Developing a Trade and Industry Policy Agenda for Service Sectors in South Africa
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# Introduction

The manufacturing sector has traditionally been the primary focus of both the trade and industrial policy literature and the national departments of trade and industry which practiced the policy for economic development. The reason lies in the ability to trade in manufactured products which meant that deliberate policies were required to develop production within national boundaries. This could either take place through restricting foreign competition (trade policy) or enhancing the competitiveness of local production (industrial policy). Part of the strategy also entailed expanding output beyond the constraints of the domestic market through expanding exports. The same tools applied here - either trade policy (opening other markets) or industrial policy (raising competitiveness).

Agriculture was also given some attention because it was tradable and responded to industrial policy aimed at the factor markets. However, agriculture also fulfilled many other strategic development functions - such as providing foodstuffs to feed the growing urban industrial workforce and constraining the rate of urbanisation. Because of this supervision of the sector usually fell to another government department.

In comparison, the service sectors have been largely ignored by both trade and industrial policy literature and by the practitioners in the departments of trade and industry. This is not to say that the importance of various service sectors was not recognised. They could adequately explain that financial markets are crucial for channeling savings into investment and that a legal system is necessary for the market system as an enforcer of property rights and contracts. However, because services were mostly non-tradable, it was felt that the product range and output levels of domestic services were entirely predetermined by the size of local demand from industry, government and consumers. In addition, as local service firms did not compete internationally, there was not substantial concern over the level of efficiency, product range, product quality and rates of innovation of domestic service sectors. The result – there was no perceived need for trade and industrial policy for services.

The main barrier to the development of service sectors was that many of these sectors showed significant market failures. These stemmed from information asymmetries to public good or natural monopoly properties. In these cases, the government would step in and either heavily regulate or supply the market. Therefore policy and research interest instead concentrated on the regulation of service industries for a variety of reasons from consumer protection to non-service of the poor to national security. As this regulatory role was quite substantial and complex, each service industry was allocated its own supervisory government department.

However, recent changes in the economic and technological environment internationally has meant that much of the previous perceptions of the service industries are now changing. The main forces at work are the lessening of the determinism in the size of domestic service output and a growing importance of efficient services for economic development. These two forces can be summarised as follows:

- 1. Less determinism in the size of domestic output Services are becoming increasingly tradable due to advances in information and communication technologies (ICTs) making trade more technically feasible and due to efforts to lower regulatory barriers to trade in services by the World Trade Organisation (WTO) through the General Agreement on Trade in Services (GATS). These developments mean that the output levels of domestic service providers are no longer linked directly to local demand. There is scope for policy either to boost output beyond the local market constraint or protect output levels from the threat of foreign supply. In addition, rapid product innovation in services has spurned huge industries which compete with manufactured goods for a share of consumer and firm income. The effect is that service sectors can deliberately alter the domestic demand they face.
- 2. Growing importance of efficient services The production of manufactured goods is becoming increasingly global and competitive due to the lowering of tariff levels and the clampdown on the use of non-tariff barriers. In order to give domestic industries some competitive edge, governments have turned their attention to improving local factor markets and intermediate inputs. Services are a significant intermediate input and so policy geared to improving the performance of service industries is beginning to receive considerable attention.

These combination of these two forces necessitate a more active trade and industrial policy on service industries. This is becoming all the more important because the liberalisation of services has been firmly placed on the trade agenda of industrial countries and so developing countries will no longer be able to hide behind restrictive trade practices that can perpetuate the dominance of domestic service providers. Active policy is also necessitated by the realisation by most countries that their service sectors have tended to be highly inefficient due to countless restrictive trade practices and the maintenance of monopolies, public or private.

The most visible expression of the growing policy interest in services has been the recent popularity of the privatisation of government-run services and deregulation. The removal of some superfluous regulations and the opening up to competition are seen as key means of raising efficiency in many service sectors. Because these have been issues of regulation, the champions and executors of these processes have mostly been the relevant supervising government department and the particular service industry itself. Further, because trade barriers in services are predominantly regulations and not tariffs, these processes have influenced one aspect of trade policy – namely protection of domestic markets. These have then been tabled as GATS offers.

However, this is as far as most developing countries have got with developing a coherent trade and industrial policy around services. Although regulation is an important component of trade and industrial policy, it is incomplete without considerations of export promotion and numerous supply-side measures. It also does not necessarily lead to a coherent policy that is consistent within itself and within a broader development goal for the economy. These gaps arise because the trade and industry departments do not have an interest or policy stance on services.

This is the point at which South Africa finds itself and the entry point for this paper. After economic stagnation following a history of import substitution industrialisation policies, there has been a turnaround in policy direction to a more open model. The new government embarked on what can be seen to be a self-imposed structural adjustment programme in order to inject efficiency and growth into the South African economy. The basic tenets of the strategy are contained within the government's macroeconomic policy document - the Growth, Employment and Redistribution, or so-called GEAR, strategy. The most relevant aspects of the policy to this discussion is trade liberalisation and the privatisation of numerous state assets. In tackling both these strategies, the issue of services is raised. As part of the drive to improve the export performance of manufacturing, focus has been on supply-side support measures – some of which provide service products missing from the economy. In terms of assets requiring privatisation, the most significant of these lie in the services sector, including transport (road, rail, ports), communication (fixed line telephony) and electricity generation. In addition to these internal concerns, there is mounting pressure internationally for South Africa to make a significant trade offer in services, with the next round of GATS talks scheduled for the year 2000.

Thusfar these processes have been led by the relevant supervisory department in government with no involvement from the Department of Trade and Industry (DTI). They have also not led to a complete and coherent trade and industrial policy intervention in the service sectors. However, the DTI recognises that it should be playing some role in service sectors in South Africa. The Trade and Industrial Policy Secretariat (TIPS) commissioned this paper to begin a process within the DTI of establishing what their interests are in the development of service sectors in South Africa and how they may express these interests in terms of concrete policy actions. Therefore the intention of this paper is to provide a more detailed understanding of the main service sectors in aggregate and use this understanding to explore how one might set policy direction and select policy tools for different service sectors. However, the aggregation in this paper means that it cannot possibly provide the detail required for specific policy actions in specific sectors. It is envisaged that a set of sectoral studies will eventually emerge which will provide the necessary detail.

The paper proceeds with a first section looking at the aggregate contribution of service industries to the South African economy. This effort concentrates on the contribution to output, growth, capital formation, employment, trade and foreign investment. The second section takes the reader one level down, analysing the nature of service production in South Africa. The detail lies around the extent of its intermediate role, the multiplier effect of rising output, the capital and skill intensity of production, and the openness to trade and competition. The section takes each measure and examines the relevance to policy-making, the South African empirical values and the implications for policy. The final section of the paper is dedicated to bringing the disparate themes together and exploring some policy issues in the South African context. It considers where trade and industrial policy from the DTI might be directed and what type of tools may be used

# 1. The Aggregate Contribution of Services to the South African Economy

A good place to start with any policy discussion on the service sectors is to run through some of the baseline statistics on what is the size of these sectors and what is their aggregate contribution to the economy. For the purpose of this analysis, services includes all parts of the economy not covered by agriculture, mining and manufacturing. An attempt was made to have the sectoral breakdown used in this chapter conform to the 12 sectors defined in the GATS. The make-up of these sectors and a discussion of other classification issues appear in appendix 1. However, data constraints meant that educational services; environmental services; health related and social services; recreational, cultural and sporting services; and other services excluding utilities were all included under community and social services. Utilities were separated out of the group 'other services' to be a group on their own. Certain data could also not be decomposed from the SIC groupings which are at a higher level of aggregation than the GATS sectors. In these cases, the figure for the SIC group was given. It should also be noted that data problems do exist in the service sectors and the construction of the data set used in this paper attempted to overcome these problems. Appendix 2 details some of the data problems and what data was used in this paper.

# 1.1 Contribution to Domestic Output, Employment and Capital Formation

The manufacturing sector is rightly seen as the core of any economy because it provides countless business opportunities through its mass of linkages and it also provides technology to improve productivity in other sectors. However, it is the service sectors that make up by far the largest component of national output, employment and capital formation. This is demonstrated in table 1 below which outlines the share and growth of output, capital formation and employment for each sector in South Africa in the 1990s.

Table 1: Sectoral contribution to national output, capital stock and employment in the 1990s

		Output			vestment	Emplo	oyment
Sector	Real formal sector growth (90-97)	Formal sector share (1997)	Informal sector share (1995)	Real formal sector growth (90-97)	Formal sector share (1997)	Formal sector share (1995)	Informal sector share (1995)
Agriculture	-1.1	4.4	8.0	-1.1	3.8	14.5	2.5
Mining	-2.0	7.5	0.0	-0.2	7.8	5.4	0.0
Manufacturing	0.1	23.0	5.4	4.0	14.1	16.7	6.3
Services Sector	2.4	65.1	83.6	0.9	74.2	63.3	89.4
Utilities	-0.3	3.8	0.0	-1.8	7.5	1.1	0.0
Construction	-1.6	2.8	6.0	-1.1	0.5	4.9	4.6
Internal trade	2.2	14.5	45.5	1.9	4.8	15.6	21.3
Catering & accommodation		0.9				1.9	
Transport	1.8	5.3	12.5	0.1	13.5	3.7	3.8
Communication		2.1				1.8	1
Financial services	4.8	6.1	3.4	1.3	20.4	3.4	1.7
Business & property services		11.1				3.9	
Community, social & personal services	2.4	18.6	16.2	2.0	27.5	27.1	58.0
TOTAL	1.1	R529.6b	R2.7b	1.1	R1,742b	8.59m	1.33m

Source: SARB Quarterly Bulletins 1990-98, CSS OHS 1995

In terms of *output*, in the formal economy services comprised 65.1% of the economy in 1997, well ahead of the 23% share for manufacturing and 11.9% for the primary sectors. Within services, the dominant group is intermediate services which makes up 70% of service production, or 45.7% of total output. This group comprises of producer services (business services; financial services; construction and utilities) with a share of 23.8% of total output, and distributive services (communication services; distribution services; and transport services) with a share of 21.9% of total output. Final demand services make up only 19.5% of total output, with social services (educational services; environmental services; health and related social services; public administration and defence) making up the major proportion of this share.

This economic structure is reflective of a mature industrial structure, far more similar to industrialised countries than developing ones. In developed economies in 1990, on average primary products made up 4% of output, manufacturing 24%, intermediate producer services 24%, intermediate distribution services 22% and final demand services 23% <sup>1</sup>. This is very similar to South Africa's structure, except for a smaller contribution of primary products and a higher share of final demand services – which are the result of higher levels of per capita income. Developing countries on average show much greater reliance on primary products (22% of output), a lower share for manufacturing (20%) and a much lower share of final demand services (14%). A more detailed look at the composition of GDP in developing and developed countries is available in appendix 4.

The service sectors have also been the main source of growth in the South African economy during the 1990s. Both agriculture and mining have experienced a real decline of 1.1% and 2.0% per annum respectively from 1990 to 1997. The agricultural sector is always subject to the vagaries of the weather, yet there has been limited potential for explosive growth in the 1990s as most land had been put under productive use and modern production methods were already in place. The gold mining sector is in long-term decline through a combination of rising costs as mines go deeper after mining out deposits closer to the surface, and a falling gold price. Manufacturing has undergone an extensive restructuring in the 1990s in response to increasing global competition brought on by trade liberalisation. This process has restricted growth during this period. The manufacturing sector already accounts for almost 80% of domestic demand and so growth is likely to be constrained locally. The growing incomes of the african population is an important source of domestic growth but in order to experience above average growth rates, manufacturing would now need to be successful in exploiting export opportunities.

In contrast, growth in the services sector throughout the 1990s has been reasonably strong at 2.4% per annum. Growth in final demand services during the 1990s also averaged around 2.4%. Growth in final demand personal services was driven by changes in domestic consumer income growth and external tourism spending. Consumer spending has increased on the back of growing incomes amongst the african population and increasing levels of indebtedness of the population as a whole. High growth in tourism to South Africa after years of isolation has also provided a boost to growth in these sectors. Growth in final demand social services is largely dependent on budgetary allocations by government. Although there is a process of deficit reduction, spending has increased through the 1990s in an effort to correct the backlog of social infrastructure that has been left in township and rural areas. All these sources of growth in final demand services are likely to continue in the foreseeable future.

Growth in intermediate services has had somewhat mixed fortunes yet on average have grown at roughly 2.4% per annum throughout the 1990s. The intermediate producer services of utilities and construction have experienced slightly negative growth rates for this period. Both of these sectors derive most of their demand from intermediate use and were therefore subject to the frailties of the South African economy in the 1990s. However, other parts of the intermediate producer services, namely financial and business services, grew at an exceptionally high rate of 4.8% per annum for the 1990s. Growth in these producer services the world over has been driven in part by the changing demands from the manufacturing sector, and in part through the rapid creation and expansion of whole new product markets. With respect to the former, 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. This also translates into greater use of external services in the production process. Independent growth in the producer services sector from the creation of new product markets have come from either innovation in established producer services (e.g. new

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<sup>&</sup>lt;sup>1</sup> Unctad 1995, pg. 7

financial instruments or insurance products) or through opportunities created by the new informatics technologies (e.g. mobile communication services, Internet products). These new service products compete with manufactured goods for a growing slice of consumer income in addition to their sales as intermediate inputs into firms. South Africa has been no exception to these trends and the relative sophistication of these sectors domestically has enabled them to take advantage of these opportunities.

The dominance of output by services is naturally mirrored in capital formation and employment. Services account for 74.2% of the total fixed capital stock and 63.3% of employment in South Africa, though this is divided unequally amongst the sub-sectors. With the exception of construction, intermediate producer services are very capital intensive operations. Excluding construction, producer services account for 21% of output, 27.9% of capital stock and only 8.4% of employment. Intermediate distributive services also reflect a mixed bag with transport and communication services being relatively capital-intensive while internal trade services are far more labour-intensive. Transport and communication account for 7.4% of output, yet 13.5% of capital stock and only 5.5% of employment. Lastly, the final demand services display both high use of capital and labour. The 19.5% of output produced by this service sector account for 27.5% of capital stock and 29% of employment. This anomaly is partly a result of an under-measurement of output for social and government services <sup>2</sup> and partly due to the mixed bag of services in this group - ranging from very capital-intensive services such as defence to very labour-intensive services such as catering or domestic servants.

The dominance of services in the output and employment of the *informal sector* is even more pronounced than the formal sector with services accounting for 83.6% of earnings. As entrepreneurs in the informal sector generally have little capital and few formal sector skills, certain components of the services sector are a natural home due to their low capital and skill requirements. The biggest individual sector by far are the internal trade, catering and accommodation services which accounts for 45.5% of informal sector output, and essentially is made up of petty trade activities. Next highest is the final demand social and personal services with 16.2% - a grouping which contains domestic workers. The last significant sector is transport and communication (12.5%), which incorporates the unregulated and thriving minibus taxi industry. Employment is concentrated in the final social and personal services which accounts for 58% due to the incidence of domestic workers. The only other major employer is the distribution services which accounted for 21.3%.

