

**FIJI'S EXPORT COMPETITIVENESS:
A COMPARISON WITH SELECTED SMALL
ISLAND DEVELOPING STATES**

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Abstract

This paper examines Fiji's export competitiveness between 1998 and 2002 with trade-based indices of the Revealed Comparative Advantage (RCA), Revealed Symmetric Comparative Advantage (RSCA) and Net Trade RCA index. In addition, Fiji's export competitiveness is also compared with selected Small Island Developing States (SIDS). Results of the RCA and RSCA reveal competitive advantage in several commodities. However, the Net RCA index indicates a weak specialisation in most export commodities. Finally, comparison of Fiji's RSCA index with selected SIDS revealed that Fiji has a competitive advantage in a narrow range of export commodities.

1.0 Introduction

With the gradual reduction in trade barriers led by the process of globalisation, more emphasis is now being placed on promoting export competitiveness. For Small Island Developing States (SIDS), like Fiji, exports play an important role in securing much needed foreign exchange to meet international payments, and simultaneously, promote economic growth and development.

However, most of the SIDS have been faced with problems such as narrow export base, largely attributed to limited natural resources, high inter-island/on-land transportation costs and lower economies of scale, if any. Therefore, to make the best out of what these Island nations have, it is essential that they identify their comparative (or competitive) advantage in specific products.

In the case of Fiji, there has been very limited research carried out on its export competitiveness. This paper tries to measure Fiji's export competitiveness from 1998 to 2002 in comparison to selected SIDS¹. The rationale for choosing these countries is that they have similar economic structures to that of Fiji and, most importantly, have similar types of merchandise exports, mainly dominated by agricultural and light industry-based products. In addition, it would be worthwhile to see how Fiji's exports performances are ranked amongst the other SIDS, before making any comparison to countries with different economic structures.

Whilst there are many definitions and, accordingly, many different measures to assess export competitiveness, this paper uses the Revealed

¹ These countries are Barbados, French Polynesia, Maldives, Mauritius, St. Lucia, St. Vincent & the Grenadines and Trinidad & Tobago.

Comparative Advantage (RCA) Index and related indices, especially, Revealed Symmetric Comparative Advantage (RSCA), to measure Fiji's competitiveness in comparison to a set of reference countries.

The rest of the paper is organised as follows: Section 2 briefly looks at Fiji's experience in embracing globalisation and competitiveness. Section 3 outlines the theoretical underpinnings of the RCA index and also provides a brief literature survey. The results of the selected indices are presented in Section 4. Firstly, Fiji's RCA and RCA-related indices are analysed over the study period, and then, Fiji's RSCA in selected export commodities are compared with the RSCA index of the selected SIDS. Finally, Section 5 concludes the paper.

2.0 Embracing Globalisation and Competitiveness: A Synopsis for Fiji

The era of globalisation since the late 1940s has dramatically changed the world's trading patterns, as well as the measures employed by countries to survive in a world where trade is being liberalised. More recently, competitiveness has attracted a lot of attention, as a result of the increasing volume of world trade, led by the wave of globalisation.

The concept of competitiveness covers a broad spectrum, from production costs to exchange rates, but perhaps can be comprehensively defined as:

“The degree to which a country can, under free and fair market conditions, produce goods and services which meet the test of international markets, while simultaneously maintaining and expanding the real incomes of its people over the long term.”

Organisation of Economic Cooperation and Development, (2002)²

For small economies like Fiji, competitiveness is essential for promoting economic development and survival in this globalised world. In addition, enhancing competitiveness is vital for SIDS to overcome their inherent vulnerabilities, such as a narrow resource base, vulnerability to external shocks, and limits to achieving economies of scale resulting in high transportation costs (Briguglio & Cordina, 2004).

Since exports are a primary source of foreign exchange for small and vulnerable economies, its long-term survival is dependent upon its ability to compete with exports of similar products from other countries in the international market. Thus, the focus of this paper is export competitiveness.

2.1 Fiji: Trade Reforms and Liberalisation

After gaining independence in 1970, Fiji's economic policies were directed towards promotion of import substitution and self-sufficiency. These policies were credited with and based on the assumption that protecting local industries from foreign competition would provide them the opportunity to grow. High import tariffs and a number of non-tariff restrictions such as import licensing and quantitative restrictions were prevalent throughout the 1970s (Ministry of Finance, 1994).

By the early 1980s, the economy started to show signs of serious decline, led by the stagnating sugar industry, as a result of a series of natural disasters. In addition, the rise in international crude oil prices in

² Cited in Briguglio & Cordina (2004) edited, *Competitiveness Strategies for Small States*.

1979/1980 reduced the tourism sector growth. As a result, increasing unemployment, declining real incomes of sugarcane growers and increasing income disparities became more visible. Subsequently, through the Ninth Development Plan in 1984, the Government of Fiji initiated and adopted outward-looking policies,³ in the view to diversify, increase efficiency and competitiveness of exports (Prasad & Tisdell, n.a.).

However, following the 1987 coup, the Development Plan was abandoned and substituted with more radical policy changes to steer Fiji's economy out of economic and social malaise. The stabilisation-cum-structural reforms in 1987 included two devaluations, while in 1989, the tax-free factory/zones (TFF/TFZ) were introduced to promote exports and import tariffs replaced import licensing⁴.

In the 1990s, the Government adopted a more pragmatic approach to integrate Fiji into the world trading system. In 1993, Fiji became a signatory of the General Agreement to Tariff and Trade (GATT) and after ratifying the World Trade Organisation (WTO) arrangements in 1996, it became a member of the WTO. Since then, Fiji has gradually moved towards more freer trade by introducing a simplified tariff band structure and simultaneously decreasing the average tariff rate to internationally acceptable levels compared to complex and relatively high tariff rates in the 1980s⁵.

³ The outward looking policies were also influenced by the emerging evidence in the 1980s of the export-led growth success achieved by the South East Asian economies, especially the "Asian Tigers", namely, Singapore, Hong Kong, Taiwan, South Korea (Ministry of Finance, 1994).

⁴ Import licensing on 31 categories of goods were replaced by high tariff rates, between 50-70 percent of the value of imports (Rogers, 2000).

⁵ The ad valorem tariff rates were reduced from 50 percent in 1991 to 27 percent in 1999. In addition, the tariff band was simplified to 4 bands; these were: zero percent (animal and vegetables); 10 percent (essential oils, chemical products and machinery); 15 percent (metals and leather) & 27 percent (manufactured items).

Fiji has also pursued bi-lateral and multilateral trade agreements, namely, the South Pacific Regional Trade Agreement (SPARTECA) with Australia and New Zealand in the late 1980s, the Melanesian Spearhead Group with Papua New Guinea, Vanuatu and Solomon Islands in 1998, Pacific Closer Economic Relations (PACER) in 2002 and Pacific Island Countries Trade Agreement (PICTA) in 2003.

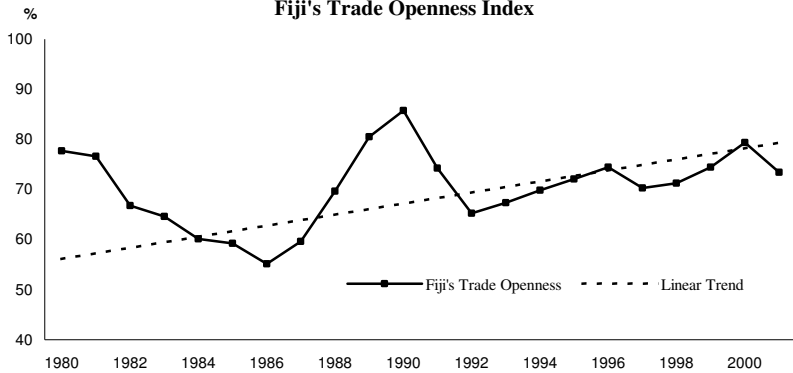
As a result of the aggressive promotion of outward-looking policies since the late 1980s⁶, Fiji's economy has significantly opened up to external trade, as indicated by Graph 1. The trade openness index⁷ has increased from around 55 percent in 1986 to around 73 percent in 2001.

