Review of Data on Trade in Services

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A REVIEW OF DATA ON TRADE IN SERVICES

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1. Introduction

The flow of trade in services is notoriously difficult to measure, and therefore it is difficult to identify what role it is playing in driving growth and competitiveness in the SA economy. This report therefore reviews the official data on trade in services and compares it to other available sources of information to get a sense of the extent to which the official data might be reflecting the reality on the ground.

How are services traded?

How are services traded?[1] The complexity of services trade poses significant challenges in the measurement of trade flows. Trade in merchandise is very easy to picture: a tanker, container or boxes are filled with goods, and transported by ship, rail, plane or truck. The container's contents will be itemised, and can be weighed or checked at customs. It is not necessary for the buyer and the seller to know or see each other.

In contrast, most services are different: they generally require direct interaction between providers and consumers. In most cases, the production and consumption of services can't be separated. Therefore most international transactions in services require either the consumer to move to the location of the producer (as in tourism, health, education) or that the producer move to the place of consumption (through foreign direct investment and/or the temporary movement of labour).

The WTO distinguishes between four modes of trade:

- **Mode 1 involves cross border trade.** This includes services embodied in goods (such as a software programme embodied in a CD). Services that electronically cross borders through telephone lines (e.g. call centres) or the Internet (e.g. distance education) are also classified as mode 1 trade.

- **Mode 2 involves consumption abroad.** This includes all services where the consumer travels to the country of the service provider, as in health, education and tourism. South Africa exports in Mode 2 when foreigners come to South Africa for a holiday, to study or for plastic surgery. When South Africans go to Zanzibar or the UK for a holiday, or obtain an academic qualification from Harvard of Cambridge Universities, this constitutes an import in mode 2.

- **Mode 3 involves commercial presence.** This takes place primarily through foreign direct investment. In this mode, a foreign company supplies a service to a consumer in the home country via a resident foreign affiliate – a SA example could include MTN in Nigeria or Shoprite in Mauritius. Certain services can only be traded by commercial presence, specifically those that require the provision or use of physical infrastructure located in the market. These include local and long-distance telephony, domestic transportation and local energy distribution.

[1] See M. Mayer et al. (2005) *Trade in Services: an overview of research findings*, an HSRC report to the DG's Economic Cluster on the Services Sector, unpublished.

- **Mode 4 involves the temporary movement of natural persons.** This occurs when an individual service provider temporarily[2] moves to the country of the consumer to provide a service. This includes a range of activities, but is largely centred on professional services (medical, accounting, engineering etc.), although there is some evidence of lower-skilled workers exporting their services through this mode, particularly in the construction and care sectors. An example can include SA financial experts working on financial deals in Dubai, or SA resident doctors flying to the UK to perform surgery.

In most countries, Modes 3 and 4 are either not captured by balance of payments statistics at all, or are not adequately captured. Given their importance in trade in services flows, it is likely that services trade is probably vastly underestimated.

There are a great many challenges in measuring trade in services. For example, the way in which data is collected for trade in services implies that foreign receipts and/or payments that have arisen through the operation of subsidiary or associate companies (largely the WTO category "commercial presence") are not reflected in national accounts as trade in services, but rather as dividends or remitted income. This would particularly be the case for telecommunications and financial services companies, who are providing an "export service" via local subsidiaries. Thus, the blurred lines between "trade" and "foreign income" in an increasingly globalised economy are making it more and more difficult to determine "trade" in terms of the definitions that are much more easily applicable in the world of manufactured goods. Multi-national employment and ownership of income exacerbate the problem.

Exchange control regulations in South Africa have, generally, provided an incentive for South African companies (and individuals) to keep proceeds un-reported. Given that the paperwork and controls (duties, shipping records, etc.) that are required for merchandise trade are practically non-existent in the services market, "adjusting" earnings is that much easier. Sophisticated mechanisms utilising offshore holding companies and subsidiaries can allow companies to either pay export earnings back offshore, or never bring them onshore in the first place. The more that these mechanisms are used, the more difficult it will be for South Africa to accurately calculate trade in services, due to reluctance to disclose on the part of individual companies. This problem is likely to persist until exchange controls are abolished.

Methodology

This report uses a number of sources of information. The starting point is the official data, made available by the South African Reserve Bank (SARB) balance of payments figures. Nominal figures for trade in services as published in the Quarterly Bulletin tables are deflated by that recommended by the SARB and/or Quantec for imports and exports respectively. [3]

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[2] Note that this mode of trade is not to be confused with emigration, which is not temporary and therefore does not constitute a trade in a service. Hence if a SA doctor permanently immigrates to the UK this is not a trade in a service. In contrast, if a SA doctor works in the UK for a year and then returns to SA, this is considered to be a mode 4 export.