# 1.2 Contribution to International Trade and Investment

The perception of service trade is that it is small and insignificant to both the service sectors themselves as well as to the economy as a whole. However, as an examination of the South African trade data will reveal, this is not the case at all and as barriers to service trade come down, service trade will become increasingly important. Table 2 below provides a breakdown of South African trade flows and other trade indices for 1996, including a detailed breakdown of service sub-sector trade. This data set was constructed from a number of sources and a full discussion of the data problems and sources used is contained in appendix 2. For the purposes of this analysis, it is important just to note that the trade for each service sub-sector consists of cross-border supply only and consumption abroad in the case of catering and accommodation. Trade through the presence of natural persons is reflected in the item "unspecified labour flows" and through commercial presence in the item "unspecified FDI flows". Note also that the FDI flows used reflect profit remittances and reinvested earnings only and not the sales of foreign affiliates which is the more conventional, yet difficult to measure, method. The result is that the total amount of service trade is likely to be considerably underestimated. This observation is based on an analysis of US service trade data that found that trade via the sales of foreign affiliates tends to far outweigh the volumes of trade via cross-border flows.

Even with the underestimation of total service trade, table 2 reveals that services are an important component of international trade in South Africa. Service imports and exports both totaled just under \$6 billion each in 1996, representing 17.8% of imports and 16.8% of exports. Interestingly, there is a small but positive balance on the service trade account, which reveals the very slenderest of comparative advantage in services for South Africa if one uses the Balassa method of calculating revealed comparative advantage<sup>3</sup>. This is in contrast to manufacturing where a sizeable trade imbalance reveals a slight comparative disadvantage for South Africa. What is also

<sup>&</sup>lt;sup>2</sup> The output of social and government services tend to be undermeasured because there is no market for them, hence no market price. The result is that output is measured as cost and not market price times output levels.

<sup>&</sup>lt;sup>3</sup> The Balassa RCA is calculated with the formula (X-M)/(X+M) where values from -1 to 0 reveal a comparative disadvantage and values from 0 to 1 reveal a comparative advantage.

encouraging is that since 1988 exports of services have been growing at a faster pace than imports (5.7% vs. 2.7%) which suggests that the very slight comparative advantage is getting stronger. Another indicator of the strength of exports is the fact that exports of services have also been growing almost twice as fast as manufactured exports.

A further noticeable feature of service trade is the low levels of import penetration and export propensity. Imports represent only 7.9% of domestic demand which is similar to the low levels experienced by agriculture (14.6%) and mining (11.5%) yet well below manufacturing at 86.9%. Export propensity is also low at 7.9% of domestic production, well below agriculture (23.8%), mining (56.2%) and manufacturing (85.6%). These low figures reflect the workings of a number of factors - the underestimation of sales through FDI; the natural low tradability of services; and also the high levels of restrictions on trade that do exist both internationally and locally.

Table 2: Breakdown of South African trade flows 1996 (US \$)

Sector	Imports					Exp	orts		Overall Trade		
	Value \$m (1996)	Share	Growth (88-96)	Share of local demand	Value \$m (1996)	Share	Growth (88-96)	Share of local prod.	Balance	RCA	
Agriculture	682.3	2.0	24.4	14.6	1,247.3	3.5	8.6	23.8	565.1	0.29	
Mining	491.0	1.5	11.5	11.0	5,120.6	14.4	10.6	56.2	4,629.6	0.83	
Manufacturing	25,656.2	76.7	6.5	86.9	22,887.0	64.3	3.2	85.6	-2,769.2	-0.06	
Services	5,942.2	17.8	2.7	7.9	5,975.3	16.8	5.7	7.9	33.1	0.00	
Utilities	5.4	0.0	na	0.1	44.2	0.1	6.7	1.0	38.8	0.78	
Construction	25.4	0.1	4.3	0.8	9.3	0.0	2.2	0.3	-16.1	-0.46	
Internal trade, catering & accommodation	1,563.0	4.7	7.9	9.0	2,224.0	6.2	28.8	12.3	661.0	0.17	
Transport services	2,656.0	7.9	6.5	38.8	1,998.0	5.6	1.8	32.3	-658.0	-0.14	
Communication services	271.5	0.8	7.0	10.8	208.0	0.6	14.9	8.5	-63.5	-0.13	
Financial services	318.6	1.0	1.5	4.8	686.0	1.9	10.1	9.9	367.4	0.37	
Business services	385.9	1.2	7.2	3.0	323.0	0.9	34.5	2.6	-62.9	-0.09	
Community & social services	44.9	0.1	-6.3	0.2	113.3	0.3	9.4	0.5	68.4	0.43	
Unspecified labour flows	387.0	1.2	-7.8	na	183.0	0.5	-9.7	na	-204.0	-0.36	
Unspecified FDI flows	284.5	0.9	-1.9	na	186.5	0.5	0.0	na	-98.0	-0.21	
Total	33,443.2	100.0	6.3	30.3	35,599.7	100.0	4.1	31.7	2,156.5	0.03	

Note: RCA is calculated with the Balassa formula (X-M)/(X+M)

Note: Unspecified FDI flows includes profit remittances and reinvested earnings only.

Source: CSS Input-Output Tables 1988 &1993; IDC 1998; IMF Balance of Payments Statistics 1988-96; Customs and Excise Abstract of Monthly Trade Statistics 1996

Within service trade, the dominant two sectors involved in cross-border supply are transport services and tourism & travel services (represented as the item internal trade, catering and accommodation). Transport services are the single largest item comprising of 7.9% of total imports and 5.6% of total exports. Trade in transport services is dominated by freight transport and the auxiliary services that surround it - accounting for 73.7% of transport exports and 80.7% of imports<sup>4</sup>. This makes trade levels heavily dependent on the levels of merchandise trade, with the proportional split between exports and imports dependent on the relative competitiveness of South Africa's transport carriers and any bilateral shipping agreements which dictate the national shares of shipping flows between each trading nation. Transport services also have the highest trade deficit of any service (-\$658m), revealing a definite comparative disadvantage in such trade for South Africa. However, the deficit is entirely accounted for in freight transport and auxiliary services, and in fact South Africa has a slight revealed comparative advantage in passenger transport of 0.01.

<sup>&</sup>lt;sup>4</sup> See table A5 in the statistical appendix 4 for an exact breakdown of transport trade flows.

In contrast, the highest positive trade balance lies in tourism and travel (\$661m) which reflects South Africa's comparative advantage in this service which requires both good tourism infrastructure and natural beauty along with a natural advantage for labour-abundant countries. The removal of apartheid has had the effect of opening up South Africa to the international tourism market resulting in rapid growth in recent years, measured at an average annual rate of 28.8% since 1988. Business travel, which represents roughly 20% of total travel, has also benefited from the greater integration of the South African economy into the world trading system as trade liberalisation occurs and investment flows increase.

Other services to benefit from increasing trade and investment flows as South Africa becomes more integrated into the global economy, are financial, business and communication services. Trade in financial services is either directly linked to merchandise trade with products such as trade finance, freight insurance and exchange rate hedging; or linked to services rendered in the movement and investment of international capital. Numerous business services also play a role in international trade and investment, from legal to property services. Finally, a high proportion of international communication services are for business purposes and are therefore subject to changes in the volume of trade and investment. Of these three service industries, financial services are the largest in terms of trade and is the only one which demonstrates any comparative advantage for South Africa - and quite a significant comparative advantage measure of 0.36. Export growth in all three has been considerably higher than the growth of imports suggesting a growing domestic strength in all three industries.

The remaining services traded cross-border - utilities, construction and community & social services - all record low levels of trade, with total imports of \$75.7m and total exports of \$166.8m for the three sectors combined. Despite this, the highest RCA measures for services are found in utilities (0.78) and community and social services (0.43). The high RCA for utilities reflects the strength of South Africa's electricity generator, Eskom, which is selling power regionally and trying to expand its operations in sub-Saharan Africa. Water imports from Lesotho have recently come online and plans are afoot to restart electricity imports from the Cabora Basa dam to cover peak periods and so the trade imbalance in favour of South Africa is likely to diminish in future. Somewhat surprising is the high comparative advantage in community and social services. A good proportion of this reflects the exporting of the broadcast of sporting events plus sales by South African satellite television group Multichoice which has made enormous inroads into the African market. Budget cuts in South Africa's public broadcaster, the SABC, has also resulted in a gradual drop in imports though this is likely to be reversed as broadcasting is opened up in South Africa.

Service trade through the presence of natural persons has been a substantial import item in South Africa in the past as cheap migrant labour from neighbouring countries was used on the gold mines in the Free State and Gauteng. However, these imports have been diminishing as numerous mines phase down operations and pressure is exerted to retrench foreign workers first. The other source of deficit on the labour income account is specialists linked to foreign multinationals operating in South Africa. South Africa has also increasingly become an exporter of labour services as local companies expand operations into the rest of Africa. However, as the centre of the regional economy, South Africa is likely to remain a net importer of labour services.

Although there exists no breakdown of the sales of foreign affiliates by sector, a good proxy for such a measure is the share of each sector in the stock of FDI. This is available for FDI in South Africa or for the import of services via commercial presence. Table 3 below contains both the actual stock of FDI in South Africa recorded by a South African Reserve Bank survey in 1995, as well as the flow of intended and actual FDI since 1994 as recorded by the private research group BusinessMap. The figures reveal that in 1995 services made up 50.5% of total FDI in South Africa. Investment in the service sectors until this point was to a large extent determined by which sectors were open to foreign direct investment. The state ownership of the vast majority of the transport and communications sector meant that only 1.8% of total FDI in services went into these sectors. Utilities also remained closed to foreign investment. The result is that two groups of sectors dominated FDI flows up until 1995 – financial and business services (72.7% of FDI in services) and internal trade, catering and accommodation (24.6% of FDI in services).

Since 1995 the pattern of investment has changed substantially as former state industries are opened up and partially privatised. The most obvious example of this process is the large investments in communication services which have accounted for almost a quarter of total FDI in South Africa since 1994, and 55.7% of FDI in services since 1994. This investment stems from the issuing of cellular telephone licenses and the selling of a 30% stake in the national provider Telkom. The other 2 popular service sectors for FDI are catering and accommodation (tourism facilities) and business services, each accounting for 16.1% of total FDI in services since 1994. Financial

services have also received some interest since 1994 with a large number of foreign banks setting up representative offices in South Africa.

Table 3: Sectoral share of FDI stock and flows in South Africa

Sector	Stock of	Flow of FDI
	FDI in S.A.	into S.A.
	(1995)	(1994-97)
Agriculture	0.9	0.0
Mining	4.3	1.3
Manufacturing	44.3	54.7
Services	50.5	42.2
Utilities	0.0	0.0
Construction	0.3	1.3
Internal trade	12.4	0.5
Catering &		6.8
accommodation		
Transport services	0.9	0.5
Communication services		23.5
Financial services	36.7	1.8
Business services		6.8
Other services	0.2	0.8
Total	\$15.5b	\$6.3b

Source: SARB Survey of Foreign Liabilities and Assets 1995; BusinessMap South African Insider 1997

However, what is most interesting about FDI in South Africa is that it is less than FDI abroad by South African firms. In 1995, the stock of foreign direct investment assets owned by South African firms totaled \$23.4 billion - \$7.9b or 51% more than the total FDI in South Africa. Part of the reason for this surprising anomaly is the large amount of disinvestment from South Africa that occurred during the mid-to-late eighties under sanctions which left small foreign holdings in South Africa by the 1990s (total disinvestment was roughly R30 billion). A closer examination of foreign investment in South Africa reveals that most of the investment in 1995 was non-direct investment – which accounted for 73% of foreign investment in South Africa. On the other end of the line is the large profits made by South African mining companies for the last 100 years which have enabled them to build up massive holdings overseas. This is evident by the fact that 46.5% of FDI by South African's abroad is in Luxembourg and 23.5% in the UK, both centres for the diamond industry and the De Beers Central Selling Organisation.

Interestingly, the trend seeing greater FDI by South African firms abroad compared to FDI in South Africa seems set to continue. FDI by South African firms since 1994 totaled \$7.3 billion - \$1 billion or 16% more than total FDI in South Africa. The vast majority of this investment has been in the mining and energy sectors and so is focused on countries with unexploited mineral reserves (mainly Africa and Latin America). It is in these sectors where South Africa has considerable expertise and extremely large domestic firms able to mobilise the funds to make such large investments. However, if one focuses on services only, South Africa will definitely have a large deficit with the sales of foreign affiliates in South Africa far outstripping the sales of branches of South African firms based abroad.

To conclude, services are already a significant component of South African trade - even with under-measurement. South Africa also demonstrates considerable strength in service trade, revealing an overall positive trade balance and a comparative advantage in half of the service sectors (some of which are capital and skill intensive). The structure of South Africa's trade in services also reflects its position in the global economy. On a regional level, it is the dominant and most developed economy in the Southern African region which means that it is will be a source of sophisticated producer services for the region. It's more developed status also means that it will have higher real wages and therefore be a net importer of labour-intensive services from the region. On an international level, South Africa is likely to be net importers of producer services as it has relatively less physical and human

capital resources. Despite this, there will be some exporting through the normal course of international trade and investment in goods. However, South Africa's less developed status and relative abundance of labour in comparison to developed countries gives it an advantage in sectors such as tourism and travel. These two opposed positions will continue to shape South Africa's trade in services.

# 2. The Nature of Domestic Service Production and its Linkages within the Economy

To undertake an informed trade and industrial policy process around services it is necessary to understand different facets of domestic service production. For instance, if a policy goal is to increase efficiency in services to enhance manufacturing competitiveness, then there is a need to understand what is size and nature of the intermediate role of services in different manufacturing sectors. To then bring about this efficiency gain, there is a need to understand the factor intensities of production for any factor market interventions and the market structure for any regulatory interventions. It is the purpose of this section to provide some answers to these questions by exploring the nature of service production in South Africa. For each measure there is a brief discussion of its relevance to the policy-making process and then a presentation and analysis of the South African values.

# 2.1 Factor Intensities of Production

# **Relevance for Policy-making**

The factor intensities of production can inform policy in a number of ways. First, it can be seen as a requirement for further expansion of a sector. For example, expansion of a skill-intensive sector requires that skilled manpower is available. If it is not, then either expansion is not feasible and efforts may be wasted or certain labour market interventions are needed to provide the skills. Expansion of a capital-intensive sector may require policy aimed at attracting foreign capital if local capital is in short supply. Second, it can be seen as the potential benefit of successful expansion of that sector. For instance, expansion of an employment intensive sector yields a great number of jobs. If the target of employment creation strategies are aimed at particular groups in society, then understanding the intensity of employment of these groups in a sector will enable better sectoral targeting in policy. Third, factor intensities may reveal the sectors in which a country is likely to have a comparative advantage when trade is opened up. Because trade in services has been so distorted by regulations, it is often difficult to determine the likely effects of competition based on existing trade flows. This is where factor intensities may provide some guide. Fourth, policy may be aimed at changing the factor intensities of production in order to bring about more desired outcomes. For instance, there may be a desire for greater employment levels in general or for greater employment of africans or woman specifically.

