then used to analyse the shares of world services trade by region and development status in the second part of the section.

⁴⁷The development of technology markets may be linked to a) the success in creating intellectual property protection on a global level, and b) the inclusion of most countries in the international production of goods.

2.4.1 Trade Theory and Services

Trade Theory

The traditional Ricardian trade theory dictates that countries specialise and trade based on their comparative advantage. Comparative advantage is in turn determined by the relative productivity of labour in producing each good compared to another country. These differences in productivity are the result of differences in production techniques. The modern theory of international trade, developed by Heckscher and Ohlin, differs slightly from this classical perspective. Under the Heckscher-Ohlin model, capital is included along with labour as a factor of production, and production functions are assumed to be identical across countries. As a result, the source of differing costs of production between countries is due to the differing relative factor endowments of the country and the factor intensities of the product. Therefore a capital-abundant country would have a comparative cost advantage in capital-intensive industries, while a labour-abundant country would have a comparative cost advantage in labour-intensive industries. However, the real test of the relevancy of a theory is how well it explains actual trade flows. Empirical testing of the Heckscher-Ohlin model has revealed some shortcomings with the model. In particular, the following facts and studies sparked dissatisfaction with the model:

- the existence of the Leontief paradox which demonstrated that the US in the 1950's had labour-intensive exports and capital-intensive imports. This conclusion contradicted the expectation that an industrial country with a relative abundance of capital would specialise in capital-intensive products⁴⁸,
- a large proportion of international trade is between industrialised countries. Further, a considerable amount of this trade is intra-industry trade. As these countries have similar factor endowments and the products have the same factor intensities, the Heckscher-Ohlin model appears to offer little in terms of explaining world trade patterns⁴⁹, and
- differences in technological capabilities between countries do exist and do influence the pattern of trade. This contradicts the Heckscher-Ohlin assumption of a common production function which is available to all⁵⁰.

⁴⁸ Leamer (1994)

⁴⁹ See for example Dosi et al (1990:15-35) or Krugman (1990:1-8)

⁵⁰ Falvey (1994)

As a result of dissatisfaction with the explanatory power of the Heckscher-Ohlin model, there have been a number of revisions and additions to the theory of international trade. The main purpose of these additions to the body of international trade theory is not to replace the traditional comparative advantage model as an explanation of trade, but to augment it in order to improve its relevance to reality. The first major revision was to extend the list of factors of production to include human capital (i.e. skilled labour) and technology. This was a direct attempt to explain the Leontief paradox of the 1950s. The addition of these factors resolved the debate as the USA exported products with a high human capital and technology content - factors of production associated with an industrial country.

However this revision to the Heckscher-Ohlin model still failed to address the problem of considerable intra-industry trade between industrialised countries. The 1980's saw the rise of the so-called 'New' Trade Theory which aimed to understand this phenomena with alternative explanations of trade flows⁵¹. Amongst the most important additional factors modelled have been increasing returns, imperfect competition, technology and the role of historical accumulation. A brief discussion of each appears below⁵².

- *Increasing returns* - new trade theorists argue that in many modern industries (e.g. aircraft manufacture), scale economies can be so large that the international specialisation of firms is necessary in order to minimise costs. This applies not only to entire industries but to specific product lines within industries. For example, firms in one particular country may only specialise in a number of motor vehicle models which opens the door to other countries to export the remaining models. Increasing returns can therefore account for much of the intra-industry trade between industrialised countries.
- *Imperfect competition* - the modelling of imperfect competition in international trade has concentrated on monopolistic competition arising from product differentiation. It is in the interest of firms to offer their product both domestically and internationally for scale economy and profit level reasons. This product differentiation on an international scale gives rise to intra-industry trade.
- *Technology* - models on the influence of technology and trade have concentrated on either product innovation or process innovation. The product innovation literature argues that

⁵¹ The most influential contributor to 'New' trade theory has been Paul Krugman. See specifically Krugman (1995)

⁵² For a detailed discussion of each see the various chapters of Krugman (1990)

innovation in one country gives rise to a temporary monopoly in the production of that product until other countries are able to replicate it. This temporary monopoly then gives rise to trade. The process innovation literature argues that differences in the technology used in production causes differences in labour productivity⁵³. It is these differences in labour productivity in addition to relative factor endowments that will determine the relative costs of production and therefore the relative pattern of international production and trade.

- *Historical accumulation* - the role of history in the current international pattern of production and trade challenges the static nature of the Heckscher-Ohlin model. This line of theory argues rightly that country factor endowments are not exogenously determined but endogenously determined. Capital produces more capital, production and education produce human capital, and research and development creates technology. This being the case, it is important to understand the dynamic accumulation of factor endowments and how this influences a nation's overall comparative advantage and specific competitive specialisations over time.

These contributions to the theory of international trade assist in not only explaining the pattern of international trade but also the absolute performance of a country. The theory of comparative advantage has driven trade analysis to exploring a country's relative performance in a number of economic sectors compared to other countries. However, it fails to explain adequately the absolute performance levels of each country. To put this in trade terms, comparative advantage explains why a country may export more of one product than another but not whether the country has a 10% or 30% share of the world market. Therefore, although a country may have a comparative disadvantage in a particular sector, it may still have a high level of absolute performance in that sector and be a significant exporter of that product⁵⁴. The additions of historical accumulation, increasing returns, imperfect competition and technology have all contributed to explaining this absolute trade performance.

It would therefore appear that an accurate analysis of the actual structure of world trade in services must make use of a variety of models. Although the Heckscher-Ohlin model can be used as a basis, it must be complemented by the revisions to the list of factor endowments and the additions of the 'new' trade theorists.

⁵³ This is in many ways a return to Ricardian principles

⁵⁴ See Dosi et al (1990) pp. 15-36 for a good discussion of the failings of traditional trade theory

Application of Trade Theory to Services

The obvious question when examining trade theory and services is whether a theory that was developed primarily for goods trade, is applicable to services trade. This has been discussed to some extent in the literature, in particular by Hindley and Smith (1984), Richardson (1987), Gray (1989) and Dunning (1989). All of these authors are in agreement that the traditional Hecksher-Ohlin model, extended to include additional factors of production, applies equally to services as it does to goods trade. The fundamental reason why the model should apply equally to services is that it is based purely on the interaction between country factor endowments and product factor intensities - i.e. it is based on factor inputs only. Whether the product is wine or insurance, the same range of factor inputs are used and their costs will be determined by their relative abundance within a country. Therefore there can be no logical basis for dismissing the theory of international trade as a fundamental explanation of services trade.

The revisions to the Hecksher-Ohlin model and the 'new' trade theory additions can be seen to be equally relevant to services as to goods trade. The extension of factors of production to include human capital and technology is probably of more importance to services than to goods trade. As demonstrated in section 1.2, producer and community/social services both show higher human capital requirements than manufacturing, making this factor an important determinant of performance in these services. A number of service sectors also experience sufficient scale economies to warrant international specialisation. The most obvious examples are the informatics and transportation industries which already demonstrate a high degree of international specialisation. The service sector is also not devoid of product innovation and differences in service production techniques across countries do occur. Therefore, technology must also be considered a possible explanatory variable in international trade. Finally, if historical accumulation affects factor endowments, then this too must influence service sector trade.

Although these theoretical models apply equally well to the service sector, they can be considered an incomplete explanatory list. There are some additional factors which can be seen to have a significant influence on the pattern of world trade in services. These are artificial policy distortions, close geographical proximity and the country share of international goods trade and investment⁵⁵.

⁵⁵ Gray (1989) has a brief overview of all likely influences on trade in services yet there is no effort to select the dominant factors explaining trade flows.

What trade theory cannot account for is the distortions in the market brought about by trade barriers and the plethora of bilateral and multilateral agreements. Services trade has not been subject to the same trade instruments as goods (i.e. import tariffs) for the simple reason that there is no easily identifiable unit of measurement in services that can be used in order to implement such a system. Barriers to trade in services generally fall under one of the following broad categories⁵⁶:

- *restrictions on market access* - these include regulations which prevent a foreign service firm from establishing a meaningful presence in the national market. Examples include complete reservation of supply to nationals or government (e.g. local airlines or telecommunications), restrictions on establishing branches (e.g. banking), local ownership requirements, and restrictions on the movement of service providers (i.e. access to temporary work visas);
- *discriminatory national treatment* - these include regulations which place the foreign service provider at a disadvantage relative to the local provider but do not restrict market access. Examples are discriminatory taxes on business income and profits, government subsidies to local firms and discriminatory government procurement;
- *general government regulation* - these include general regulations which indirectly restrict or discourage foreign service providers. Examples are the licensing of professionals, exchange controls and inadequate protection of intellectual property rights;
- *natural trade barriers* - natural trade barriers do not constitute deliberate intervention. These could include language, culture, distance and climate.

However, much of the regulation that occurs is not necessarily a pre-meditated attempt to restrict foreign access to domestic service markets, but rather is introduced for public welfare considerations. Government often assumes responsibility to prevent non-service of the poor ('cream-skimming' by service providers) and the sale of sub-standard products when imperfect information exists for the buyer (e.g. by registration and qualification of professionals). A further reason cited for intervention is national security and the importance of the certain service sectors to overall economic performance (e.g. banking and its crucial role in the monetary system of a country).

The services sector is considered to be the most regulated and distorted of all economic sectors. In fact, the regulations on services are so large that Hindley and Smith (1984) consider it difficult to draw any conclusions on the factors influencing comparative advantage for different service sectors.

⁵⁶ See either Benz (1985) pp. 99-107

A prime example is the airline industry where bilateral agreements covering landing rights effectively regulate completely the flow of international trade in the industry.

The service sector also differs significantly from goods in its requirement, or preference for, close geographical proximity. On one level this heavily influences the decision on where to locate production for the servicing of a market⁵⁷. With goods production, the decision on the location of production depends mostly on cost considerations. These include the cost of the required factors of production and transport costs to the target market. However, with many services, the preference or requirement for physical proximity will often over-ride any considerations on the relative costs of production in a particular location⁵⁸. The result of this phenomena is a far lower level of trade in services than goods, and the existence of production of almost all services in all locations. On another level, this desire for close physical proximity will influence the pattern of what trade in services does occur. Countries close to the target market will have a distinct competitive advantage over those countries located at a distance. Probably the best understood is the tourism industry. Travellers are unable or unwilling to traipse any great distance for short holidays and weekend trips, limiting themselves to countries and locations which are close to home. Another example is many business services where the client often prefers the provider to be a minimum distance away in the event that personal interaction is required at relatively short notice.

The final additional influence on services trade flows is the country share of international goods trade and investment. Many services are traded in conjunction with international business transactions and goods trade. This makes the direction and volume of trade in these services dependent on the extent of international business transactions and goods trade by a country. Some concrete examples of this influence are:

- *Communication services* - the amount of exports by a country is determined by the number of incoming international calls which are routed by the national provider. The amount of imports are determined by the number of out-going international calls for which the national provider pays other providers to route the call for them through their national network. Therefore, the quantity and direction of trade is not really influenced by country comparative advantages. Comparative

⁵⁷ Dunning (1989) provides a neat analysis of the FDI or trade decision for services.