[3] These deflators are being revised by the SARB. There is a difference between the import and export deflators. The mix of products SA exports consists largely of primary goods (commodities) while imported goods consist largely of semi- and finished secondary goods of which investment goods, oil and consumer goods make up a large portion. Exports are mostly priced in US$ while imports are priced in a broader basket of currencies. Both these

This data is difficult to compare to anything else, partly because it is only published according to 3 very broad sectors that do not correspond to SIC codes, namely: 'travel', 'transport' and 'other'[4]. It is also not decomposed either by country of origin or destination or by mode of trade. In addition, mode 3 trade (commercial presence) is not captured and most mode 4 trade (temporary movement of natural persons) is either not captured or conflated with 'travel'. [5]

The SARB data is compared to a range of other sources. In the first instance, it is compared to that made available by Quantec, which is a private company providing data to users. This is the data made available through the Trade and Industry Policy Strategies (TIPS) website, and is used by researchers across the country. The different categories of trade in services are not always comparable, because of the basis on which the various sources have done their sector allocations. This is particularly the case when using the SARB data, which is not disaggregated past transport, travel and tourism, while the Quantec data is available by SIC code. The Quantec data is not official[6]: but it does offer one estimate of SIC category breakdowns, that are aligned to the balance of payments. The paper then makes use of other sources such as company information and expert opinions.

Obtaining industry-based information in services is a special challenge. Unlike manufacturing, there are no export councils for services, except for the South African Electrotechnical Export Council, which is a public/private partnership between South African companies and the Department of Trade and Industry to support and co-ordinate export initiatives for the following sectors: Electronics, Electrical Engineering Information Technology, Telecommunications. Export Councils would normally provide very valuable source data about trade.

2. Overview of Services Trade

Figure 1, and Figure 2 show imports and exports sourced from the SARB, in current Rand and deflated to 2000 prices. Figure 1 shows a trade deficit after 2000, reaching R 3.5 billion by 2003. This deficit widens to R 5.9 billion if we include compensation made to employees[7]. Payments and receipts related to compensation to employees in presented in **Error! Reference source not found.**, and shows how important this

factors can lead to different deflators over the medium term. Longer run comparisons of the deflators should however be more in line as prices tend to converge over the longer run.

[4] It is also not clear how the "compensation of employees" category in the SARB data is accounted for by the various sub-sectors.

[5] A resolution was taken to improve this state of affairs at a workshop convened by the dti in 2004 as part of the "Services Project". A plan is in place to achieve this objective. Please see paper by Greg Lewis, *An Analysis of SA's Trade in Services Data*, HSRC report submitted to the DG's Economic Cluster, unpublished. For ease, his paper has been appended to this report.

[6] The value of comparing the Quantec data to the SARB figures was underlined when, upon calling the SARB for guidance in using its data, an official asked why the researcher was not simply getting the data from the Quantec site!

[7] The Reserve Bank lists exports and imports associated with "compensation for employees" separately from its sector categories. It appears that Quantec builds this into its sector categories. According to the SARB, approximately 5% of exports were accounted for by compensation to employees in 2003, as compared to almost 10% of imports.

activity is becoming, likely in sectors like finance, medical and construction. Figure 2 shows that imports have been growing faster than exports in real terms[8].

If the researcher were to directly access the Quantec site for this data, they would find a growing trade surplus, reaching R 49 billion by 2003. Figure 3 shows that the main divergence is found in their import numbers, where the SARB records dramatic growth in services imports, and Quantec shows relatively slow growth. What explains the difference?

The SARB data records merchandise trade FOB – in other words, the freight and insurance attached to merchandise trade is recorded under services categories. The Quantec merchandise trade is recorded CIF – in other words, including freight and insurance. It is done this way to enable users to directly compare import product prices to domestic prices[9]. In this vein, the Quantec figures offer a more realistic presentation of how services trade is faring, as it isolates trade in services, as opposed to trade that arises merely as a result of merchandise trade. This is shown in Figure 4. It is not clear why there should be such a large deficit in freight and insurance costs associated with merchandise trade, unless importers and exporters are either under-reporting or alternatively primarily engaging foreign firms.