# The South African Case

Table 4 below presents data on the capital and skill intensity of production for South African service sectors as well as the employment intensity of Africans and females. What is missing from this table is some indicator of the technological intensity of each sector which should be developed at a latter stage. The data reveals that services as a whole are relatively capital-intensive. They are about 4 times more capital-intensive than agriculture, 25% less capital-intensive as mining and roughly 50% more capital-intensive than manufacturing. Measuring the skill-intensity of production was done by allocating each of the 9 main occupational groups to a skill level. High skilled contains occupation groups 1 (professional, semi-professional and technical occupations) & 2 (managerial, executive and administrative occupations); medium skilled contains occupation groups 3 (clerical and sales occupations), 6 (production workers, operators and artisans) and 8 (transport, delivery and communications occupations); low or unskilled contains occupation groups 4 (basic service occupations), 5 (farming, forestry and fishing occupations) and 7 (labourer). This is obviously imperfect and more nuanced classifications will need to be done in future.

Services are also more skill-intensive than all other sectors of the economy with 28% of total employment in high-skill categories compared to merely 11% in manufacturing. They do, however, also employ a significant number of low or un-skilled workers – 27% compared to 21% in manufacturing. Africans make up only 55% of total employment in services which is roughly the same as manufacturing but well below the primary sectors of the economy. Yet services are the least unequal in terms of gender – with females making up 40% of employment, well above manufacturing (29%) and agriculture (20%).

Table 4: Indicators of the nature of employment by sector 1995

Sector	K-L Ratio (R1000s capital per employee)	Average earnings (excl. benefits)	% employ high skilled	% employ medium skilled	% employ low-or un- skilled	% employ africans	% employ males
Agriculture	46	446	0.9	13.9	85.2	74.3	20.2
Mining	258	2055	7.3	68.7	23.4	75.0	4.1
Manufacturing	135	2061	11.1	67.6	20.8	55.8	29.3
Services Sector	199	2049	27.9	44.6	26.9	55.1	39.9
Utilities	1 216	2660	19	63.1	16.3	51.2	12.9
Construction	17	1582	10.4	68.4	20.8	56.1	6.7
Internal trade	45	1688	13.5	70.4	15.8	51.3	43.0
Catering & accommodation		1026	15.5	13.5	70		
Transport	430	2101	14.2	68.7	16.6	52.1	16.3
Communication		2579	30.5	59.3	9.3		
Financial services	482	2748	21.1	73.9	5	32.1	45.1
Business services		2616	32.2	38.7	28.6		
Community, social & personal services	171	2179	42.7	19.8	37	64.3	48.4
Total Economy	169	1789	20.2	45.3	34.2	59.1	33.4

Sources: SARB Quarterly Bulletin March 1998, CSS OHS Survey 1995

However, aggregation hides some important differences amongst service sectors<sup>5</sup>. At one end of the scale, utilities, transport, communication, financial and business services are all highly capital-intensive. At the other end, construction has the lowest capital-intensity for all sectors of the economy and internal trade, catering and accommodation services have a capital-intensity roughly equivalent to agriculture. An outcome from the lower capital requirements is that there is a greater proliferation of SMEs operating in these sectors.

There are also dramatic differences in the skill-intensity of employment. The most skill-intensive are community & social services (43% highly skilled), business services (32%), communication (31%), financial services (21%) and utilities (19%). For all the other service sectors, high skilled jobs make up between 10-15% of employment. A closer look at the catering & accommodation sector reveals that with 70% of employment low or unskilled, there is backing for the general feeling that tourism is one answer to absorbing rural and unskilled workers into the formal sector.

In terms of the racial composition of different sectors, most hover around the average for services in general. The exceptions are financial and business services which show an extremely low participation rate for africans (32%) and community & social services which shows a relatively high rate of participation by africans (64%). The former is most likely a result of the race-skills overlap in the South African labour market while the latter is because professions such as teaching and nursing were part of a few professions open to africans during apartheid years. Many of these professions also have a gender bias towards woman which results in a far more equitable share of females in community and social services as a whole. Other good performers on the gender score were financial & business services, internal trade, catering and accommodation.

# 2.2 Demand Structure of Services

# **Relevance for Policy-making**

The demand structure of any sector gives the extent to which output in that sector is currently dependent on growth in other sectors of the economy (the intermediate role) or growth in domestic final demand (the role of consumers and government) or growth in external demand (exports). The use for policy is twofold: first, it reveals the main means of stimulating changes in output in each sector. For example, it could be decided that sectors

<sup>&</sup>lt;sup>5</sup> Note that aggregation at the sectoral level still hides important sub-sectoral differences, but that is left for sectoral-specific studies.

which show a very high level of intermediate demand will receive sufficient stimulation from growth in other sectors and it is these other sectors where policy will concentrate. Alternatively, it could be decided to develop the independent growth factor by promoting exports or encouraging the development of products for the final demand market.

Second, it shows where efficiency gains in any one sector will be felt most by the economy. For example, efficiency gains in a sector with a high level of final demand may result in a lower cost of living for consumers but have very little impact on the competitiveness of other sectors in the economy. Any efficiency gain should see enhanced export performance in all sectors unless they are not orientated to exports. The obvious problem with this type of analysis is that it is static. For instance, poor competitiveness may be a reason why exports do not form a substantial component of demand anyway. However, as a short term policy tool it is still useful.

#### **The South African Case**

The previous classification of services as intermediate producer, intermediate distributive, final social and final personal used in the first chapter revealed the dominant demand structure for each service sector internationally. Table 5 below details the structure of demand in each economic sector in South Africa. It is apparent that intermediate demand is the dominant source of demand for many service sectors. Construction (86% intermediate demand), utilities (78%), communication (72%) and financial services (63%) all have shares of intermediate demand above the economy average and well above manufacturing at 52%. Transport and business services have lower than expected levels of intermediate demand (around 50% for both). In transport it is due to a sizeable amount of intermediate demand being for trade purposes and is classified under exports while business services includes real estate services which have a sizeable final demand component.

The services dominated by personal consumption expenditure are internal trade (59%), catering and accommodation (64%), and community and social services (65%). Although the previous section revealed which sectors were more amenable to trade, this is reinforced by figures in table 4 which show clearly that transport and tourism (catering & accommodation) are the most trade-orientated, followed by finance and communication services. It is these sectors that are most likely to respond to policies aimed at stimulating export performance in the service sector in the short run.

Table 5: Structure of demand in each economic sector (1993)

	Intermediate Demand	Personal Consumption Expenditure	Government Expenditure	Exports
Agriculture	65.1	27.8	1.2	5.9
Mining	31.2	2.4	0.2	66.2
Manufacturing	51.9	29.0	4.9	14.2
Service Sectors	48.8	42.5	4.1	4.6
Utilities	77.9	18.6	3.1	0.4
Construction	86.3	0.0	13.5	0.2
Internal trade	35.5	58.6	2.3	3.7
Catering & & accommodation	18.2	64.2	4.8	12.8
Transport services	49.6	33.7	3.9	12.8
Communication services	72.2	19.0	4.2	4.5
Financial services	63.1	29.4	1.3	6.2
Business services	48.1	43.1	7.0	1.8
Community, social & personal services	28.3	65.1	5.3	1.4
Total	61.4	22.4	7.3	8.8

Source: CSS Input-Output Tables 1993

# 2.3 Intermediate Role in the Economy

# **Relevance for Policy-making**

The analysis of the demand structure of services reveals how important intermediate demand is for a particular service sector, but it does not reveal just how important that service is for other sectors in the economy. Understanding the exact contribution of any one sector to the cost and performance of another sector is crucial for policy. Any policy aimed at making a sector more internationally competitive must focus to some extent on the efficiency of its intermediate inputs. This was less important in the past when the absolute size of tariff levels dwarfed the potential gains from marginal adjustments to the cost of domestic inputs. However, with international tariffs now at low absolute levels in most countries, the size of these marginal gains could well make a difference to competitiveness. In fact a World Bank study of the causes of the decline in the world trade share of sub-Saharan countries, revealed that highly inefficient export-related domestic services (e.g. transport, communication, finance, cargo-handling, customs) were the main cause of this decline and not changing tariff levels in destination countries (which had in fact reduced considerably)<sup>6</sup>.

#### The South African Case

One measure of the importance of services as an intermediate input, is the cost contribution that the service makes to the final output of the receiving sector. Table 6 below provides a breakdown of the total service input requirements for all economic sectors in 1993. The table contains only the intermediate inputs brought externally by any sector and does not include the contribution of internal labour and capital. The sectoral breakdown is the same as what has been used up until this point in the paper, though community and social services excludes government services. When reading the table it is important to note two figures to understand the importance of services to output. First, how many cents of services need to be purchased from outside a firm to produce one rand of output, and second, what proportion of total external requirements do services make up. The first measure reveals how important services are overall and the second how important they are relative to other inputs. The table also includes an average intermediate contribution to the South African economy weighted by the contribution of each sector to GDP. Note also that a more detailed version of this table containing a breakdown for the 10 main manufacturing sub-sectors and the main service sub-sectors appears in appendix 4.

Table 6: Total services input requirements 1993

	Agriculture	Mining	Manufacturin	Service	Weighted
			g	Sectors	Average
Agriculture	6.9	0.1	5.5	0.4	1.8
Mining	0.3	0.2	3.0	0.8	1.2
Manufacturing	28.0	20.6	39.6	14.1	21.1
Service Sectors	12.7	12.5	12.3	27.2	22.0
Utilities	1.2	6.0	2.0	5.5	4.5
Construction	0.5	0.5	0.0	2.9	1.9
Internal trade	6.7	3.0	4.7	3.8	4.1
Catering & accommodation	0.0	0.0	0.0	0.6	0.4
Transport services	2.5	2.2	2.1	2.4	2.3
Communication services	0.1	0.1	0.4	2.0	1.4
Financial services	0.7	0.0	1.2	2.8	2.1
Business services	0	0.7	1.8	5.8	4.2
Community, social & personal services	1.0	0.0	0.2	1.4	1.0
Total Intermediate Input	48.5	39.9	64.9	43.6	48.4

Source: CSS Input-Output Tables 1993

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<sup>&</sup>lt;sup>6</sup> World Bank working paper 1995

The table is very revealing of just how important services are as an intermediate input. The external service requirements to produce one rand of output is much the same for agriculture, mining and manufacturing – all around 12.5 cents – but significantly more for services themselves at 27.2 cents. This means that a 10% reduction in the price of services in general would lead to a drop of over 1% in the price of manufacturing products and almost 3% in other services. In terms of relative importance, services make up 26% of total external requirements for agriculture, 31% for mining, 19% for manufacturing and 62% for services themselves. This is well below the contribution of manufacturing products to external requirements in all sectors except services itself. However, on a weighted basis, services are a marginally more important intermediate input in the South African economy.

The contribution by services is dominated by what are classified as intermediate producer services (financial & business services, construction and utilities) and intermediate distribution services (distribution, transport and communication) which account for over 90% of the service inputs into all sectors of the economy. On a weighted basis the largest intermediate contributors are utilities (4.5c per rand of output), business services (4.2c), distribution services (4.1c), transport services (2.3c), financial services (2.1c), construction (1.9c) and communication (1.4c). It is these services that need to be efficient and competitive within the South African economy in order not to penalise the downstream manufacturing sector or other sectors which may be promoted.

However the above rands and cents analysis fails to convey the true importance of certain services to the downstream users. Such services may be critical to the operation of a firm and if the service product is missing or of sub-standard quality, it may seriously hinder the ability of that firm to operate. An obvious example is information and communication services which, as shown, do not contribute significantly to the cost of operations but are necessary for most firms to operate and compete internationally. Another is financial services where the lack of key markets such as venture capital, finance for SMEs or risk management products, can seriously affect economic performance.

# 2.4 Multiplier Effects of Service Production

# **Relevance for Policy-making**

The existence of linkages in the economy, as detailed above, means that an autonomous increase in output in one sector will stimulate output increase in other sectors resulting in a significantly greater overall increase for the economy. The number of linkages and the size of these multiplier effects have been at the core of the traditional focus on industrialisation as the means to economic development. The multiplier represents the potential gains from an initial output increase in a sector – gains which can be contained in a national economy if sourced locally. The measured domestic multiplier is the actual gains to the domestic economy currently based on the actual extent to which the secondary demand is sourced locally. From a policy perspective both are of interest. The potential multiplier may be a target to aim for any import substitution goals. The actual domestic multiplier represents the current effect of existing policies aimed at stimulating output and a means of identifying potential bottlenecks in the future.

#### The South African Case

Table 7 below holds the output multiplier for a R1 increase in the output of each service sector, broken down by its sectoral impact. A more detailed version of this table, including manufacturing sub-sectors, appears in appendix 4. This is followed by table 8 which holds the employment multiplier for a R1 million increase in output in each sector, broken down by its sectoral and labour market impact. As with table 7, a more detailed version appears in appendix 4.

The current output multiplier effect for services (1.87) in South Africa is just marginally more than mining (1.8), but significantly below that of agriculture (2.11) and manufacturing (2.39). This may be either due to a low true multiplier or just a failure to make the links locally. The second round effects of an increase in services output on agriculture and mining are low, as with all other sectors. The second round effect on manufacturing (0.32) is the lowest of all 4 main sectors – it is about 25% less than the multiplier from mining, almost half that of agriculture and only 40% of the effects from manufacturing itself. However, the second round effect of an increase in services on other services is the highest of all the 4 main sectors of the economy (0.49).

Turning to the service sub-sectors, a few stand out as exceptions to this general trend. Catering and accommodation has the highest multiplier of all sectors of the economy at 2.43. This is due to its very high second round effects on agriculture (0.2) and manufacturing (0.7), while the effect on other services is around

average for a service sector (0.48). Construction also has a very high multiplier effect roughly equivalent to manufacturing. The sectoral impact is predominantly on manufacturing (0.63) and other services (0.65). The only other above average performers are utilities and financial services. Business services and communications have the lowest multipliers by a significant margin at 1.31 and 1.57 respectively. Two-thirds of the second round effects that do exist are in other services. Justification for stimulating these two sectors would therefore need to based on their key intermediate role.

Table 7: Total direct and indirect domestic output multiplier effect of a R1 increase in output of each sector (1993)

	Sectoral	Sectoral distribution of output multiplier						
	Agricultur e	Mining	Manufactu ring	Service Sectors	Total Multiplier Effect			
Agriculture	1.11	0.07	0.57	0.36	2.11			
Mining	0.01	1.04	0.41	0.34	1.80			
Manufacturing	0.10	0.08	1.78	0.44	2.39			
Service Sectors	0.02	0.04	0.32	1.49	1.87			
Utilities	0.01	0.08	0.33	1.68	2.08			
Construction	0.01	0.09	0.63	1.65	2.37			
Internal trade	0.01	0.03	0.24	1.51	1.79			
Catering & accommodation	0.20	0.04	0.71	1.48	2.43			
Transport services	0.01	0.07	0.35	1.46	1.88			
Communication services	0.00	0.02	0.19	1.36	1.57			
Financial services	0.01	0.02	0.19	1.81	2.03			
Business services	0.00	0.01	0.10	1.20	1.31			
Community, social & personal services	0.02	0.03	0.32	1.47	1.84			

Source: CSS Input-Output Tables 1993

By applying the output-employment ratios to the above table, it is easy to develop an employment multiplier as shown in table 8. The overall employment multiplier effect is determined both by the size of the output multiplier but also by the intensity of employment use in the sectors that benefit. The table includes the skill, race and gender effect.