The significant rise in the openness index in 1988-90 shows the effect of the introduction of the TFF/TFZ schemes. However, the index fell in 1991-92, attributed to a fall in exports, as a result of the slowdown in major industrial economies, such as the US, the UK and Canada. In addition, imports fell, following lower domestic demand, due to the weak performance in the mining and quarrying, agriculture, forestry and fishing sectors.

⁶ The sharp fall in the index in the early-to-mid 1980s (as illustrated by the graph), was largely attributed to the decline in exports of agricultural commodities and lower import demand, stemming from the wave of cyclones (such as Cyclone Eric and Nigel) experienced during this period.

⁷ Measured as the ratio of exports and imports of goods to nominal Gross Domestic Product (GDP).

FIGURE 1
Fiji's Trade Openness Index

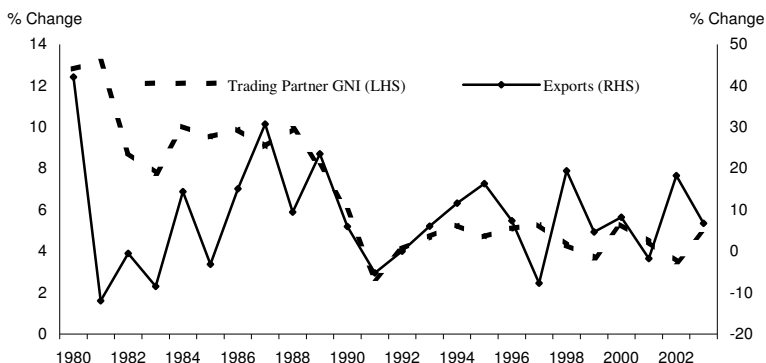


Source: International Financial Statistics

2.2 Fiji's Export Performance and Need for Export Competitiveness

For small and vulnerable economies, exports are essential in sustaining growth and external viability. Export industries in Fiji have contributed significantly in terms of capital inflows, employment, utilisation of domestic resources and widening the manufacturing base. In addition, export earnings contribute directly to the level of gross foreign reserves, which are vital in meeting Fiji' external obligations. Exports have also allowed domestic industries to achieve some economies of scale, which otherwise would not have been possible due to the limited domestic market size.

FIGURE 2
Trading Partner Gross National Income (GNI) & Fiji's Exports



Source: International Financial Statistics

Even though Fiji's export performance has been volatile and highly dependent on a narrow range of commodities, it has been positive. Exports rose at an average rate of 6.9 percent, consistent with an average percent change of 6.5 percent in trading partners' gross national income, as illustrated in Figure 2⁸.

Nevertheless, with the cessation of Fiji's trade agreements, particularly, the Cotonou Agreement (2007) and SPARTECA (2011), Fiji's exports will come under intense competitive pressures. Moreover, the negotiation of free trade blocks within the Pacific Island economies, with Australia and New Zealand⁹; and the European Union (EU)¹⁰, will also add to the challenge of enhancing export competitiveness. In the medium-to-

⁸ In a recent study, Prasad (2000) found that Fiji's exports are largely dependent on trading partners' national income.

⁹ PACER.

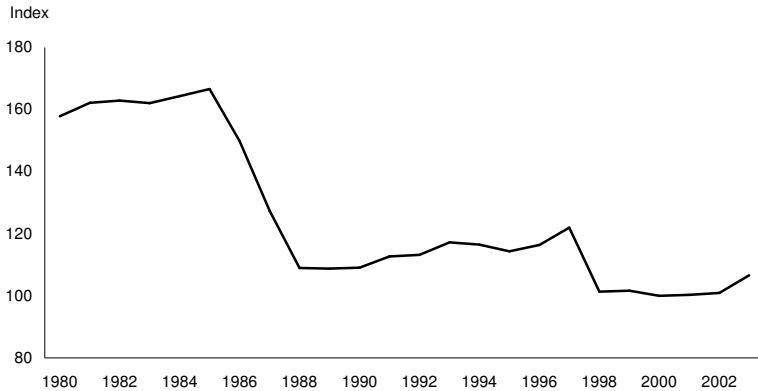
¹⁰ The Cotonou Agreement signed with the EU requires negotiation of WTO compatible trade arrangements, known as the Economic Partnership Agreement (EPA), which will replace the existing non-reciprocal preferential trade arrangements under the Lome and subsequently under the Cotonou Agreement.

long term, Fiji needs to enhance its export competitiveness to survive in the world market.

Figure 3 shows the trend in Fiji's Real Effective Exchange Rate (REER) index, which reflects the movements in Fiji's exchange rate adjusted for relative price differences between Fiji and its major trading partners. The graph shows that Fiji's REER has depreciated over the last two decades, indicating an improvement in its international competitiveness. The large fall in the REER index in 1987 and 1998 reflects the devaluations of the Fiji dollar.

Although the REER is a useful indicator of competitiveness, measuring the domestic prices to foreign prices, it does not specifically measure export competitiveness. Consequently, the major flaw in applying the REER index as a measure of export competitiveness is its failure to capture changes in competitiveness at a sectoral and regional level (Edwards & Schoer, 2001). Therefore, export based indices such as the RCA and related indices are more suitable in measuring export competitiveness.

FIGURE 3
Fiji's Real Effective Exchange Rate (REER)



Source: International Financial Statistics

3.0 Measuring Export Competitiveness: The Revealed Comparative Advantage (RCA) Index

The concept of comparative advantage is widely used in economic literature to evaluate the patterns of trade and specialisation of countries in commodities which they have a competitive edge. However, the concept in its true sense is difficult to measure due to the lack of comprehensive data on factor costs. Therefore, attempts have been made to measure comparative advantage in an indirect way (Greenaway & Milner, 1993)¹¹. The most widely accepted indirect approach is the RCA index, which reveals the comparative advantage of a nation from its past trade data.

Balassa (1965) assumed that in the absence of comprehensive data on factor costs, export performance could be used to reveal the comparative advantage of individual countries. More specifically, the pattern of

¹¹ Cited in Mlangeni, et al, 2000.

commodity exports reflects relative costs as well as differences in non-price factors that can be expected to determine the structure of exports. However, Balassa (1965) restricted his analysis to manufactured goods only, as distortions in primary products, such as subsidies, quotas and special arrangements, would not reflect the real comparative advantage.

Thus, using only export data, the RCA index (also known as the Balassa Index) is defined as:

$$RCA_j^A = \frac{X_j^A / X^A}{X_j^W / X^W}$$

where:

X_j^A = Country A's export of product j

X^A = Total exports of country A

X_j^W = World exports of product j

X^W = Total world exports

The index reveals a comparative advantage (disadvantage) in export of commodity i by country A if the index's value is greater (less) than one, with respect to the world or a set of reference countries¹².

Balassa (1965) applied the RCA index, for the first time, to evaluate the RCA of the US, Canada, the European Common Market, the UK, Sweden and Japan. Since then, the RCA index has been applied to numerous reports and academic publications [See United Nations Industrial Development Organisation (1986), World Bank (1994), van Hulst et al

¹² A set of reference countries can also be used as the denominator, especially for cross-country comparison.

