EXPORT DIVERSIFICATION AND STRUCTURAL CHANGES IN SOUTH AFRICA

Ireen Choga*, Asrat Tsegaye**

Abstract

What is the nature and extent of export diversification in South Africa? The primary purpose of this paper is to seek empirical answers to this question. In an attempt to derive empirical measures of the extent of export diversification and the structural changes taking place in South Africa, this paper uses a sample of a group of 28 selected commodities for the period 1980-2012 for which the most recent data is available. The following methods were used to measure the extent of export diversification and the structural changes in export diversification: Commodity-Specific cumulative export Experience function, the Commodity –specific traditional index (CSTI), variance of CSTI, concentration ratio and the aggregate specialisation index. The Commodity-Specific Cumulative Experience Function plots show that roughly, commodities such as scientific equipment, transport equipment, motor vehicles, furniture, machinery and electronic products were shifted to the right indicating that the commodities are non-traditional in nature whereas gold coal agricultural products and wood are traditional in nature. The CSTI rankings indicated that motor vehicle exports ranked first showing that motor vehicles are non-traditional exports. Findings of this paper corroborate findings of other scholars; we conclude that our results are complementary.

Keywords: Export Diversification, Nature, Extent, South Africa

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1 Introduction

Export diversification is conceived as the progression from traditional to non-traditional exports (Bensassi,Marquez-Ramos and Martinez-Zarzoso, 2010). Export diversification can lower instability in export earnings, boost export revenues, upgrade value added and enhance growth through many channels. Recent researchers argue that export diversification is more important especially in developing countries. Therefore, nature, extent and structural changes in export diversification is a subject that has generated much discussion in both theoretical, empirical literature as well as policy makers. Export diversification can take place in different forms and dimensions and thus its analysis can be undertaken at different levels. Different researchers used various ways of measuring the extent and degree of export diversification. According to Naude and Rossouw (2008), the extent of diversification is described by the share of primary and manufactured exports in total exports (vertical diversification). Other researchers describe the extent of diversification as the shares of various standard international trade classification categories of manufacturing sub-sectors in total manufacturing (horizontal diversification) (see Bonaglia and Fukasuku 2003; Edwards and Alves 2006).

Export diversification involves changing the composition of a country's export mix (Cramer, 1999). Diversification can be achieved either by adjusting shares of commodities in the existing export mix, or by adding new commodities to the export mix. There are both horizontal and vertical dimensions to export diversification. Horizontal diversification involves adjustments in the export mix. According to Ali, Alwang and Siegel (1991), vertical diversification occurs when a country's production and export structure shifts from primary commodities to manufactured goods. It is argued that a more diversified export mix enables a country to accomplish export stability. Many developing countries are pursuing export diversification as an engine of growth to insulate themselves from unexpected changes in their terms of trade and, to stabilise domestic incomes and employment (Heshmati, 2003). In addition, developing countries have minimised their reliance on primary commodity exports and have made remarkable progress in exporting manufactured or semi-manufactured goods over the past three decades (Edwards and Alves, 2005).

Many African countries continue to depend on very few export commodities for a large proportion of

their export earnings. Between 1996 and 2000, broad primary commodities accounted for about 85% of total exports from Africa. Primary commodity dependence can have three impacts on economic development (Collier, 2003). Dependence on primary commodities may result in foreign currency shortages, export instability and lack of competitiveness.

The South African economy slightly reduced its reliance on primary commodity export at the start of the 1990s. Tsikata (1999: 5) stated:

"South Africa's trade regime has been reorientation from an inward-looking to an outward-looking economy with emphasis on increased exports, beginning in 1990 and gaining impetus when the country made its formal offer to the WTO in 1994 and entered a stage of trade liberalisation. This has contributed slightly towards diversification of South African exports from mining".

Diversification of exports increased the composition of products being exported. Therefore, export diversification can be widely seen as a positive trade objective in sustaining economic growth. This paper is organised as follows: section two literature review, section three methodology, sections four and five consist of results and conclusions respectively.

2 Literature review

According to Amurgo-Pacheco and Denisse Pierola (2008) traditional trade theories are ill suited to investigate diversification patterns because they failed to explain trade between countries with similar technology and similar factor endowments. In other words, the basic implications of international trade theory, such as the law of comparative advantage and Heckscher-Ohlin theory may no longer be valid when considering the context of the nature and extent of export diversification. Given this unexplainable portion of trade, theorists began to look for other reasons for trade, where trade could occur between similar countries and yield gains from trade. Looking for the reasons of trade between countries with similar factor endowment, technology marks the break between the traditional trade theory and the new trade theory. A departure from the neoclassical international trade is taken by considering the following theories: the Linder Hypothesis (1961), the Prebisch (1950) and Singer (1950) Hypothesis and the imitation lag hypothesis. These newer theories of trade can be said to have stemmed from comparative advantage although the comparative advantage is more subtle and can only develop with the opening up of trade. In addition, new trade theories are based on increasing returns to scale, imperfect competition and differentiated goods.

