Export Markets' Segmentation, Performance and Marketing of Indian Carpet Industry: A BCG Matrix Approach

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Abstract

Carpet weaving is a traditional and well established industry in India. Exquisite Indian carpets are not only part of luxurious lifestyles in modern times but also reflect timeless amalgamation of nature, culture and art. Today, the exquisite masterpieces created by over 3 million Indian carpet weavers and craftsmen continue to enchant the consumers the world over. This industry plays a vital role in employment and income generation as well as foreign exchange earnings. Since, this industry is primarily rural based, it also leads to balanced regional growth. It is therefore of prime concern to evaluate its export performance, identify the promising export markets and develop certain export marketing strategies for the overall prosperity of this industry.

Strategic business models are widely used in corporate world these days to analyse the problems and prospects of any business situation. BCG (Boston Consulting Group) matrix is one among the widely used model which helps in segmenting the product portfolio or markets in four groups viz. Star, Cash cow, Dog and Problem child (or Question mark).

For the present study, BCG matrix has been applied to identify the export markets for the Indian carpet industry and classify them in four aforesaid segments.From about 200 countries of carpet export destinations, top 30 countries with highest average export values for last 10 years (2003-04 to 2012-13) has been considered. Average market growth rate and relative market share, calculated from export data of 5 years ranging from 2008-09 to 2012-13, has become the base for the application of this matrix. USA, UK, UAE, Turkey and Australia have emerged as the Star markets; Belgium, Canada, France, Germany and Italy as the Cash cow markets; Austria, Greece, Spain, etc. as the Dog markets; and Brazil, Malaysia, Singapore, etc. as the Problem child markets. Appropriate export marketing strategies have also been suggested apart from analysis of export performance of carpet industry.

Keywords:

Export performance, segmentation, export marketing strategy, strategic business model, BCG matrix, carpet industry.

Introduction

The Indian Carpet Industry

Carpet industry in India provides the finest example of how a domestic industry practiced at home can be transformed to a full-grown mechanised industry. From safe confines of the home where the carpet was weaved jointly by all the family members, this beautiful piece of handicraft has found its way

to industries where it is now produced in mass scale. Carpet weaving is not a new profession in India. The tradition of pile carpet weaving dates as far back as the 16ᵗʰ century, when Mughals established the art of carpet weaving in the town of Akbarabad, now Agra. Carpet weaving continued to spread and survive in India under the patronage of the Indian nobility. At the great London Exhibition in 1851 Indian carpets attracted world attention and appreciation for the first time for its acceptable quality, oriental patterns, fine weaves and rich colour combinations.

The carpet industry, though spread over different parts of India, is concentrated in Bhadohi-Mirzapur-Varanasi carpet belt in Uttar Pradesh, which accounts for around 80% of the carpet looms, weavers, production and exports. Other major carpet belts are Agra belt in Uttar Pradesh, Jaipur-Bikaner belt in Rajasthan, Panipat belt in Haryana and Kashmir belt in J&K. Indian carpet weavers are versatile and capable of weaving carpets in different qualities, sizes, knots, designs and colour combinations to suit the varying needs of the carpet-importing countries. The prime carpet types are woollen carpets, silk carpets, jute carpets and staple/synthetic carpets. These carpets could eitherbe hand-knotted, hand-tufted, hand-woven or machine-made.

The contribution of carpet industry to employment and income generation is well-known. It provides employment in rural and semi-urban areas, thereby contributing substantially to the societal objectives of poverty alleviation, employment generation and balanced regional growth. It has performed commendably in the field of exports and thus earning valuable foreign exchange.

The BCG (Boston Consulting Group) Matrix

BCG Matrix (also popularly known as Growth-share Matrix) is a strategic management model developed by Bruce D. Henderson of Boston Consulting Group in 1968. BCG, based in America having offices worldwide, is the world's leading advisor on business strategy.
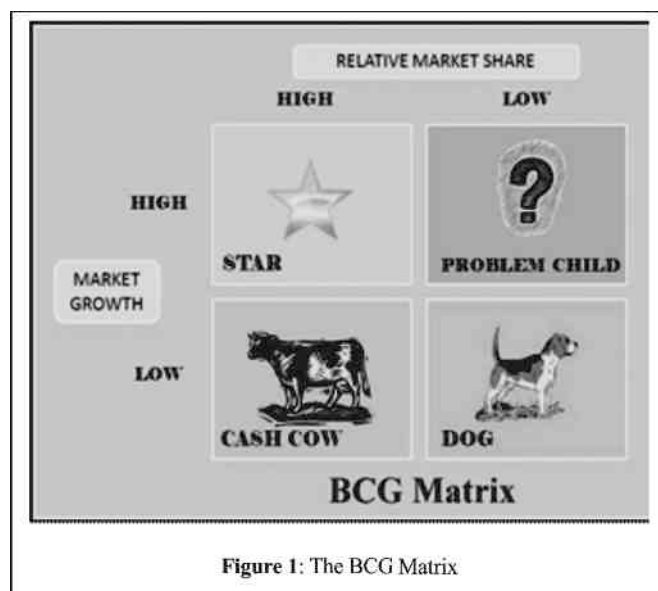