(1991) and Lim (1997)]¹³.

However, one major problem with the RCA index is that large differences in country sizes can cause problems when applying the RCA across countries (Yeats, 1985 & Laursen, 1998). For instance, if exports of a commodity form a very large share of total domestic exports, but forms a very small component of total world exports, extremely high indicator values will be recorded (Mlangeni, et al, 2000). This upward-amplified RCA index makes cross-country comparison difficult.

In addition, Yeats (1985) also outlined that voluntary export restraints, such as general versus the most-favoured-nations tariffs on the same item, and national exports incentives (like subsidies) that are applied to a wide range of agricultural and manufactured products in most countries around the world, result in biased RCA values.

Nevertheless, to overcome the problem of upward-biased RCA index values, Laursen (1998) adjusts the RCA index to make it symmetric, such that the adjusted index values are between -1 and $+1$. Laursen (1998) identifies this index as the RSCA, which is algebraically defined as:

$$RSCA_j^A = (RCA_j^A - 1)/(RCA_j^A + 1)$$

Positive (negative) values of RSCA show a competitive advantage (disadvantage) in exporting product j .

Moreover, Balassa (1965) stated that use of export-import ratios would account for the imported intermediate goods used for production of export commodities, and thus reveal the real comparative advantage of a nation. Mlangeni, et al (2000) used the net trade to total trade ratio to

¹³ For details see Laursen (1998).

evaluate a country's trade performance, which accounts for the possibility of simultaneously exporting and importing within a particular product category. This ratio is represented as:

$$\text{Net Exports } RCA_j^A = \frac{X_j^A - M_j^A}{X_j^A + M_j^A}$$

where:

X_j^A - Country A's exports of product j

M_j^A - Country A's imports of product j

This ratio also ranges from -1 to $+1$. The values indicate comparative disadvantage when it is between -1 and 0 . On the other hand, when the value is between 0 and $+1$, it illustrates a comparative advantage. However, if it is equal to 0 , it indicates that exports and imports of a particular product are equal. More specifically, this index measures the degree of specialisation of a country in exporting a particular product.

Although the RCA results are subject to caveats, it is a useful indicator in measuring competitiveness, especially when used with other related indices (particularly, the RCSA and Net Trade RCA) to overcome some of the limitations of the RCA index.

3.1 RCA Index: Literature Survey

The RCA index has been widely used in cross-country and product-specific comparisons to assess competitiveness. For instance, Rana (1988) examines the pattern of RCA of 13 Asian and Pacific

developing (APD) countries (including Fiji). Evidence showed that the pattern of comparative advantage of the APD countries changed over the period 1965 to 1984. Changes were more significant in the case of the Newly Industrialised Economies (except Hong Kong) and the Association of South East Asian Nations-4 (ASEAN-4) countries (Indonesia, Malaysia, the Philippines and Thailand), which gained comparative advantage in exporting several labour-intensive and moderately capital-intensive items. However, they were not generally significant in the South Asian and the South Pacific countries.

Similarly, Kreinin and Plummer (1994) measured the structural change in the East Asian Countries, using the spearman rank correlation coefficient on the results from the dynamic variant of the RCA index for 1981 and 1990. The results indicated that structural patterns of the developing East Asian exports have changed considerably over the decade. This change in structural patterns was attributed to the faster restructuring of the manufacturing sector than the primary sector and more rapid increase in intra-regional trade than global trade.

In terms of a product specific comparison, Wadud (n.a.) provides an international comparison of the dynamic comparative advantage in the textiles trade, based on the RCA approach. The estimated RCA indicated that while there is overwhelming evidence of comparative advantage revealed by export performance of the developing countries, a few developed high-income economies appear to have acquired and sustained their comparative advantage over time.

In addition, many studies have also utilised the modified RCA indices and/or complementary indices to supplement the RCA index

results. Gorton et al (2000) analyses the competitiveness of agriculture production in Bulgaria and the Czech Republic compared to the international markets and the EU. They employed the RCA index and Domestic Resources Cost (DRC) ratios to measure competitiveness in these two countries. The results showed that while the Czech Republic and Bulgarian cereal producers were competitive at world market and EU prices, livestock production (except pork production in Bulgaria) in both the countries was not competitive at the world market.

Moreover, using the RCA and other complementary indices, from 1996 to 1998, Giurca and Serbanescu (2000) evaluated the competitiveness of the Central European Free Trade Agreement (CEFTA) countries¹⁴. Overall, they identified Hungary as the most competitive country among the CEFTA countries, while the statistical results for Romania showed that several of its products were still competitive among the CEFTA countries.

In a similar study, Ferto and Hubbard (2003), using four indices of RCA and highly disaggregated export and import data for the period 1992 to 1998, examined the competitiveness of the Hungarian agriculture and food industry in relation to that of the EU. The results indicated that Hungary has a comparative advantage in a range of agri-food products, including animals and meat. Moreover, the results also complemented the findings of other studies that have used price and cost based approaches in identifying competitiveness in cereals and crops.

Bender and Li (2001) try to provide additional evidence to the stages of comparative advantage thesis postulated by Balassa (1965,1979,1986). They proceed by examining the structural performance

¹⁴ Bulgaria, Czech Republic, Hungary, Poland, Romania, Slovak Republic, Slovenia.

and shift of export items and the RCA of several Asian and Latin American economies, over the period 1981-1997. The statistical results strongly supported the shift in comparative advantage hypothesis. Moreover, they also elaborated that in spite of the strong growth in East Asia's exports, it is losing its export comparative advantage to the South Asian economies and to the Latin American countries.

Tuncalp et al, (1987) also used the modified RCA index to measure Saudi Arabia's trade performance with its selected trading partners from 1971 to 1984. In conclusion, Tuncalp et al, (1987) found that Saudi Arabia maintained its comparative advantage in trading with Japan, South Korea, Taiwan, Spain, Bahrain and Brazil. However, Saudi Arabia remained at a comparative disadvantage to the US, West Germany, England, Switzerland, Lebanon, Belgium and Kuwait.

Yanagida and Tian (n.a) used the 3-digit Standard International Trade Classification (SITC) export and import data (of selected commodities) to analyse the competitiveness of 42 selected ESCAP economies (including Fiji), using the RCA and Revealed Competitiveness (RC) index from 1976 to 1991. Results revealed that most of the countries were competitive in selected commodities except for wheat (in which only Australia was competitive). However, they also argued that RCA and RC are relative measures, therefore results should be treated with caution and with understanding of their limitations.

Although some of the above studies have measured Fiji's export competitiveness in cross-country studies, they have not been very explicit. Therefore, this paper uses the RCA, RSCA and Net Exports RCA indices to explicitly assess Fiji's export competitiveness with selected SIDS. The

purpose of this comparison is to rank Fiji's selected exports amongst the other selected SIDS that have similar economic characteristics as Fiji. In addition, this ranking will reveal the status of Fiji's export competitiveness relative to other SIDS exports.

4.0 Estimation of Indices

The RCA and RCA-related indices, the RSCA index and Net Exports RCA index, are used to assess international export competitiveness of Fiji relative to the set of reference countries.