The Linder Hypothesis was proposed in 1961 as a possible resolution to the Leontief paradox, which questioned the empirical validity of the Heckscher-Ohlin theory. H-O predicts that patterns of international trade will be determined by the relative factor-endowments of different nations. Linder proposed an alternative theory of trade that was consistent with Leontief's findings. The Linder hypothesis presents a demand based theory of trade in contrast to the usual supply based theories involving factor endowments. Linder hypothesised that nations with similar demands would develop similar industries. In other words, high income countries have a comparative advantage in the production of high quality goods and consume those good in greater proportions. These nations would then trade with each other in similar, but differentiated goods. In other words, international trade in manufactured goods will be more intense between countries with similar, per capita income levels than between countries with dissimilar per capita income levels.

The Prebisch Singer Hypothesis developed by Prebisch (1950) and Singer (1950) argues that, the terms of trade between primary and manufactured products deteriorate over time. In other words, Prebisch (1950) and Singer (1950) believed that the long term trend of primary commodity price is negative. Countries that export primary goods that do not have the means to manufacture goods to export will lose in the long run as their goods will become relatively cheaper than the manufactured ones. A common explanation for the phenomenon is the observation that the income elasticity of demand for manufactured goods is greater than that for primary products. Therefore, as income rise, the demand for manufactured goods increases more rapidly than demand for primary products.

The imitation lag hypothesis was developed by Posner in (1961). This hypothesis considers technological transfer as an important determinant of trade. The hypothesis is against the idea that same technology is available everywhere. It is the proposition of this model that same technology is not always available in all countries and that there is a delay in the transmission or diffusion of technology from one country to another. Assuming we have two countries in the world, according to the hypothesis; a new product produced or invented in the first country is immediately produced in a second country. Therefore, the main point is that trade focuses on new products.

Previous researchers conducted several studies regarding export diversification and economic growth and structural changes on export diversification. Different results were observed due to the countries researched, methods used and the employed. Researched conducted in developed countries includes the work of Hesse (2008), Lederman and Maloney (2007), Maloney (2007), Agosin (2007), Kadyrova (2011), Herzer (2008), Brenton et al (2007), Nicet-Chenaf and Rougier (2008), Herzer and Nowak-Lehmann (2006), Ar-Marhubi (2000), Amurgo and Pacheco (2008), Parteka and Tamberi (2008). Researchers conducted in developing countries includes the work of Chandra et al., (2007), Cabral

and Veiga (2010), Carrere et al., (2007), Ferreira (2009), Widodo (1998), Arip et al., (2010), Shewangizaw (2003), Songwe and Winkler (2012), Lederman and Klinger (2006), Akbar and Naqvi (2000), Ferdous (2011), Aditya and Roy (2009), Alaya (2012). Noted researchers who contributed to the South Africa literature include but are not limited to Petersson (2005), Matthee and Naudé (2008), Naude and Rossouw (2008).

3 Methodology

To derive empirical measures of the extent of export diversification and the structural changes taking place in South Africa, this paper uses a sample of 28 group of selected commodities for the period 1980-2012. This paper adopts Samen (2010)'s methods of measuring the extent of export diversification and the structural changes in export diversification. These are as follows: Commodity-Specific cumulative export Experience function, the Commodity –specific traditional index (CSTI), variance of CSTI, concentration ratio and the aggregate specialisation index. The following section discusses how each measure is calculated.

The first step in this paper is to calculate the commodity specific cumulative export experience function which is regarded by empirical studies such as Gutierrez de Pineres et al., (1997) as the most common measure of export diversification as well as the structural exports in a given industry. This is obtained as follows:

$$CSCEEF = \frac{\sum_{t0}^{te} X_{it}}{\sum_{t0}^{tT} X_{it}} \quad (1)$$

Assuming that Xit represents the real value of exports of the ith commodity in year t, t0 , te and tT represent the initial, current and terminal periods of the sample respectively. The numerator represents the summation of the real exports from the initial period to the current period whereas the denominator represents the summation of the real value of exports from the initial period to up to the terminal period.

The numerical values of CSCEF are plotted for two or more commodities (or industries) together. A commodity which could be labeled as primary in the initial period is expected to be different from a commodity that can be labeled as manufactured in that its export experience function would be shifted to the left. In other words, for the more primary commodity the plot of CSCEF for such a commodity is shifted to the left or linear, whereas for a manufactured commodity the graph of CSCEF would be expected to shift more towards the right. A comparison of CSCEF across different commodities may also shed light on the diversification of the export industries.