Figure 1: The BCG Matrix

Figure 1: The BCG MatrixBCG Matrix has been primarily developed for companies' product portfolio optimization, but now

it has a wider application. It is used as an analytical tool in brand marketing, strategic management and portfolio analysis. The matrix has two dimensions namely average market growth and market share relative to the largest competitor in the industry. Vertical axis represents market growth and horizontal axis represents relative market share. The model on the basis of these two dimensions classify the strategic business units, product line or markets into four broad groups. Consequently, the matrix is divided into 4 quadrants – Cash Cows, Stars, Problem Child (Question marks) and Dogs.Cash Cows are the high share and low growth markets. These markets represent a significant source of cash for the firm. Stars are the high share and high growth markets. They are the leading markets. Stars will be cash cows if they maintain their market share but its market growth decline over time. Problem Child (or Question marks) are the markets with high growth rate but low market share. These markets require a lot of cash investment than they can generate. Dogs are the low share and low growth markets. These markets are generally referred as cash traps since they do not generate significant cash to the business unit.

Though the significance of BCG Matrix in strategy decisions in undeniable, it has been criticised on various limitations. First, market growth rate and market share are not the only factors for assessing market attractiveness. There are many others factors pertaining to economical, socio-cultural, political, geographical constraints. Second, the markets are assumed to be independent to each other. But in real business scenario, this assumption does not hold good. Third, the definition of what constitutes a market is ambiguous. However, despite these limitations, this matrix still serves as a prominent tool in developing market portfolio and taking various strategic decisions.

The purpose of the study is twofold. First, to assess the export performance of carpet exports from India in past decade. Second, to apply the BCG matrix approach in carpet industry of India and classify the carpet export markets in certain broad categories, so as to frame appropriate marketing strategies.

Objectivesof The Study

- To provide an overview of Indian Carpet Industry and its Export performance.

- To segment the carpet export markets and assess market attractiveness, based on market share and growth approach of BCG Matrix.

- To frame appropriate marketing strategies for aforesaid segmented carpet export markets.

Research Methodology

The present study is an exploratory research. The study area is Indian carpet industry. For the sake of convenience, "carpet" has been used as synonym for carpets, rugs and other floor coverings exported by India. Both primary and secondary data were used for the present study. Primary data were collected through semi-structured interviews of carpet exporters and experts in the field of carpet exports. Primary data served the purpose to develop the marketing framework for the present study. Secondary data on carpet exports has been used for the application of BCG Matrix. The export data has been collected online from the website of

Ministry of Commerce & Industry, Govt. of India and *UN International Merchandise Trade Statistics*. The period of the study is 5 years ranging from 2008-09 to 2012-13. From about 200 countries of carpet export destinations, top 30 countries with highest average export values for last 10 years (2003-04 to 2012-13) has been considered for the present study.

BCG matrix has been used as the data analysis technique. For the application of this matrix, two main parameters were of interest – rate of market growth and relative market share. Rate of market growth has been calculated using the formula –

$$R = \frac{(V2 - V1)}{V1} \times 100$$

Where, V2 is the value of carpet exports in Year 2 and V1 is the value of carpet exports in Year 1. R represents the rate of market growth between Year 1 and Year 2, and is expressed in percentage. Further, average rate of market growth for the study period is calculated through simple average formula. $\times 100$

Relative market share for the particular export market is calculated using the formula –

$$M = \frac{(Vm)}{VL} \times 100$$

Where, M is the relative market share. VM is the average value of carpet exported to a particular country during the study period. VL is the average value of carpet exported by the market leader. China has emerged as the market leader in carpet exporting (*UN IMTS Yearbook, 2012*) with an average value of carpet exports of Rs. 12,00,000 Lacs. This value served as the benchmark for calculation of relative market share.