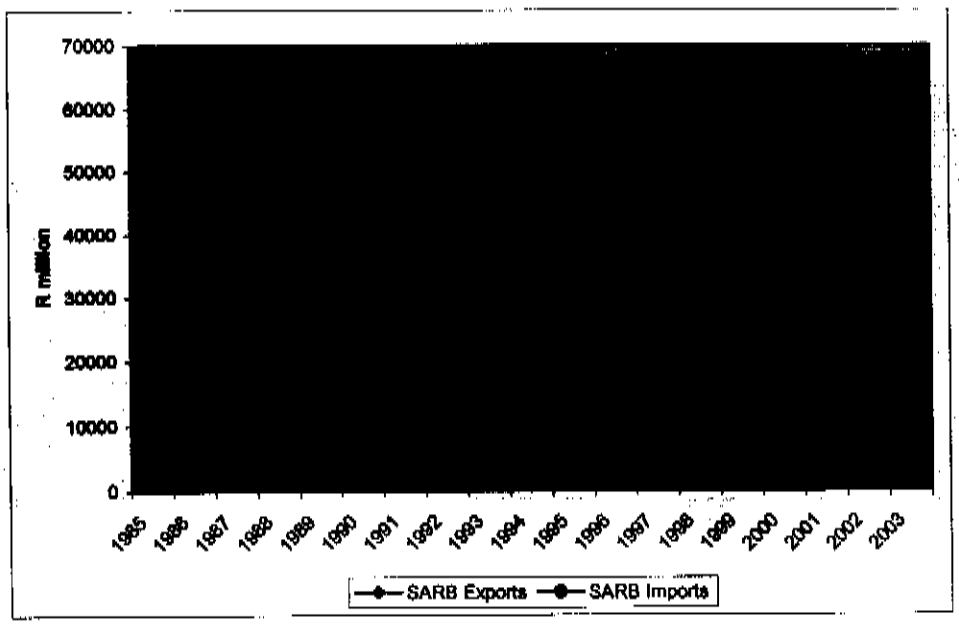


Figure 1: Services Imports & Exports (current Rand)

[8] Note that the deflated figures should not confuse the reader into thinking that there is a growing deficit. It merely offers an indication of real growth (see footnote 3).

[9] Quantec makes estimates of sector categorisations that are closer to SIC codes. According to its owner, Claude van der Merwe, their data adds up to the total as reflected in the balance of payments account for service exports in the SARB Bulletin. On the import side they do a CIF adjustment to show each industry's goods imports to include the cost of transport and insurance. The CIF adjustment is then subtracted from the service imports as reflected in the SARB data. It should be noted that the SARB service categories do not accord strictly to the SIC and are at purchases prices and not basic prices. Quantec say that they will continue to improve its data, but admit that the data is 'softer' than that for merchandise.

Figure 2: Services Imports & Exports (2000 Rand)