Table 8: Total direct and indirect domestic employment multiplier effect of a R1 million increase in output of each sector (1993)

	Direct Effect		Indired	t Effect		Total	*	_	nder dist ient creat	
		Agricul ture	Mining	Manufa cturing			No. high skilled	No. low skilled	No. African	No. female
Agriculture	68.7	7.8	1.0	5.6	6.0	89.2	2.5	67.8	63.9	19.2
Mining	14.3	0.5	0.6	3.4	4.8	23.6	2.4	5.5	15.9	3.2
Manufacturing	14.3	6.6	1.1	14.7	6.5	43.2	4.6	13.1	25.2	12.1
Service Sectors	19.1	1.5	0.6	5.2	7.8	34.2	6.8	10.2	18.7	10.3
Utilities	5.7	0.4	1.1	3.4	7.2	17.8	2.9	3.6	9.6	3.6
Construction	35.1	0.6	1.3	14.9	13.3	65.2	7.4	13.8	36.4	9.6
Internal trade	21.5	0.5	0.4	3.6	8.0	33.9	4.8	6.2	17.6	13.0
Catering & accommodation	43.1	14.0	0.5	10.0	6.2	73.8	9.3	45.6	41.5	26.3

Transport services	13.9	0.6	1.0	4.1	7.0	26.5	3.8	5.4	14.2	5.9
Communication	16.8	0.2	0.2	1.9	5.6	24.7	6.6	3.0	13.0	4.8
services										
Financial services	11.2	0.6	0.2	3.4	11.3	26.6	5.4	4.0	11.1	10.5
Business services	7.0	0.3	0.1	1.4	2.9	11.7	3.1	3.2	4.7	4.6
Community, social	27.8	1.3	0.4	4.8	7.6	41.9	14.2	14.5	25.7	17.8
& personal										
services										

Source: CSS Input-Output Tables 1993, OHS 1995

The results for services in general reveal a pattern similar to the output multiplier. At 34 jobs, employment creation from a R1million increase in service output is about 50% higher than mining, 25% lower than manufacturing and about 40% of the number achieved by agriculture. However, on average services do create the most high skilled jobs, although they remain second last in terms of the number of low skilled, african and female jobs created through a multiplier effect. A expected, certain service sectors go against this average trend. Catering and accommodation has a substantial employment multiplier effect (74 jobs) of which many are generated indirectly (31), are low skilled (46), for african workers (42) and for females (26). The other above average performers in are construction (65 jobs) and community and social services (42 jobs). A high proportion of jobs created by these two sectors go to african workers. The real under-performers are business services (12 jobs) and utilities (18 jobs).

# 2.5 Domestic Market Structure

# **Relevance for Policy-making**

In most countries, numerous service sectors tend to be monopolistic or oligopolistic in nature. This is either because the state has chosen to be the sole provider for natural monopoly, strategic or universal service reasons (e.g. telecommunications), or because there significant exist economies of scale advantages which limits the number of entrants (e.g. retail banking). Even in service sectors where there are more numerous firms, excessive regulation can often restrict competition to a greater or lesser extent. It is these uncompetitive market conditions that are seen by many as the dominant cause of inefficiencies in the services sector. The standard solution is to inject competition, domestic or foreign, through privatisation, deregulation and trade liberalisation.

If the direction of policy in services is to increase efficiency - whether to respond to trade opportunities and threats or to improve the competitiveness of other sectors – then it is necessary to identify and respond to market structures or regulations within each sector which have the effect of restricting competition. An approach to altering the competitive conditions will need to be formulated depending on the potential competition domestically, the potential competition from abroad, trade liberalisation pressures, and domestic sector development priorities.

# **The South African Case**

As with other countries, many of South Africa's service sectors tend to be monopolistic or oligopolistic in nature. The gradual opening up of many service sectors through privatisation, deregulation and trade liberalisation is starting to make an impact on some sectors. However, often the status quo does not change - either because the extent of market opening is insufficient (e.g. telecommunications) or because the local incumbents are strong and have a firm grip on the local market, discouraging new entrants (e.g. retail banking). However, concentration does not imply a lack of competition – either potential or actual – and this section does not try to make judgements on the extent of competitive behavior in concentrated markets. What follows is merely a description of the market structure in each main service sectors. Because it is difficult to generalise for such broad sectors as communications, there is some discussion of the sub-sectors too.

Table 8 contains a summary of the domestic market structure for sub-sectors of each service sector. It reveals that the state either completely dominates or has a monopoly in significant sub-sectors of half of the 12 service industries. Further, 5 of the 12 service industries have significant sub-sectors where only a few firms dominate the market. This supports the earlier observation that South Africa's service sectors tend to be monopolistic or oligopolistic in nature either because the state has chosen to be the sole provider for natural monopoly, strategic or universal service reasons, or because the small market size combined with economies of scale advantages have limited the number of entrants. However, it should also be noted that significant sub-sectors exist in 10 of the 12

service industries where many firms compete for market share. In fact, in 4 of the 10, competition amongst many firms occurs in the entire sector.

Of the sub-sectors dominated by the state, deregulation is planned in the utilities, communications and transport services which will open these markets to most likely a few dominant firms. Of the sub-sectors dominated by a few firms, further deregulation seems unlikely to change the market structure significantly as they all operate in markets where either there are significant economies of scale or where the size of the local market restricts the profitability of more entrants. What follows is a discussion of each sector.

Table 8: Domestic market structure for service sectors

Sector	State Domination or Monopoly	Few Firms Dominate	Many Competing Firms
Intermediate producer services			
Business services			All business services
Financial services		Retail banking, insurance	Corporate banking, insurance brokerage
Construction		Site preparation, equipment leasing and civil structures	Most other construction
Utilities	Electricity generation and distribution, water purification and distribution		
Intermediate distributive services			
Communication services	Post, public fixed line telephony	Mobile telephony, Courier services, broadcasting	VANS
Distribution services			All
Transport services	Rail transport, airports, ports	Air transport	Road transport
Final demand social services			
Educational services	Primary, secondary, tertiary educational services		Specialist Training
Environmental services	Sewage, refuse disposal and sanitation		
Health services	Public health system	Private hospitals and clinics	Private practitioners
Final demand personal services			
Tourism and Travel			All
Recreational, cultural and sporting services			All

## Intermediate Producer Services

Intermediate producer services (business services, financial services, construction, utilities) are all competitive markets with the exception of utilities where state monopolies operate.

Business services are characterised by many producers operating in a competitive manner. The nature of the services is that they are usually knowledge-based with low capital requirements. Therefore the only restrictions to entry tend to be recognition of professional qualification and/or reputation. As South Africa has a considerable number of skilled professionals in a large variety of fields, there are in most cases a large number of small firms operating competitively in each service. However, this is not always the case. Price competition can be limited by professional associations setting standard tariffs and by limiting the recognition of qualifications. In other business services a few dominant players emerge due to a number of factors such as quality and reputation or the ability to handle the complete needs of large clients (e.g. auditing). Regardless, the market for business services in South Africa is competitive.

Financial services in South Africa is generally characterised by the dominance of a small number of large firms, with many smaller players active in niche markets. However, the transformation of the financial services sector that is occurring internationally is mirrored in the local market and the shape of the sector is gradually changing. In the banking sector the main players are Standard, First National, Nedbank and Absa. These four firms dominate the retail banking sector where a vast amount of investment in branch and electronic banking infrastructure is required. Competition in this market is beginning to come from partnerships between retailers, who already have the necessary 'branch' and electronic systems to access a broad market, and smaller banks which have the banking products and expertise (e.g. Pick n Pay and Boland Bank). There is also a rapid growth in community banking operations aimed at the lower end of the market and private banking operations aimed at the upper end of the market. The former do not offer the same range of services as the traditional retail banks while the latter offer more personal and specialist services. The difficulty in entering the retail banking sector has meant that new entrants have targeted the corporate and merchant banking sector where there has been a very rapid growth in competition in South Africa. At the time of writing there were 32 registered local banks, 10 registered foreign banks, 12 registered branches of foreign banks and 63 representative offices of foreign banks.

The insurance industry in South Africa displays similar levels of concentration in the administration of insurance products but offers more competitive conditions in the selling of insurance products. The main players in the industry are Momentum/Southern Life, Old Mutual, Sanlam, Fedsure/Norwich and Liberty Life which all administer insurance products. There has been a number of recent changes in the industry. A spate of mergers, in line with international trends, has increased the concentration of firms while Old Mutual and Sanlam are in the process of demutualising. Some of these firms sell their own products while others make use of agencies or brokerages. A further trend in the industry is the tying of brokerages to individual firms.

The *construction industry* in South Africa is comprised of a large number of small firms and a few large civil engineering firms. The 1994 census revealed that there were 12,368 establishments, of which 11,323 employed under 50 people, 1,027 employed between 50 and 1000 people, and 18 employed over 1000 people. This market structure is to be expected as small-scale building construction requires little capital and widely available skills in servicing a large market – hence many small firms. Larger civil construction requires considerable capital reserves and complex project management and technical skills in servicing a market offering a small number of large projects – hence a few large firms. However, the extensive sub-contracting work arrangements of construction firms results in a very competitive industry. In fact, concentration indices reveal that in only 2 sub-groups – site preparation and renting of equipment – do the largest 10 firms control more that 50% of output. The landscape of civil construction in South Africa is changing as government tendering procedures have been adjusted to encourage participation by previously disadvantaged groups and with international firms entering the local market. However, the market structure remains more or less unchanged.

The *utilities* of electricity, gas and water represent the only intermediate producer service sector where state control exists. The parastatal ESKOM generates 95% of all power in South Africa using predominantly steam turbines (92%) and one nuclear plant. The remaining 5% is produced by local authorities and some private enterprises. The distribution of electricity is controlled by ESKOM and the local authorities. ESKOM is the bulk distributor of electricity, but only distributes approximately 55% of its generated electricity to the final consumer itself. The remainder is distributed to local authorities who then distribute it onto final consumers. In terms of market segmentation, local authorities are dominant distributors to households (89%), commerce (86%) and their own operations (99%) with a significant share of distribution to manufacturers (30%). Self-producers are mostly active in mining (35%), manufacturing (22%) and in the transport parastatal Transnet (50%). Water operates in a similar, but more decentralised, manner to electricity. The purification and bulk supply of water to major urban areas is performed by regional water authorities. The local authorities then distribute the water to the final consumer. Smaller urban areas which do not fall under the larger water authorities have their own water purification facilities and rural areas are serviced mostly by the provincial governments. There are planned

changes in the regulation of utilities which aim to attract private investment in the sector in order to relieve the burden on government (e.g. Eskom is to be privatised). There are also moves to open the management of water and electricity distribution operations at a regional and local level to private utility management firms.

#### Intermediate Distributive Services

Intermediate distributive services (communication services, distribution services, transport services) represent sectors of strong state intervention in South Africa – with the exception of distribution services.

Communication services incorporates the postal, courier, telecommunications and broadcasting sectors. Similar to most countries, the postal service in South Africa is state-owned as it is seen as a necessary yet loss-making service. The operation has recently been separated from telecommunications and corporatised. Minimal competition is offered by a small private postal operation (Postnet) which has recently been established, but which has limited coverage and services. The SA Post Office does offer a courier service, but this is within a competitive industry open to private operators. Telecommunication services in South Africa are also dominated by the state but have undergone enormous changes in the past few years in response to international and local pressure to open up the markets to competition. Public fixed line telephony is currently supplied by the monopoly Telkom. However, a regulatory process has been put in place to move the sector to a competitive duopoly by early in the next century. Telkom was corporatised in 1992 and an independent regulatory authority (the South African Telecommunications Regulatory Authority - SATRA) was established. A 5 to 7 year time limit was placed on the monopoly in 1996 in order to address the infrastructure backlog in previously disadvantaged communities and prepare itself for competition. The exact length of the exclusivity period depends on Telkom's delivery on addressing the backlog and improving efficiency. In order to inject capital and efficiency, Telkom took on international partners in 1997 by selling a 30% stake to Telecom Malaysia and SBC Communication. Telkom's monopoly also extends to being the sole carrier of international telecommunications traffic whose network must be used by all communication service firms – including mobile communications.

Three large private telecommunications operators do exist – namely the transport parastatal Transnet, the electricity parastatal Eskom, and the South African National Defence Force (SANDF). All three have relatively extensive networks yet are restricted from providing public services. Mobile communications were introduced for the first time in South Africa in 1994 when 2 licenses were awarded to Vodacom and MTN – both consortium's of local and international investors. All indications are that this represents a competitive duopoly as the roll-out of transmission infrastructure and value-added services has been extremely rapid. The regulatory authority has recently decided that the market size warrants a third operator and a new license will be issued before in the very near future. Value-added Network Services (VANS), including Internet Service Providers (ISPs), have been open to private participation since 1991 and licenses are issued and managed by SATRA. This is a competitively vibrant component of the market with many operators but which has seen some consolidation recently. There has been recent action by Telkom to lay claim to the ISP market by defining it as a basic service, yet this was overturned by SATRA.

Broadcasting is another previously state dominated sector which is slowly being opened up to competition. Until recently, almost all radio and television broadcasting was run by the State through the public broadcaster – the South African Broadcasting Corporation (SABC). Competition in television came from M-Net, a pay-for-view operator whose license restricted it from offering news services. Competition in radio came from a small number of cross-border stations and a commercial talk station in Johannesburg (Radio 702). However, deregulation of the industry is being supervised by the Independent Broadcasting Authority (IBA) which was established in 1994. Since then, a large number of community radio licenses have been awarded as well as a number of regional commercial licenses. The SABC has also sold off a number of its regional stations, adding to the private sector involvement. In terms of television, a license for one more public station has recently been awarded and Multichoice, the holding company for M-Net, has added a digital satellite service to its existing decoder business.

Distribution services, which include the retail and wholesale industries, are characterised by many producers operating in a competitive manner. This is because the low capital and skill requirements, as well as the large, spatially distributed market, make this a SME friendly sector. However, similar to international experience, a few large dominant firms have emerged in many of the retail/wholesale sub-sectors due to the existence of economies of scale in the purchasing and distribution functions and returns to reputation. This is evident in sub-sectors from clothing to food to jewelry. Despite the emergence of large firms, the markets remain competitive.

*Transport services* are another sector where state involvement has been immense in South Africa. The means of involvement has been through the parastatal giant Transnet which operates divisions in all modes of transport.

However, contrary to other sectors, Transnet often operates in competition with private providers. In the air transport sub-sector, the state owns both the national carrier – South African Airways (SAA) – but also another domestic carrier – Sun Air. Domestic passenger and freight transport is a limited market and only one other additional carrier exists – Comair – which was recently brought by British Airways. A number of carriers entered the market in the early 1990s but only Comair has survived. International air transport services to and from South Africa are open to numerous international carriers as well as SAA. However, the number of operators on any particular route is usually restricted to the respective national carriers under landing slot agreements and so the extent of actual competition may be relatively small. In terms of ownership, Sun Air is due to be privatised and SAA partially privatised in the near future. Airports in South Africa are state-owned through the Airports Company. However, private sector involvement has began with the sale of a 30% stake in the company to the Italian airports company in order to raise capital to expand facilities.