Results and discussions

Export Performance

Indian carpet industry is primarily an export-oriented industry. There has been an overall increasing trend in the carpet exports for the last decade (2003-04 to 2012-13). The export enlarged by around 230% in last ten years. The average growth rate was around 11%. The carpet export value stood at Rs. 3,37,368.47 Lacs in 2003-04, which increased to Rs. 7,74,880.07 Lacs in 2012-13. Though, carpet export had registered a growth of 30.75% in 2012-13 from previous year, its share in India's total export for that period is merely 0.48%.
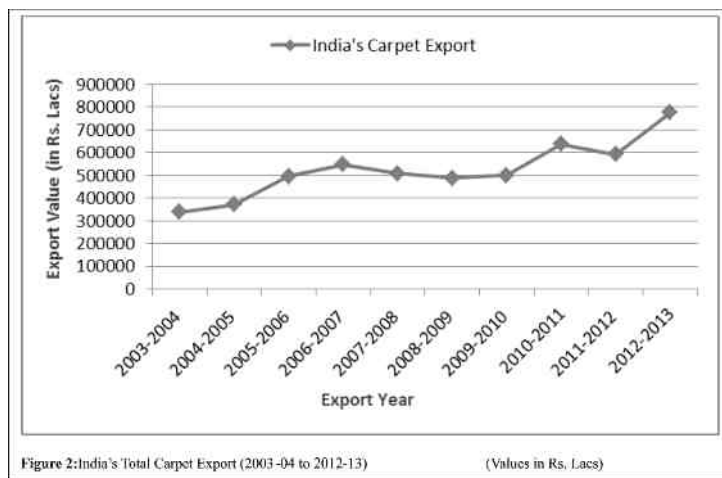

Figure 2: India's Total Carpet Export (2003-04 to 2012-13)   (Values in Rs. Lacs)

There has been a positive growth rates throughout the decade, except in 2007-08, 2008-09 and 2011-12. The prime reason ascribed to it is Great recession of 2009 and Global recession of 2011. Consequently, the disposable income during these periods dropped and carpet being luxury product succumbed to negative growth.

Carpets produced in India are exported globally to around 200 countries. The major carpet exporting destinations are USA, Germany, UK, UAE, Italy, Australia, Turkey, France, Canada, Belgium, Brazil, Japan, Netherland, Saudi Arab and Sweden. These 15 countries account for 85% of the total carpet exported from India in 2012-13. USA emerged as the top carpet export destination in 2012-13 with export value of Rs. 3,19,940.64 Lacs, which accounts for 41.30% of total carpet export in that year. USA is followed by Germany (9.65%) and UK (9.12%). It is significant

to note that Germany used to be the importing leader of India carpets 1990s followed by USA. The main reason for this plummet in carpet export is again the recession of 1994 faced by Germany.

Considering 10 years export data for the period of 2003-04 to 2012-13, the picture remain the same as in current year. USA is the global importing leader of Indian carpets with an average exports value of Rs. 2,07,159.66 Lacs, followed by Germany and UK. This reveals that these export markets are though well-established, exploration of newer export markets is not significant.

Market Growth Rate

In application of BCG matrix approach, market growth rate and relative market share are the two dimensions of interest. Market growth rate is very important variable since it tells about the potentials and future prospects of the market. It is used as proxy to

the industry attractiveness. It also helps in framing appropriate marketing strategy. High market growth rate means higher cash inflows, but at the same time it also requires cash outflows as investment to stimulate further growth.

The results of the market growth rate of 30 countries, included in the study, over 5 years period (2008-09 to 2012-13) are shown in Table 1. The last column represents the average rate of market growth, which has been used further analysis in BCG approach.