The second step is to calculate the Commodity-Specific Traditionality index. This is regarded as an alternative way of ranking exports by the traditional attribute, which involves computing the mean of the cumulative export experience index for each ith commodity for the entire sample period as shown below:

$$CSTI_i = \frac{\sum_{t=t0}^{T} CSCEEF}{t_T - t_0 + 1} \quad (2)$$

A higher value of the commodity-specific traditional index (CSTI) indicates a more traditional export commodity. Using both CSCEF and CSTI, it is possible to identify and estimate the extent and nature of diversification of a country's export portfolio of different commodities. Therefore, it is possible to identify and estimate the extent and nature of export diversification of South Africa's export portfolio of different varieties using both the CSSEEF and the CSTI.

The variance of CSTI (VCSTI) is used to test the robustness of the commodity-specific traditionality index. A variance of CSTI tests the stability of traditionality for a specific commodity over the sample period. A low value of VCSTI implies that the composition traditionality for a specific commodity has been stable over the sample period.

$$VCSTI_i = \frac{\sum_{t-t0}^{Te} (CSCEEF - CSCEEF_i)^2}{t_T - t_0 + 1} \quad (3)$$

Where CSCEEFi is the mean value of CSTI

The concentration ratio is used to measure the degree of diversification. It is assumed that a smaller value of the concentration ratio is associated with a broader or diversified export mix and also that it is associated with growth and stability of export earnings. In this study the concentration ratio is calculated as follows:

$$CR = \sum_{i=1}^{N} \frac{(SX_i - 1/N)^2}{\frac{1}{N}} \quad (4)$$

Where N represents the total number of export commodities in the export portfolio, SXi is the actual share of the ith commodity in total exports and 1/N is assumed to be the ideal share of export earnings for each commodity.

3.1 Specialisation index

The aggregate specialisation index measures the long run structural change in the composition of the export mix. The specialisation index is calculated as follows:

$$ASI_t = \sum_{i=1}^{N} X_{it} \Big/ \sum_{i=1}^{N} X_{it} \quad (5)$$

When the numerical value of the specialisation index is approaching 1, the country's export mix is dependent significantly on only a single commodity.

Put differently, when the specialisation index is approaching 0, it implies that the export mix is diversified. The specialisation index gives a long run perspective of the changing composition of the export mix because it can be calculated for each year over a long period.

4 Results

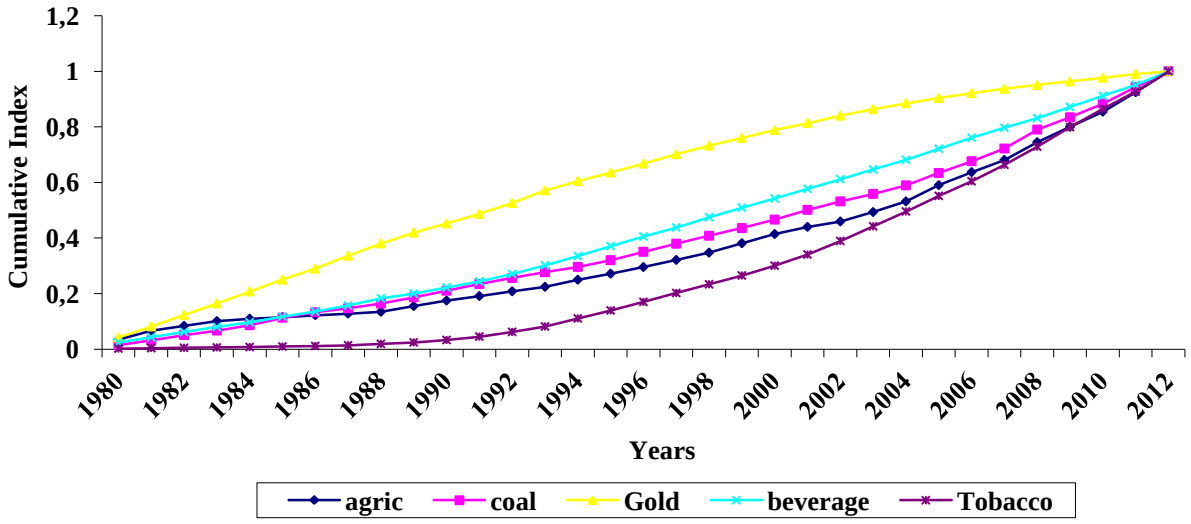
4.1 Empirical results on the extent and nature of export diversification in South Africa

This section presents results of the extent of export diversification and structural changes in the export of South Africa. These results are found using various measures corresponding to different definitions or concepts. As discussed in chapter 4, these measures are among others such as; the commodity-specific cumulative export experience function, the commodity-specific traditionality index (CSTI), the variance of CSTI, the concentration ratio and the aggregate specialisation index. This section will use a sample of 28 selected commodities in South Africa for the period 1980 -2012 for which the most recent data are available. The following section present results of the commodity- specific cumulative export experience function.