⁵⁸ Naturally there are some high weight/low value goods where transport costs become too prohibitive for trade to take place and physical proximity is the over-riding requirement. However these are in the minority unlike services where these are in the majority.

advantage may only influence the volume of calls through the price of telecommunication services⁵⁹. The only scope for Ricardian-based trade lies in the international routing of calls between countries⁶⁰;

- *Financial services* - outside of the major international financial centres such as London, a significant amount of exports of financial services depends on the flow of capital and investment in and out of a country. Services rendered to international clients are not possible without this flow of international capital. Therefore, nations which attract international capital will export considerable financial services and this will not be based on any particular comparative advantage in providing financial services;
- *Business travel* - unlike with goods and other services, different travel destinations are not always substitutes for each other. This is especially true of the large business travel industry where the destination is determined by business needs and not the relative cost of travel⁶¹.

With the addition of these influences on international trade in services, the theoretical foundations for analysis of services trade have been laid. It remains for the next section to reveal the actual patterns of trade and to see if this conforms to the models discussed in this section. This process is assisted by the work in section 1.2 which uncovered the characteristics of different services, and section 2.3 which broke down the product structure of international services trade.

2.4.2 The Regional Structure of Trade in Services

A breakdown of the share of world goods and services trade by development status and region appears in *table 6*. The most defining features of the export and import shares of the different regions and development levels are listed below. An analysis of these trends follows their listing.

1. *Industrial country domination of exports* - industrial countries accounted for three-quarters of all services exports in 1994. This is a greater level of domination than industrial countries display in goods trade where they accounted for 69.5% of exports in 1994. However, as with goods trade, this domination is decreasing as they accounted for 79.1% of services exports in 1988;

⁵⁹ The extent of this influence will depend on the price elasticity of telecommunication services.

⁶⁰ Note that this argument does not depend on the national providers being publicly owned or even operating in a monopoly and so the liberalisation of telecommunications should not influence these trends. They will influence the amount of FDI and associated income within countries.

⁶¹ The exception to some extent is of course the international conference industry.

2. *Industrial country domination of imports* - in 1994 industrial countries accounted for 72.3% of all services imports which was down slightly from 75.1% in 1988. However, this decrease in import share was less than half the decrease in import share experienced in goods trade and the overall dominance is greater than with goods trade;
3. *Trade balances of different regions* - industrial country regions all have positive trade balances in services trade except for those in the Asia region⁶². This region has the largest trade deficit of all and it can be attributed almost entirely to Japan which had a services trade deficit of US\$50 billion in 1994⁶³. Also of interest is that all developing country regions have negative services trade balances with the exception of the developing countries in the European region. Not only have these countries consistently shown a surplus throughout the 1980's and 1990's, but the surplus is the highest when measured as a percentage of total trade (21%);
4. *A decreasing trade share for Africa and the Middle East* - it is expected that the import and export share of industrial countries will diminish over time as other countries develop, yet Africa and the Middle East are the only developing regions which have seen their share of both exports and imports decrease over the period 1988 to 1994. Both regions have seen their service trade shares drop by about 20%;
5. *A rapidly increasing trade share for developing Asia* - the Asian developing countries have seen their share of service exports and imports increase by an incredible 43% and 51% respectively. The next highest increase was in the developing countries of the Americas which experienced only an 8% increase in export share and a 5% increase in import share.

An analysis of the trends in regional shares of services trade is informed by knowledge of the mix of service products traded, the characteristics of these products, the endowments of different regions and a suitable trade theory. From the discussion in section 2.3, it is known that services trade is dominated by producer services (66.3%) and international travel (29.1%). From the discussion in chapter one, it is known that producer services are more capital- and skill-intensive than all other economic sectors except utilities. International travel, as part of consumer services, is the opposite and displays the characteristics of high labour intensity and low skill requirements. What both service types have in common is a high income elasticity. In terms of country endowments, industrial countries will be well endowed with physical and human capital while the opposite is true of most developing countries (the NICs being the exception).

⁶² The countries which make up this group are Japan, Australia and New Zealand.

⁶³ IMF Balance of Payments Statistics 1995

Table 6: Share of world goods and services trade by development status and region (1988 & 1994)

Category	Services				Goods			
	Exports		Imports		Exports		Imports	
	1988	1994	1988	1994	1988	1994	1988	1994
Industrial Countries ¹	79.1	75.2	75.1	72.3	73.2	69.5	74.6	68.5
Asia	7.4	7.1	12.2	11.6	11.2	10.8	7.7	7.5
Europe	52.6	48.5	45.6	45.8	45.9	42.4	46.0	40.6
Americas	19.2	19.6	17.4	14.9	16.1	16.3	20.8	20.4
Developing Countries	20.7	24.7	24.4	26.7	26.8	30.5	25.4	31.6
Africa	1.9	1.5	3.0	2.4	2.6	2.0	2.3	2.0
Asia	9.1	13.0	8.6	13.0	13.1	18.1	12.8	18.5
Europe	3.2	3.4	2.3	2.2	3.2	2.3	3.1	2.7
Middle East	2.8	2.4	6.3	4.7	3.6	3.5	3.7	3.2
Americas	3.7	4.0	4.2	4.4	4.3	4.6	3.5	5.2

¹ Note that the classification of industrial countries is that of the IMF as outlined in table 4 above.

Source: IMF Balance of Payments Statistics Yearbook 1995

Analysis of Export Shares

Given the service products traded, it is understandable why the industrial countries dominate the export of services to an even greater extent than goods trade. A simple Heckscher-Ohlin analysis would suggest that the industrial countries have a comparative advantage in the production of the producer services component of international trade due to their relative abundance of human and physical capital. As producer services dominate trade, it is expected that industrial countries would have an overall comparative advantage in services trade. This is supported by calculations of revealed comparative advantage measures for different development levels and regions outlined in table 7. The RCA measures have been calculated for services as a whole and for the three key sub-sectors, namely transport, travel and business services⁶⁴. As expected, the industrial countries have a

⁶⁴ It is obviously not useful to calculate a RCA measure for government services as they represent expenditures by embassies and international and regional organisations. These are not marketable products in which countries specialise and trade.

revealed comparative advantage in services as a whole and in the producer services of transport and business services.

Table 7: Revealed comparative advantage measures for services as a whole and for each service category by development status and region (1988 & 1994)

	All Services		Transport		Travel		Business Services	
	1988	1994	1988	1994	1988	1994	1988	1994
Industrial Countries	1.06	1.06	1.07	1.09	1.02	1.03	1.08	1.07
Asia	0.71	0.71	1.10	1.09	0.38	0.34	0.69	0.75
Europe	1.11	1.11	1.05	1.09	1.09	1.04	1.18	1.20
Americas	1.14	1.15	1.08	1.08	1.24	1.40	1.06	0.91
Developing Countries	0.81	0.84	0.81	0.79	0.94	0.93	0.75	0.84
Africa	0.79	0.79	0.87	0.98	1.17	1.15	0.37	0.34
Asia	0.74	0.78	0.62	0.62	0.75	0.72	0.86	0.96
Europe	1.00	1.35	1.26	1.41	1.31	1.75	0.72	1.14
Middle East	0.82	0.74	0.90	0.90	0.55	0.61	1.02	0.76
Americas	0.88	0.89	0.90	0.94	1.41	1.43	0.46	0.45

¹ Note that revealed comparative figures for the service sub-sectors have been calculated comparing the share of trade in that item to the share of total goods and services trade. This method eliminates distortions in the RCA measure which occur if the trade share of each item is compared to the share of total services only. In that case it is impossible to have a revealed comparative advantage in all sub-sectors because in order to have a revealed comparative advantage in one service type, a country must have a revealed comparative disadvantage in another service.

Source: IMF Balance of Payments Statistics Yearbook 1995

However, the usefulness of comparative advantage analysis in explaining trade flows is limited. For one it is only designed to explain the relative specialisations of countries and not their *absolute* trade shares. A case in point is the high RCA measures for developing Europe despite the low absolute shares of this region. In addition, other factors such as increasing returns, geographical proximity, shares of world goods trade and investment, and absolute stocks of factor inputs, may well dominate over comparative advantage considerations. The case in point here is the measured comparative

advantage of the industrial countries in international travel. This sector is low capital- and skill intensive - characteristics which suggest a comparative advantage for developing countries.

The reason why industrial countries have a high absolute share of world services trade is due in most to their dominance of world goods trade and investment (most of which occurs between themselves), their close geographic proximity to the major markets for international services (i.e. each other)⁶⁵, and their large share of the world stock of human and physical capital (the important factor inputs for services production). The important influence of these factors in explaining absolute trade flows can be demonstrated within the travel industry. Industrial countries will dominate the business component of the travel market because the vast majority of goods and services trade and production takes place in and between industrial countries. Within the tourism component of the market, some competitive advantage stems from the close proximity to the major consumers of tourism, namely the citizens of industrial countries. This locational advantage is an important factor for the European industrial countries in particular⁶⁶. Also the extent of tourism infrastructure (i.e. physical capital) will determine the production capacity of each country. This infrastructure, and hence capacity, is far more extensive in the industrial countries. A final influence is, of course, consumer preferences because different locations are not perfect substitutes. The combination of these factors has resulted in Europe and the Americas being the most popular international travel destinations, hence dominating world travel services. Europe accounted for 59.5% of arrivals and the Americas 19.7% of arrivals in 1995⁶⁷.

The decline of the industrial country share of world services trade can be attributed almost entirely to the gains made by the developing Asian economies. The same factors that explain the high share of services trade by industrial countries can explain the rising share of the Asian developing economies. Firstly, the developing Asian countries are rapidly increasing their share of world goods trade (13.1% to 18.1% from 1988 to 1994) and investment. This increasing share of international flows has boosted service exports associated with these flows (e.g. business travel, financial services and communication services). Secondly, the rapid increase in output and household incomes within the Asian region has given the Asian countries a locational advantage in servicing this large and growing

⁶⁵ This applies mainly to the European industrial countries which accounted for almost 50% of international service exports in 1994.

⁶⁶ This is also a major determinant of domestic tourism within each country, which is of course not reflected in international travel figures.

⁶⁷ WTO statistics quoted in Satour, (1996:1). Note that although these figures do include the developing countries in these regions, the industrial countries do dominate the arrivals.

component of international service consumers (this includes private households, business firms and governments). Thirdly, the rapid growth of the Asian economies combined with huge investments in the human capital of the region, have increased the region's share of the world stock of physical and human capital. This has both increased the capacity of service production in the region and shifted the relative specialisation of the region towards services. The shift in specialisation is evident from an increase in the RCA measure from 0.74 to 0.78 between 1988 and 1994.

Another region to experience rising trade shares and increasing specialisation (as measured by the revealed comparative advantage) is developing Europe. Although developing Europe has experienced an absolute decline in both output and goods trade share⁶⁸, its services trade has benefited from its close geographical proximity to industrial Europe, its strong human capital base and its increasing integration into the world trading system since the demise of the Cold War. Developing Europe's RCA measure for services is the highest of all regions and has increased the most significantly since 1988. This is best explained through the poor performance of the manufacturing sector in ex-Eastern bloc countries which effectively collapsed when exposed to international competition. This poor performance has resulted in an exaggerated relative performance of their service sectors. This is evident from the low absolute trade share of services trade for developing Europe.