4.1 Data

The International Trade Centre – United Nations Conference on Trade and Development/ World Trade Organisation (ITC – UNCTAD/WTO) database was the main source for raw data (see Appendix A). The raw data was sourced in 3-digit SITC from 1998 to 2002 for the 25 countries¹⁵ (for the country list, see Appendix B). The 3-digit data was converted to 2-digit SITC for ease of comparison. However, for Fiji, the 1998 to 1999 exports and imports data was not available on the ITC – UNCTAD website. Thus, it was constructed using domestic data, sourced from the Fiji Islands Bureau of Statistics' Overseas Merchandise Trade Statistics for 1998 and 1999. For consistency and comparison, all data are denominated in US dollars.

¹⁵ The country list includes Fiji's top 10 trading partners and other 15 countries selected on the basis of data availability on the ITC – UNCTAD/WTO website database.

4.2 Estimated Indices and Results

Estimation of Fiji's RCA and RCSA indices in comparison to the set of reference countries (see Appendix C) shows that during the study period (1998-2002), Fiji has enjoyed a competitive advantage in several export categories. These broad export categories are Food and Live Animals, Beverages and Tobacco, Crude Materials, Animal & Vegetable Oils, Fats and Waxes, Miscellaneous Manufactured Products and Other Commodities and Transactions not classified elsewhere (Other Commodities hereafter).

Specifically, Fiji's major domestic exports that have a comparative advantage are: fish, fruits & vegetables, sugar, beverages (including mineral water), cork & wood (or timber), clothing & footwear (or garments), and gold.

However, it should be noted that most of Fiji's main domestic exports, particularly sugar and garments are heavily supported by preferential trade agreements, in terms of preferential prices (for sugar) and duty-free access (for clothing & footwear). Therefore, in the presence of these trade distortions, these exports (sugar and garments) may not reflect their true competitiveness. As a result, the export performance indices of these commodities should be treated with caution.

Nevertheless, other major domestic commodities such as fish, fruits & vegetables, beverages (including mineral water), timber and gold show their true competitive advantage, as these commodities are not distorted by trade agreements. Further analysis of these commodities shows that, except for timber, all other commodities exhibit an improvement in their competitiveness from 1998 to 2002. Thus, these products provide possible

avenues for increasing export earnings and diversification from sugar and garments, as major export earners.

In particular, there is tremendous room for growth in the fruits and vegetables sector. The lack of improvement in the timber industry's competitiveness could be attributed to several domestic factors hindering the industry, such as high maintenance costs of heavy machinery and equipment, high land transportation and freight charges; and lack of suitable infrastructure to access forests.

The fishing industry is also becoming an important export industry for Fiji and internal problems (such as over-fishing within Fiji's Exclusive Economic Zone, issuance of unsustainable levels of fishing licenses and the improper utilisation of the Total Allowable Catch) must be resolved so that Fiji can raise its competitiveness in this industry. As for mineral water, this is clearly a potential export leader.

Figure 4 shows the results from the Net Exports RCA index, which exhibit Fiji's specialisation across the export products. Overall, Fiji's specialisation is mostly in those products that exhibit a competitive advantage (discussed above). The broad categories are namely, Food and Live Animals, Beverages and Tobacco, Crude Materials, Miscellaneous Manufactured Articles and Other Commodities. The specific categories are fish, sugar, beverages, cork & wood, pulp & waste paper, clothing, footwear and gold.

However, Animal & Vegetable Oils, Fats & Waxes do not show any degree of specialisation, despite exhibiting a positive RSCA index. This illustrates that export of these categories are more than offset by the imports of similar commodities.

FIGURE 4
Fiji's Net Exports RCA Index for Selected Commodities:
Average Net Trade RCA Index: 1998-2003



This index also reveals Fiji's weak domestic export sectors/commodities, such as meat & meat preparations, dairy products and fruits & vegetables. These sectors/commodities have a high potential for growth.

Moving on to the cross-country comparison, Fiji's average RSCA index (for selected commodities) from 1998 to 2002 is compared to similar averages of RSCA indices of selected SIDS (presented in Appendix D). Furthermore, each country's export products are ranked across countries. This illustrates the competitiveness ranking of countries in specific export commodities, 1 being the most competitive and 8 being the least competitive.

The ranking amongst the selected SIDS reveals that Fiji only has a higher competitive advantage in two of the broad categories, that is, in Crude Materials and Other Commodities. However, it was surprising to see that Food & Live Animals (consisting of fish, sugar and fruits & vegetables) and Miscellaneous Manufactured Articles (comprising clothing & footwear), which on average account for around 39 percent and 35 percent of Fiji's total exports, respectively, lagged behind other SIDS. However, this is in line with current domestic industry developments, particularly the declining output in the non-cane agricultural, fisheries and clothing industries.

Nevertheless, some of Fiji's major domestic exports (highlighted in Appendix D), such as sugar, cork & wood, footwear and gold have outperformed other SIDS¹⁶.

¹⁶ In addition, other specific commodities showing a higher comparative advantage were crude animals & vegetables and cork & wood manufacturers (excluding furniture).

Overall, the calculated RSCA indices of SIDS shows that Fiji's export competitiveness is restricted to a narrow range of export commodities, compared to other SIDS. The RSCA indices are also useful in indicating the weak and strong sectors, and structural shift in export patterns of an economy. Comparison of Fiji's RSCA indices with other SIDS, shows that most of Fiji's domestic exports are dominated by weak domestic sectors. Moreover, Fiji's RSCA indices have been high for only some of the major domestic commodities, indicating no change in commodity export patterns. In other words, there has been no major structural change in Fiji's export pattern.

5.0 Conclusion

The results provide useful insights into Fiji's export competitiveness. In the first part of the results, Fiji's RCA, RSCA and Net Trade RCA indices are calculated and analysed from 1998 to 2002. While the RCA and RSCA indices reveal competitive advantage in several commodities (such as fish, fruits & vegetables, sugar, mineral water, timber clothing & footwear and gold), the Net Trade RCA indicates a weak competitiveness in most export commodities (e.g. fruits & vegetables, meat & meat preparations and dairy products). However, the results of the sugar and clothing & footwear categories should be interpreted with caution, as preferential trade agreements distort their real RCA and RSCA indices.

Secondly, average RSCA indices from 1998 to 2002 are constructed for selected SIDS (including Fiji). Comparison of Fiji's average RSCA to selected SIDS shows that Fiji has a competitive advantage in a narrow range of export commodities. Further analysis over the sample period

shows that Fiji's exports are largely dependent on the traditional export commodities, especially sugar, clothing & footwear, which enjoy the benefits of preferential trade arrangements.

Notwithstanding the limitations of these indices, the results are quite useful for policymakers, as it identifies the need for raising the competitiveness of Fiji's other potential export sectors (such as mineral water, fruits & vegetables, especially horticulture, and timber). A broad-based effort is needed to maintain and raise Fiji's export competitiveness by aligning domestic resource costs (such as labour, raw materials, finance, communication and transportation costs) to internationally competitive levels.

Finally, this study should only be viewed as a start, given that further studies using domestic resource costs and trade intensity indices will provide more insight into Fiji's export competitiveness. It will also be useful to carry out similar comparisons against Asian countries to provide a wider reference/base for assessing Fiji's export competitiveness.