4.1.1 Commodity – Specific Cumulative Export Experience Functions

This section illustrates cumulative distribution functions for the 28 selected commodities. However, the commodities are divided into groups of fives so that the plots may be seen clearly on the graphs. As discussed in section three, if the numerical values of CSCEEF are plotted for two or more commodities together, then the distribution function differ according to whether exports are concentrated earlier or later in the period, or are roughly constant over the period. In other words, if the cumulative distribution functions are shifted to the left, it indicates that a large proportion of the exports occurred relatively early in the sample period; the linear shapes indicates that the real exports are constant over the sample period and if the cumulative distribution functions are shifted to the right, it indicates more export experience in recent years. In addition, the nontraditional commodities are presumed to be manufacturing commodities. It is presumed that diversification in production of these commodities eventually leads to diversification in exports. An illustration of cumulative distribution functions for agricultural products, coal, gold, beverages and tobacco are presented in the diagram below.

Figure 4.1(a). Cumulative Exports of primary commodities in South Africa

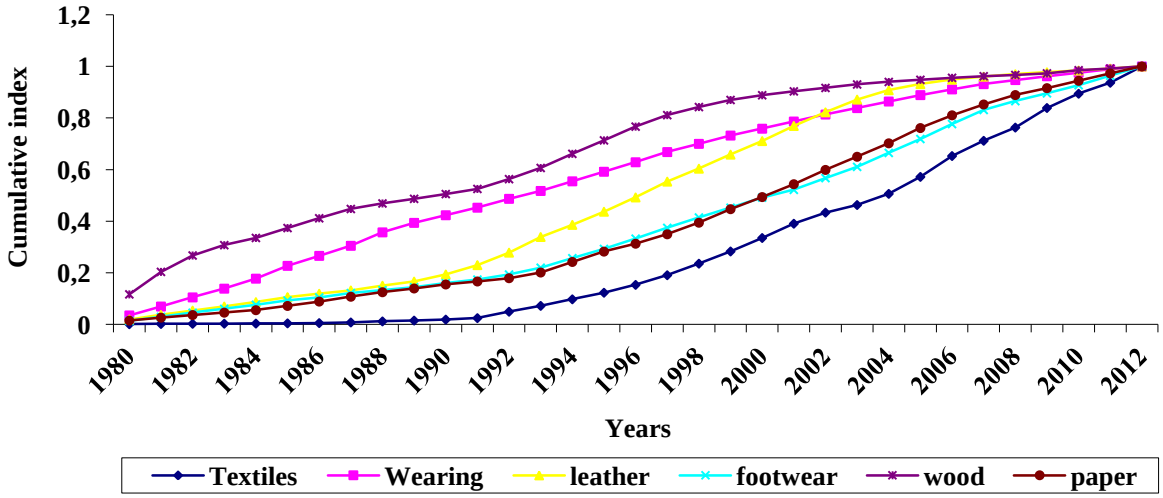


Source: Own diagram plotted from figures obtained from Quantec, 2013 website

Figure 4.1(a) shows the CSCEEF plots for most traditional export commodities namely agriculture, coal, gold, beverages and tobacco, were shifted to the left, implying that a relatively large percentage of exports of these commodities transpired in the early period of the sample. In other words, a large proportion of the export for these commodities occurred early or the country was concentrating on the exports of these commodities during the early years of the sample period. Primary commodities, such as gold, coal and beverages indicate that the CSCEEF plots are shifted towards the left of the diagram meaning that the commodities are more traditional. This is evidenced by the intuition that "for more traditional commodity, one would expect the plots of CSCEEF for such a commodity to be shifted to the left or linear". This indicates that no structural changes took place in these commodities. In other words, there little and or no diversification has taken place in the manufacture of these products.

However, for export items such as tobacco and agricultural commodities, the CSCEEF plots are shifted more towards to the right indicating greater experience in exporting these commodities in recent years particularly since the late 1990s. The exports of these two groups of commodities comprise of items that newer and more nontraditional. South Africa began to export processed agricultural products after 1994 when the newly democratic government was elected.