Finally, the African region has experienced the largest decline in its share of world trade. In the period 1988 to 1994, Africa has not only failed to make large investments in the human capital of the continent, but has also failed to accumulate significant amounts of physical capital through either domestic investment or attracting foreign capital to the continent. This has resulted in a drop in its share of the world stock of these factor inputs. In addition, Africa's has a small and declining share of world output and goods trade which has meant a minimum amount of services trade generated either through goods trade and investment or through close proximity to large regional markets.

Analysis of Import Shares

The import shares of different countries can be explained almost entirely by the relative income levels and degree of integration in world trade and investment. As discussed in chapter one, producer services and international travel are highly income elastic. The significantly higher income levels of

⁶⁸ Output has declined in the former Eastern bloc countries as they adjust to market economies. The decline in world trade shares is evident from table 6.

the industrial countries mean that they will consume the lion's share of world services trade. In addition, the extensive amount of goods trade and investment between themselves, means that they will be major importers as well as exporters of international services. To understand the slight decline in the industrial countries' share of service imports, the relative performance of this group of nations must be examined. The Asian developing countries have experienced greater incomes growth amongst a large population. In addition, they have increased their share of world trade and investment. This has resulted in their rising share of world imports of services at the expense of the industrial countries. Their share of world service imports rose from 8.6% in 1988 to 13.0% in 1994.

However, the main decline in the industrial countries have been in industrial Asia (mainly Japan) and industrial Americas (the USA and Canada). Japan's decline can be linked to its economic slump which has continued throughout the 1990's. However, the large drop in the import share of the USA and Canada is not immediately obvious because they have maintained average GDP growth rates throughout the period in question. This drop in import share may be attributable to both locational and domestic market factors. The Americas do not have a very close geographic proximity to the other large exporter of services, namely Europe. This will influence the ability of European service providers to penetrate the Americas market from a distance and will also influence them to choose FDI in preference to trade in services. The size of the Americas market will also push service providers from around the world in the direction of having a physical presence in the market due to the large potential gains. Another region where import shares have dropped considerably is Africa. However, Africa's decline can be explicitly linked to income growth which has been particularly poor and below the world average. This has resulted in Africa's share of imports to decrease by 20% from 1988 to 1994.

Distribution of Product Shares in Imports and Exports

Another means to examine the competencies of services production by different development levels and regions is to examine the share of different service items in the export and imports of services. *Table 8* outlines these shares for different regions and development levels. An analysis of each region is very instructive as to where their relative strengths and weaknesses lie within services trade.

The industrial countries as a whole have a similar share spread for exports and imports suggesting a similar competency in all services. On a regional basis, the Asian industrial countries perform badly in the export of travel services and derive a greater proportion of export earnings from transport. This trend can be linked to their low share of world tourism and their remarkable performance in goods trade to which transportation services are linked. Surprisingly, industrial Americas have a relatively low export share for business services (category 'other') which is compensated for by a higher share in travel. A similar trend occurs in their imports of services. This supports the hypothesis put forward earlier that a large part of exports or imports of these services occurs through FDI as the Americas are not geographically close to the other big industrial country markets.

Table 8: Breakdown of trade shares of service items in the exports and imports of services by development status and region (1994)

Category	Exports				Imports			
	Trans- port	Travel	Govt.	Business	Trans- port	Travel	Govt.	Business
Industrial Countries	23.3	28.2	4.8	43.7	26.3	29.7	3.2	40.8
Asia	35.0	14.0	4.8	46.1	31.6	28.0	1.1	39.3
Europe	22.3	27.4	3.2	47.1	24.8	28.6	2.2	44.5
Americas	21.3	35.5	8.8	34.4	26.9	34.3	8.2	30.6
Developing Countries	21.3	32.2	3.4	43.1	32.7	21.8	5.9	39.7
Africa	28.2	42.4	10.9	18.5	40.2	19.3	9.5	30.9
Asia	17.9	26.7	1.8	53.5	34.2	20.4	2.0	43.4
Europe	23.8	37.9	1.6	36.8	27.2	23.2	3.4	46.3
Middle East	27.7	23.8	4.2	44.3	22.1	17.0	17.7	43.2
Americas	24.2	47.1	6.6	22.2	38.0	31.5	3.7	26.8

Source: IMF Balance of Payments Statistics Yearbook 1995

In comparison to the industrial countries, travel services make up a greater proportion of exports in developing countries (at the expense of transportation) and transport services take up a greater share of imports (at the expense of travel). This is indicative of their relative factor endowments and income levels. Travel services are the least capital and skill intensive and so one can expect a

relatively better performance in this sector. In fact, even in the highly capital-intensive sector of transportation, developing countries gain a greater proportion of their export earnings from the less capital-intensive parts of the industry compared to industrial countries. This is evident from *table 9* which shows a higher proportion of their transportation exports is attributable to the port, landing and handling fees charged to incoming ships and planes which are grouped under the category 'other'. Not only are these the least capital-intensive part of the transport industry but they are also the monopoly of the country in which the goods move in or out. In terms of imports, developing countries import proportionally more from the highly capital-intensive transportation sector and import less of travel services. The capital-intensive nature of transportation limits the production and competitiveness in developing countries forcing them to import more. In fact, as *table 9* demonstrates, they import proportionally more of the most capital-intensive component, namely freight transport, compared to industrial countries. The low household incomes in developing countries will limit the extent to which international travel is affordable and so limit the share of travel in total imports.

Table 9: Breakdown of trade shares of services categorised under transportation by development status (1994)

Transport type	Industrial Countries		Developing Countries	
	Exports	Imports	Exports	Imports
Passenger	23.6	21.2	19.9	9.2
Freight	50.0	47.7	50.5	68.1
Other	26.4	31.1	29.7	22.8

Source: IMF Balance of Payments Statistics Yearbook 1995

On a regional level, the developing regions of Africa, Europe and the Americas derive considerably more of their export earnings from travel. This is mainly at the expense of exports of business services. The opposite is true of the Asian developing countries and is reflective of the stronger stock of human and physical capital of the Asian countries in comparison to these other regions which are relying more on traditional sources of comparative advantage. The weaknesses of developing Africa and the Americas and the strength of developing Asia is also reflected in the breakdown of imports of services. Africa and the Americas import proportionately less business services than the other developing countries and import proportionately more transport services.

What is interesting is that for developing countries as a whole, business services make up a similar share of exports and imports in comparison to the industrial countries. However, the mix of business services exported and imported by industrial and developing countries differs significantly. This is shown in *table 10* below which provides a breakdown of the shares of different items under business services by development status. This table was derived using the same sample used to construct parts of *table 5* and so the same caveats listed there apply here. Of particular concern is the accuracy of data for developing countries where the sample comprises of only 18.3% of exports and 18.7% of imports (compared to 67.8% and 65.3% respectively for industrial countries) and which show an exceptionally high proportion of the residual item 'other business services'.

Table 10: Breakdown of trade shares of services categorised under business services by development status (1994)

Category	Industrial Countries		Developing Countries	
	Exports	Imports	Exports	Imports
Communication	2.8	5.5	5.0	4.3
Construction	7.4	5.5	11.4	1.9
Insurance	6.5	7.7	3.7	5.9
Financial	9.0	9.7	3.7	5.2
Computers & Information	0.6	1.0	0.1	1.0
Royalties & License Fees	13.9	9.1	1.2	4.5
Other business services	58.1	59.7	66.3	71.6
Personal, cultural, recreational	1.7	1.8	8.7	5.6

Source: IMF Balance of Payments Statistics Yearbook 1995

Given these data problems, it is not useful to read too much into the developing country breakdown. However, it is noticeable that developing countries export a proportionately greater amount of the more labour-intensive construction services and recreational services. In comparison, the industrial countries export more of insurance and financial services and the technology-intensive royalties and license fees. As a considerable amount of word services trade takes place between industrial

countries, it is not surprising that a sizeable proportion of their imports are also very capital, skill and technology intensive. The most noticeable differences in shares between imports and exports lies in the very technology-intensive royalties and license fees where industrial countries have a greater proportion of exports and developing countries a greater proportion of imports. Another outstanding feature is the very low share of construction services in developing country imports compared to the industrial countries - a reflection of their relative comparative advantage in this sector.

Chapter 3

South African Trade in Services

This chapter provides a macro analysis of South Africa's trade in services. The first section lays the necessary groundwork by assessing the different service trade data available on South Africa and performing the task of creating a reasonably accurate time series. The next section examines the size and growth of services trade over the past 15 years. It also analyses the forces behind the growth of services and compares the performance to world averages. Section three attempts to break down the product structure of the flow of services in and out of the country. Despite the problems stemming from a lack of good data, some more or less reliable estimations are provided. Section four suffers even more from a lack of data in its attempt to determine the regional shares of South African services imports and exports. However, some estimates and alternate proxies are provided which give a good impression of the direction of trade. In the last section there is a rudimentary macro analysis of the competitive performance of the South African services sector. This section also makes use of performance levels of other countries with similar economies to South Africa in order to provide some means of measuring the potential competitive advantage of South Africa.

3.1 South African Service Trade Data Issues

It was observed in the last chapter that the only source of services trade data, aside from individual surveys, is the Balance of Payments. However, it was also observed that the definition of services trade has changed recently with the introduction of the fifth edition balance of payments manual (BPM5) from the IMF. Unfortunately, the South African Reserve Bank (SARB) is still making use of the fourth edition guidelines (BPM4) which not only makes their presentation of services trade inconsistent with the IMF, but more importantly, definitionally incorrect.

The differences between BPM4 and BPM5 are presented in figure 1 below. The first noticeable difference between the two methods is that BPM5 has separated the service and income account into two separate accounts in the balance of payments. However, this is merely a presentational change and does not alter what is considered a service or an income item. The primary difference in the definition of service trade between the BPM5 and BPM4 is the classification of the income of foreign workers. Under BPM4 this was classified as a services trade item under the category 'other services'. However, under BPM5 foreign worker income has been classified as part of the income account in the balance of payments under the new category 'compensation of employees'. Hence it is no longer considered part of services trade. This change is theoretically sound because a foreign worker salary is individual labour income which is not considered an economic service by Hill's definition⁶⁹.

Figure 1: A comparison of service item classifications under BPM4 and BPM5

BPM4	BPM5
<p>Services & Income Account</p> <ul style="list-style-type: none"> • Transport <ul style="list-style-type: none"> – freight & merchandise insurance • Travel • Other Services <ul style="list-style-type: none"> – foreign labour expenditures – foreign labour income • Investment Income 	<p>Services Account</p> <ul style="list-style-type: none"> • Transport • Travel <ul style="list-style-type: none"> – foreign labour expenditures • Other Services <ul style="list-style-type: none"> – merchandise insurance <p>Income Account</p> <ul style="list-style-type: none"> • Investment Income • Compensation of Employees <ul style="list-style-type: none"> – foreign labour income

There is also one significant re-classification of a service item within the services account under BPM5. Foreign worker expenditures have been moved from the category 'other services' to be included under the travel item. The rationale is that like any other traveller, these workers are temporarily located in the country and so all expenditures are considered travel expenditures. The only other re-classification of a service item is the separation of freight and merchandise insurance in

⁶⁹ As discussed in the first chapter, Hill defines services as occurring between two economic entities and so internal labour and capital services are excluded from the measurement. Hill, T.P, (1977), pp. 318-9.

order to move the merchandise insurance component across to the category 'other services' where it logically belongs.