Road transport is another sector where the state is involved under competitive conditions. The Autonet and PX divisions of Transnet offer road freight transport services, though in stiff competition to numerous other private firms. These divisions are likely to be fully privatised in the near future. Passenger transport by road is the scene of intense competition in South Africa. Urban transport sees competition between a limited municipal bus service and an unregulated minibus taxi industry. Long distance routes are covered by minibus taxis and a handful of luxury bus companies. In contrast, rail transport services remain the sole domain of the state where Metrorail is the Transnet division operating urban passenger transport and Spoornet is the division operating long-distance freight and passenger services. All rolling stock and rail infrastructural assets are owned by the two companies. Competition in this sector comes from other modes of transport rather than other operators. Finally, sea transport is open to competition from carriers from around the world. The state interest in the sector is through ownership of the ports by the Transnet division Portnet. Competition in the sector is restricted by international maritime agreements where companies registered in both the receiving and shipping country get preference.

## Final Demand Social Services

Final demand social services (educational services, environmental services, health and related social services) are traditional areas for state intervention to ensure universal access to a minimum standard of service. These are also the services on which most tax income is spent.

In *educational services*, the state is the main producer of primary, secondary and tertiary education. Private schooling does exist in South Africa for the more affluent, but it is not significant and educates only 1.5% of the school-going population. At a tertiary level, state universities and technikons offer the only officially recognised degrees. This includes a correspondence only university, Unisa. There is some competition to the state at the tertiary level as private colleges have emerged offering full 3 year specialist programmes in predominantly business subjects. The biggest players are Boston College and Intech College. A private university has also been established in Johannesburg which merely offers lectures for Unisa degrees. However, the private sector is most active in the provision of short specialist training courses. The size and diversity of the South African economy means that there is a dense network of training institutions in almost all specialist fields.

*Environmental services* include sewage, refuse disposal and sanitation services. These are all provided by local authorities and currently no private sector involvement exists.

The structure of *health services* in South Africa are a standard blend of public and private provision. The state offers a public health system through hospitals and clinics which is free for primary health care but charges on an ability-to-pay basis for tertiary care. However, the existence of a sizeable affluent community in South Africa has led to the extensive development of private hospitals and clinics. The provision of private hospital services is dominated by two companies – Clinic Holdings and Mediclinic. South Africa has a dense network of private health practitioners in all fields. The existence of private health services has necessitated the development of private medical aid schemes which is a concentrated sub-sector.

### Final Demand Personal Services

Final demand personal services (tourism and travel-related services, recreational, cultural and sporting services) are all open and competitive sectors of the economy. The tourism and travel-related industry is heavily populated with small firms because of the low skill and capital requirements in many sub-sectors of the market. Even though there are a number of large firms in various sub-sectors of the industry (e.g. 5-star hotels, package tours), they are unable to influence the market because of the competitive nature of the sector. The same competitiveness applies to recreational, sporting and cultural services. The South African government is involved through the provision

of libraries and museums, and the funding of various cultural services. However, its role is merely support and not dominance.

# 2.6 Openness to Trade

# **Relevance for Policy-making**

The process of developing a trade policy for services must begin with an understanding of the current trade regime. From there, assessments can be made as to where there are likely to be pressures to liberalise and where there might be a desire to liberalise because excessive restrictions on foreign entry may be seriously affecting the efficiency of the local service providers. However, the process of describing the trade regime in services is far more tricky than with goods because tariffs are rarely usable for the simple reason that there is often no easily identifiable unit of measurement in services that can be used<sup>7</sup>. Barriers to trade most common in services are regulations or subsidies/procurement policies that serve to restrict market access by foreigner service providers or discriminate them. These barriers also differ according to which mode of supply is chosen by foreign providers, and may dictate the choice of supply mode. Appendix 3 lists the type of restrictions that exist for each mode of supply.

However, some of the regulation that occurs is not a premeditated attempt to restrict foreign access to domestic service markets, but rather it 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 substandard products when imperfect information exists for the buyer (e.g. by registration and qualification of professionals). Another reason 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). For this reason, a clear and deliberate trade policy may not exist but may be more the result of years of accumulating regulation. Therefore, the starting point for developing a deliberate trade policy is understanding what exists first and then deciding what is desirable to keep and what barriers should be removed.

## **The South African Case**

Detailing the main regulations that restrict market access or discriminate in the provision of a service by a foreign provider is a huge task and beyond the scope of this paper. However, one can get an impression of the current openness to trade of South Africa based on the existing GATS offer. Each countries GATS schedule operates on a positive list approach – i.e. a member lists those sectors and sub-sectors for which they are making specific commitments. Commitments are then made on market access and national treatment separately for each mode of supply subject to any restrictions. There is the opportunity to make horizontal commitments which are then binding in all sectors and sub-sectors. Table 9 overleaf contains a summary of the South African GATS offer, including the updated offers on telecommunications and financial services. A discussion follows.

# Horizontal Measures

South Africa made two horizontal commitments. The first pertains to limitations on market access for the presence of natural persons mode of supply. It binds a commitment to allow the temporary presence for up to 3 years without an economic means test for service salespersons, intra-corporate transferees (executives, managers, specialists and professionals) and personnel engaged in establishment. Although these commitment fall under the presence of natural persons, they play an important role in facilitating FDI in South Africa by service firms. What the offer does not cover is individuals which are not linked to a firm that is establishing or has established itself. It therefore restricts freelance professionals from operating in South Africa without complying with other regulations. The other pertains to national treatment limitations for commercial presence. In this instance a binding commitment was made limiting the local borrowing of South African registered companies with a non-resident shareholding of 25% or more.

<sup>&</sup>lt;sup>7</sup> Exceptions are tariff charges on foreign transporters or travelers.

Table 9: Summary of South African sectoral commitments to GATS

Sector	Sub-sector Coverage	Cross-border Supply	Consumption Abroad	Commercial Presence	Presence of Natural Persons
Horizontal measures				limitation on local borrowing by South African registered companies with a non-resident shareholding of 25 percent or more	temporary presence without requiring an economic means test for services salespersons, intra-corporate transferees and persons engaged in establishment
Intermediate producer services					
Business services	No coverage of R&D services; advertising services; services incidental to energy distribution; packaging services; printing and publishing	<ul> <li>No restrictions on market access or national treatment in 27 services</li> <li>Restrictions specified for architectural services</li> <li>Unbound in 8 services, 2 due to technical infeasibility</li> </ul>	No restrictions on market access or national treatment in 29 services     Restrictions specified for architectural services     Unbound in 6 services	No restrictions on market access or national treatment in all services covered except legal and auditing services	Unbound except for horizontal commitments for all services covered
Financial services	Complete coverage of the sector	Unbound for all services covered	No restrictions on market access or national treatment in all insurance services     Unbound for all banking and other financial services except no restrictions on market access for the provision and transfer of financial information and financial data processing	There are numerous restrictions on market access for all services covered – mainly involve local incorporation and registration, a local capital base and residency of key personnel No restrictions on national treatment in all insurance services Restriction on national treatment in banking relates to maintaining a R1m deposit for banks not incorporated in South Africa	Unbound except for horizontal commitments for all services covered
Construction	Complete coverage of the sector	Unbound due to lack of technical feasibility for all services covered	No restrictions on market access or national treatment in all services covered	No restrictions on market access or national treatment in all services covered	Unbound except for horizontal commitments for all services covered
Intermediate distributive services					

Communication services	No coverage of postal services, all audiovisual services and the telecommunication services of telegraph, electronic mail, voice mail, on-line information and database retrieval, EDI, enhanced fax services and code & protocol conversion	Market access restriction for all telecommunication services - international traffic must go through Telkom monopoly or subsequent duopoly     No restrictions on national treatment for all telecommunication services     No restrictions on market access or national treatment for courier services	No restrictions on market access or national treatment in both telecommunication and courier services	Market access restriction for all telecommunication services – limited number of suppliers in all but VANS, and foreign investment in suppliers limited to a maximum of 30%     No restrictions on national treatment for all telecommunication services     No restrictions on market access or national treatment for courier services	Unbound except for horizontal commitments for all services covered
Distribution services	No coverage of commission agent's services	• No restrictions on market access or national treatment in all services covered	No restrictions on market access or national treatment in all services covered	No restrictions on market access or national treatment in all services covered	Unbound except for horizontal commitments for all services covered
Transport services	Coverage of passenger and freight road transport and the maintenance and repair of road transport equipment only	Unbound on all services covered, one due to lack of technical feasibility	No restrictions on market access or national treatment for maintenance and repair services     Unbound for passenger and freight transport	No restrictions on market access or national treatment in all services covered	Unbound except for horizontal commitments for all services covered
Final demand social services					
Educational services	No coverage of entire sector				
Environmental services	Coverage of consultancy services to all categories only	• No restrictions on market access or national treatment in all services covered	No restrictions on market access or national treatment in all services covered	No restrictions on market access or national treatment in all services covered	Unbound except for horizontal commitments for all services covered
Health services	No coverage of entire sector				
Final demand personal services					
Tourism and Travel	Complete coverage of sector	<ul> <li>Unbound for catering and tourist guide services due to lack of technical feasibility</li> <li>No restrictions on market access or national treatment in all other services covered</li> </ul>	No restrictions on market access or national treatment in all services covered	No restrictions on market access or national treatment in all services covered	Unbound except for horizontal commitments for all services covered
Recreational, cultural and sporting services	No coverage of entire sector				
Other	Coverage of washing & cleaning services and hairdressing services only	Unbound due to lack of technical feasibility for both services covered	No restrictions on market access or national treatment in both services covered	No restrictions on market access or national treatment in both services covered	Unbound except for horizontal commitments for both services covered

#### Intermediate Producer Services

For business services, it appears as if South Africa has a relatively open trade regime. The GATS offer has bound no restrictions on market access or national treatment for the majority of services for cross border, consumption abroad and commercial presence modes of supply. The commitment on the presence of natural persons mode is contained in the horizontal measure. However, this does apply only to people who are linked with a service provider which is establishing or has established a commercial presence here. The services excluded either reflect legal concerns (auditing, legal services) or genuine trade restrictiveness (e.g. R&D).

Construction also appears relatively open with no restrictions on market access or national treatment for consumption abroad & commercial presence (cross-border supply is considered technically infeasible and presence of natural persons is covered by horizontal commitments). However, limitations on raising local finance and the incidence of preferential treatment of local companies in government contracts can serve as significant barriers to foreign companies acting alone.

Financial services contain the most limitations and the least coverage – demonstrating a more restrictive trade regime. There are no binding commitments made for cross-border supply of banking and insurance products which is a reflection of both existing exchange controls and prudential concerns. Exchange controls are reflected in the consumption abroad mode of supply which has no binding commitments for banking services. However, there is no restriction on insurance consumption abroad. The prudential concerns are reflected in commercial presence commitments where there are numerous market access limitations which require local incorporation and registration, local capital base and residency of key personnel. The only national treatment restrictions relate to banks that require a deposit to operate.

#### Intermediate Distributive Services

Intermediate distributive services are an area of considerable government involvement and so offer a far more restrictive trade regime. The exception is *distribution services* where there exist no market access or national treatment restrictions exist under all modes of supply, with exception of the presence of natural persons.

The restrictiveness of trade in communications services is first reflected in the coverage of commitments. There is no coverage of postal services and audiovisual services. Both are dominated by government monopolies although opening up slightly in recent times. There are commitments under telecommunication services, but these merely bind the current state monopoly. In terms of cross-border supply, all international traffic must go through Telkom. For commercial presence, there is restricted market access to all forms of telecommunications except value-added network services (VANS) – essentially maintaining the Telkom public telephony monopoly and the cellular duopoly. In addition, any foreign investment in the sector is limited to a 30% maximum. Presence of natural persons are at least not restricted for the foreign investors. Only courier services have no market access or national treatment restrictions.

Transport services display the same extent of trade restrictiveness as communications. Only road transport receives any coverage in the GATS offer. Air transport is heavily regulated due to bilateral landing rights agreements dictating trade on international carriers and restricted market access through licensing for domestic carriers. The same type of restrictions apply to marine transport, while with rail a local state monopoly exists.

In summary, transport and communications services display extremely high levels of trade restrictiveness in almost all sub-sectors. Opening up to trade is linked directly to privatisation and deregulation.

#### Final Demand Social Services

Final demand social services – education, health & environmental services - receive almost zero coverage by the South African offer. The only commitment is unrestricted access and national treatment of consultancy to environmental services, but not delivery of the services themselves. The lack of commitments may not be a reflection of significant trade restrictions as a healthy private sector exists in both education and health anyway, but rather difficulty in putting together an offer which adequately expressed the local regulation.

#### Final Demand Personal Services

Tourism and travel services have no restrictions on market access or national treatment for all modes of supply that are technically feasible. Other than that there is only coverage of cleaning & hairdressing services. Again,

the exclusion of significant offers on other services included in this category (e.g. recreational services) probably has more to due with capacity to make an offer rather than numerous trade restrictions.

In summary, trade in services with South Africa is least open in transport, communication and financial services where considerable barriers exist. These are mostly tied in with government monopolisation of numerous subsectors, exchange controls or prudential requirements. Therefore a department like the DTI may have little control over any liberalisation process. In other sectors there appears to be a far more open trade regime. However, sectors which are capital-intensive (e.g. hotels) or which derive much of their demand from government procurement (e.g. construction) are less open to trade due to limitations on access to local finance and a local bias in government procurement policies. Again, the DTI may have little influence over these forms of trade restrictions.

# 3. Exploring a Trade and Industrial Policy Agenda for Service Sectors

In the introduction it was argued that in with the growing tradability of services and their importance as a determinant of competitiveness of other parts of the economy, that a coherent trade and industrial policy is required. It was also argued that South Africa, like many countries, has made some progress in this regard with recent attempts at privatisation and deregulation. However, although regulation forms an important component of trade and industrial policy for service sectors, it is not the whole story. Other policy instruments are at the disposal of policy such as export promotion and numerous supply-side measures. These instruments have not been used broadly in services because of a lack of involvement from the Department of Trade and Industry. Having the deregulation and privatisation process run by the relevant supervisory department of government and the industry itself without the DTI's involvement also means that the process does not necessarily form part of a broader trade and industrial development strategy for the country and other concerns may dictate the outcome.

The purpose of this section is to explore where the DTI can get involved in the service sectors and make a useful contribution. It holds as an assumption that the DTI currently is in charge of trade and industrial strategy and the relevant policy instruments. It also recognises that historically various supervisory government departments have been in control of regulation of the service sectors, that they are likely to continue with this role, and that they have enormous capacity in their respective fields. It would therefore seems that some form of cooperative process will emerge. The section will examine the DTI's role in three components of trade and industrial policy-making – namely developing a sectoral development goal for each service sector, designing and implementing market opening strategies, and designing and implementing export expansion strategies.

# 3.1 Developing Sectoral Goals and Policy Direction

The development of sectoral goals and policy direction should be consistent with the broader economic development strategy for the country. It will also depend on the specific sectoral characteristics and the potential role that the sector can play within it. What follows is a brief discussion of South Africa's existing broader economic development strategy and then the process of specific sectoral goals.

## **National Economic Development Strategy and Goals**

The current economic development strategy for South Africa is the Growth, Employment and Redistribution, or so-called GEAR, strategy. The core goal of the strategy is to put South Africa on a high growth path in order to address high unemployment and tackle the backlog of delivery of social infrastructure. Growth in output is to be achieved through the accelerated growth of manufactured exports and the increased investment by both the public and private sectors. The expansion of exports is critical to this process as balance of payments deficits have always been a constraining factor on economic growth in South Africa. The emphasis on investment simply recognises its role as the core of economic growth. The GEAR strategy envisages the achievement of these goals through the major transformation of the South African economic environment. This transformation includes:

- Creating a competitive platform that encourages exports;
- Creating a stable macroeconomic environment to encourage private sector investment;
- Restructuring the public sector to be more efficient in capital investment and social delivery; and
- Establishing greater labour market flexibility and enhanced human resource development.