Appendix A Data Sources and Construction

Series	Sources and Construction
Exports	<p>Reference Country Data (see Appendix B) from 1998-2002 (except for Fiji – Export data was only available from 2000-2002)</p> <p><i>International Trade Centre UNCTAD/WTO</i> (Website: http://www.intracen.org/tradstat/)</p> <p>Export Data for Fiji 1998-1999 (converted into US dollars using yearly average exchange rate)</p> <p><i>Fiji Islands Bureau of Statistics, Oversea Merchandise Trade Statistics 1998,1999.</i></p>
Imports	<p>Reference Country Data (see Appendix B) from 1998-2002 (except for Fiji – Import data was only available from 2000-2002)</p> <p><i>International Trade Centre UNCTAD/WTO</i> (Website: http://www.intracen.org/tradstat/)</p> <p>Import Data for Fiji 1998-1999 (converted into US dollars using yearly average exchange rate)</p> <p><i>Fiji Islands Bureau of Statistics, Oversea Merchandise Trade Statistics 1998,1999.</i></p>

Appendix B Reference Country List

	Country
1	Australia*
2	Barbados
3	Brazil
4	China*
5	Fiji
6	France
7	French Polynesia
8	Germany*
9	Hong Kong*
10	India*
11	Indonesia
12	Japan*
13	Korea
14	Malaysia
15	Maldives
16	Mauritius
17	New Zealand*
18	Pakistan
19	Philippines
20	Singapore*
21	St. Lucia
22	St. Vincent & the Grenadines
23	Trinidad - TBG
24	United Kingdom*
25	United States of America*

The country list includes Fiji's major trading partners (indicated by *). Moreover, the selection was also based on availability of full 5 year export and import data on the ITC – UNCTAD/WTO website.

Appendix C

Table 1: RCA and RSCA Indices for Fiji's Exports 1998-2002

SITC Code	Major Commodities	RCA Index					RSCA Index				
		1998	1999	2000	2001	2002	1998	1999	2000	2001	2002
0-	FOOD AND LIVE ANIMALS	7.17	8.01	7.29	8.53	9.26	0.76	0.78	0.76	0.79	0.81
00-	Live Animals	0.00	0.00	0.00	0.00	0.00	-0.99	-0.99	-1.00	-1.00	-1.00
01-	Meat and Meat Preparations	0.53	0.32	0.26	0.73	1.02	-0.31	-0.51	-0.58	-0.15	0.01
02-	Dairy Products and Birds' Eggs	0.04	0.10	0.23	0.41	0.28	-0.92	-0.82	-0.62	-0.41	-0.57
03-	Fish, Crustaceans, Molluscs and Aquatic Invertebrates and Preparations	10.09	10.85	12.02	16.18	16.17	0.82	0.83	0.85	0.88	0.88
04-	Cereal and Cereal Preparations	1.06	1.37	1.50	1.65	2.54	0.03	0.16	0.20	0.24	0.43
05-	Fruits and Vegetables	1.62	1.58	2.71	2.76	3.53	0.24	0.22	0.46	0.47	0.56
06-	Sugar, Sugar Preparations and Honey	102.34	122.01	109.54	106.28	118.56	0.98	0.98	0.98	0.98	0.98
07-	Coffee, Tea, Cocoa, Spices & Manufactures	1.08	0.61	2.83	2.70	2.54	0.04	-0.24	0.48	0.46	0.43
08-	Feeding Stuff for Animals	0.05	0.11	0.07	0.21	0.10	-0.91	-0.80	-0.86	-0.66	-0.82
09-	Miscellaneous Edible Products and Preparations	0.13	0.19	0.54	0.60	0.60	-0.77	-0.68	-0.29	-0.25	-0.25
1-	BEVERAGE AND TOBACCO	0.33	0.70	2.12	2.99	3.91	-0.50	-0.17	0.36	0.50	0.59
11-	Beverages	0.58	1.08	3.43	4.73	5.82	-0.26	0.04	0.55	0.65	0.71
12-	Tobacco and Tobacco Manufactures	0.00	0.11	0.10	0.08	0.13	-1.00	-0.81	-0.82	-0.85	-0.77
2-	CRUDE MATERIALS. INEDIBLE, EXCEPT FUELS	3.48	1.99	1.75	1.86	1.70	0.55	0.33	0.27	0.30	0.26

21-	Hides, Skins, and Fur skins, raw	0.35	0.25	0.24	0.03	0.08	-0.48	-0.60	-0.61	-0.95	-0.85
22-	Oil seeds and Oleaginous fruits	1.34	1.25	0.00	0.10	0.04	0.14	0.11	-1.00	-0.82	-0.92
23-	Crude rubber (including synthetic & reclaimed)	0.00	0.00	0.00	0.13	0.00	-1.00	-1.00	-1.00	-0.77	-1.00
24-	Cork and Wood	14.92	7.11	10.26	11.20	11.86	0.87	0.75	0.82	0.84	0.84
25-	Pulp and Waste Paper	0.19	0.21	0.26	0.30	0.52	-0.68	-0.65	-0.59	-0.54	-0.32
26-	Textile Fibers (other than wool tops and other combed wool) and their wastes (not manufactured into yarn or fabric)	0.01	0.06	0.07	0.01	0.02	-0.98	-0.89	-0.88	-0.97	-0.97
27-	Crude Fertilisers, other than those of Division 56 and crude minerals (excluding coal, petroleum and precious stones)	0.17	0.89	0.14	0.02	0.62	-0.71	-0.06	-0.75	-0.95	-0.24
28-	Metallic ferrous Ores & Metal Scraps	0.10	0.17	0.10	0.12	0.10	-0.82	-0.71	-0.82	-0.79	-0.83
29-	Crude Animal and Vegetables Not Elsewhere Specified (n.e.s)	18.63	8.60	5.05	6.78	3.05	0.90	0.79	0.67	0.74	0.51
3-	MINERAL FUELS, LUBRICANTS AND RELATED MATERIALS	0.00	0.00	0.00	0.00	0.00	-1.00	-1.00	-1.00	-1.00	-1.00
4-	ANIMAL & VEGETABLE OILS, FATS AND WAXES	1.94	2.88	1.53	0.94	1.76	0.32	0.48	0.21	-0.03	0.27
41-	Animal Oils and Fats	0.01	0.01	0.00	0.00	0.00	-0.97	-0.97	-1.00	-1.00	-1.00
42-	Fixed Vegetable Fats and Oils, Crude, Refined or Fractionated	2.55	3.79	2.07	1.26	2.31	0.44	0.58	0.35	0.12	0.40
43-	Animal or Vegetable Fats and Oils, Processed, Waxes of animal or vegetable Origin, Inedible Mixtures or Preparation of Animal or Vegetable Fats and Oils, n.e.s	0.00	0.01	0.00	0.00	0.00	-0.99	-0.99	-1.00	-1.00	-1.00