Although these changes may appear insignificant, they have an enormous impact on countries which make use of large numbers of migrant workers. The large number of migrant workers on the mines in South Africa, means this change will influence the service trade figures of South Africa, Lesotho, Swaziland and Mozambique quite significantly. To give an idea of the size of this item, South Africa's payments for foreign worker salaries reached \$1.1 billion in 1990 before coming down to around \$660 million in 1994⁷⁰. If included under services, this item would represent 10.8% of total South African service imports and 89% of total Lesotho service exports in 1994⁷¹.

Therefore, in order not to allow this item to distort the true picture of service trade in South Africa, data presented for South Africa should comply with the BPM5 approach to services trade classification. Usually this would just involve the use of the IMF data on South Africa which is sourced from the SARB before being adjusted to the new definition. However, a problem arises with the service item 'foreign worker expenditures'. Migrant labourers into South Africa are paid a proportion of their salary in South Africa which is then spent there and a proportion is remitted to their home country⁷². However, the proportion paid in South Africa is paid in Rands and does not go through the balance of payments. Therefore, both the IMF and SARB balance of payments figures need to be augmented by data on foreign worker expenditures in South Africa. The IMF presentation attempts to do this by adding foreign worker expenditure estimates to the travel item. However, in order to keep the overall flow of foreign exchange correct, the IMF moves the expenditure amount out of 'other services' into travel, thereby lowering the value of this item below its true value.

This thesis is concerned with determining the true extent and nature of services trade in South Africa and not maintaining the level and balance on the services account on the balance of payments. Therefore, for the purpose of analysing services trade, a new time series was developed using the SARB data as a basis. From this basis the following adjustments to the data were done:

⁷⁰ IMF Balance of Payments Statistics 1995. The decline of the foreign worker salaries is tied into both the gradual decline of the mining industry in South Africa and the move to employing less migrants.

⁷¹ Calculated from data sourced in IMF Balance of Payments Statistics 1995

⁷² A survey by The Employment Bureau for Africa (TEBA), the recruitment organisation for the Chamber of Mines, estimates that 57% of the total salary of a migrant labourer on the South African mines is remitted to the home country. Penny, N, (1986)

- the value of foreign worker expenditures as estimated by the IMF were added to the travel account;
- the value of foreign worker income was removed from the 'other services' account and placed under the income account;
- merchandise insurance was moved from the transportation account to the 'other services' account.

These changes align the data with the new BPM5 definition of services trade and should therefore be a true reflection of the value and nature of services trade in South Africa. Fortunately, with exchange controls in place, all major transactions should be accounted for and so the overall data should be reasonably accurate.

3.2 Size and Growth of South African Services Trade

South African trade in services has experienced fluctuating fortunes over the past 15 years, as with the rest of the South African economy. As outlined in *table 11* below, both the export and import of services experienced negative growth in the first half of the 1980's, saw a rapid increase in the late 1980's, before slowing down in the first half of the 1990's. This general trend applies equally to the goods trade and is based on the underlying and fluctuating fortunes of the South African economy over the period. The S.A. economy peaked in 1981 on the back of an extremely high gold price before going into a nose-dive driven by disinvestment and sanctions. The economy bottomed out in 1985 having experienced an average annual dollar shrinkage of 7.3% from 1980⁷³. In the late 1980's the economy improved, being driven in part by increased exports which were promoted to cover the capital account deficit. The economy recovered to its previous level by 1988 and recorded an average annual dollar growth rate of 12.3% for the period up to 1990. The first half of the 1990's saw slow GDP growth of 3% in dollar terms which is in part due to the enormous uncertainty during the lengthy negotiations to bring about democratic elections in 1994. These factors have determined the underlying trend in the trade performance while other factors have determined the relative performance of specific sectors around the trend.

⁷³ GDP data from the South African Reserve Bank.

Table 11: Value and growth of South African trade in goods and services (US\$ millions)

	Exports				Imports			
	1980	1985	1990	1994	1980	1985	1990	1994
Services								
Value (\$m)	3,517	2,511	4,395	4,365	4,021	2,517	4,252	5,456
Avg. Growth over period		-6.7	11.2	-0.1		-9.4	10.5	5.0
Share of trade	12.1	13.5	15.7	14.8	18.1	19.6	20.2	20.3
Goods¹								
Value (\$m)	12,540	9,186	16,515	18,700	18,181	10,344	16,775	21,433
Avg. Growth over period		-6.2	11.7	2.5		-11.3	9.7	4.9
Share of trade	43.1	49.3	59.1	63.5	81.9	80.4	79.8	79.7
Gold								
Value (\$m)	13,021	6,940	7,024	6,384				
Avg. Growth over period		-12.6	0.2	-1.9				
Share of trade	44.8	37.2	25.1	21.7				

¹ Excludes non-monetary gold exports

Source: IMF Balance of Payments Statistics Yearbook 1995

Service Exports

South Africa's exports of services have grown at an average annual dollar rate of 1.5% from 1980 to 1994 despite the large shrinkage from 1980 to 1985. This is a poor rate in comparison to world services trade growth of 9.0% and South African goods trade growth of 2.8% for the same period. However, the decline of the gold industry and its exports have allowed services exports to increase their share of total exports from 12.1% to 14.8% during this period. This share of total exports is well below world averages of 21.2% in 1994⁷⁴. The most likely cause of the poor growth performance of service exports in comparison to world averages is the impact of sanctions against South Africa. Sanctions will tend to impact on services trade far more than goods trade because it is more difficult to disguise the country of origin with services, unlike with goods trade. In fact, with

⁷⁴ See table 2 in section 2.2

particular items such as travel it is impossible to do so. In addition, as the share of world goods trade and investment is an important influence on the level of trade for certain services, increasing isolation during the sanctions period would negatively impact trade in these service items. In particular, financial services, business travel and communication services would have suffered.

The hypothesis whether sanctions had a more serious negative impact on South African service exports can be tested to some extent by an assessment of the changing world market shares of South African goods and services and their influence on growth. *Table 12* takes a look at overall export performance from the perspective of world market share and the export orientation of South African production⁷⁵. The world market share of South African service exports dropped 47% from 1984 to 1994, while that of goods exports dropped only 6%. This provides some evidence that sanctions had a more profound impact on service exports compared to goods exports. However, one also needs to account for factors such as the more concerted effort by the state to boost goods exports after 1995 and the dynamic changes in international competitiveness of the sectors⁷⁶. This is demonstrated by the large increase in export orientation in the goods sector (from 30.4% in 1984 to 43.5% in 1994) while the services sector experienced a drop in export orientation (from 9.3% in 1984 to 7.3% in 1994). The impact of this drop in world market share on export levels is dramatic. As *table 12* demonstrates, service export levels are 47.9% lower than what they would be had South Africa maintained its world market share.

However, despite this drop in world market share, the export orientation of the South African service sector at 7.3% of production, is still higher than the world average of 6.6% for 1994. This would suggest that overall export levels are not out of line with world trends and the below average share of services in total exports may be merely due to the strong influence of gold exports.

⁷⁵ The year 1984 was chosen as a comparative year to 1994 because it was before the full brunt of sanctions and was positioned at a similar stage of the business cycle to 1994.

⁷⁶ It can be argued that sanctions also had an impact on competitiveness through isolation from new technologies and products.

Table 12: Share of South African production and the percentage of production traded for goods and services (1980 & 1994)

	Goods excl. Gold	Services
Share of S.A. Production		
1984	42.3	49.6
1994	39.9	55.9
Percentage of production exported ¹		
1984	30.4	9.3
1994	43.5	7.3
World Market Share		
1984	0.49	0.76
1994	0.46	0.40
Source of export growth ²		
% of exports attributable to change in world market share	-7.1	-47.9
Percentage of sales imported ³		
1984	33.6	8.7
1994	33.3	8.3
Source of import growth ⁴		
% of imports attributable to change in market penetration	-0.9	-4.6

¹ This is calculated by dividing exports by total production

² This is calculated by the formula $100 - ((X_{TS} / X_{1994}) * 100)$ where X_{TS} is the value of exports that would have occurred in 1994 if the world market penetration of 1984 applied and X_{1994} is the value of exports in 1994.

³ This is calculated by dividing imports by the sum of imports and domestic production

⁴ This is calculated by the formula $100 - ((M_{TS} / M_{1994}) * 100)$ where M_{TS} is the value of imports that would have occurred in 1994 if the import penetration percentage of 1984 applied and M_{1994} is the value of imports in 1994.

Source: Trade data from the IMF Balance of Payments Statistics Yearbooks 1988 and 1995

Output data from The South African Reserve Bank Quarterly Bulletins 1985 & 1995

Imports

Aside from the slump in the early 1980's, South Africa's imports of services correspond very closely to world averages in terms of growth rates (10.5% vs 11.9% for 1985 to 1990 and 5.0% vs 6.4% for 1990 to 1994) and share of total imports (20.3% vs 21.2% in 1994). However, the root causes of the growth in South African service imports is very different to that of the common world trend presented in chapter two. While 25% of the growth in world trade in services can be attributed to the increasing tradeability of services, the growth in South African imports has occurred on the back of diminishing market penetration by imports. As shown in *table 12*, the percentage of sales imported fell from 8.7% to 8.3% from 1984 to 1994. This drop in market penetration had the effect of dampening import growth to the extent that overall levels in 1994 were 4.6% lower than what they would have been had the level of market penetration been maintained.

This drop in market penetration can feasibly be linked to two causes, namely increasing isolation under sanctions and an improving competitive performance by the South African services sector. As mentioned under the discussion of service exports, increasing isolation during sanctions would negatively impact trade in those services which feed off interaction with the global economy such as financial services, business travel and communication services. This applies equally to imports as well as exports. After eliminating increased market penetration as a source of import growth, it has to be concluded that the strong growth in imports of services from 1984 to 1994 is due to the rapid growth of services production and consumption in South Africa. The service sector grew at an average annual dollar rate of 5.8% from 1984 to 1994, compared to only 3.3% in the goods sector for the same period. This has allowed services to increase its share of total output from only 49.6% in 1984 to 55.9% in 1994 (see table 12).

3.3 Product Structure and Performance of South African Services Trade

An analysis of the product structure and performance of South African services trade is useful for a number of reasons. Firstly, it reveals where are the current strengths and weaknesses within South African services production and trade. Secondly, the potential growth areas in exports can be identified by comparing the current product mix with the expected comparative advantages or

disadvantages of different sectors. Thirdly, the analysis reveals which sectors dominate imports and which should be targeted for development in order to reduce the level of imports.