The GEAR strategy then established a set of integrated policies to achieve this transformation. These included fiscal policy, monetary policy, trade and industrial policy, labour market policy and public sector restructuring. Any specific service sector goals should be consistent with these policies.

The policy area where specific goals and policy direction has already been set for service sectors is in public sector restructuring. GEAR envisages a comprehensive programme of full or partial privatisation of all state

corporations over the medium term. The purpose being to provide resources for deficit reduction, raise capital for the extended social delivery programmes of these sectors and improve the efficiency of delivery of services. It would also crowd in private investment which would be one of the drivers of growth. The services affected by government's privatisation or public-private partnership plans are telecommunications, transport (air and rail) and electricity supply.

Although the trade and industrial policy in GEAR is currently aimed exclusively at manufacturing, it is important to examine it as it will dictate the trade and industrial policy direction that will be developed for services. In the trade and industrial policy realm, the drive to boost exports is a central part of the GEAR strategy. The lack of competition and the bias in the incentive system that currently exists from an import substitution industrialisation path had severely constrained manufactured exports. The GEAR strategy to address this sees the reduction of tariffs in order to contain input prices under a devaluating currency and to facilitate industrial restructuring in line with South Africa's comparative advantages. This reduction in tariffs also lowers the bias against exports, favouring export expansion. Industrial policy was designed to complement trade policy. It is accepted that the South African manufacturing sector is uncompetitive internationally. Therefore, to prevent de-industrialisation under trade liberalisation, there was a need for supportive supply-side industrial policies such as technology support and export promotion. GEAR recognises and supports these policies. Industrial policy also recognises the redistributive component of GEAR and offers particular support for SMEs. Finally, industrial policy aims to stimulate new investment by offering tax incentives, including greater incentives for labour-absorbing industrial investment to support job creation.

# **Developing Sector-specific Goals and Direction**

For any one sector there are four domestic players that should influence the development of sectoral goals and direction – the relevant supervisory government department, the DTI, the service providers themselves and the users of the service. It is likely that the current goals and direction have been set by the supervisory department and the providers only. Taking their lead from GEAR, the likely goals are to improve efficiency and increase investment. The likely direction is to privatise (if applicable) and deregulate.

The DTI can serve four roles in this process. First, it can bring additional goals and direction to a sector. The trade and industry goals spelt out in GEAR do not just include improvements in efficiency and investment, but also expanding exports, improving efficiency to the point of international competitiveness, creating employment and bringing about a redistribution of gains. For instance, the DTI may detect a comparative advantage in financial services and make export promotion an active part of the industry strategy. Second, the DTI can influence the weighting and extent to which each goal is pursued. The DTI should have a broader and more balanced perspective of how the sector fits into the economy than the relevant line department. While the line department may set goals which are mainly based on the best interests of the existing service providers themselves, the DTI can weigh these up against the intermediate effect that sector has on other industries and its multiplier effect on the economy as a whole. For instance, the DTI may set greater efficiency goals for telecommunications because of the crucial intermediate role it plays or set greater investment goals for tourism because of the strong output multiplier and employment effect.

Third, the DTI can represent the industrial users of the service in the development of service sector goals and direction. To date the process has usually been influenced heavily by the industry itself because of the close relationship it has with the supervisory department. The DTI's role in this regard is more important with sectors that have a prominent intermediate role. For instance, the DTI may represent industrial users in setting efficiency and privatisation targets for transportation sectors. Finally, the DTI can bring a range of policy instruments to the table that may expand the policy directions options open for achieving these goals. The supervisory departments are limited to regulatory instruments while the DTI can bring in supply-side industrial policy and export promotion instruments. For instance, the DTI could extend their investment incentives to include communication services or push for the opening of financial markets in other countries during trade negotiations in the WTO.

It should be noted that many supervisory departments may already have a broad perspective on sectoral goals and may even be using some of the DTI instruments to assist them. However, it would seem that the DTI may need to set up some form of relationship with each department whereby they can play a more structured role in this process. This may also require some organisational and research capacity within the DTI. Once goals have been set, the next step is the design and implementation of specific policy instruments.

# 3.2 Market Opening Strategies

Market opening strategies have two components – trade policies aimed at opening the domestic market to foreign competition and industrial policies aimed at preparing domestic producers to be competitive in a more open environment.

# **Trade Policy**

Trade policy is the one area where the DTI can have the most impact. Supervisory line departments would historically have very little experience in trade issues because services have been relatively non-tradable up until now. Although the DTI has almost no experience with services trade, it has experience in trade negotiations and researching the potential impacts of market openings.

Most service sectors are undergoing some form of deregulation/privatisation as part of the GEAR strategy. As regulations form the primary trade barriers in services, these processes are influencing the relative openness of trade in each sector. Because of this, trade policy at the moment is a by-product of a domestic market opening strategy and not a deliberate process. A deliberate trade policy needs to be developed in light of upcoming negotiations. This is where the DTI can be of assistance. Involvement can be seen at each part of the process.

The first step is defining the extent of market openness that exists at present. Existing regulations need to be examined and translated into WTO terms. This has to be some form of collaborative process between the DTI which understands WTO-speak and the relevant supervisory department which knows the sector's regulatory environment. It has already occurred in some sectors for the initial GATS offer. Second, there needs to be some research as to how significant these current barriers are to all four modes of supply and what are the likely impacts on the domestic market from removing each one. Due to the intermediate role that services play, this assessment should include both the likely negative impact on the ownership and production by domestic producers but also the positive impact on cost, quality and product range within the domestic market. The purpose is to provide information to support decision-making on the trade offers. This analysis will involve a standard sectoral assessment where the current international competitiveness of the sector and its own strengths and weaknesses are examined. This step would most likely be done by the supervisory department due to their knowledge of the sector.

Finally, an offer needs to be worked out based on a) the current state of openness, b) the desired outcome for the domestic producers and the domestic users, c) the expected pressure to liberalise from other countries, and d) the various tradeoffs that can be made using that sector in the broader negotiation process. The DTI can play a significant role in representing the demands of domestic users and using the sector as some form of bargaining chip within a broader negotiation context. The latter may involve resisting pressures to liberalise by liberalising elsewhere or using the liberalisation of the sector to get concessions from other countries or preventing liberalising other domestic sectors that may be more vulnerable.

#### **Industrial and Investment Policies**

The purpose of industrial policy in an environment where trade barriers are being lowered is a) to enhance the competitiveness of domestic producers, and b) to promote greater investment in and development of the sector domestically. Enhancing competitiveness effectively involves interventions that lower the cost or enhance the quality of factor inputs – human resources, technology and capital. Promoting investment involves making the cost of investment cheaper (investment incentives) or creating opportunities to invest. Deregulation and privatisation, the current agenda for supervisory departments, is aimed at creating opportunities to invest by both domestic and foreign service providers. However, they are not always in a position to bring about changes in the other areas of possible intervention as they do not have control over the instruments. This is where the DTI can play a role.

The DTI already has a portfolio of industrial policy instruments that are almost exclusively apply to manufacturing only. These include investment incentives, investment promotion, innovation subsidies, training support, small business development, and so on. Service sectors may well benefit from these instruments being extended to include them. As demonstrated earlier, some services are extremely capital intensive, others skill intensive and others technology intensive. Use of the same factor inputs means that these instruments should work as well with services as with manufacturing. However, the decision to extend such policy instruments to services should be based on the realistic needs of the industry and the potential costs to the DTI. The need for

intervention should be based on how competitive the service sector is anyway, what are the effective instruments for the sector and whether deregulation is successful in raising the investment levels in the sector.

As noted for the last section, the supervisory government departments may have already embarked on providing some industrial policy type support for their sectors. Other may benefit from economy-wide programmes aimed at boosting investment (e.g. stable macro environment, better infrastructure) or training (skills enhancement bill). However, it may be necessary that the DTI have a structured dialogue with each service sector to ensure that needs are being met.

# 3.3 Export Expansion Strategies

Services in South Africa, like most sectors, have traditionally been very inward looking. The sectors that have a sizeable export component have mostly done so either because of goods trade facilitation (finance, transport) or because it is in their very nature (tourism). However, even these sectors may not have reached their full potential. Again two types of policies emerge – trade policy aimed at opening other markets and industrial and trade facilitation policies aimed at improving the ability of domestic producers to export.

## **Trade Policy**

As mentioned previously, trade policy is the one area where the DTI can have the most impact because of its experience and prominent role in negotiating all trade treaties on behalf of South Africa. In expanding exports, trade policy takes the form of negotiating the opening of other markets. One can examine the DTI's potential role within each step of the process.

The first step is to understand the existing export activity undertaken by South African service sectors. It is important to recognise that FDI is an important component of service trade and so analysis should extend beyond conventional trade measures. This should include an analysis of the markets to which South Africa currently exports. The second step is to understand which sectors does South Africa have the potential to expand exports – this is based on an analysis of existing comparative advantage and potential comparative advantage. Again, included should be an analysis of which are potential markets for South African exports. Next is to understand what barriers to trade exist in the export markets. It is felt that all of these processes would probably be led by the supervisory government department and the industry itself but with some technical support by the DTI.

The final step is to develop a trade strategy to open up the markets for South African exporters. This requires establishing a set of demands for other countries and possibly linking them to concessions made in local market openings. Developing these tradeoffs is where the DTI may be of most use.

# **Industrial and Trade Facilitation Policies**

Industrial policy aimed at enhancing the competitiveness of domestic producers also serves a role in export expansion policies. These have been discussed under market opening strategies. In addition to these, there are a string of policies that provide an incentive for firms to export and facilitate exports. Part of this incentive comes from opening the domestic market to competition, maintaining a stable and competitive real exchange rate and lowering exchange controls. Another is opening up foreign markets. However, entering into export markets does involve a considerable set-up cost which export promotion instruments can lower for the individual firm.

Again, the DTI has already developed a string of policies to assist exporters that could also be of use to service sectors wishing to export. These include export marketing assistance and export credit. Yet services do differ significantly from goods in that FDI is the main source of exports. In this instant, policies such as foreign investment reinsurance, investment roadshows and economic offices in South African embassies abroad can play a more crucial role. Most of these are open to services already but a greater recognition of their role may lead to changes in the range and quality of service by the DTI. A final note should also recognise that some sectors are beginning to become active in export markets on their own initiative. However, it may still be necessary for the DTI to assist the process and push those which are not yet outward looking.

# **Concluding Remarks**

The environment around service sectors is changing with them becoming more tradable and more important in determining the competitiveness of a country. These pressures can only intensify in future as pressures to liberalise trade in services and goods increases. The existence of these forces necessitate a more active trade and industrial policy on service industries. There have been moves within the GEAR strategy of South Africa to deregulate and privatise many service sectors in order to improve efficiency and boost investment. However, these often do not go far enough or fail to tackle other components of a comprehensive trade and industrial programme such as competitiveness support or export promotion. It is within this context that the DTI can play a significant role. This paper has tried to provide some guidance to this process by both painting a picture of the contribution and nature of services within the South African economy, and establishing what role the DTI might play. However, this is the first step in a long process. If the DTI is to tackle the services issue seriously then it needs to establish some organisational capacity to both cooperate with other government departments and to conduct some research.

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# **Appendix 1: Services Classification Issues**

Standard national accounting methods have traditionally seen the services, or tertiary, sector as including the standard industrial classification (SIC) groups 6 to 9. These include:

- 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

However, for the purposes of multilateral trade negotiations around services under the auspices of the WTO, the final agreement included all activities other than agriculture, mining and manufacturing – extending the national accounting approach to include utilities (SIC 4) and the construction industry (SIC 5). Therefore, it seems that any national policy process around services, which must include a service trade policy, should include these sectors in its boundaries - and hence so has this study. In fact, where possible, policy analysis should make use of the more logical and disaggregated categorisation of services used in the GATS agreement which identifies 12 distinct sectors rather than the more aggregated national accounting approach. The 12 GATS sectors along with their sub-sectors and South African SIC classification are as follows:

- 1. Business services including professional services (881-3); computer and related services (86); research and development services (87); real estate services (84); rental/leasing services without operators (85); and other business services (889).
- 2. *Communication services* including postal services (7511); courier services (7512); telecommunications (752); and audiovisual services (9611-3).
- 3. Construction and related engineering services including general construction work for buildings (5021); general construction work for civil engineering (5022); installation and assembly work (503); building completion and finishing work (504); and other (501, 5023-4, 505).
- 4. *Distribution services* including commission agents' services (611); wholesale trade services (612-9, 6311); retailing services (62, 6312, 633-5); and franchising.
- 5. *Educational services* including primary education services (92001-2); secondary education services (92002); higher education services (92004-8); adult education services (92008-9); and other educational services (92003,9).
- 6. *Environmental services* including sewage services (94); refuse disposal services (94); and sanitation and similar services (94).
- 7. *Financial services* including all insurance (82) and insurance-related services (832); and banking (811) and other financial services (819, 831).
- 8. *Health related and social services* including hospital services (9311); other human health services (9312-9, 932); and social services (933).
- 9. Tourism and travel related services including hotels and restaurants (64); travel agencies (7414) and tour operator services (7414); and tourist guide services (7414).
- 10. Recreational, cultural and sporting services including entertainment services (9614-9); news agency services (962); libraries, archives, museums and other cultural services (963); and sporting and other recreational services (964).
- 11. Transport services including maritime transport services (721); internal waterways transport 722); air transport services (73); space transport (73); rail transport services (711); road transport services (632, 712); pipeline transport (713); and services auxiliary to all modes of transport (7411-3,9).

12. Other services not included elsewhere - including electricity, gas, steam and hot water supply (41); collection, purification and distribution of water (42); public administration and defence activities (91); activities of membership organisations (95); other service activities (99); and household services (10).

For analytical purposes it is also useful to organise the GATS disaggregated service classification in terms of their demand source in the economy. This type of classification was initially put forward by Browning and Singelmann (1975) and essentially splits service sectors by whether they predominately service intermediate or final demand. The practical problem with this classification system is that all of the sectors service both intermediate and final demand, making the isolation of each component fairly difficult<sup>8</sup>. The four categories commonly used in this approach with the inclusion of the electricity and construction sectors is:

- 1. Intermediate producer services including business services; financial services; construction and related engineering services; and utilities (electricity, gas and water).
- 2. *Intermediate distributive services* including communication services; distribution services; and transport services.
- 3. *Final demand social services* including educational services; environmental services; health and related social services; and public administration and defence.
- 4. Final demand personal services including tourism and travel-related services; recreational, cultural and sporting services; and household services.

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<sup>&</sup>lt;sup>8</sup> For example, under transport services, the transport of goods is an intermediate distribution service but the transport of passengers is a personal final demand service. Under financial services, corporate banking is a intermediate producer service but retail banking to the general population is a personal final demand service.