S.No.	Country	2008-09	2009-10	2010-11	2011-12	2012-13	Average Rate of Market Growth
1	AUSTRALIA	9.49	12.25	5.64	30.90	21.92	16.04
2	AUSTRIA	0.68	-28.18	41.73	-16.44	3.75	0.31
3	BELGIUM	23.55	6.20	-14.98	-21.39	10.50	0.77
4	BRAZIL	47.53	-6.54	35.09	37.52	23.12	27.34
5	CANADA	0.28	3.43	1.17	3.60	26.14	6.93
6	CHILE	14.58	-23.18	42.46	-1.64	74.54	21.35
7	DENMARK	-2.14	3.85	17.16	-10.64	24.52	6.55
8	FINLAND	9.45	-5.89	-1.73	-14.96	31.37	3.65
9	FRANCE	-8.56	1.84	10.64	10.03	19.68	6.73
10	GERMANY	2.07	15.96	-5.98	-4.77	9.41	3.34
11	GREECE	-2.44	-16.54	-39.35	-22.71	-9.98	-18.20
12	ISRAEL	20.08	45.05	-19.37	12.66	-6.10	10.46
13	ITALY	-1.59	-2.55	1.19	3.14	-6.36	-1.23
14	JAPAN	3.61	1.64	-6.02	40.85	45.30	17.08
15	MALAYSIA	-38.34	-33.14	2362.44	-96.50	187.40	476.37
16	MEXICO	-2.59	-3.61	19.52	9.36	3.62	5.26
17	NETHERLAND	-2.34	4.43	63.86	-24.42	22.49	12.80
18	NORWAY	3.91	8.28	23.72	12.52	54.53	20.59
19	POLAND	17.16	-22.75	5.88	38.49	-5.29	6.70
20	PORTUGAL	-1.24	13.70	7.79	-33.44	-25.26	-7.69
21	SAUDI ARAB	104.29	-1.39	176.10	-63.22	40.91	51.34
22	SINGAPORE	1.19	-4.09	20.83	-3.98	62.49	15.29
23	SOUTH AFRICA	3.58	12.20	77.62	-12.82	8.78	17.87
24	SPAIN	-28.39	-11.21	-1.17	-0.23	-17.41	-11.68
25	SWEDEN	-6.70	-18.28	11.15	21.00	7.14	2.86
26	SWITZERLAND	-14.51	8.33	-0.96	25.19	19.78	7.57
27	TURKEY	31.07	6.84	47.36	22.84	-0.11	21.60
28	UAE	25.44	44.29	130.62	-53.54	78.39	45.04
29	UK	-14.88	5.72	6.81	20.08	79.76	19.50
30	USA	-11.63	-0.73	22.08	6.66	40.83	11.44

Table 1: Average Rate of Market Growth (%) for the period 2008-09 to 2012-13

Malaysia experienced exceptionally highest market growth rate with 476.37%, followed by Saudi Arab (51.34%) and UAE (45.04%), despite the fact that they ranked 23rd, 16th and 4th respectively in export values for 2012-13. Greece had the negative average market growth at -18.20% and ranked 27th in exports. Greece and Spain are the only countries which experienced constantly dropping exports and thus negative market growth throughout 5 years period.

Relative Market Share

Another dimension of BCG approach is relative market share. Higher market share results in higher cash returns due to the benefits of economies of scale and experience curve. Relative markets share helps in inter-comparison of markets and evaluate the market in relative to the leading competitor of the industry.

S.No.	Country	Total Export	Average Export	Relative Market Share
1	AUSTRALIA	86077.76	17215.55	1.43
2	AUSTRIA	16001.68	3200.34	0.27
3	BELGIUM	59469.53	11893.91	1.00
4	BRAZIL	34351.15	6870.23	0.57
5	CANADA	61257.23	12251.45	1.02
6	CHILE	15620.54	3124.11	0.26
7	DENMARK	29412.97	5882.59	0.49
8	FINLAND	15528.9	3105.78	0.26
9	FRANCE	61759.41	12351.88	1.03
10	GERMANY	357195.04	71439.01	5.95
11	GREECE	25453.54	5090.71	0.42
12	ISRAEL	11479.09	2295.82	0.19
13	ITALY	95643.59	19128.72	1.59
14	JAPAN	48156.87	9631.37	0.80
15	MALAYSIA	48366.54	9673.31	0.81
16	MEXICO	12298.89	2459.78	0.20
17	NETHERLAND	53057.71	10611.54	0.88
18	NORWAY	12545.65	2509.13	0.21
19	POLAND	16389.22	3277.84	0.27
20	PORTUGAL	42345.97	8469.19	0.71
21	SAUDI ARAB	46125.42	9225.08	0.77
22	SINGAPORE	13932.41	2786.48	0.23
23	SOUTH AFRICA	39017.32	7803.46	0.65
24	SPAIN	47723.21	9544.64	0.80
25	SWEDEN	40305.06	8061.01	0.67
26	SWITZERLAND	8874.22	1774.84	0.15
27	TURKEY	76706.78	15341.36	1.28
28	U A E	121511.34	24302.27	2.03
29	U K	202396.38	40479.28	3.37
30	U S A	1110353.21	222070.64	18.51

Table 2: Relative Market Share (%)　　　　　(Values in Rs. Lacs)

Export Market Segmentation: A BCG Matrix Approach

The Indian carpet export markets are classified using the BCG matrix approach. This approach considers two dimensions – average market growth rate and relative market share. Markets are evaluated on whether they have High/Low growth rate and High/Low relative market share. The markets are thereafter classified into four broad groups – cash cows, stars, problem child and dogs.