Table 13 provides a share breakdown of South African exports and imports of services for the years 1988 and 1994. The product breakdown conforms to that used for world services trade in section 2.3 in order to permit comparisons. The main difference is that the travel item has been broken into migrants and non-migrants because they represent an important component of South Africa's travel industry and are central to explaining trends in travel exports. There is also no further breakdown of business services due to a lack of reliable data. Analysis is also supported by table 14 which presents the dollar trade balance, export-to-import ratio and RCA measures for each service item and sub-category⁷⁷.

Table 13: Breakdown of South African service trade into shares of service items (1988 & 1994)

Service Item	Exports			Imports		
	1988	1994	Growth ¹	1988	1994	Growth
Travel ²	42.9	45.0	4.9	28.9	34.0	10.0
Migrant workers	52.8	20.1	-11.2	1.2	0.5	-3.0
Other	47.2	79.9	13.7	98.8	99.5	10.1
Transport	25.5	30.1	6.9	46.8	44.0	6.3
Passenger	24.4	27.4	8.8	13.6	24.4	16.1
Freight	24.6	22.5	5.4	62.2	51.5	3.1
Other	51.0	50.1	6.6	24.2	24.1	6.2
Business Services	31.2	20.4	-2.9	23.3	18.2	3.2
Government	0.5	4.4	41.6	1.0	3.7	28.6
Total	100.0	100.0	4.1	100.0	100.0	7.3

¹ All growth rates are based on dollar values.

² The breakdown of travel into migrants and non-migrants is based on expenditure and not actual numbers of persons.

Source: IMF Balance of Payments Statistics Yearbook 1995

The South African Reserve Bank Quarterly Bulletins 1985 & 1995

⁷⁷ The RCA measure is calculated using the world trade share of an item divided by the overall world trade share of a country. As such it tells us which sectors have a higher world trade share relative to other sectors in the economy. Naturally it is assumed that the basis for this differing shares are the relative factor endowments strengths of the economy.

Product Structure and Performance of Service Exports

The share distribution of South Africa's services exports is quite different from world trends but has a definite similarity to the rest of Africa. This is not totally unsurprising as South Africa's service exports account for 25.6% of total African service exports⁷⁸. In comparison to the world averages, South Africa relies to a much greater extent on the export of travel services which make up 45% of exports compared to 29.2% for the world and 32.2% for the developing world. Transport service exports also make up a larger share of total exports compared to world averages (30.1% compared to the world average of 22.8%). The above average shares of these items is at the expense of business service exports which made up only 20.4% of exports in 1994. This distribution of trade shares is in line with, and to some extent a reflection of, the relative factor endowments of South Africa. Exports are dominated by the labour- and low-skill intensive travel sector with the lowest share being in the capital- and high skill-intensive business services sector. A more detailed discussion of each category appears below.

Travel Services. At the highest level of aggregation, travel services is the only sector to demonstrate a revealed comparative advantage (i.e. a RCA measure greater than one). *Table 14* shows that in 1994 the RCA measure was 1.08. The share of travel in the services account has always been significant because of the expenditure of migrant workers. Although the tourism industry suffered during the apartheid years, the expenditure of migrants helped maintain the high level of travel expenditure during this period. As *table 13* shows, migrants accounted for just over half of the foreign travel receipts in 1988. However, the decline of the gold mining industry and restrictions on the number of migrants on the mines has led to a decline in this source of expenditure⁷⁹. This has been more than compensated for by the rapid growth of the South African tourism industry since the beginning of transformation in 1990. The non-migrant travel expenditures have increased at 13.7%, making it the second fastest growing item over this period after government services exports. It is this growth in tourism that has helped to marginally increase the share of travel in total exports from 42.9% to 45.0% during the period 1988 to 1994. However, as demonstrated in *table 14*, this item still has a negative trade balance with an export-to-import ratio of 84.9%. But with such a growth rate, it is expected that this item will move into a positive balance in the near future.

⁷⁸ Calculated from IMF Balance of Payments Statistics 1995. This figure is slightly misleading as data for some African countries does not exist, therefore boosting the share of those countries which do provide data to the IMF.

⁷⁹ In the late 1980's there was a drive to increase the proportion of South African workers on the mines at the expense of migrants. See Cooper, C (1995)

Table 14: Measures for the assessment of South African export performance (1994)

Trade Item	Trade Balance (1994, \$m)	Exports as a % of Imports		RCA Measure ¹	
		1988	1994	1988	1994
Services	-1,091	96.9	80.0	0.67	0.70
Travel	+106	143.9	94.6	0.98	1.08
Migrant	+385	6441.7	3950.0	n/a	n/a
Other	-279	68.7	84.9	n/a	n/a
Transport	-1,087	52.8	54.8	0.66	0.93
Freight	-941	20.9	23.9	0.33	0.42
Passenger	-226	95.1	61.5	0.75	1.12
Other	+79	111.0	113.8	1.19	1.71
Business Services	-104	129.4	89.6	0.54	0.33
Government	-6	44.4	97.0	n/a	n/a
Merchandise	-2,733	81.5	87.2	0.68	0.81
Gold ²	+6,384	n/a	n/a	45.96	45.25

¹ Note that revealed comparative figures for the service sub-sectors have been calculated comparing the share of trade in that item to the share of total goods and services trade.

² The RCA measure for the gold sector was calculated using world imports of non-monetary gold as reported by the IMF. The reason that exports were not used is that some of the main gold exporters (e.g. the former Soviet bloc) are not reported in the IMF BoP statistics.

Source: IMF Balance of Payments Statistics 1995 & South African Reserve Bank Quarterly Bulletins

Another way to analyse travel exports is to break them down into business and personal travel as stipulated under the BPM5 guidelines. If this is done, then in 1994 business travellers accounted for 19.6% of all foreign arrivals⁸⁰. Although these statistics represent arrivals rather than spending, the share of spending should be similar. This is because, as Satour surveys show, although business travellers spend more, their length of stay is less which tends to equate overall spending⁸¹. The remaining 80% of personal travellers were made up of the following: 67.4% were holiday makers,

⁸⁰ Calculated from CSS Tourism and Migration Statistics, 1996

⁸¹ In the 1996 survey of air travellers by Satour, business travellers made up 36% of foreign arrivals and 34.5% of spending.

0.8% arrived for study, 1.8% arrived for work, 4% were contract workers, and 6.4% were either in transit or on border concessions⁸².

Government services. These services have been the fastest growing item on the export account, increasing at an incredible 41.6% from 1988 to 1994. However, this has been due to the expansion of foreign embassies and representation in international organisations following the transformation to a democratic and internationally acceptable state. This can be seen by the extremely low share of government services in 1988 and its expansion to a level which is in line with international averages (the average world share of government services in total service trade is 0.1% higher than South Africa at 4.5%). This growth is expected to taper off in line with world trends once all these foreign relations have been re-established.

Transportation Services. The only other service item to experience a growth in its share of exports is transportation services which grew from 25.5% to 30.1% of exports. The overall growth rate of 6.9% is the highest of all non-government services at that level of aggregation and this relatively good performance is reflected in the high jump in the RCA measure from 0.66 in 1988 to 0.93 in 1994 (see table 14). Despite this seemingly good performance, the negative balance of \$1,087m accounts for almost all of the deficit on the services account of \$1,091m. In addition, the export-to-import ratio remains more or less unchanged in the low 50 percents and is the lowest of all sectors by a huge 30% margin.

The fastest growing component of transportation services is passenger services, which is an indication of the rapid growth of international tourism and business travel to South Africa. In fact, growth has been so rapid that the national carrier, South African Airways, has been forced to concede market share to foreign carriers in order to cope with demand. This has caused the share of exports in total international passenger services to and from South Africa to drop from 48.7% in 1988 to 38.0% in 1994⁸³. However passenger transportation forms only a small component of the total trade in this category. The dominant item is freight transport where South Africa has an extremely low RCA of 0.42 in 1994. This poor rating is reflected in the large negative trade balance of \$941m in 1994 and an extremely low export-to-import ratio of 23.9%. Other transportation services (i.e. port and handling fees) forms just over half of South African exports in this item which

⁸² CSS Tourism and Migration Statistics, 1996

⁸³ Calculated by dividing exports of passenger services by total trade in passenger services. Data from IMF and SARB balance of payments data.

is a reflection of the lack of foreign competition in this sector. Local port and handling services have to be performed on South African soil and therefore foreign competition is non-existent⁸⁴. It is also assisted by the operation of a central port and rail network through which much of the trade from other Southern African countries is directed. The dominance of this component demonstrates further the weakness of South Africa in the highly capital-intensive transportation sector.

Business Services. The poorest performing sector over the period 1988 to 1994 was business services. Business service exports experienced negative growth and has seen its share of total exports diminish from 31.2% to 20.4%. This contrasts dramatically with world trends where business services is the fastest growing item of services trade and has an average share of total trade of 43.5%. However, this is in line with African trends where business services make up only 18.5% of total service exports⁸⁵. This poor performance is reflected in an extremely low and dropping RCA measure of 0.33 in 1994. This suggests South Africa has a severe comparative disadvantage in this highly skill-intensive sector.

However, this poor export share and performance may also be linked to a general lack of trade in business services by South Africa due to geographical and isolationist reasons. South Africa is an isolated country whose main regional market, Southern Africa, has the lowest GDP and GDP/capita levels in the world and an extremely low and dropping share of world goods trade⁸⁶. Therefore, in the region where South Africa has an inherent competitive advantage, demand for income elastic business services is extremely low. In other regions, South Africa faces a geographical constraint which will force it to adopt a stronger FDI approach to the international sale of services. Therefore, the demand for services in the Southern African region will have a significant influence on the performance of South African business service exports. An indicator of the lack of demand in this region is reflected in the fact that Africa as a whole accounted for only 2.4% of world service imports in 1994⁸⁷. This hypothesis is supported by the fact that the overall trade deficit in business services in 1994 was very low (\$104m) and the export-to-import ratio high at 89.6%.

⁸⁴ Foreign implies foreign resident and not foreign ownership.

⁸⁵ See table 8

⁸⁶ In 1994 sub-Saharan countries made up all of the 10 poorest countries and 31 of the 50 poorest countries in the world in terms of per capita income (World Bank World Development Report 1996). Also, in 1994, Africa as a whole only accounted for 2% of world trade (IMF Balance of Payments Statistics 1995).

⁸⁷ See table 6

Attempting to break down the business service exports into the different categories listed in the IMF BPM5 guidelines is currently not feasible without an extensive survey. The data that does exist is incomplete and sometimes misleading. For instance, data on insurance services is available in both the IMF and SARB statistics, but these are presented on a gross basis - i.e. premiums only - while the true measurement should be on a net basis - i.e. premiums less claims. The only data that is reasonably accurate is that of royalties and some telecommunications. In 1994, royalty and license fee exports were valued at \$51 million, which is 5.7% of total business service exports. In the same year Telkom reportedly earned \$370 million in international telecommunications revenue, which represents 41.5% of total business service exports for that year⁸⁸. This share of telecommunications is incredibly high in comparison to the estimated 4.2% world average presented in table 6. Part of this above average performance could be attributed to the considerable amount of routing that is done for other sub-Saharan countries. However, it is mostly a reflection of the poor performance by other business services rather than exceptional telecommunication revenues.