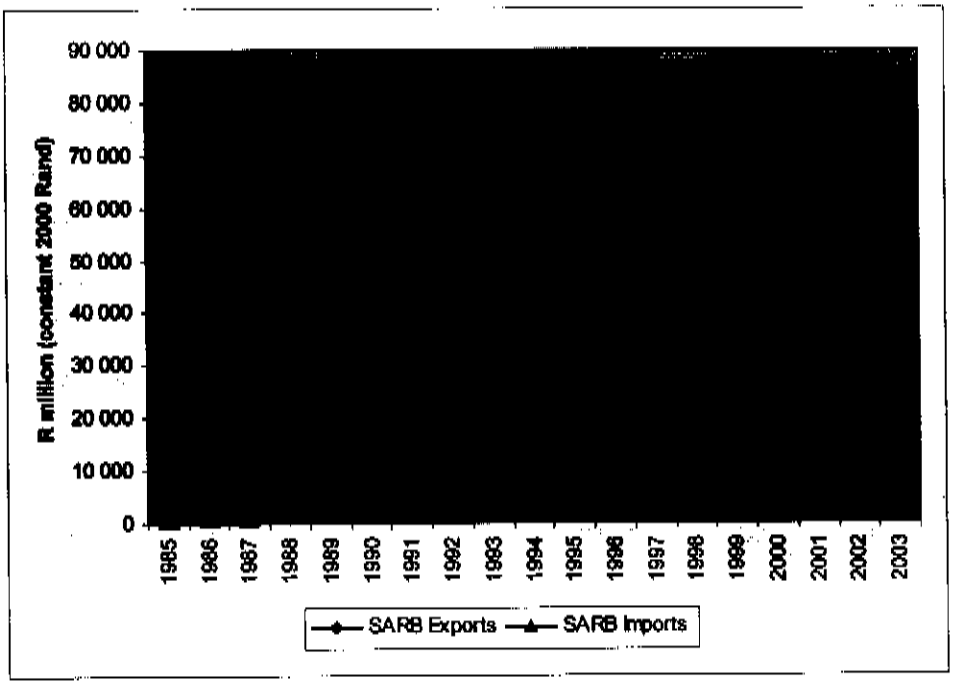
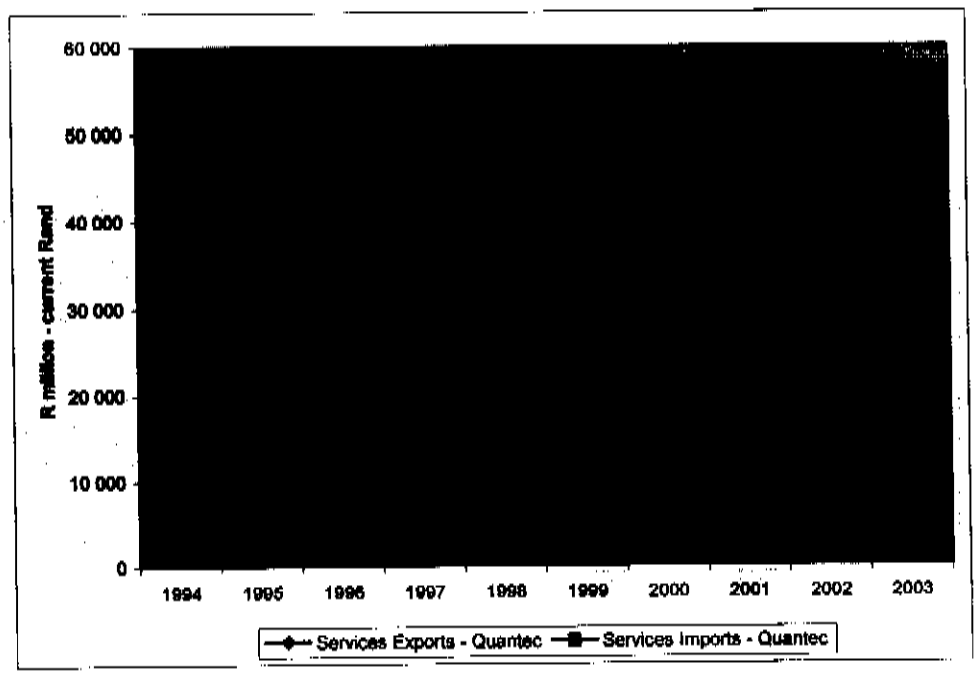


Figure 3: Services Imports & Exports - Quantec (current Rand)



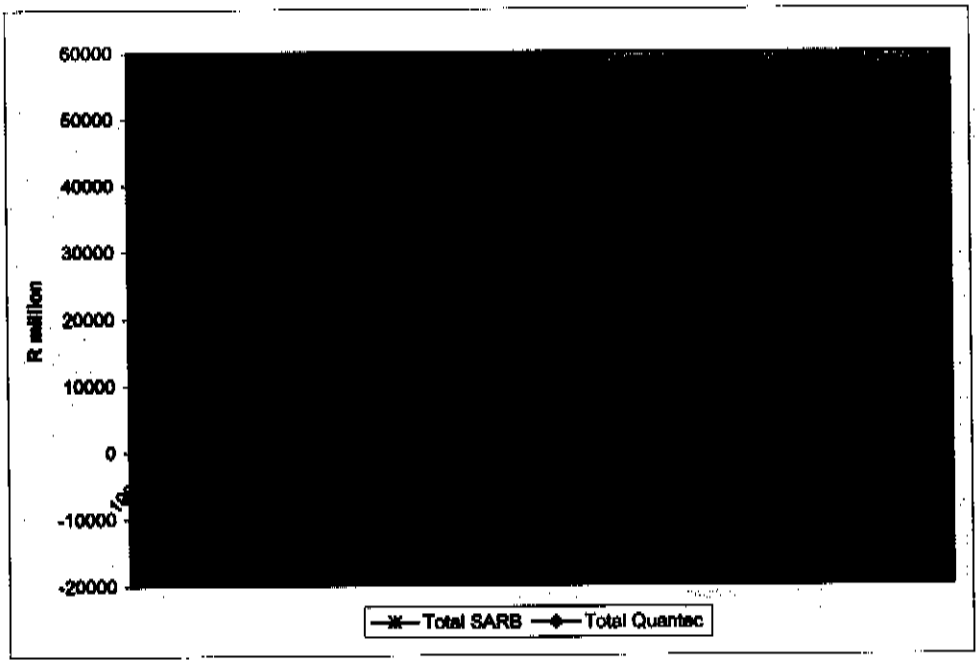


Figure 4: Net Surplus/Deficit in Services Trade (current Rand)

Figure 5: Compensation of Employees - SARB

If we were to look at the Reserve Bank figures for **direct** investment income (on the assumption that companies very reasonably could include income/expenditure from or to a foreign associate or subsidiary as "trade in services") the figures for 2003 show an even larger deficit, of an additional R17 billion.