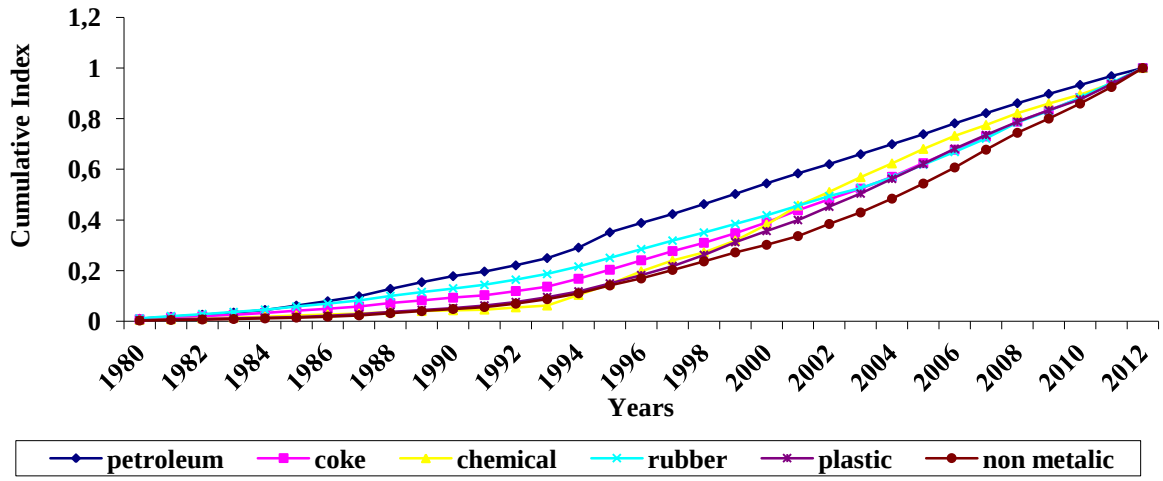
Figure 4.1(b). Cumulative Export index of selected commodities in South Africa



Source: Own diagram plotted from figures obtained from Quantec, 2013 website

Figure 4.1(b) shows the CSCEEF plots of textiles, wearing, leather, footwear, wood and paper. The plots of wood, wearing and leather are somehow flat or shifted to the left which implies that the composition of these exports has not changed significantly during the period 1980-2012. Commodities such as textiles, paper and footwear have experienced some cumulative marginal expansion since 1994. This can be seen by the right-ward shifted CSCEEF plots in Figure 4.1 (b). This marginal expansion implies that there was a slight diversification of exports that took place because the above mentioned commodities may be classified as semi manufactured exports. Results from this study are similar to the results that were found by Petersson, 2005 and Samen 2010.

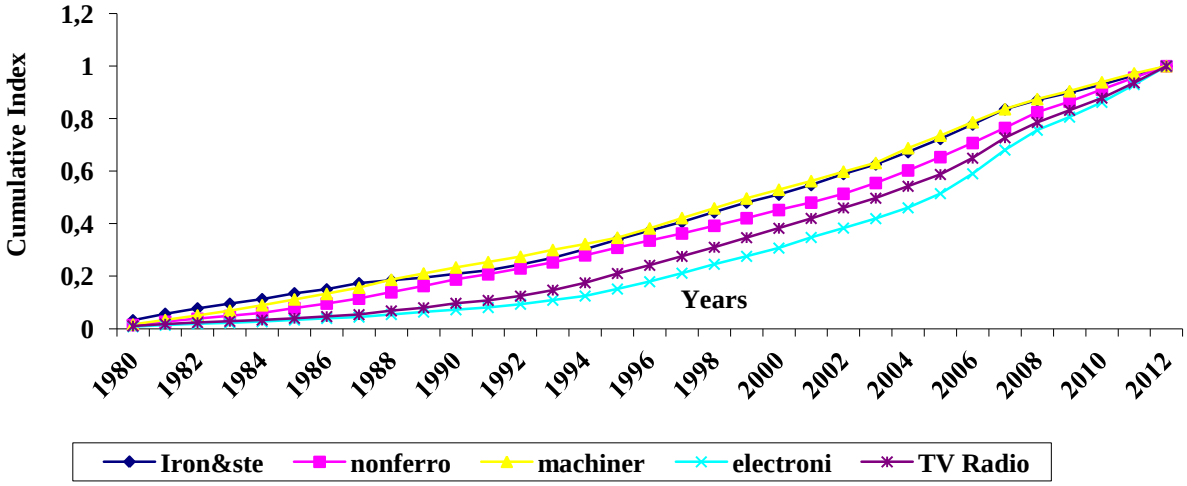
Figure 4.1 (c). Cumulative export index of selected commodities in South Africa



Source: Own diagram plotted from figures obtained from Quantec, 2013 website

Figure 4.1 (c) shows plots of petroleum products, coke, chemicals, rubber, plastic and non-metallic products. Plots for these products reveal some interesting results regarding the export diversification for the product since 1980. The CSCEEF plots are slightly shifted towards the right which implies that the export mix of these products have relatively changed during the period 1980- 2012. This means that there was diversification which took place on the production of these products.