Product Structure and Performance of Service Imports

The share distribution of different service item imports for South Africa is very different to most regions of the world yet displays some similarities to the developing economies in the Americas. The item with the largest share is transportation services which accounted for 44% of imports in 1994. This is similar to both Africa (40.2%) and the developing Americas (38.0%) and is a reflection of the extremely capital-intensive nature of this service, a factor of production which is relatively scarce in both continents. The share of travel service imports in South Africa, at 34%, shows a greater similarity to industrial countries (average 29.7%) than to developing ones (average 21.8%). Finally, the purchase of foreign business services forms an extremely small share of total imports at 18.2% in 1994. A discussion of each trade item follows below.

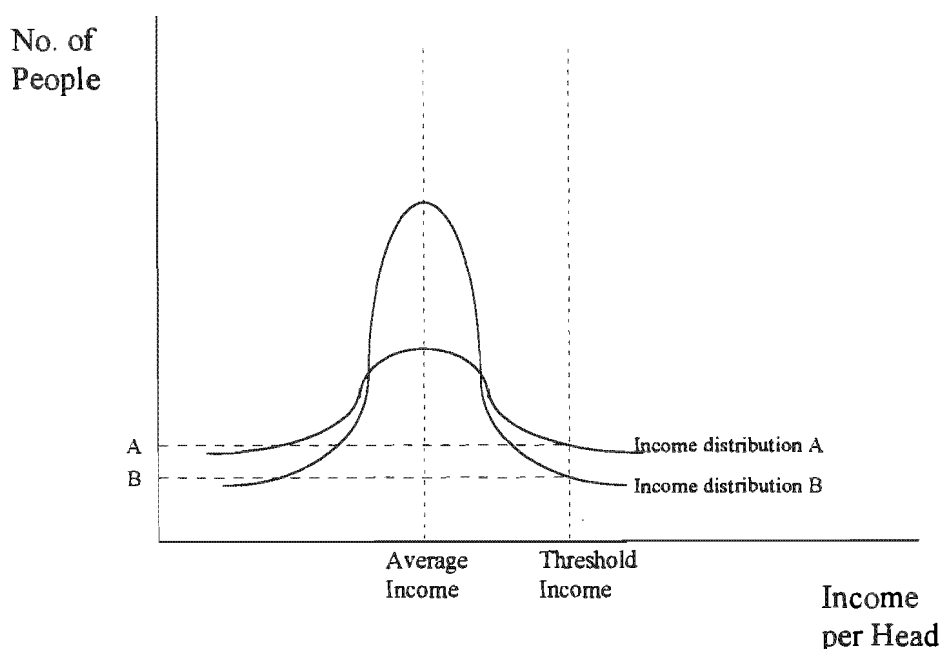
Transportation Services. The dominant transportation import is the highly capital-intensive freight transportation services. What is heartening is that the growth of imports in these services is lower than the growth of exports which is helping to diminish the trade imbalance on this item. Passenger transport has been the fastest growing component of transportation imports which is both a result of increased travel to South Africa (business and personal) and the increased market share of foreign carriers on South African routes. This latter development is, as mentioned above, partly because of

⁸⁸ Telkom revenue data sourced from BMI-Techknowledge Communications Handbook 1995

the inability of the national carrier SAA to respond to such a sudden surge in demand, but also because as new routes are opened in response to new demand, traffic is shared between the national carriers of the two countries.

Travel Services. South Africa has a higher share of total imports in travel than other poorer African countries because of the income elasticity of this product. However, to have such a high share of total service imports is also a reflection of the highly unequal income distribution within South Africa. When a country's average income is very low, then total demand for luxury goods and services like international travel will tend to be higher with a skewed income distribution than with a more equal income distribution. This is illustrated in figure 2 below where it is clear that the number of people above the threshold income required to demand this service is higher with the more unequal income distribution A than with the more equal income distribution B. This will cease to be the case when either the average income level increases sufficiently or the minimum threshold income decreases sufficiently. The impact of the unequal income distribution on the share of travel services in service imports is also apparent in the Latin American countries where the share is close to South Africa's at 31.5%⁸⁹.

Figure 2: A illustration of total demand for tourism services under different income distributions



⁸⁹ See table 8

Breaking the travel item into business and personal travel as stipulated in the BPM5 guidelines is not possible for South African tourist departures because the data is not available. What is available is the breakdown for air departures which only represented 29.4% of all travel departures in 1995. Nevertheless, these figures show that 29.8% of departing South African citizens were travelling for business purposes. However, this measure will overestimate the business component of travel as it excludes almost all of the non-air travel to Southern Africa of which a larger proportion is for holiday purposes.

Business Services. The final defining feature of South African service imports is the incredibly low share of business services at only 18.2%. If it is accepted that a sizeable proportion of business service trade is determined by geographical proximity and levels of interaction in the world economy, then this low share is understandable. Countries with close geographical proximity to South Africa have business services sectors which are not competitive with South Africa's, and hence have negligible penetration of the South African market. Those countries which are competitive with the South African business services sector are sufficiently far away to limit their penetration of the South African economy from a trade perspective. This is not to say that penetration of the market through direct investment has not occurred in the South African economy but just not through trade⁹⁰. Therefore, based on geographical proximity arguments, one should expect low import penetration of South Africa's business services sector. In addition to these arguments, the lack of integration in the world economy due to the isolation from sanctions would have an impact on levels of certain business services such as financial and communication services. Finally, one can argue that South African business services are not only internationally competitive but have also benefited from high protection levels (e.g. in financial and telecommunication services) which have limited import penetration.

⁹⁰ This alternative route to penetrating the market seems apparent in the IT industry where the distance to Europe and the USA makes servicing the S.A. market from there impossible, especially for emergency support. Therefore all the major international IT professional services firms have associate firms based in South Africa. (see Hodge & Miller, 1996)

3.4 Regional Structure of South African Services Trade

The share of South African services trade with different regions of the world is important for an understanding of services trade and for informing the policy process. Unfortunately, public data on the exact regional share distribution of exports and imports for different services items trade is non-existent. This implies that either extensive surveys of firms engaged in services trade is performed or proxies are found for these trade shares, imperfect as they may be. The latter approach has been taken and what follows is an attempt to map the regional shares of trade for the three main service trade categories, namely travel, transportation and business services.

3.4.1 Travel Services

The travel sector is the most publicly researched service trade item in South Africa due to the importance of the industry for foreign exchange, employment and income, and the fact that part of the responsibility for marketing the sector lies in the public domain⁹¹. Unfortunately, most of the research efforts have understandably concentrated on the export of travel services (i.e. foreign arrivals in South Africa) and very little is readily available on the import of travel services (i.e. international travel by South Africans).

For the export of travel services, the best proxy for the share of world regions is to examine the regional breakdown of all foreign arrivals in South Africa. This data is presented in *table 15* for each world region. However, this data is an imperfect indication of regional shares as it reflects the numbers of persons and not the total spending for each region. The average spending per day will vary by region of origin and by the purpose of the visit. In addition, the proportion of travel which is business or personal will vary by region. For instance, in the summer 1996 survey by Satour of foreign *air* arrivals, it was found that visitors from Africa spent on average R610 per day, compared to R578 for Far East Asia, R500 for North America and R435 for the United Kingdom⁹². The same survey of air arrivals found that business travellers spend on average R723 per day compared to R593 for holiday makers and R309 for those visiting friends and relatives. Unfortunately, this data

⁹¹ Most often one is marketing the country itself or a region within the country rather than a particular holiday resort, etc. In this case, as no one tourism operator can be excluded from reaping the benefits of such an exercise, the responsibility for the function lies in the public domain. Hence the public funding of Satour.

⁹² Satour (1996:2)

exists for air travellers only and no data is available for those who arrive from other African countries by rail or road which account for 70.6% of all arrivals⁹³.

Table 15: Regional breakdown of South African foreign arrivals and departures by residents (1995)

Region	All foreign arrivals (%)	Departures by S.A. residents (%)¹
Africa	73.7	78.6
Europe	15.4	10.2
Americas	3.4	3.2
Asia	3.4	4.7
Oceania	1.3	1.2
Unspecified	2.8	2.2
Total	100.0	100.0

¹ The CSS provides a destination breakdown for air travel only yet one can safely assume that all road and rail travel is to other African countries. Further, sea travel represents a negligible amount of foreign travel. Therefore, these shares were calculated using the regional shares of air travel and allocating all non-air travel to the Africa region. Source: CSS Tourism and Migration Statistics, 1995

Despite these shortcomings, the data on foreign arrivals is instructive as a rough guide to which regions account for most of South Africa's travel exports. As *table 15* shows, Africa completely dominates foreign arrivals accounting for 73.7% of all arrivals. The only other region with a significant share is Europe with 15.4%, while all other regions each have less than 3.5% of all arrivals. These figures demonstrate the importance of two factors in trade in services, namely geographical proximity and the extent of goods trade and investment. With South Africa relatively geographically isolated from much of the world, its foreign arrivals will be dominated by the African region. The high share of the European region is a reflection of the extensive goods trade and investment links with this region (and possibly the income elasticity of travel services)⁹⁴. Europe accounted for 46.1% of all goods trade with South Africa in 1995⁹⁵. The proportion of business and

⁹³ Calculated from dividing total air arrivals by total foreign arrivals. Data from CSS Tourism and Migration statistics 1995.

⁹⁴ The extent of these links can be attributed to factors such as colonial linkages, relatively close geographical proximity compared to other industrial countries and the fact that many non-European MNCs use European subsidiaries to service the African region.

⁹⁵ Calculated from Customs & Excise Foreign Trade Statistics 1995. A complete share breakdown of the different regions appears in table 15 below.

personal travellers for Africa and Europe are very similar with 13.0% of travellers from Africa arriving for business versus 14.2% of Europeans⁹⁶. Also, as expected, a higher proportion of African travellers are here for contract work than the other regions.

For the import of travel services, the best available proxy for the regional share of travel spending is the regional breakdown of all departures from South Africa by South African residents. As with the export data, it must be acknowledged that this is not a perfect proxy for the regional share of spending. In fact, it is probably less instructive than foreign arrivals data because the cost of travel to different regions can vary enormously, a factor which is controlled for with foreign visitors to South Africa. Further, even if comparative price data was available for each world region, it would still be difficult to make accurate adjustments based on process. The reason is that different price levels may also impact on the length of stay and the quality of travel facilities used (e.g. hotels, restaurants) making overall daily spending patterns similar.

Despite these interpretative problems, the data on departures is useful in pointing out the complete dominance of the African region in the import of travel services. Africa accounts for 78.6% of all departures by South African citizens which is a higher than for the export of travel services. As with exports, the only other significant share is held by Europe with 10.2% and all other regions have less than a 5% share each. This again demonstrates the importance of geographical proximity and trade and investment links as major determinants of trade in these services.