As with other sectors, it is possible that South African companies are under-reporting export income from services in order to divert hard currency earnings. Not all of these mechanisms are illegal, and many are quite common among companies who want to hedge against the Rand.

As a matter of interest, the United Kingdom in 2002 indicated the following with regards to trade in services with South Africa. This gave a total value to exports from the UK of £963 million, and imports from South Africa of £610 million.

Table 1: Trade in Services between SA and the UK, 2002 (£ million)

	Trans	Trav	Comm	Constr	Insur	Finan	ICT	Royalties	Other	Pers	Govt	Total
Exports from the UK to SA	178	208	20	0	101	98	20	48	252	26	0	963
Imports to the UK from SA	145	329	20	0	7	24	3	10	57	6	9	610

3. Assessment of submitted trade data: sector-specific issues

TOURISM & TRAVEL

Tourism activities generally fall under Mode 2 – Consumption Abroad

The main source of non-African tourism for South Africa is the UK, followed by the rest of Europe and the USA.

*Main destinations for tourists **from** South Africa are Europe, the USA and Mauritius.*

The Reserve Bank figures for "travel" for 2003 show receipts of R38 billion in current Rand. In 2003, there were 6.477 million tourist arrivals. If travel receipts were sourced only from these arrivals, then on average, R 4,940 was spent per visitor. This seems very low.

More than 70% of recorded tourists visiting South Africa are from mainland Africa, and by far the majority of these are from Lesotho (nearly 30%), Swaziland, Botswana and Zimbabwe. The main reason for visits is shopping and visiting family. It is possible that many of these visitors do not spend much on catering and accommodation, but rather spend on buying goods to take home with them. If we exclude African visitors from the travel totals, then the average expenditure per visitor is R 16,467 which seems closer to the mark for a long haul destination.

Stats SA tourism statistics (those that are available electronically) show the following in respect of arrivals of foreign travelers **not** from Africa:

Table 2: Tourism Arrivals

Year	Number	% change from previous year
2003	1,943,203	+4.3%
2002	1,862,460	+19.5%
2001	1,558,325	-1.2%
2000	1,578,001	

If we look at departure figures for South African residents, it shows 1,254,063 people were part of the tourism import market in 2003 (that is, they traveled outside of SA). As R 18.3 billion was 'imported', this comes to an average R 14,593 spent per South African traveler abroad.