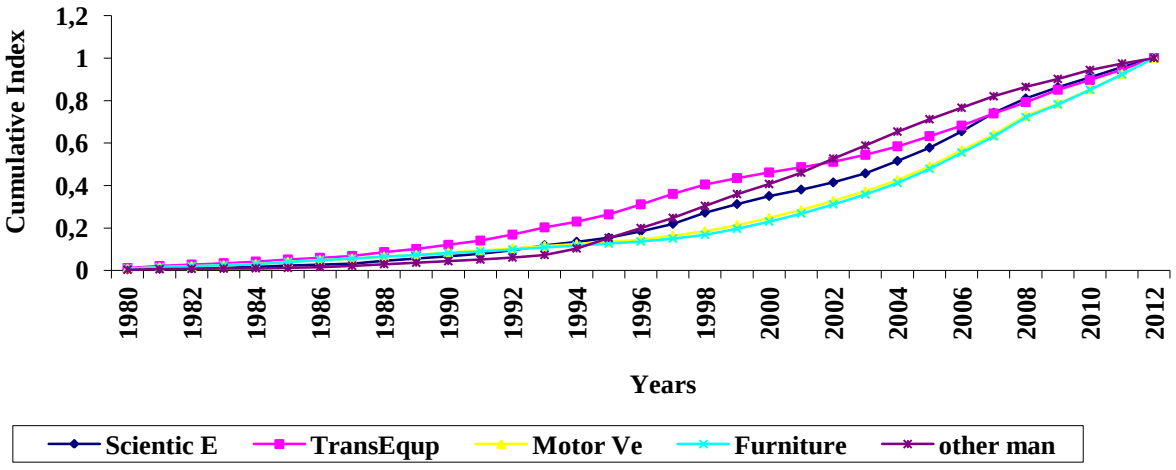
Figure 4.1 (d). Cumulative Export Index for selected commodities in South Africa



Source: Own diagram plotted from figures obtained from Quantec, 2013 website

Figure 4.1 (d) shows the CSCEEF plots for iron and steel, non-ferrous product, machinery, electronic products and television and radios. The plots are extremely shifted to right indicating that the products are non-traditional in nature. In addition, these products have experienced some cumulative marginal expansion in recent years. We can conclude that export diversification has taken place in the manufacture of iron and steel, machinery, electronic products, and televisions and radios.

Figure 4.1 (e). Cumulative export Index of selected commodities in South Africa



Source: Own diagram plotted from figures obtained from Quantec, 2013 website

Figure 4.1(e) shows plots cumulative index for scientific equipment, transport equipment, motor vehicles, furniture and other manufactures. As shown by Figure 4.1(e) the plots shifted towards the right, indicating that the commodities are non-traditional in nature. The nontraditional commodities are presumed to be manufacturing commodities meaning that export diversification has taken place.

4.1.2 Commodity Specific Traditionality Index (CSTI) and Variance of CSTI

As discussed in section three, a special way of ranking exports according to traditionality characteristics (less diversified or diversified) is necessary in order to determine whether the export mix in South Africa is diversified or not. In this section we present results on the commodity specific traditionality index which is calculated by computing the mean of the cumulative export experience index for each commodity or industry for the entire sample. This formula or method was discussed in detail in chapter four.

As indicated earlier, a more traditional export commodity or a less diversified commodity is reflected by a higher value of the commodity specific traditionality index. It is possible to identify and estimate the extent and nature of export diversification of South Africa's export portfolio of different varieties using both the CSSEEF and the CSTI. Substantial export diversification arises if the values for CSTI are

small. In addition, the variance of CSTI (VCSTI) is used to test the robustness of the commodity-specific traditionality index. A variance of CSTI tests the stability of traditionality for a specific commodity over the sample period. A low value of VCSTI implies that the composition traditionality for a specific commodity has been stable over the sample period. Table 5.1 shows the commodity –specific traditionality index and the variance of CSTI for 28 selected products in South Africa. In other words, it shows the ranking of commodities from the most diversified commodity to the least diversified. The VCSTI shows the stability of commodities over time.