3.4.2 Transportation Services

As with travel services, no public data exists for the regional shares of transportation service imports and exports. However, proxies do exist for these services though it is debatable how good they are as an indicator of true regional trade patterns. It is best to split the analysis between passenger and freight services. For passenger services, the combined regional breakdown of foreign arrivals into and residents departures from South Africa can be used. This data is presented in *table 16* below. As expected, the Africa region dominates the trade flows followed by Europe. The major problem with this proxy is that although it provides a good impression of physical flows, it is inaccurate with regard to the value of exports and imports. The reasons are:

⁹⁶ CSS Tourism and Migration statistics 1995

- the cost of a specific transportation service will vary according to the distance covered and also the mode of transport⁹⁷,
- this measure does not exclude those persons travelling in their own vehicles which would not form part of transportation service trade, and
- it is not possible to split imports from exports as there is no indication of what proportion of passengers from each region are transported by a South African transport firm.

If one makes adjustments for the first two factors, one can expect the share of the Africa region in imports and exports to diminish significantly as distances are shorter (and hence costs are lower) and almost all of those travelling in their own vehicles will be coming from or going to other African countries. However, what should be reasonably accurate is the proportions between the non-African regions as distances are more or less similar and almost all the passengers will be transported by the same mode of transport, namely by air.

Table 16: Regional breakdown of South African goods trade and passenger travel (1995)

Region	% Share of passenger travel ¹	% Share of goods trade ²
Africa	75.4	9.9
Europe	13.6	46.1
Americas	3.3	13.4
Asia	3.8	28.9
Oceania	1.3	1.7
Unspecified	2.6	--
Total	100.0	100.0

¹ The regional shares have been calculated from the combined foreign arrivals and resident departures and therefore cover all passenger flows.

² The shares of trade have been calculated from the value of both imports and exports. In addition, it included only that part of trade which was allocated to a region by Customs & Excise. Fortunately the sample did comprise of 85% of all trade and so should be accurate.

Source: Customs & Excise Abstract of Monthly Statistics 1995

⁹⁷ For example, a train ride to Harare from Johannesburg will cost 1/20th of the price of a plane ride to London.

For freight services the best proxy is probably the direction of trade statistics combining both imports and exports. The share of each region is presented in *table 16*. For these services the Africa region does not dominate. Europe has the largest share with just over 46% followed by the Asia region with just under 29% and the Americas with 13.4%. Oceania is again negligible while Africa comprises just under 10% of all goods trade. However, this proxy suffers from the problem that it reflects the value of the goods transported and not the value of the services used to transport them. These two values can differ significantly as the cost of transportation will depend on the physical weight and volume of the product transported, the distance travelled and the mode of transport used. The other less significant problems with the proxy are the inability to split exports and imports (there is no indication of what proportion of freight from each region is transported by a South African firm) and the inclusion of some freight transport for other Southern African countries which moves through South African ports.

Based on the above observations, a few adjustments can be made to the regional share values presented in *table 16*. With regard to the weight and physical volume issue, it is felt that no real adjustments are required as one can reasonably assume that each region should import and export a similar mix of goods in terms of physical volumes and value⁹⁸. The impact of distance and the mode of travel on the cost of transportation should favour the Africa region and hence lower its share of transport services quite significantly. Its impact on all other regions should be similar and hence not require adjustments to their relative shares. However, the movement of freight from other African countries through South Africa should serve to raise value of transportation services consumed and provided by the African region. Therefore, an overall assessment may leave the freight transportation service shares of the different regions more or less unchanged from those presented in *table 15*.

3.4.3 Business Services

No data or even suitable proxies exist for the regional shares of the export and import of business services in South Africa. However, some broad patterns are not that difficult to determine using knowledge of the South African economy and the sectors involved. What follows is a qualitative discussion of these patterns for a number of business service trade items.

⁹⁸ Although South African imports from industrial countries will tend to be higher value-added than imports from developing countries and therefore have a higher value to weight ratio, this is counter-balanced by lower value-added exports from South Africa to the industrial countries and higher value-added exports to developing countries.

Communication services. Exports and imports of communications services are determined by the number of incoming and outgoing calls plus any additional third party routing services provided. The regional share of calls will reflect the extent of business and personal links between the different regions and South Africa. As such, one would expect dominance of exports and imports by Europe and Africa with very small shares for the other remaining regions. The Africa region will have a higher share than the extent of business and personal links suggest because South Africa has established itself as a regional hub for routing international calls to and from sub-Saharan Africa⁹⁹. This is a result of South Africa's better telecommunications infrastructure compared to the rest of Africa. In particular, South Africa has the SAT-2 optical fibre cable link to Europe, it has satellite routing facilities via the INTELSAT satellite, and is planning an optical fibre link to the Far East¹⁰⁰.

Insurance services. International insurance services are dominated by freight insurance, whether it is the insurance of the actual goods and vehicles or insurance against currency fluctuation. As such one would expect the regional shares of imports and exports to be similar to the goods trade shares presented in *table 15*. In fact, these figures may be an extremely good proxy as they represent the value of the goods traded which is one of the prime determinant of insurance cost. These figures show that Europe dominates with almost half of all trade, followed by Asia with almost 30%.

Financial services. Trade in financial services for a small economy like South Africa will be dominated by the international flow of capital. Therefore, the regional shares should reflect the direction of these flows. Exports of financial services occurs with the flow of foreign capital into and out of South Africa while imports occur when with the flow of local capital into and out of South Africa. On the export side, most foreign capital entering South Africa comes from Europe, followed by the Americas and Asia. Therefore one would expect Europe to dominate the purchases of South African financial service exports followed by the other two regions. Imports would tend to be dominated by Europe and Africa. Europe has been the source of bond issues and loans while Africa has been the source of South African investment abroad under exchange control restrictions.

Royalties and license fees. Royalties and license fees reflect payments for technology and ideas. It is therefore expected that South Africa will import most of these services from the industrial countries. Based on trade, FDI and historical links, Europe should heavily dominate as a source of imports followed by the Americas and then Asia. The export of these services represent the sale of South

⁹⁹ BMI-Techknowledge Communications Handbook 1995

¹⁰⁰ BMI-Techknowledge Communications Handbook 1995

African generated technology and ideas. These exports will most likely be to countries whose economies are of a similar or less developed nature than South Africa and who have similar technological needs to South Africa¹⁰¹. Therefore one would expect the Africa region to dominate the purchase of S.A. exports of these services which is further supported by the fact that South African firms have a large FDI presence in these markets.

Construction services. The export of construction services from South Africa is heavily dominated by the Africa region. South African contractors have had considerable success in penetrating the African market due to their expertise and low cost compared to industrial country firms. They are also often taken on as partners by international consortiums operating in Africa because of their knowledge of operating on the continent. Some consultants have made inroads into European markets due to their lower cost but this is limited. The import of contractor services only occurs for large projects because the local industry is well developed. This tends to be dominated by European firms who have considerable experience and knowledge in these technically demanding projects. These firms also make inroads into other African countries through the disbursing of aid money from their home countries but this has not been a factor in South Africa.

Personal, cultural and recreational services. This category is dominated by entertainment services such as music, films and television. As such it is relatively predictable that the USA will dominate as a source of imports of these services followed by the UK. Africa will represent only a small portion of total imports yet they are likely to almost dominate the purchases of exports of these services. Most of the South African exports will be either music or television, both of which have successfully penetrated the sub-Saharan market but not the rest of the world.

In total it appears as though trade in business services with South Africa is dominated by either Africa or Europe. The former demonstrating the importance of the close regional proximity and the latter showing the importance of trade, investment and historical links.

¹⁰¹ The latter is identified through a similar economic structure and consumer preferences (including government and business buyers) to South Africa.

3.5 International Comparison of South African Service Export Performance

The analysis of South Africa's services trade thusfar has concentrate on explaining the overall trade balance and growth, the breakdown of product shares in the import and export of services, and finally the regional share of trade in different service items. Although much discussion has centred on the relative performance of South African service exports in each preceding section, it is felt that this is incomplete. To complete the analysis of South Africa's service trade performance, one should compare the trade performance to countries of similar economic development status and structure to that of South Africa. This type of approach may be of more use than general comparisons to world trends because influential factors like factor endowments are controlled for when assessing comparative international performance. Aside from determining how well or badly South Africa has performed, this type of analysis is also useful in determining potential comparative advantage. By looking at the service export performance of similar economies it can be determined what is feasibly possible to achieve with the given factor endowments of a country at South Africa's level of development.

For the comparative analysis six countries were chosen. The basis for the comparison was similar GDP/capita levels to S.A. and similar economic structures to S.A. (as determined by the relative size of the primary, secondary and tertiary sectors). Two countries were chosen from each of the Americas, Asia and Europe in order to get some variety and control for geographic influences on service trade performance. No countries were taken from Africa or Oceania due to a lack of similar economies to South Africa. The countries chosen were Brazil and Mexico from the Americas, Malaysia and Thailand from Asia, and Turkey and Poland from Europe. As shown in *table 17*, all have similar GDP/capita levels, similar shares of services in the economy and only the two South American countries have significantly different GDP levels. The measures used for comparison in *table 17* are a) growth in exports from 1988-1994, b) revealed comparative advantage measures to detect potential comparative advantages, c) export-to-import ratios to determine overall balance for the item and performance relative to imports and d) an export index which compares the absolute value of exports adjusted for market size (South Africa = 100). This last measure will give some indication of the export orientation of the services sector in each country in lieu of measures such as exports/production for which there is insufficient data.

Table 17: International comparison of South Africa's service trade performance (1994)

Comparative Measure	South Africa	Americas		Asia		Europe	
		Brazil	Mexico	Malaysia	Thailand	Turkey	Poland
GNP/capita (\$)	3,040	2,970	4,180	3,480	2,410	2,500	2,410
GDP (\$m)	107,773	554,587	377,115	70,626	143,209	131,014	92,580
Services share of economy (%)	56	49	64	42	50	52	54
Services							
Export Index	100	22	64	229	198	204	121
X/M	80.0	47.9	79.2	73.7	71.4	285.6	117.2
RCA	0.70	0.47	0.66	0.49	0.97	1.75	0.99
Growth 88-94	4.1	12.8	8.0	16.9	15.0	10.8	10.1
Travel							
Export Index	100	9	92	262	221	181	9
X/M	105.8	43.8	117.9	194.4	122.1	499.0	46.3
RCA	1.08	0.31	1.44	0.86	1.67	2.39	0.11
Growth 88-94	4.9	34.8	7.4	24.6	10.3	10.1	-5.5
Transport							
Export Index	100	32	22	218	94	76	201
X/M	54.8	51.2	26.2	43.1	27.9	128.1	170.4
RCA	0.93	0.93	0.29	0.61	0.61	0.87	2.17
Growth 88-94	6.9	8.5	6.1	8.8	8.5	6.3	9.1
Bus. services							
Export Index	100	36	40	201	323	478	275
X/M	89.6	49.5	41.9	44.1	72.8	324.0	95.4
RCA	0.33	0.37	0.19	0.20	0.74	1.92	1.05
Growth 88-94	-2.9	13.1	10.4	17.6	37.2	13.1	13.2

¹ The export index is calculated by the formula $((X_A/(GDP_A/GDP_{SA}))/X_{SA}) * 100$ where X_A is the exports of country A, X_{SA} is the exports of South Africa, GDP_A is the GDP of country A and GDP_{SA} is the GDP of South Africa.