5-	CHEMICALS AND RELATED PRODUCTS, n.e.s	0.03	0.05	0.08	0.07	0.10	-0.93	-0.90	-0.86	-0.87	-0.81
51-	Organic Chemicals	0.00	0.00	0.00	0.01	0.00	-1.00	-1.00	-1.00	-0.98	-1.00
52-	Inorganic Chemicals	0.02	0.01	0.04	0.03	0.03	-0.96	-0.97	-0.92	-0.94	-0.94
53-	Dyeing, Tanning and Colouring Materials	0.18	0.21	0.34	0.34	0.44	-0.69	-0.65	-0.49	-0.50	-0.39
54-	Medical and Pharmaceutical Products	0.01	0.02	0.10	0.11	0.20	-0.99	-0.96	-0.81	-0.80	-0.66
55-	Essential Oils and Rescinds and Perfumed Materials, Toilets, Polishing and Cleansing Preparations	0.18	0.32	0.35	0.23	0.29	-0.70	-0.51	-0.48	-0.63	-0.55
56-	Fertilisers	0.04	0.00	0.00	0.00	0.00	-0.92	-1.00	-1.00	-1.00	-1.00
57-	Plastics in Primary Form	0.02	0.01	0.00	0.00	0.00	-0.96	-0.99	-1.00	-1.00	-1.00
58-	Plastics in Non Primary Form	0.01	0.07	0.06	0.05	0.04	-0.98	-0.86	-0.89	-0.91	-0.92
59	Chemicals Materials ad Products n.e.s	0.00	0.00	0.00	0.00	0.02	-1.00	-0.99	-1.00	-0.99	-0.96
6-	MANUFACTURED GOODS CLASSIFIED CHIEFLY BY MATERIAL	0.45	0.51	0.61	0.50	0.47	-0.38	-0.32	-0.24	-0.33	-0.36
61-	Leather, Leather Manufacturers Not Elsewhere Specified and Dressed Fur skins	0.04	0.09	2.04	0.42	0.27	-0.92	-0.83	0.34	-0.41	-0.58
62-	Rubber Manufacturers n.e.s	0.01	0.01	0.14	0.03	0.08	-0.98	-0.98	-0.76	-0.94	-0.85
63-	Cork and Wood Manufacturers (Excluding Furniture)	2.42	2.72	2.40	1.57	2.01	0.41	0.46	0.41	0.22	0.33
64-	Paper, Paperboard and Articles of Paper Pulp of Paper or of Paperboard	0.67	0.54	0.29	0.95	1.22	-0.20	-0.30	-0.55	-0.02	0.10
65-	Textile Yarn, Fabrics, made up of Articles, n.e.s and Related Products	1.00	1.15	1.43	0.83	0.54	0.00	0.07	0.18	-0.09	-0.30

66-	Non Metallic Mineral Manufacturers n.e.s	0.19	0.28	0.42	0.54	0.30	-0.69	-0.56	-0.41	-0.30	-0.54
67-	Iron and Steel	0.13	0.23	0.23	0.19	0.20	-0.78	-0.63	-0.62	-0.68	-0.67
68-	Non Ferrous Metal	0.04	0.02	0.05	0.07	0.06	-0.92	-0.95	-0.91	-0.87	-0.89
69-	Manufactures of Metal n.e.s	0.21	0.16	0.29	0.32	0.42	-0.65	-0.72	-0.55	-0.51	-0.40
7-	MACHINERY AND TRANSPORT EQUIPMENT	0.02	0.00	0.00	0.00	0.00	-0.96	-1.00	-0.99	-0.99	-0.99
71-	Power Generating Machinery and Equipment	0.01	0.01	0.01	0.00	0.00	-0.99	-0.99	-0.98	-1.00	-0.99
72-	Machinery Specialised for Particular Industries	0.04	0.00	0.00	0.00	0.00	-0.92	-1.00	-1.00	-1.00	-1.00
73-	Metal Working Machinery	0.00	0.00	0.00	0.00	0.00	-1.00	-1.00	-1.00	-1.00	-1.00
74-	General Industrial Machinery and Equipment n.e.s and Machine Parts n.e.s	0.01	0.00	0.00	0.00	0.00	-0.98	-1.00	-1.00	-1.00	-1.00
75-	Office Machines and Automatic Data Processing Machines	0.00	0.00	0.00	0.00	0.00	-0.99	-1.00	-1.00	-1.00	-1.00
76-	Telecommunications and Sound Recording and Reproducing Apparatus and Equipment	0.00	0.00	0.00	0.00	0.00	-1.00	-1.00	-1.00	-1.00	-1.00
77-	Electrical Machinery, Apparatus and Appliances, not Elsewhere and Electrical Parts Thereof	0.03	0.00	0.00	0.00	0.00	-0.94	-1.00	-1.00	-1.00	-1.00
78-	Road Vehicles (Including Air Cushion Vehicles)	0.00	0.00	0.00	0.00	0.00	-1.00	-1.00	-1.00	-1.00	-1.00
79-	Other Transport Equipment	0.11	0.00	0.05	0.04	0.03	-0.79	-1.00	-0.91	-0.92	-0.94
8-	MISCELLANEOUS MANUFACTURED ARTICLES	2.88	2.91	3.04	2.77	2.46	0.49	0.49	0.51	0.47	0.42

81-	Prefabricated Buildings, Sanitary Plumbing, Heating and Lighting Fixtures and Fittings n.e.s	0.05	0.05	0.14	0.06	0.15	-0.91	-0.91	-0.75	-0.89	-0.75
82-	Furniture and Parts Thereof, Bedding, Mattresses, Mattress Supports, Cushions and Similar Stuffed Furnishings	0.78	0.86	1.14	1.13	1.09	-0.12	-0.07	0.07	0.06	0.04
83-	Travel Goods, Handbag and Similar Containers	0.06	0.05	0.22	0.13	0.48	-0.88	-0.90	-0.64	-0.76	-0.35
84-	Articles of Apparel and Clothing Accessories	10.95	11.19	11.30	10.05	8.74	0.83	0.84	0.84	0.82	0.79
85-	Footwear	2.83	2.40	4.34	3.71	4.11	0.48	0.41	0.63	0.57	0.61
87-	Professional, Scientific & Controlling Instruments and Apparatus	0.00	0.01	0.02	0.39	0.09	-1.00	-0.98	-0.95	-0.44	-0.83
88-	Photographic Apparatus, Equipment and Supplies and Optical Goods, Not elsewhere Specified, Watches and Clocks	0.00	0.03	0.03	0.03	0.07	-0.99	-0.95	-0.94	-0.93	-0.87
89-	Miscellaneous Manufactured Articles n.e.s	0.10	0.25	0.20	0.17	0.25	-0.82	-0.60	-0.66	-0.71	-0.60
9-	COMMODITIES AND TRANSACTIONS NOT CLASSIFIED ACCORDING TO KIND	2.32	2.89	4.38	2.54	2.46	0.40	0.49	0.63	0.44	0.42
93-	Special Transactions	0.00	0.00	2.56	0.24	0.17	-1.00	-1.00	0.44	-0.61	-0.71
97-	Gold, Non Monetary (Excluding Gold, Ores)	10.32	16.68	16.68	20.71	21.90	0.82	0.89	0.89	0.91	0.91

Source: Author's calculation based on data from ITC – UNCTAD/WTO website database (from 1999-2002) and constructed data (for Fiji from 1998-1999).

Appendix D RSCA Index and Rank of Selected Export Commodities

The 5-year average RSCA Index and rank of selected export commodities of the selected SIDS (including Fiji) is presented in Table 2 (on the next page). The 2-digit SITC codes of Fiji's major domestic export commodities are marked by *. While Fiji's positive RSCA index of selected commodities in the upper-half ranking (i.e. between 1-4) are in bold.

The country codes used in Table 2 are as follows:

- B – Barbados,
- F – Fiji,
- FP – French Polynesia,
- Md. – Maldives,
- Mt. – Mauritius,
- SL – St. Lucia,
- SV – St. Vincent & the Grenadines, and
- TT – Trinidad & Tobago.