To categories any market in high or low average market growth rate markets, the cut-off has been set at 11%. This figure has been arrived at by taking a grand average of growth rates, excluding the outliers, i.e. Malaysia (476.37%). Similarly, cut-off for relative market share has been set at 1%. The outlier excluded in this case is USA (18.51%). The outliers are excluded to normalise the cut-offs and keep it realistic.
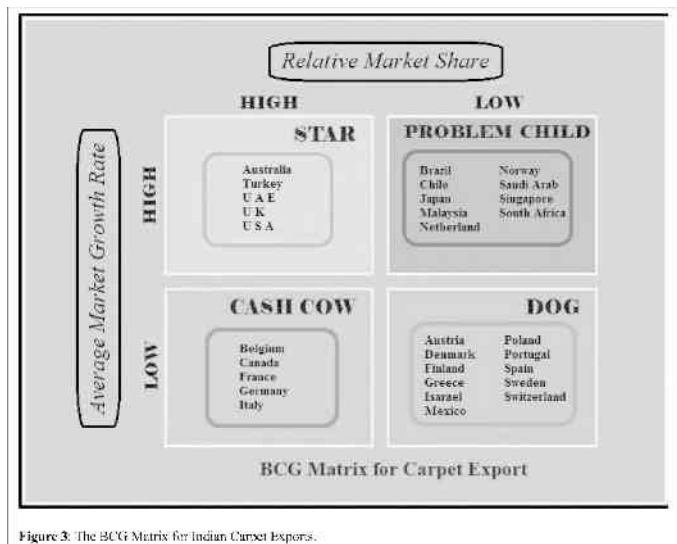

Figure 3: The BCG Matrix for Indian Carpet Exports.

Cash cows are markets with low growth rate but high market share. Cash cow markets for Indian carpet industry are Belgium, Canada, France, Germany and Italy. These markets are substantial source of cash. The earnings here are high and stable. The strategy for these markets would be to further *invest to maintain* current level and milk the benefits. These markets are significant source of foreign exchange for India. Stars are the markets characterised by high growth and high market share. Star markets for carpet export includes Australia, Turkey, UAE, UK and USA. These markets have the best growth and high profit opportunities. The strategy here should be to *invest to growth*. Problem child markets have high growth but low market share. These markets include Brazil, Chile, Japan, Malaysia, Netherland, Norway, Saudi Arab, Singapore and South Africa. The strategy for these markets is to *invest by choice* in those markets, which have potential, otherwise divest.

Conclusions and Recommendations

Through this study, an attempt is made to segment the export markets of India Carpet Industry on the basis of relative market share and market growth. This may help export marketers to formulate target marketing strategy. The carpet industry is one of the significant, stable and growing export earning sector in our country. It is a significant source of valuable foreign exchange.

The exporters should maintain the trade commitment in star markets and seek further investment to boost performance. USA is undoubtedly the star market among others. The exporters should customise the carpets in tune with the tastes and preferences of USA customers. High quality products with contemporary designs are preferred more in these markets. Besides, UAE, UK and Turkey also are the lucrative star markets. Cash cow markets have great potential to grow. Among cash cow markets, Canada and France are the most growing markets. The exports should therefore explore and engage in penetration marketing here. Problem child are the most strategy intensive markets. The exporters should therefore be cautious about selecting and dropping a particular market. Concentrated marketing should be adopted by selecting only fewer markets. For dog markets, in present context, only those markets should be maintained which have positive market growth rate. Among them, Israel and Switzerland seems to be promising with positive growth. Greece, Portugal and Spain, on other hand, experienced negative growth. These markets should not be focused much, it not divested.

Expert opinions suggest that quality of the carpet has the major stake in the overall carpet demands. Carpets being luxury and artistic products, price seems to be secondary, though it has significant stake to some extent. Timely delivery is another important factor in long-term relationship and business with foreign counterparts. Warranty and after-sales services have negligible presence in carpet trade. Agents play an important role as liaison between the carpet exporters and foreign buyers. Negative publicity regarding child labour should be wiped out through strong and determined commitment and campaign against child labour. Carpet exhibition, be it in India or abroad, has a very vital role in boosting the exports. It provides an excellent platform to the exporters to showcase their carpets for direct selling. CEPC (Carpets Export Promotion Council) and such organisations are playing appreciable job in organising such exhibitions.

Being said all, it should be kept in mind that market growth and market share are not the only factors to segment the carpet export markets. Economical, technological, socio-cultural, political and many other such factors too influence the export marketing of carpet to a great extent. These factors can be further studied to frame an improved segmentation of carpet export markets. However, BCG matrix is widely used and an acceptable strategic model.

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