Figure 6: Trade In Travel Services – SARB

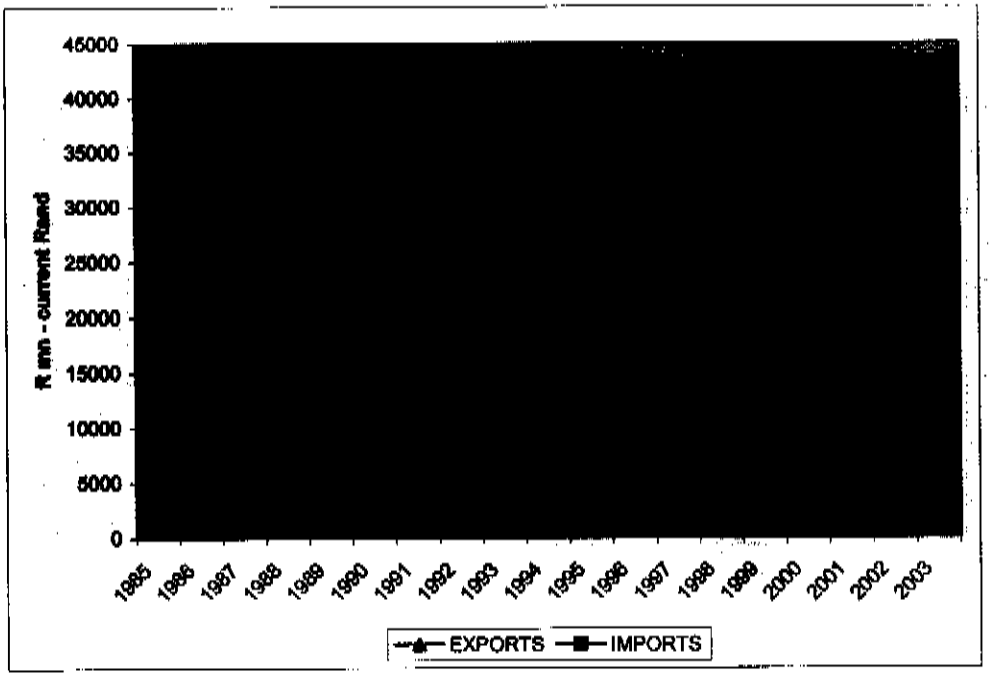


Figure 6 shows that exports have been rising considerably over the 1990s, but particularly after 2002. Exports have also grown albeit less dramatically. This is surprising in the current Rand context.

Researchers should note that the SARB figures cannot be directly compared to the Quantec figures, which use the SIC codes. Tourism isn't a sector, so much as it is an agglomeration of activities. The Quantec figures refer only to catering and accommodation, and do not include transport and car hire, the latter of which is included under "Business Services" (SIC 85).

Not only are these figures a fraction of the SARB travel category, they show the reverse trend: with a trade *deficit* which also comes to naught in 2002. This picture more closely resembles what we know about growing tourist numbers until the Rand appreciated in 2003.

Figure 7: Trade in Catering & Accommodation (Quantec) - current

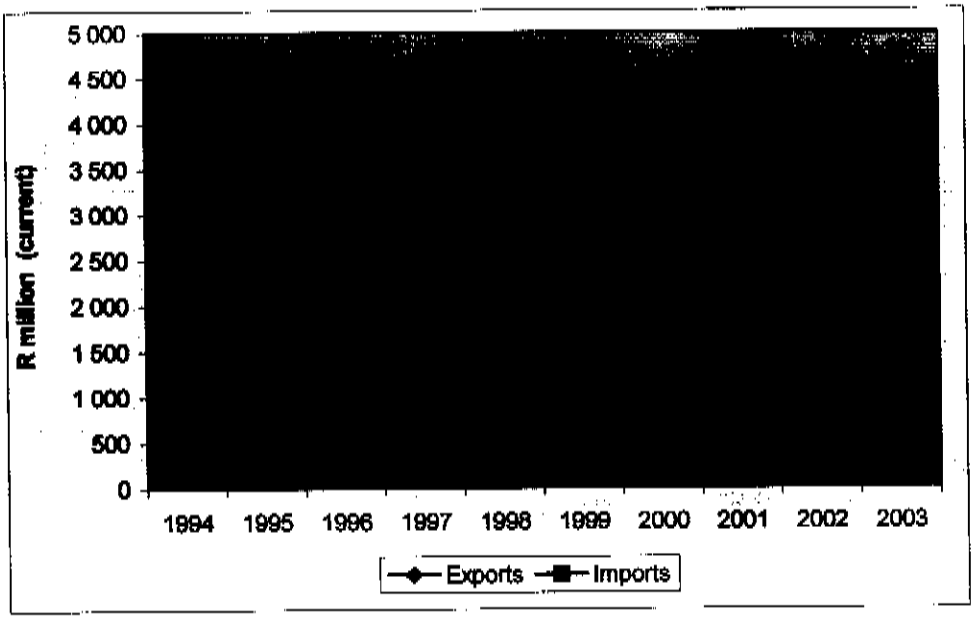
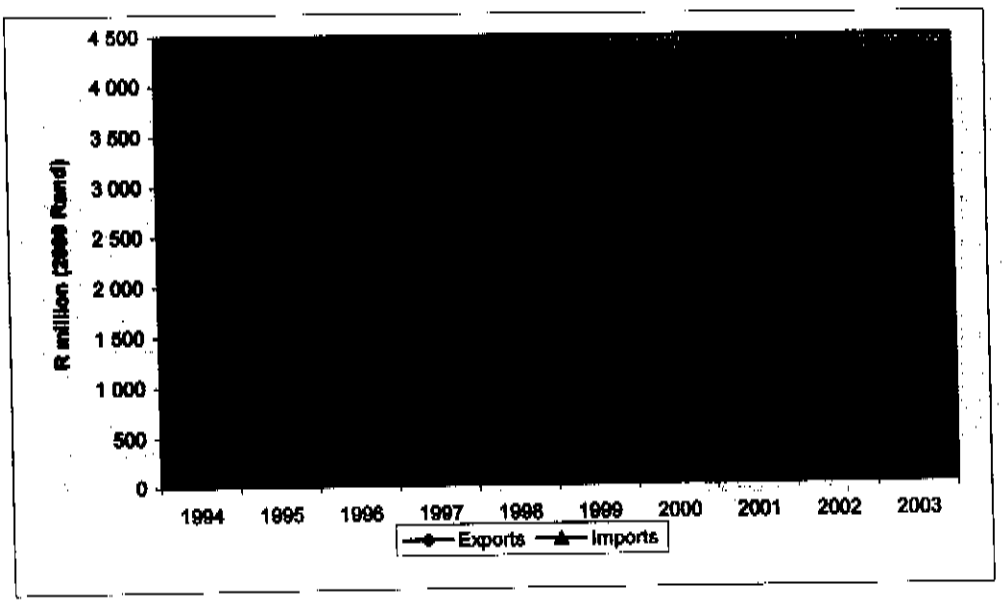