Table 2: RSCA Index and Rank of Selected Export Commodities

SITC Code	Major Commodities	RSCA Index								Rank in Products (cross-country comparison)							
		B	F	FP	Md.	Mt.	SL	SV	TT	B	F	FP	Md.	Mt.	SL	SV	TT
0-	FOOD AND LIVE ANIMALS	0.72	0.78	0.05	0.85	0.66	0.85	0.89	-0.06	5	4	7	2	6	3	1	8
01-	Meat and Meat Preparations	0.26	-0.31	-1.00	-1.00	-0.77	-1.00	-1.00	-0.76	1	2	5	5	4	5	5	3
02-	Dairy Products and Birds' Eggs	0.12	-0.67	-1.00	-1.00	-0.83	-1.00	-1.00	-0.47	1	3	5	5	4	5	5	2
03*-	Fish, Crustaceans, Molluscs and Aquatic Invertebrates and Preparations	0.04	0.85	0.62	0.98	0.71	-1.00	0.50	-0.24	6	2	4	1	3	8	5	7
04-	Cereal and Cereal Preparations	0.57	0.21	-1.00	-1.00	-0.42	-0.86	0.93	0.05	2	3	7	7	5	6	1	4
05*-	Fruits and Vegetables	-0.03	0.39	0.42	-1.00	-0.71	0.97	0.97	-0.14	5	4	3	8	7	1	2	6
06*-	Sugar, Sugar Preparations and Honey	0.96	0.98	-1.00	-1.00	0.97	-1.00	-1.00	0.61	3	1	5	5	2	5	5	4
07-	Coffee, Tea, Cocoa, Spices & Manufactures	-1.00	0.23	0.18	-1.00	-0.74	0.40	0.38	-0.14	7	3	4	7	6	1	2	5
08-	Feeding Stuff for Animals	-0.02	-0.81	-0.82	0.60	0.01	-1.00	0.81	-0.17	4	6	7	2	3	8	1	5
1-	BEVERAGE AND TOBACCO	0.80	0.15	-0.68	-1.00	-0.69	0.88	0.53	0.44	2	5	6	8	7	1	3	4
11-	Beverages	0.87	0.34	-0.54	-1.00	-0.56	0.92	0.69	0.57	2	5	6	8	7	1	3	4
12-	Tobacco and Tobacco Manufactures	-0.88	-0.85	-1.00	-1.00	-0.96	-1.00	-1.00	-0.17	3	2	5	5	4	5	5	1
2-	CRUDE MATERIALS, INEDIBLE, EXCEPT FUELS	-0.72	0.34	-0.46	-0.93	-0.56	-0.81	-1.00	-0.85	4	1	2	7	3	5	8	6
22-	Oil seeds and Oleaginous fruits	-1.00	-0.50	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	2	1	2	2	2	2	2	2
23-	Crude rubber (including synthetic & reclaimed)	-1.00	-0.95	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	2	1	2	2	2	2	2	2
24*-	Cork and Wood	-1.00	0.83	-1.00	-1.00	-0.92	-1.00	-1.00	-0.90	4	1	4	4	3	4	4	2
25-	Pulp and Waste Paper	-1.00	-0.56	-0.83	-1.00	-0.98	0.07	-1.00	-0.84	6	2	3	6	5	1	6	4
26-	Textile Fibers (other than wool tops and other combed wool) and their wastes (not manufactured into yarn or fabric)	-0.51	-0.94	-1.00	-1.00	-0.45	-1.00	-1.00	-1.00	2	3	4	4	1	4	4	4

29-	Crude Animal and Vegetables Not Elsewhere Specified (n.e.s)	-0.39	0.72	0.60	-1.00	0.21	-1.00	-1.00	-0.61	4	1	2	6	3	6	6	5
3-	MINERAL FUELS, LUBRICANTS AND RELATED MATERIALS	0.18	-1.00	-1.00	-1.00	-0.99	-1.00	-1.00	0.88	2	4	5	5	3	5	5	1
4-	ANIMAL & VEGETABLE OILS, FATS AND WAXES	-0.01	0.25	0.41	-1.00	-0.74	-0.41	-1.00	-0.41	3	2	1	7	6	5	7	4
41-	Animal Oils and Fats	-1.00	-0.99	-1.00	-1.00	-1.00	-1.00	-1.00	-1.00	2	1	2	2	2	2	2	2
42-	Fixed Vegetable Fats and Oils, Crude, Refined or Fractionated	0.13	0.38	0.52	-1.00	-0.72	-0.32	-1.00	-0.32	3	2	1	7	6	5	7	4
43-	Animal or Vegetable Fats and Oils, Processed, Waxes of animal or vegetable Origin, Inedible Mixtures or Preparation of Animal or Vegetable Fats and Oils, n.e.s	-1.00	-1.00	-1.00	-1.00	-0.76	-1.00	-1.00	-0.75	4	3	4	4	2	4	4	1
5-	CHEMICALS AND RELATED PRODUCTS, n.e.s	0.13	-0.87	-0.86	-1.00	-0.84	-0.81	-0.81	0.29	2	7	6	8	5	4	3	1
51-	Organic Chemicals	-0.89	-0.99	-1.00	-1.00	-0.95	-1.00	-1.00	0.42	2	4	5	5	3	5	5	1
52-	Inorganic Chemicals	-1.00	-0.95	-1.00	-1.00	-0.88	-1.00	-1.00	0.88	4	3	4	4	2	4	4	1
53-	Dyeing, Tanning and Colouring Materials	0.61	-0.54	-0.94	-1.00	-0.82	-1.00	-1.00	-0.57	1	2	5	6	4	6	6	3
54-	Medical and Pharmaceutical Products	0.06	-0.84	-1.00	-1.00	-0.87	-1.00	-1.00	-0.95	1	2	5	5	3	5	5	4
55-	Essential Oils and Rescinds and Perfumed Materials, Toilets, Polishing and Cleansing Preparations	0.24	-0.57	-0.11	-1.00	-0.84	-1.00	-1.00	-0.03	1	4	3	6	5	6	6	2
56-	Fertilisers	-1.00	-0.98	-1.00	-1.00	0.48	-0.27	-1.00	0.84	5	4	5	5	2	3	5	1
57-	Plastics in Primary Form	-0.86	-0.99	-1.00	-1.00	-0.99	-1.00	-1.00	-0.90	1	3	5	5	4	5	5	2
58-	Plastics in Non Primary Form	-0.56	-0.91	-1.00	-1.00	-0.86	-1.00	-0.31	-0.61	2	5	6	6	4	6	1	3
6-	MANUFACTURED GOODS CLASSIFIED CHIEFLY BY MATERIAL	0.14	-0.33	0.67	-1.00	-0.20	-0.34	-0.29	-0.05	2	6	1	8	4	7	5	3
61-	Leather, Leather Manufacturers n.e.s and Dressed Fur skins	-1.00	-0.48	-1.00	-1.00	-0.59	-1.00	-1.00	-1.00	3	1	3	3	2	3	3	3