# **Appendix 2: Service Data Issues**

An analysis of the service sector in any economy will be constrained by the lack of quality data. This is partly due to the inherent difficulty in collecting data on these sectors, but also due to the historic concentration of statistical effort on the primary and secondary sectors - the original targets for economic policy. South Africa is no exception. It is therefore useful to briefly examine some of the service data problems that do exist and which will affect the statistical analysis in the paper. Before looking at data issues in output, employment and trade data for services, it is important to mention that all South African time series data is plagued by the problem of excluding the former TBVC states from the mid-1970s to the mid-1990s, making time series analysis slightly inaccurate. However, as limited production and trade occurred in these former homelands, it does not represent a substantial problem.

## **Output Data**

Output data in South Africa is collected via a census of firms every few years. In the period between the census years, a representative sample of firms are used to keep track of changes in output from the census year. As a methodology this is sound and allows frequent updates of output data which can then be readjusted every census year. The problem with services is that the census years are not as frequent as manufacturing. A census of manufacturing is done every 2 years but in services the census's are anywhere between 3 and 6 years apart. The last two *published* census years for each sector of the economy are as follows:

- Agriculture 1993, 1988
- Mining 1993, 1990
- Manufacturing 1993, 1991, 1989
- Electricity, gas, steam 1995, 1992
- Construction 1994, 1991
- Commerce 1991, 1983
- Transport 1992, 1986
- Business services 1993, 1987
- Medical services 1987, 1981
- Social, recreational and personal services 1988

The infrequent census is problematic at a time when there is considerable growth of new service industries (e.g. mobile phones and the Internet) and the rapid expansion of existing services (e.g. tourism and the minibus taxi industry). The result is that South African output data for the service sectors is likely to underestimate the true value to a considerable extent. A further problem is that there is less data on sub-sectors than exists for the manufacturing sector, which is exacerbated in the years between census years where no sub-sector data is provided. This makes it difficult to disaggregate the data from the 6 SIC groups into the 12 GATS categories and beyond into their respective sub-sectors.

For the purposes of this study, the CSS output data was used as the problems with the data were not too immense and no alternative is available. In order to disaggregate the data beyond the 6 SIC groups, the 1993 input-output tables were used which provide a disaggregation of SIC groups 6 to 8. No attempt was made to disaggregate the community and social services grouped in SIC 9 although this is technically possible to do from government budgets along with estimates of private provision of education and health.

# **Employment Data**

There are three possible sources of employment data in South Africa - the Central Statistical Services (CSS) Official Employment Series which is based on a representative sample of firms and is updated every quarter; the CSS Population Census conducted every 5 years; and the CSS October Household Survey (OHS) which surveys a large proportion of households annually since 1993. Of the three, the official employment series is the most inaccurate with the result that the official unemployment rate is calculated from the OHS data. More importantly for this study, apart from the exclusion of agriculture from the series, the inaccuracy falls almost entirely on the services sector where large parts of the sector are completely ignored. The CSS survey excludes:

"...agriculture, hunting, forestry and fishing, restaurants and other eating and drinking places, boarding houses, caravan parks and guest farms, water and air transport, parts of services allied to transport, financial institutions other than banking institutions, building societies and insurance companies, real estate and business services, parts of educational services, parts of medical, dental and other health services, parts of welfare organisations, religious organisations, parts of social and related community services, parts of recreational and cultural services, parts of personal and household services and the informal sector." (CSS 1997)

In fact, the CSS statistics for services only includes the following:

- Electricity, gas and water includes Eskom only
- *Construction* includes the entire sector
- Wholesale and retail trade, motor trade, hotels and restaurants includes wholesale, retail and motor trade; and registered hotels only
- *Transport, storage & communication* includes only transport of passengers and goods per road by private transport companies, Transnet, S.A. Post Office, Telkom and SABC.
- Financial intermediation, insurance, real estate and business services includes banks, building societies and insurance companies only
- Community, social and personal services includes only the public sector and the laundries and drycleaning services.

Therefore any serious study of services in South Africa should use either the Census data or OHS data. The only problem with this data set is that there is not a complete time series available. The census is conducted every 5 years and the only 2 to include the former TBVC states in the last 30 years were the 1970 and 1996 census. The OHS began only in 1993, only included the former TBVC states from 1994, and only included foreign mineworkers from 1995. However, for the years that it is available, it should be an accurate reflection of employment and in addition the OHS includes the informal sector.

For the purposes of this paper the OHS survey data was used to provide an estimate of employment by sector. This data was also used to determine the occupational, racial and gender mix of employment by sector. High levels of disaggregation are possible with this data as 50 industry groupings are used in the survey.

## **Trade Data**

Gathering data on goods trade is relatively simple as physical items must physically cross a border and if the customs system is reasonably efficient then most trade will be recorded. For services it is far more difficult because not only are the output of services not necessarily physical objects, but they can also be traded in a manner which either does not cross borders (e.g. FDI) or they do so in a manner less easily detectable (e.g. electronic or the movement of persons). According to the GATS there are four modes of supply in the international trade in services. These are:

- 1. Cross-border supply
- 2. Consumption abroad
- 3. Commercial presence
- 4. Presence of natural persons

Therefore, in order to get a complete picture of trade in services, there is a need to compile data on each one. *Cross-border supply* involve any services delivered from across national boundaries without the movement of producers or consumers. There are two possible sources of data on these flows – the balance of payments and the input-output tables. The balance of payments holds a record of flows of foreign exchange under the services and transfers account. Outflows represent imports and inflows represent exports. According to standard IMF reporting procedures there is some disaggregation of these transactions, but not at a level which makes comparison to the 12 GATS sectors possible. The available categories in South Africa comply with the 4th edition of the IMF Balance of Payments Manual and include passenger transport, goods transport, freight and merchandise insurance, non-merchandise insurance and the general category of 'other services'. South Africa has not yet moved to the fifth edition of the IMF balance of payments manual which breaks down business services into 10 separate groups. The concern is that this data is not very accurate because it will fail to capture is transactions that do not go through the BoP such as intra-firm services or services provided to move export goods to the border before export. In order to overcome both the disaggregation and accuracy issues, it is better

to make use of input-output tables. The more comprehensive survey of firms includes a differentiation of imports from domestic supply of service inputs enabling one to more accurately determine the true extent of service trade transactions. It also handles services in a far more disaggregated form than the balance of payments.

Consumption abroad involves the movement of consumers only. This mode of supply is the only option for tourism and travel services, but is also common in educational and health services. The two important sources of information for this form of service trade are tourism and travel surveys and the balance of payments. Travel surveys in South Africa have usually been limited to air travel and incoming tourists – missing out large numbers of land travel by people from neighbouring states. Although recording under the balance of payments should be more accurate, it still requires formal conversion of the currency and so will miss out on spending in rands in neighbouring states or currency transactions using informal money-changers. Both approaches should therefore slightly underestimate spending under this category. Further disaggregation of this item on the balance of payments is not that critical as the vast majority will be under tourism and travel services with only minor portions going to educational and health services.

Commercial presence is not included as trade under strict IMF classifications. However, under the auspices of the WTO it is considered to be trade for the service sector and not the primary and manufacturing sectors because it forms such a crucial means of service firms trading. Imports are recorded as the domestic sales of foreign affiliates while exports are recorded through the sales the foreign affiliates of domestic companies. Obtaining data on the sales of foreign affiliates, either domestically or abroad, can only really be done through a survey. The balance of payments only captures profit remittances and reinvested earnings, which comprise a small component of total sales. Estimates of sales can be derived from estimates of the total FDI stock which is available in South Africa - yet this is bound to be inaccurate. The additional problem with collecting this data is the need to first adjust the figures to exclude FDI in non-service industries and then try and break down FDI flows into the individual service sectors.

Finally, the presence of natural persons comprises of the temporary movement of individual producers. Imports are measured as the income of temporary resident foreigners (i.e. less than 1 year) in South Africa while exports are the income of South African residents temporarily located outside the country. The conventional means of recording this mode of supply is through the balance of payments yet this is likely to underestimate trade as any income paid locally in local currency is likely to be missed. A further problem is naturally breaking this trade down into different service sectors and deciding whether foreigners are temporary or permanent residents as their status can change. In order to overcome the later problem, it is conventional to include both items worker remittances (measuring long-term residents) and labour income (measuring temporary residents). In South Africa all earnings are included under labour income anyway which reduces the problem of whether to include worker remittances or not.

In conclusion, South Africa, like all other countries, does not have sufficiently good service trade data that can allow an accurate assessment of trade in each of the 12 GATS service categories. However, exchange control regulations mean that most cross-border transactions that do occur should actually be recorded even if they cannot be broken down sectorally.

For the purposes of this paper, the trade data set was constructed from a number of different sources. Crossborder trade in services was based predominately on data from the IDC - which is based on the 1995 social accounting matrix (SAM) data from WEFA - and the CSS input-output tables from 1984, 1988 and 1993. These provided a level of disaggregation and accuracy not found in the BoP data for most service sectors, and their use also enabled some time series analysis. However, these sources did not appear accurate for the export and import of travel or the import of transport services and therefore the balance of payments data was used for these two items. Labour flows were taken from the balance of payments and included both worker remittances and labour income items. For FDI flows it was decided only to include the actual flows recorded through the BoP even though this would grossly underestimate this source of trade. The reason being that no figures on the sales of foreign firms is available and therefore complete guesstimates would have to be used. It seemed better to note the extent of FDI holdings in South Africa and by South African firms abroad which would give some indication of the possible size of operations and potential for trade via commercial presence. The actual figure used was 50% of that reflected in the balance of payments in order to exclude the flows from non-service industry FDI. The ratio between FDI in services and other industries was based on the SARB survey of foreign liabilities and assets in 1995. For South African FDI abroad no such estimate exists and so a rough 50% was used though the suspicion is that this estimate exaggerates the amount of service FDI from South Africa as flows seem to be dominated by mining interests.

# **Appendix 3: Barriers to Trade in Services**

Barriers to trade in services can be classified according to the mode of supply and by the type of restriction. The four modes of supply are cross-border supply, consumption abroad, commercial presence and presence of natural persons. The type of barriers are those restricting market access, those with discriminatory national treatment and other general measures which affect the ability to trade. This appendix draws on the joint UNCTAD-World Bank publication "Liberalizing International Transactions in Services: A Handbook" (1994) and lists each type of barrier for each mode of supply.

# **Cross-border Supply**

#### Market Access

• Quantitative restrictions (e.g. market-sharing, local content requirements)

#### National Treatment

• Price-based instruments (e.g. price controls, subsidies, tariffs)

#### Other Measures

- Government procurement and sourcing problems
- Discriminatory access to distribution networks
- Intellectual property rights

## **Consumption Abroad**

## Market Access

- Requirements relating to travel documentation
- Exit visas
- Entry visas
- Residence permits
- Proof of vaccination

## National Treatment

- Limits on foreign currency available to traveller
- Taxes on travel
- Regulations relating to cross-border medical insurance
- Rules relating to the recognition of educational standards and certificates obtained abroad
- Restrictions on land ownership
- Restrictions relating to local currency
- Restrictions on freedom of movement
- Price discrimination
- Measures relating to gainful employment

## Other Measures

• General consumer regulations

#### **Commercial Presence**

#### Market Access

• Total prohibition of FDI (e.g. monopolised sectors, administrative discretion in licensing)

- Partial prohibition or limitations on certain types of investment (e.g. acquisitions vs greenfield investment; branches vs subsidiaries; equity vs non-equity FDI; majority or wholly-owned affiliates vs joint ventures)
- Restrictions on the geographic location of foreign affiliates
- Restrictions on the number of foreign firms in the market (e.g. license quotas)

#### National Treatment

- Limits to the scope of business operations and access to local finance (e.g. non-access to government procurement)
- Performance requirements (e.g. trade balancing, employment and training, technology transfer, local content, export requirements)
- Investment incentives (e.g. tax incentives, concessional loans)
- Rules relating to external financial transfers (e.g. exchange controls)
- Tax measures (e.g. double taxation,

#### Other Measures

- Promotion of FDI in services (e.g. investment promotion, information services)
- Protection of FDI in services (e.g. transfer of investment income, insurance guarantees)
- General regulatory framework for service transactions (e.g. prudential requirements, competition policies)
- Intellectual property rights

#### **Presence of Natural Persons**

#### Market Access

- Visas, residence permits, and work permits
- Licensing requirements

# National Treatment

- Restrictions on living conditions and civil rights
- Restrictions on the rights of dependents
- Restrictions on overseas remittances by foreign workers
- Taxation of foreign providers
- Discrimination against foreigners in the workplace
- Restrictions on local government procurement and subsidies

#### Other Measures

- Rules relating to repatriation
- Cultural barriers

# **Appendix 4: Statistical Appendix**

Table A1: Total services input requirements 1993

	Ag ric ult ure	Mi nin g	Ma nuf act uri ng	Ser vic e Sec tor s	Util itie s	Co nstr ucti on	Dis trib utio n ser vic es	To uris m & tra vel	Tra nsp ort ser vic es	Co mm uni cati on ser vic es	Fin anc ial ser vic es	Bus ines s ser vic es	Co mm unit y, soci al & per son al ser vic es	Tot al Int er me dia te Inp ut
Agriculture	6.9	0.3	28.0	12.7	1.2	0.5	6.7	0.0	2.5	0.1	0.7	0.0	1.0	48.5
Mining	0.1	0.2	20.6	12.5	6.0	0.5	3.0	0.0	2.2	0.1	0.0	0.7	0.0	39.9
Manufacturing	5.5	3.0	39.6	12.3	2.0	0.0	4.7	0.0	2.1	0.4	1.2	1.8	0.2	64.9
Food, beverages,	22.4	0.2	35.5	11.9	1.6	0.0	4.6	0.0	2.4	0.3	1.3	1.3	0.4	75.2
tobacco	4.7	0.1	46.5	0.1		0.0		0.0	0.0	0.2	0.0		0.1	<b>70</b>
Textiles, clothing, leather and footwear	1.1	0.1	46.5	8.4	1.1	0.0	3.7	0.0	0.8	0.3	0.9	1.5	0.1	59.4
Wood and wood	7.9	0.1	36.7	13.1	1.7	0.0	5.5	0.0	1.7	0.4	1.5	2.2	0.1	61.6
products														
Paper and printing	2.1	0.3	44.2	15.4	2.2	0.0	6.7	0.0	1.9	0.4	1.8	2.2	0.1	69.5
Chemicals, rubber	1.2	7.3	41.5	13.5	2.4	0.0	4.1	0.0	2.9	0.3	1.3	2.0	0.4	67.7
and plastic														
products														
Non-metallic mineral products	0.1	7.4	20.8	15.3	5.0	0.0	3.7	0.0	3.3	0.3	1.1	1.8	0.1	47.3
Basic metals	0.0	10.2	18.0	15.9	8.3	0.0	2.5	0.0	3.3	0.1	0.9	0.8	0.0	51.1
Metal products and	0.1	0.3	46.9	12.9	1.3	0.0	5.9	0.0	2.0	0.5	1.2	2.0	0.1	64.1
machinery														
Transport	0.1	0.2	41.0	12.0	1.1	0.0	5.8	0.0	1.2	0.3	0.7	2.8	0.1	59.9
equipment														
Other	0.1	29.4	29.2	9.1	0.5	0.0	4.1	0.0	1.1	0.5	1.0	1.7	0.2	70.7
manufacturing	0.4	0.0	141	27.2	<i></i>	2.0	2.0	0.6	2.4	2.0	2.0	5.0	1.4	12.5
Service Sectors	0.4	0.8	14.1	27.2	5.5	2.9	3.8	0.6	2.4	2.0	2.8	5.8	1.4	43.6
Utilities	0.1	3.4	11.3	36.2	28.3	1.8	2.1	0.0	2.1	0.2	0.8	0.5	0.4	53.3
Construction	0.0	2.5	28.5	32.4	1.1	16.1	4.9	0.0	2.4	0.8	1.1	6.1	0.0	66.1
Distribution	0.0	0.0	9.7	31.9	1.3	1.7	9.4	0.5	5.1	2.0	2.5	8.8	0.6	42.1
services Tourism & travel	4.8	0.1	35.7	21.3	5.8	0.5	1.6	0.1	1.1	0.3	0.5	10.2	1.2	62.3
Transport services	0.2	0.1	16.9	23.0	3.7			i e	4.7	0.3	2.2	3.4	0.3	
•				23.0		1.3	6.5	0.7						43.1
Communication services	0.0	0.0	8.3	22.1	1.7	0.0	4.5	0.0	3.2	11.7	0.1	1.4	0.1	31.5
Financial services	0.0	0.0	5.4	49.3	1.0	0.5	3.5	1.3	1.5	3.8	24.8	9.9	2.9	55.0
Business services	0.0	0.0	3.9	12.4	0.5	0.5	1.8	0.4	1.4	1.1	1.2	4.6	0.8	16.7
Dustiless services	<b>U.U</b>	0.1	3.7	14.4	0.5	0.5	1.0	0.4	1.4	1.1	1,4	4.0	0.0	10./