Figure 8: Trade in Catering & Accommodation (Quantec), constant 2000 Rand



When deflated, the data show a steady decline in the real value of exports (around 15%) from 1998 to 2001, with a strong rise in 2002 (more than 10%), and then falling back in 2003. This coincides with the exchange rate fluctations.

The Quantec figures for 2003 show that R 3.878 billion was 'exported' in catering and accommodation. As already noted, it is possible that a large portion of African visitors do not make use of catering and accommodation services. This in itself is probably not a very important issue, since these visitors are generally spending money on goods (retail) rather than services (catering and accommodation). If only non-African foreign arrivals booked into a hotel, this would mean that each one spent R 2,000 on their visit. This seems low for a long-haul destination, but may simply represent some leakage from the SA market to foreign tour operators.

The fall in trade value in 2003, despite the increase in the volume of tourists, can easily be explained by the nearly 25% real increase in the value of the Rand over the same period which would have reduced expenditure in local currency terms.

Quantec shows a deficit in accommodation and catering trade of R 880 million (in current Rand) in 2003. If it is accurate, it could be possible despite the fact that arrivals exceeds the number of departures. This might be explained by leakages: where SA tourists pay overseas operators and foreign tourists also pay over some of their receipts to foreign operators[10].

[10] For example, of the average 5215 Swiss Francs tour package price from Switzerland to SA, and making use of SA Airways, only 42% will flow to SA. One quarter goes directly to the tour operator. The rest goes to other foreign inputs, from fuel for the flight, to imported furniture in the hotel, to the import of food products, to the hire of a care from a foreign multi-national. (see: Tourismus in Entwicklungsländern, Antwort der Bundesregierung auf die Grosse Anfrage der CDU/CSU, Drucksache 15/2027, April 2004.

http://www.igtn.org/pdfs/346_Tourism_and_GATS.pdf

TRANSPORT AND STORAGE

A significant portion is Mode 1, but South African companies tend to use foreign subsidiaries to provide services, which would then fall under Mode 3.

The Reserve Bank's balance of payments data has a sub-category "transport" which shows receipts (exports) of R9.5bn and payments (imports) of R25.5 bn in 2003, as . This represents a real average annual growth in exports by 12.7% between 1994 - 2003, (mostly in passenger fares) and a real average annual real growth of 93% in imports, mostly in non-passenger fares. Quantec presents "transport and storage", with exports of R 14.4 billion and imports of R 11.45 billion. This entails real average annual growth from 1994 – 2003 by 13.8% for exports, and 2.1% for imports. The Quantec data shows an increase in receipts until 2002, and then a decline in 2003.

There is likely a critical difference between Quantec and the SARB, as already noted: the SARB records freight and insurance associated with merchandise trade as a service import or export. The Quantec data includes these items within the merchandise trade statistics. It is perhaps worth noting that, according to the SARB, transport exports that did not involve passenger fares amounted to R 2.25 billion in 2003, and imports amounted to R 19.6 bn.