62-	Rubber Manufacturers n.e.s	-1.00	-0.90	-0.93	-1.00	-0.92	-1.00	-1.00	-0.85	5	2	4	5	3	5	5	1
63-	Cork and Wood Manufacturers (Excluding Furniture)	-0.75	0.37	-0.85	-1.00	-0.72	-1.00	-0.14	-0.21	5	1	6	7	4	7	2	3
64-	Paper, Paperboard and Articles of Paper Pulp of Paper or of Paperboard	0.50	-0.20	-1.00	-1.00	-0.71	0.59	0.18	0.09	2	5	7	7	6	1	3	4
65*-	Textile Yarn, Fabrics, made up of Articles, n.e.s and Related Products	-0.54	-0.03	-0.95	-1.00	0.30	-0.64	-1.00	-0.76	3	2	6	7	1	4	7	5
7-	MACHINERY AND TRANSPORT EQUIPMENT	-0.58	-0.99	-0.46	-1.00	-0.92	-0.83	-0.97	-0.82	2	7	1	8	5	4	6	3
72-	Machinery Specialised for Particular Industries	-0.90	-0.98	-0.93	-1.00	-0.76	-1.00	-1.00	-0.67	3	5	4	6	2	6	6	1
73-	Metal Working Machinery	-1.00	-1.00	-0.98	-1.00	-0.93	-1.00	-1.00	-0.96	5	4	3	5	1	5	5	2
74-	General Industrial Machinery and Equipment n.e.s and Machine Parts n.e.s	-0.94	-1.00	-0.54	-1.00	-0.87	-0.94	-1.00	-0.68	5	6	1	7	3	4	7	2
75-	Office Machines and Automatic Data Processing Machines	-0.83	-1.00	-0.93	-1.00	-0.98	-1.00	-1.00	-0.98	1	5	2	6	3	6	6	4
76-	Telecommunications and Sound Recording and Reproducing Apparatus and Equipment	-0.89	-1.00	-0.75	-1.00	-0.93	-1.00	-1.00	-0.95	2	5	1	6	3	6	6	4
78-	Road Vehicles (Including Air Cushion Vehicles)	-0.97	-1.00	-0.94	-1.00	-0.97	-1.00	-1.00	-0.98	3	5	1	6	2	6	6	4
79-	Other Transport Equipment	-0.77	-0.91	0.48	-1.00	-0.90	-1.00	-0.80	-0.57	3	6	1	7	5	7	4	2
8-	MISCELLANEOUS MANUFACTURED ARTICLES	-0.12	0.47	-0.43	0.49	0.67	-0.18	-0.80	-0.73	4	3	6	2	1	5	8	7
81-	Prefabricated Buildings, Sanitary Plumbing, Heating and Lighting Fixtures and Fittings n.e.s	0.30	-0.84	-1.00	-1.00	-0.83	-1.00	-1.00	-0.42	1	4	5	5	3	5	5	2
82-	Furniture and Parts Thereof, Bedding, Mattresses, Mattress Supports, Cushions and Similar Stuffed Furnishings	-0.42	-0.01	-1.00	-1.00	-0.79	-0.44	-0.60	-0.51	2	1	7	7	6	3	5	4

83-	Travel Goods, Handbag and Similar Containers	-1.00	-0.71	-1.00	-1.00	-0.15	0.28	-1.00	-0.93	5	3	5	5	2	1	5	4
84*-	Articles of Apparel and Clothing Accessories	-0.45	0.82	-0.93	0.85	0.90	0.39	-0.87	-0.80	5	3	8	2	1	4	7	6
85*-	Footwear	-1.00	0.54	-1.00	-1.00	-0.79	-1.00	-1.00	-0.96	4	1	4	4	2	4	4	3
87-	Professional, Scientific & Controlling Instruments and Apparatus	-0.57	-0.84	-0.47	-1.00	-0.60	-1.00	-1.00	-0.80	2	5	1	6	3	6	6	4
88-	Photographic Apparatus, Equipment and Supplies and Optical Goods, Not elsewhere Specified, Watches and Clocks	0.19	-0.94	-1.00	-1.00	0.15	-1.00	-1.00	-0.98	1	3	5	5	2	5	5	4
9-	COMMODITIES AND TRANSACTIONS NOT CLASSIFIED ACCORDING TO KIND	-0.42	0.47	-0.63	-1.00	-0.98	-1.00	-1.00	-0.99	2	1	3	6	4	6	6	5
97*-	Gold, Non Monetary (Excluding Gold, Ores)	-1.00	0.88	-1.00	-1.00	-0.85	-1.00	-1.00	-1.00	3	1	3	3	2	3	3	3

Source: Author's calculation based on data from ITC – UNCTAD/WTO website database (from 1999-2002) and constructed data (for Fiji from 1998-1999).

References

- Balassa, B. (1965). Trade Liberalisation and 'Revealed' Comparative Advantage, *The Manchester School of Economic and Social Studies*, Vol. 119, pp. 93-123.
- Bender, S. & Li, K.W. (2001). "Trade and Comparative Advantage of Asia and Latin America Manufactured Exports", APEC: Heading Towards New Century and Bright Future, *APEC Study Centre Consortium Conference*, May 18-20.
- Briguglio, L. & Cordina, G., ed. (2004). Competitiveness Strategies for Small States, *Islands and Small States Institute of the Foundation for International Studies, Malta and the Commonwealth Secretariat, London*.
- Edwards, L. & Schoer, V. (2001). The Structure and Competitiveness of South African Trade, *Trade and Industrial Policy Strategies 2001 Annual Forum*, September 10-12.
- Ferto, I. & Hubbard, L. J. (2001). Regional Comparative Advantage and Competitiveness in Hungarian Agri-Food Sectors, *77th EAAE Seminar/ NJF Seminar No.325*, August 17-18.
- Giurca, D. & Serbanescu, C. (2000). Romanian Agro-food Sector Competitiveness in CEFTA – What are the real chances?,

International Conference: European Rural Policy at the Crossroads, *The Arkleton Centre for Rural Development Research, King's College, University of Aberdeen*, June 29-July 1.

Gorton , M., et al, (2000). The Competitiveness of Agriculture in Bulgaria and the Czech Republic vis-à-vis the European Union (CEEC and the EU Agricultural Competitiveness), *Comparative Economic Studies*, Spring 2000, vol. 42, no.1.

International Trade Organisation UNCTAD/WTO Database, website:
<http://www.intracen.org/tradstat/>

Kreinin, M. E. & Plummer, M. G. (1994). Structural Change and Regional Integration in East Asia, *International Economic Journal*, Vol. 8, No. 2.

Laursen, K. (1998). Revealed Comparative Advantage and the alternatives as Measure of International Specialisation, *Danish Research Unit for Industrial Dynamics*, DRUID Working Paper No. 98-30, Copenhagen, Denmark.

Ministry of Finance of the Republic of Fiji. (1994). Deregulation of the Rice, Dairy and Canned Fish industries, *Supplement to the 1994 Budget Address*.

- Mlangeni, T. et al. (2000). Revealed Comparative Advantage in SADC Economies, *South African Update*, Trade and Industrial Policy Secretariat (TIPS), March, vol. 5.
- Prasad, B. C. & Tisdell, C. (n.a.). Economic Adjustment and International Trade: A Policy Dilemma for Fiji, *World Trade and Development*.
- Prasad, S. (2002). Determinants of Exports in Fiji, Reserve Bank of Fiji, Working Paper, 00/04.
- Rana, P.B. (1988). Shifting Revealed Comparative Advantage: Experiences of Asian and Pacific Developing Countries, *Asian Development Bank*, Report No. 42.
- Rogers, A (2000). An Analysis of the Determinants of Fiji's Imports, Reserve Bank of Fiji, *Working Paper*, 00/03.
- Tuncalp, S., et al, (1987). An Assessment of Saudi Arabia's Trade Performance with Selected Trading Partners, *Management International Review*, 3rd quarter 1987, vol. 27, issue 3.
- Wadud, I. K. M. (n.a.). An International Comparison of Dynamic Comparative Advantage in Textiles and Clothing Trade: Estimates and Implications, *Monash University Sunway Campus*, Selangor, Malaysia.

Yanagida, J. F. & Tian, X. (n.a.). Competitiveness and Comparative Trade Advantage: An Empirical Analysis of Selected Pacific Basin and Asian Countries, http://www.hawaii.edu/apfat/PP11/iep_p11.htm, retrieved on September 27 2002.

Yeats, A.J. (1985). On the Appropriate Interpretation of Revealed Comparative Advantage Index: Implications of a Methodology Based on Industry Sector Analysis, *Weltwirtschaftliches Archiv*, Vol.121, pp.61-73