Source: Output data from the World Bank World Development Report 1996

Trade data from IMF Balance of Payments Statistics 1995

The comparison of South Africa's overall service exports with the six similar economies reveals the poor performance of this sector. The growth of South Africa's service exports from 1988 to 1994 was the lowest of all countries by a considerable degree. South Africa's exports grew at only 4.1% compared to an average 12.3% for the other six economies. Further, the absolute export levels (adjusted for economy size) were greater than South Africa for all except the Latin American countries. In fact, Malaysia, Thailand and Turkey recorded export levels around and above twice that of South Africa's in 1994. There are a number of potential reasons for this far greater level of exports in these countries. First, it may be due to different relative factor endowments to South Africa. In particular, the development of human capital which has been neglected in South Africa and also the Latin American countries which performed badly. This cause of differences in export performance is statistically supported by the very high RCA measures in Thailand, Turkey and Poland. Second, it may be due to a greater export orientation in a country's economy (goods and services). This cause is reflected in the performance of Malaysia which has a very high level of exports despite having the second lowest revealed comparative disadvantage in service exports (0.49). This is also reflected in the poor performance of Brazil and South Africa, two states which were formerly very inward looking. Third, a cause of the disparity in export performance may well be geographic location. The four countries with the highest levels of exports, adjusted for output size, are either in the rapidly growing Asia region or Europe. The extensive trade within these regions and their proximity to this may well be a prime driver in determining their better export performance. Brazil and South Africa are located within lower income and growth regions and are some distance from the world growth centres. The anomaly is Mexico which is well placed to feed off trade with the USA. It may be that the closer ties brought about by NAFTA has altered this state of affairs or that Mexico merely lacks a sufficient stock of the factor endowments required for large scale service exports (i.e. capital and highly skilled labour).

In addition to exposing the poor performance of South African service exports by international standards, these facts also point to the future potential of such exports. If the degree of export orientation of an economy influences the level of service exports, then South Africa can expect continued growth in its service exports. The demise of sanctions is still only a few years behind and the re-integration of South Africa into the world economy has been a gradual process. Further, the trade strategy that has been adopted in recent years has been one of increasing export orientation, through tariff reduction and export promotion. Alongside the macroeconomic strategy, this should serve to increase trade and investment. On a less positive note, the neglect of human capital in the

past will continue to plague service sector exports as it influences the comparative advantage of the country. This will take a generation to correct and will hinder export performance in this time. Finally, the geographic location of South Africa, isolated from the major growth regions, will always provide a break on the extent to which export levels can improve. The extent of this constraint on performance will depend on the fortunes of the sub-Saharan region to which South Africa's future is tied.

Moving to a sub-sectoral perspective on services exports, then in terms of absolute export levels, South Africa performs best in the transportation services sector. South Africa has higher adjusted export levels than all the other countries except for Malaysia and Poland and considerably higher levels than Brazil and Mexico. Further, its export-to-import ratio, although low, is higher than all countries except the European duo of Turkey and Poland. In addition, South Africa's RCA measure, at 0.93, is second only to Poland, which has an exceptionally high RCA of 2.17. These facts suggest that all countries of a development status similar to South Africa's do not perform well in the transport sector. This is most likely because of the immense capital requirements and capital-intensity of this sector. This being the case, South Africa's relatively good performance by international standards may be a result of previous policies aimed at keeping capital relatively cheap. A further influence is the use of South African ports and transport network to filter trade to and from other Southern African countries.

Based on this international comparison, it appears as though there is little room for vast improvement in the export of transportation services by South Africa. Only Poland has outstripped South Africa's performance on all accounts in transport exports. Although Malaysia has a higher adjusted absolute level, it also has higher adjusted import levels as revealed by a lower export-to-import ratio. Therefore, although transport services accounted for most of the deficit on the South African services account, this is likely to remain unchanged in the near future because performance has been above average by international standards. As capital and skill accumulation occurs over time, the changing factor endowments will help improve performance in this sector.

The next best performing sector by international standards has been the travel sector in South Africa. Although the growth in the South African travel exports is the second lowest, this rate is tempered by the sharp drop in migrant expenditures as shown earlier in *table 13*. If one excludes migrants, then

growth has been at 13.7%, which is the third highest rate after Brazil and Malaysia¹⁰². However, adjusted absolute levels still lag behind the two Asian countries and Turkey, which show levels in excess of twice that of South Africa's. The cause of this poor performance can be linked directly to the international unacceptability of the previous apartheid government. Yet these facts also suggest, as is often cited, that there is considerable potential to expand South African international travel exports. This scope for improvement is also demonstrated by the very high growth rates in tourism to South Africa in recent years.

Finally, South Africa's worst performing service sector in terms of exports is the business services sector. South Africa's business services exports have shrunk at a dollar rate of 2.9% per annum from 1988 to 1994 while exports from all the comparative countries' sectors grew at an average rate of an incredible 17.4%, with the lowest still above 10% growth. In adjusted export level terms, Malaysia exports twice as much as South Africa, Poland just less than three times, Thailand just more than three times and Turkey almost five times as much as South Africa. Only Brazil and Mexico perform worse than South Africa which has been the case consistently across all service sub-sectors. However, South Africa does have the third highest export-to-import ratio after the two European countries. This suggests that the higher adjusted export levels in the Asian countries are to some extent a reflection of the greater trade and investment and the geographic location of their economies rather than a superior competitive performance in providing these services. This is at least the case with Malaysia which has a considerably lower RCA than South Africa. The considerably higher RCA measures for Thailand, Turkey and Poland suggest that it is in business services that South Africa's neglect of human resources has been exposed through poor export performance. It is these services which are highly skill intensive while transportation is more capital-intensive and travel services labour-intensive. This is also reflected in the poor performance of Brazil and Mexico.

These facts suggest that there may not be considerable scope for immediately improving the potential of South African business service exports. The lack of a large stock of skilled human capital has no short-term fix and will restrict exports for some years. Geographic location will also provide some form of barrier to vast improvements in business service exports. Finally, trade and investment in and by South Africa is increasing which will boost export performance in the near future. However, trade and foreign investment is not taking place on the scale prevalent in the East Asian economies and so South African exports are likely to continue to lag behind these countries.

¹⁰² Brazil's growth rate is somewhat misleading due to the very low base from which it has been growing.

An overall assessment of South Africa's service exports in comparison to similar economies suggests that South Africa is under-performing in this area. However, it also shows that increases in service exports will arise naturally out of the increasing trade and investment in South Africa which is brought on through the democratisation of the country and the change in trade policy. This increase requires no explicit effort geared at improving services exports but will merely feed off increased goods trade and investment. However, there is a constraint to vast improvements based on geographic location and poor human resources. The latter can be broken in the longer term through investment in skills while the constraint of the former can only be broken by the improved economic performance of the sub-Saharan region. The particular strengths of the South African exports are in transport and travel while considerable weaknesses exist in business service exports. On an optimistic note, South Africa's performance has only been considerably worse than the Asian tigers on all accounts while it has been far better than the Latin American countries of Brazil and Mexico in all regards, and slightly weaker than the European developing countries.

Conclusion

Services trade has recently become quite a significant component of world trade. This is despite the dominance of direct investment over trade as the preferred means of penetrating a foreign market. However, much of this growth has been built on the growing share of services in total world demand for goods and services, and very little is attributable to an increasing tradeability of this sector. In fact, the inherent low tradeability of services will always limit its role in world trade. The issue of the tradeability of services also impacts on the product mix of world trade. Services trade is dominated by producer services (transport and business services) and the travel industry. The former offers a distinct comparative advantage to the industrial nations because of the high skill and capital intensity of its production. The latter offers production advantages to developing countries yet remains dominated by industrial countries. This is because factors such as geographic proximity, high levels of international business travellers and consumer preferences have served to override traditional comparative advantage. However, the travel industry is not alone in having other influences disturb the factor endowment predictions of trade flows. Most producer services are influenced to some extent by policy interventions, geographic proximity or the level of integration within the international trading system.

Understanding the influence of these other factors on service trade volumes and patterns is important when analysing South African services trade. South Africa's service export and import volumes have been negatively affected historically by low goods exports and sanctions, which limited the level of integration of the country in the world trading system. The product mix of South Africa's service trade has been influenced by both the comparative advantages and disadvantages of the country, and its geographic location. The developing nature of the economy means that South Africa performs relatively better in the travel industry, which is low skill and non-capital intensive, compared to the transport industry, which is very capital intensive. South Africa's location in the poorest region in the world and some distance from major markets has, amongst other things, limited the extent of trade in business services. As a result, these make up an unusually small component of total services trade in South Africa. The importance of regional location in services trade is reflected in the fact that African countries dominate South Africa's services trade. This is in contrast to goods trade where Africa represents only a small proportion of total trade. These factors have had some influence on the fact that South African service exports have under-performed to date, as revealed by an

international comparison with countries with similar economies to South Africa. Surprisingly, the best comparative performance is in the transport sector, followed by the travel industry and then business services.

To conclude, this thesis has made a significant contribution to the general literature on services trade and the South African literature in particular. The main contributions to the general literature are:

- the statistical assessment of the economic characteristics of various service sectors based on the South African data. This has served to remove the generalised and anecdotal characterisation of the services sector;
- the statistical analysis of the sources of world services trade growth. There has been much speculation in the literature on the sources of growth between increased tradeability and purely increased output. This is resolved through determining the growth contribution of each source which demonstrates the dominant effect of increased output on growth;
- the breakdown of the product structure of business services trade based on a sample of industrial and developing countries;
- clarification of the major determinants of services trade through the addition of geographical proximity and the level of integration into the world economy alongside the explanations of traditional factor endowment and 'new' trade theory; and
- the numerous tables examining the regional and development status breakdown of world service exports and imports at various levels of product aggregation. Not only has this contributed to the understanding of service trade flows, but it also provides some empirical evidence to support the prior theorising on the determinants of service trade performance.

The entire third chapter represents a significant contribution to the South African literature as no such detailed work along these lines has previously been done. Of particular importance is:

- the construction of a South African data set which complied with the IMF BPM5 definition of services trade;
- the calculation and analysis of the major sources and constraints on South African service export growth and import penetration;

- the calculation and analysis of the product shares and relative performance of different service items. This provided a useful understanding of where South Africa's relative strengths and weaknesses lay in services trade;
- the breakdown of regional trade patterns for South African exports and imports based on a number of reasonable proxies. This analysis also supported earlier theorising on the major influence of geographic proximity and trade and investment flows on service trade levels; and
- the construction and analysis of an international comparison table with countries from various regions which demonstrate similar characteristics to South Africa. This provided an international benchmark to compare South Africa's export performance in services and isolate the potential areas of improvement.

These numerous contributions are extremely useful not only for academic purposes, but also for South African policy purposes. It hopefully lays the basis for understanding both the likely implications of service trade liberalisation with certain regions or the whole world, and the limitations of policies designed to limit imports and boost exports of services. These are areas which can be pursued in further research projects.

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