Table 4.1. CSTI and VCSTI for South Africa 1980-2012

Rank	Commodity	Commodity-Specific Traditionality Index (CSTI)	Variance of traditionality index (VCSTI)
1	Motor Vehicles	0.247485	0.06869
2	Transport Equipment	0.25418	0.18138
3	Beverages	0.259127	0.079988
4	Plastic Products	0.262006	0.078778
5	Tobacco	0.266851	0.089522
6	Machinery and Equipment	0.270745	0.074649
7	Rubber Products	0.286827	0.088569
8	Television, Radio and Communication Equipment	0.287915	0.087528
9	Coke	0.301149	0.098609
10	Electrical machinery	0.307484	0.079465
11	Petroleum Products	0.311481	0.082525
12	Furniture	0.313965	0.109415
13	Chemicals	0.330438	0.076947
14	Scientific Equipment	0.341309	0.081285
15	Agricultural products	0.342006	0.060444
16	Other manufactures	0.35699	0.069159
17	Iron and steel	0.36523	0.077174
18	Coal	0.372449	0.06801
19	Leather	0.379787	0.08799
20	Wood	0.381241	0.09716
21	Paper	0.394745	0.093384
22	Non-metallic minerals	0.407782	0.079574
23	Food	0.411237	0.077621
24	Non-ferrous metals	0.41246	0.083295
25	Wearing	0.483689	0.121732
26	Textiles	0.560628	0.085889
27	Gold	0.583728	0.083857
28	Footwear	0.656086	0.069736

Source: Own table made from figures obtained from Quantec, 2013 website

Analysing the CSTI values for the export portfolio of South Africa as reported in Table 4.1, it is evident that exports that ranked at the top have smaller values of the CSTI. Motor vehicle exports rank at the top of the selected sample which has the CSTI index of 0.247485 followed by transport equipment that has an index of 0.25418. Beverages are ranked third on the sample followed by plastic products, tobacco, machinery and equipment, rubber and television, radio and communication equipment. Their CSTI indexes are less than 0.3. All products that have the CSTI index of less than 0.3 are considered as non-traditional export.

Commodities such as coal, leather, wood, paper, non-metallic minerals, food, nonferrous metals, wearing, textiles, gold, footwear have high CSTI indexes which are close to 0.4 and some above 0.4. This shows that these commodities are considered traditional or less diversified because of the higher values of the CSTI. However, the variance of CSTI for wearing is 0.1 which implies that the commodity is not stable.

4.1.3 Concentration Ratio

The concentration ratio is used to measure the degree of diversification. It is assumed that a smaller value of the concentration ratio is associated with a broader or diversified export mix and also that it is associated with growth and stability of export earnings. The concentration ratios have been estimated for five different categories of export mix (top 1, top 2, top 3, big 5 and big 7) for the period 1980- 2012. Table 4.2 shows the commodity export concentration ratios of South Africa for the top seven commodities.

As shown by the results of the estimated concentration ratios in Table 4.2, it can be concluded that, there seems to be a general trend towards

diversification of the export portfolio since 1994. The estimated values of the concentration ratios are relatively smaller as compared to the concentration ratios of other products. The concentration ratio for the motor vehicle which is the top 1 commodity for example is 22% which is a very small percentage. In other words, the concentration ratio is closer to 0. The concentration ratio for the top three commodities that is, motor vehicle, transport equipment and beverages is 56% which mean on average each commodity's concentration ratio is 18% which is closer to zero. In addition, the concentration ratios for the big 7 commodities is 97% which means that the concentration ratio for each commodity is 13.85% which is very a small percentage or in other words the concentration ratio is closer 1 for each of the big seven commodities.

Table 4.2. Commodity export concentration ratios of South Africa for the top 7 commodities as a Percentage

Period	Top 1	Top 2	Top 3	Big 5	Big 7
1980-2012	(0.220541) Motor Vehicles	(0.512593) Motor Vehicles, Transport Equipment	(0.567528) Motor Vehicles, Transport Equipment, Beverages	(0.805145) Motor Vehicles, Transport Equipment, Beverages, Plastics, Tobacco	(0.970104) Motor Vehicles, Transport Equipment, Beverages, Plastics, Tobacco, Machinery& Equipment, Rubber

Source: Own table made from figures obtained from Quantec, 2013 website

4.1.4 Specialisation Index

The aggregate specialisation index measures the long run structural change in the composition of the export mix. When the numerical value of the specialisation index is approaching 1, this shows that the country's export mix is dependent significantly on only a single commodity. Put differently, when the specialisation index is approaching 0, it implies that the export mix is diversified. The specialisation index gives a long run perspective of the changing composition of the export mix because it can be calculated for each year over a long period. Figure 4.2 illustrates the specialisation index for South Africa for the period 1980 to 2012.