I	Community, social	0.4	0.1	14.5	28.2	2.8	0.9	3.9	1.6	2.2	2.0	1.4	8.9	4.5	43.6
	& personal services														

Source: CSS Input-Output Tables 1993

 $Table\ A2:\ Total\ direct\ and\ indirect\ output\ multiplier\ effect\ of\ a\ R100\ increase\ in\ output\ of\ each\ sector\ (1993)$ 

		3.60	3.6	G	TT. 111.		D: .	m	m	C	E.	ъ :	C
	Agri	Mini	Man	Serv	Utilit	Con	Distr	Tour	Tran	Com	Fina	Busi	Com
	cult	ng	ufac	ice	ies	stru	ibuti	ism	spor	muni	ncial	ness	muni
	ure		turi	Sect		ctio	on .	&	t .	catio	servi	servi	ty,
			ng	ors		n	servi	trav	servi	n	ces	ces	soci
							ces	el	ces	servi			al &
										ces			pers
													onal
													servi
A 14	111 4	0.7	0.6	2.2	0.6	0.0	0.7	20.4	0.0	0.2	0.0	0.4	ces
Agriculture	111.4	0.7	9.6	2.2	0.6	0.9	0.7	20.4	0.9	0.3	0.8	0.4	1.9
Mining	7.0	104.0	7.8	4.0	7.9	8.7	2.9	3.6	6.9	1.6	1.5	0.8	2.8
Manufacturing	56.8	41.0	177.8	32.3	32.5	62.5	24.3	71.1	34.7	19.2	19.3	9.6	32.2
Food, beverages, tobacco	16.4	0.5	30.0	3.7	0.6	0.5	0.8	41.0	1.0	0.2	1.1	0.5	2.6
Textiles, clothing, leather and	1.5	1.2	22.4	1.1	0.7	1.6	1.1	1.3	1.7	1.2	0.8	0.3	1.4
footwear													
Wood and wood	0.7	1.1	4.1	0.9	0.4	2.8	0.8	1.0	0.5	0.3	0.6	0.3	1.1
products													
Paper and printing	2.7	1.5	13.2	3.7	1.5	2.7	5.9	4.2	3.1	2.8	7.6	1.9	6.0
Chemicals, rubber	24.0	14.1	41.7	9.8	12.9	15.4	8.7	13.0	16.2	4.3	4.7	2.4	11.9
and plastic													
products													
Non-metallic	0.9	0.7	9.2	2.6	1.8	13.5	0.8	2.2	1.3	0.3	0.4	0.4	0.8
mineral products													
Basic metals	2.0	3.4	11.0	2.2	3.5	7.4	1.0	1.6	1.8	0.9	0.6	0.5	1.2
Metal products	6.3	14.9	34.5	6.5	9.1	17.6	3.8	5.5	4.9	8.4	2.1	2.6	3.9
and machinery													
Transport	1.9	2.9	8.0	0.8	1.0	0.8	0.9	0.7	3.2	0.5	0.5	0.2	0.7
equipment													
Other	0.3	0.5	3.9	1.0	1.1	0.4	0.4	0.6	0.9	0.2	0.9	0.5	2.5
manufacturing													
Service Sectors	35.9	34.1	43.5	148.5	167.5	165.3	150.9	147.7	145.7	135.7	180.9	119.6	147.4
Utilities	4.9	10.3	7.7	23.2	141.8	6.1	3.9	10.9	7.7	3.7	3.5	1.5	5.8
Construction	1.4	1.3	0.9	17.6	3.2	120.5	3.0	1.6	2.3	0.4	1.5	0.9	1.8
Distribution	12.8	7.4	12.2	14.5	6.7	11.5	113.4	8.1	11.0	7.5	7.9	3.2	7.9
services													
Tourism & travel	0.2	0.3	0.4	7.5	0.3	0.3	0.7	100.3	1.0	0.1	2.0	0.5	1.9
Transport services	6.6	5.2	6.6	11.8	5.5	7.1	7.8	5.3	108.3	5.1	4.0	2.3	4.6

Communication	1.5	2.3	3.0	10.3	1.8	3.2	3.5	1.9	2.0	113.9	6.8	1.8	3.6
services													
Financial services	3.4	2.8	5.2	12.3	3.5	4.7	5.2	3.5	5.4	1.3	134.5	2.2	3.7
Business services	2.9	2.8	5.5	28.9	3.0	10.5	12.0	13.4	6.4	3.0	16.2	106.0	12.5
Community, social	2.1	1.6	2.1	22.5	1.6	1.5	1.4	2.6	1.5	0.5	4.6	1.2	105.6
& personal													
services													
Total Multiplier	211.0	179.7	238.7	187.0	208.4	237.4	178.8	242.8	188.2	156.7	202.5	130.5	184.2
Effect													

Source: CSS Input-Output Tables 1993

Table A3: Total direct and indirect employment multiplier effect of a R1 million increase in output of each sector (1993)

	Agri cult ure	Mini ng	Man ufac turi ng	Serv ice Sect ors	Utilit ies	Con stru ctio n	Distr ibuti on servi ces	Tour ism & trav el	Tran spor t servi ces	Com muni catio n servi ces	Fina ncial servi ces	Busi ness servi ces	Com muni ty, soci al & pers onal servi ces
Agriculture	76.6	0.5	6.6	1.5	0.4	0.6	0.5	14.0	0.6	0.2	0.6	0.3	1.3
Mining	1.0	14.9	1.1	0.6	1.1	1.3	0.4	0.5	1.0	0.2	0.2	0.1	0.4
Manufacturing	8.1	5.8	25.4	4.6	4.6	8.9	3.5	10.1	5.0	2.7	2.8	1.4	4.6
Food, beverages, tobacco	2.2	0.1	4.0	0.5	0.1	0.1	0.1	5.4	0.1	0.0	0.1	0.1	0.3
Textiles, clothing, leather and footwear	0.5	0.4	8.0	0.4	0.3	0.6	0.4	0.5	0.6	0.4	0.3	0.1	0.5
Wood and wood products	0.4	0.7	2.5	0.6	0.2	1.7	0.5	0.6	0.3	0.2	0.3	0.2	0.7
Paper and printing	0.6	0.4	3.0	0.9	0.3	0.6	1.4	1.0	0.7	0.6	1.8	0.4	1.4
Chemicals, rubber and plastic products	0.7	0.4	1.2	0.3	0.4	0.4	0.2	0.4	0.5	0.1	0.1	0.1	0.3
Non-metallic mineral products	0.7	0.5	7.3	2.1	1.4	10.7	0.6	1.8	1.0	0.2	0.3	0.3	0.6
Basic metals	0.1	0.1	0.4	0.1	0.1	0.3	0.0	0.1	0.1	0.0	0.0	0.0	0.0

	ı	ı											
Metal products and machinery	0.1	0.2	0.5	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.0	0.0	0.1
Transport equipment	0.2	0.3	0.9	0.1	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.0	0.1
Other manufacturing	0.1	0.2	1.1	0.3	0.3	0.1	0.1	0.2	0.3	0.1	0.3	0.2	0.7
Service Sectors	6.8	6.5	8.3	28.3	32.0	31.6	28.8	28.2	27.8	25.9	34.5	22.8	28.1
Utilities	0.3	0.6	0.4	1.3	8.1	0.3	0.2	0.6	0.4	0.2	0.2	0.1	0.3
Construction	0.5	0.5	0.3	6.2	1.1	42.3	1.1	0.6	0.8	0.2	0.5	0.3	0.6
Distribution services	2.7	1.6	2.6	3.1	1.4	2.5	24.4	1.7	2.4	1.6	1.7	0.7	1.7
Tourism & travel	0.1	0.1	0.2	3.2	0.1	0.1	0.3	43.3	0.4	0.1	0.9	0.2	0.8
Transport services	0.9	0.7	0.9	1.6	0.8	1.0	1.1	0.7	15.0	0.7	0.6	0.3	0.6
Communication services	0.3	0.4	0.5	1.7	0.3	0.5	0.6	0.3	0.3	19.2	1.1	0.3	0.6
Financial services	0.4	0.3	0.6	1.4	0.4	0.5	0.6	0.4	0.6	0.2	15.1	0.2	0.4
Business services	0.2	0.2	0.4	2.0	0.2	0.7	0.8	0.9	0.4	0.2	1.1	7.4	0.9
Community, social & personal services	0.6	0.4	0.6	6.2	0.4	0.4	0.4	0.7	0.4	0.1	1.3	0.3	29.3
Total Multiplier	92.5	27.7	41.4	35.0	38.1	42.3	33.1	52.8	34.4	29.0	38.0	24.6	34.4
Effect													
Direct Employment	68.7	14.3	14.3	19.1	5.7	35.1	21.5	43.1	13.9	16.8	11.2	7.0	27.8
Indirect Employment	23.8	13.4	27.1	15.9	32.4	7.2	11.6	9.7	20.5	12.2	26.8	17.6	6.6

Source: CSS Input-Output Tables 1993; OHS 1995

Table A4: Indicators of the nature of production by sector 1995

Sector	K-L Ratio (R1000s capital per employee)	Average earnings (excl. benefits)	Value- added per employee	Value- added per R1000 capital
Agriculture	46	446	15 110	328
Mining	258	2055	73 359	284
Manufacturing	135	2061	72 759	538
Services Sector	199	2049	53 245	268
Utilities	1 216	2660	192 192	158
Construction	17	1582	31 598	1 875
Distribution services	45	1688	46 574	1 037
Catering & accommodation		1026		
Transport	430	2101	70 002	163
Communication		2579		
Financial services	482	2748	119 234	247
Business services		2616		
Community, social & personal	171	2179	35 350	207

services				
Total Economy	169	1789	52 052	308

Sources: SARB Quarterly Bulletin March 1998, CSS OHS Survey 1995

Table A5: Occupational mix of employment by sector 1995

Sector	1.Prof/ Semi- P/Tech	2.Adm /Exec/ Mangr	3.Clr & Sales	4.Serv ice	5.F&F wrkr/F sh	6.Prod .wrk& op/Art isan	7.Labo urer	8.Tran sport occup	9.Unsp ec	Total
Agriculture	0.4	0.5	1.3	1.2	82.4	1.7	1.6	10.9	0.0	100.0
Mining	4.6	2.7	9.1	7.5	0.6	48.9	15.3	10.7	0.7	100.0
Manufacturing	5.3	5.8	12.8	4.2	0.6	47.4	16.0	7.4	0.5	100.0
Services Sector	22.0	5.9	26.6	19.4	2.2	11.5	5.3	6.5	0.5	100.0
Utilities	16.3	2.7	14.7	6.7	0.0	41.1	9.6	7.3	1.6	100.0
Construction	5.2	5.2	4.1	1.3	0.1	59.8	19.4	4.5	0.3	100.0
Distribution services	2.5	11.0	51.2	6.7	0.5	14.2	8.6	5.0	0.3	100.0
Catering & accommodation	0.9	14.6	11.7	65.5	3.0	0.7	1.5	1.1	1.0	100.0
Transport	5.6	8.6	11.4	8.9	0.9	10.2	6.8	47.1	0.6	100.0
Communication	26.9	3.6	21.2	6.2	0.0	15.9	3.1	22.2	0.9	100.0
Financial services	11.0	10.1	72.9	4.6	0.0	0.5	0.4	0.5	0.0	100.0
Business services	24.5	7.7	30.7	26.0	0.5	5.5	2.1	2.5	0.6	100.0
Community, social & personal services	41.0	1.7	14.0	30.4	4.5	3.0	2.1	2.8	0.5	100.0
Total	15.2	5.0	19.7	13.6	13.5	18.1	7.1	7.5	0.4	100.0

Occupation 1: Professional, semi-professional and technical occupations

Occupation 2: Managerial, executive and administrative occupations

Occupation 3: Clerical and sales occupations

Occupation 4: Service occupations

Occupation 5: Farming, forestry and fishing occupations

Occupation 6: Production workers, operators and artisans

Occupation 7: Labourer

Occupation 8: Transport, delivery and communications occupations

Occupation 9: Unspecified occupations

Source: CSS OHS 1995

Table A6: Racial and gender mix of employment by sector 1995

Sector	Race				Gender	
	African	Coloured	Asian	White	Male	Female
Agriculture	74.3	17.7	0.2	7.8	79.8	20.2
Mining	75.0	2.7	0.7	21.5	95.9	4.1
Manufacturing	55.8	15.9	6.6	21.7	70.7	29.3
Services Sector	55.1	11.0	4.2	29.5	60.1	39.9
Utilities	51.2	7.5	1.2	40.2	87.1	12.9
Construction	56.1	19.3	2.9	21.7	93.3	6.7
Internal Trade, catering & accommodation	51.3	13.5	7.0	28.1	57.0	43.0

Transport storage and Communication	52.1	9.1	4.1	34.7	83.7	16.3
Financial, real estate and business services	32.1	7.4	4.7	55.7	54.9	45.1
Community, social & personal services	64.3	9.4	2.7	23.5	51.6	48.4
Total	59.1	12.4	3.9	24.7	66.6	33.4

Source: CSS OHS 1995

Table A7: Breakdown of transport service trade in South Africa 1996

	Exports	Imports
Passenger transport	26.3%	19.3%
Freight transport	56.4%	60.8%
Auxiliary transport services	17.3%	19.9%
Total	100%	100%

Source: IMF Balance of Payments Statistics 1997

Table A8: Sectoral share of GDP by development status (1988-90)

	Developing Countries	Developed Countries	
Agriculture	16	3	
Mining	6	1	
Manufacturing	20	24	
Services	58	72	
Utilities	2	3	
Construction	7	7	
Internal trade, catering & accommodation	15	15	
Transport and communication	7	7	
Finance and business services	13	17	
Community, social & personal	6	11	
Government services	8	12	
Total	100	100	

Source: UNCTAD 1995