Figure 9: Trade in Transport Services - SARB

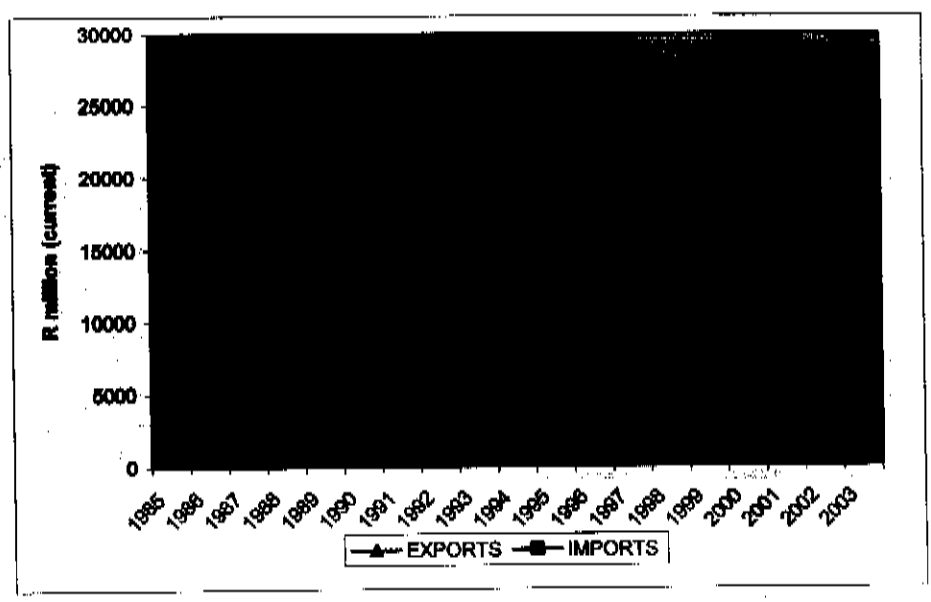
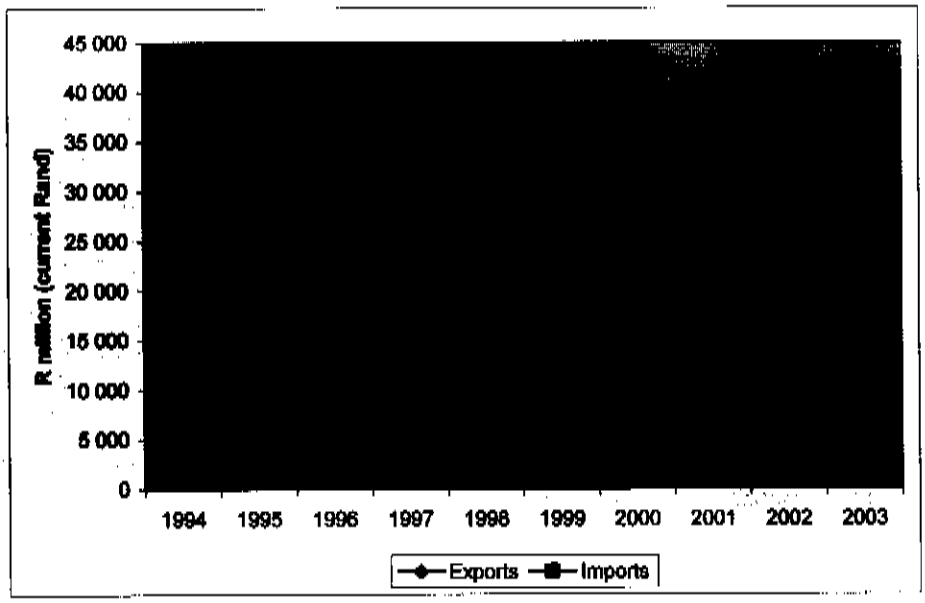


Figure 10: Trade in Transport & Storage (Quantec)



Quantec's receipts are some R5bn more than the SARB reported (which may be due to the problems with classifying earnings from foreign subsidiaries and/or associates as discussed above and below) and that service payments (R11.5bn) are less than half of what the SARB has on record.

The SARB data shows (as the tourism figures would suggest) that receipts from passenger fares are higher than payments, the big difference is in the "other" transportation category, where payments are almost 8 times higher than receipts. Why is this significant spend on other transport not captured in the data? It suggests that there are significant outflows on freight and related services that are not being captured. Although earnings data is available from companies such as Bidvest (the largest non-government entity engaged in freight management in sub-Saharan Africa) it is not so easy to separate earnings and payments from or to foreigners from those that are from local businesses. The answer may well lie in the state transport agencies such as the NPA and Spoornet, who are unlikely to be part of a business survey.

"OTHER" SERVICES

Figure 11 and Figure 12 present trade in "other" services, based on SARB and Quantec estimates respectively. Again, these show very different trends, which are difficult to disentangle given the sparse information available from the SARB. According to the SARB, trade in "other services" has moved into a growing deficit, especially since 2001. Quantec estimates there is a growing surplus. In addition, the SARB figures are considerably lower than those put forward by Quantec.

Figure 13 and Figure 14 show disaggregated trend estimates from Quantec for "other services". Essentially this shows the main export growth in wholesale and retail. Imports are much smaller, and mainly in communications, business services and finance. Given the gaps in measuring Mode 3 (commercial presence), this may understate the activity in both directions.