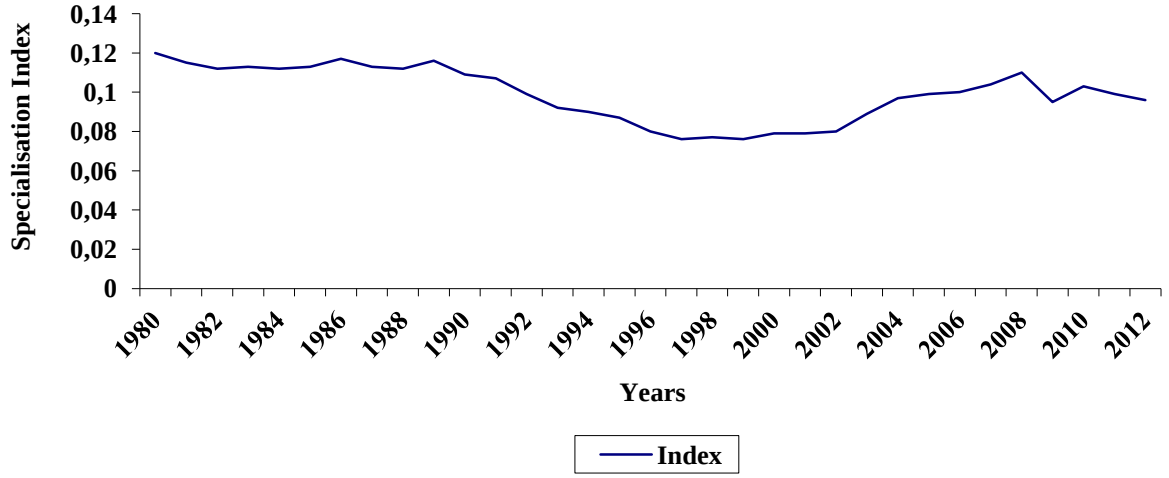
As indicated before, larger values of the specialisation index indicates specialisation of the export portfolios whereas smaller values are a reflection of diversification. As shown by Figure 4.2, plots of the specialisation index show that they were relatively higher since 1980 up to the mid-1990s. This shows that the South African export basket was concentrated a few commodities. The reasons for this may be attributed to lack of knowledge and skills to introduce new commodities into the export mix as well as sanctions that were imposed on the South African economy. The specialisation index decreased to 0.08 in 1997 and maintained the same level up to the 2006. This shows that South Africa began to diversify its export base in the mid-1990s. The reason for this may due to the end of apartheid and the lifting of sanctions that occurred in 1994. One can conclude that South Africa for the past three decade has developed a declining trend of the specialisation index. This means that South Africa has slightly reduced its dependence on the narrow basket of commodities. Results from this study are similar to the results that were found by Hasan and Toda (2004) in Malaysia. In this study, Malaysia developed a declining trend of the specialisation index over the entire sample period. This implied that Malaysia, over the years has reduced its dependence on a narrow band of export commodities. Like South Africa, since the 1980s, it has successfully diversified the composition of its export mix.

5 Conclusions

The main aim of this paper was to investigate the extent and nature of export diversification as well as to establish the relationship between export diversification, export stability and export growth in South Africa. Different structural changes in export diversification were constructed based on the following measures: the Commodity-Specific Cumulative Experience Function and the Commodity-Specific Traditional Index, variance of commodity ratio, concentration ratio and aggregate specialisation index. The Commodity-Specific Cumulative Experience Function plots show that roughly, commodities such as scientific equipment, transport equipment, motor vehicles, furniture, machinery and electronic products were shifted to the right indicating that the commodities are non-traditional in nature whereas gold coal agricultural products and wood are traditional in nature. The CSTI rankings indicated that motor vehicle exports ranked first showing that motor vehicles are non-traditional exports. However, gold and other primary commodities ranked last indicating that they are traditional in nature. The concentration ratio for the motor vehicle which is the top 1 commodity is a very small percentage. In other words, the concentration ratio is closer to 0. It is assumed that a smaller value of the concentration ratio is associated with a broader or diversified export mix and also that it is associated with growth and stability of export

earnings. The concentration ratios for the big 7 commodities is 97% which means that the concentration ratio for each commodity is 13.85% which is very a small percentage. Plots of the specialisation index show that they were relatively higher since 1980 up to the mid-1990s.

Figure 4.2. Trends in the Specialisation index for South Africa 1980-2012



Source: Own diagram plotted from figures obtained from Quantec, 2013 website

One can conclude that South Africa for the past three decade has developed a declining trend of the specialisation index. This means that South Africa has slightly reduced its dependence on the narrow basket of commodities.

One important implication from this study is that export diversification has positive influences on economic growth. However, the study finds that South Africa still relies on primary and low-value added exports. In this case, policy makers are urged to come up with policies that promote export diversification. The researcher recommends suitable changes on existing polices. The country needs to change the strategy of relying on primary and low value added exports and rely instead on high value added or manufactured exports. In other words, policies that enhance, promote and support innovate production are recommended and they are also important for economic growth and development of South Africa. The South African government can be advised to continue engaging implementing trade liberalisation policies. In other words, the South African government can embark on a policy that subsidise small to medium scale firms that engage in the innovation and production of new products. The support to such firms will increase future possibilities of a diversified export basket for the country.

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