CHAPTER 5

SUMMARY AND RECOMMENDATIONS FOR FUTURE RESEARCH

5.1 SUMMARY

This research aims to study the various factors influencing the supply chain activities of small manufacturing firms in South India. It aims to measure

1. The key supply chain practices influencing small manufacturing firms

2. The factors related to SCM practices viz environmental uncertainty, Supply chain flexibility and competitive advantage

3. The performance of the organization

All previous studies have been focused on large organizations, and this is probably the first study focused on small manufacturing firms. An attempt has been made to integrate all the factors involved in the supply chain, both directly and indirectly into a causal model. Based on the data collected from 75 respondents, the proposed model was tested using PLS Path modeling method using Visual PLS software. This study increases our knowledge of SCM in the following ways
1. This research gives a framework that identifies various significant constructs and sub constructs to study the supply chains of small manufacturing industries in India. These constructs are environmental uncertainty, SCM practices, supply chain flexibility, competitive advantage and organizational performance. SCM practices had six sub-constructs namely strategic supplier partnership, customer relationship, information sharing, information quality, lean practices and logistics practices. The sub-construct on logistics practices has been added to the already existing measuring instruments. More constructs and sub-constructs may be added to the model by future researchers.

2. This study provides supporting evidence to the already existing literature on supply chains. This represents one of the first attempts to apply the concepts proposed internationally to small manufacturing firms in the Indian context. This means that all firms need to fine tune their SCM practices if they are to survive in business.

3. The study shows that uncertainty in the environment forces firms to have better SCM practices. As the business environment becomes more and more uncertain, the firms start having better supplier and customer relations and make operations more efficient. This proves the old saying “Necessity is the mother of all invention”. However the information sharing though unidimensional is left out of the supply chain practices construct, probably indicating the reservation of small firms in sharing information with other members of the supply chain.
4. This study shows that as the SCM practices of a firm get better, the flexibility of the supply chain also gets better. This shows that firms with maturing SCM practices will have agile manufacturing capability and the ability to respond quickly to the changes in market situations.

5. The study shows that Supply chain flexibility has a significant impact on the competitive advantage of the firm. This means that as the firm becomes more flexible, it will give a competitive advantage to the firm over its competitors, particularly because this concept is still in its infancy in India, especially among the small manufacturing firms.

6. The study shows that firms with more competitive advantage will perform better in the long run. However the impact seems to be a little weak, though significant. This shows that other factors, particularly SCM practices influence the performance of an organization very strongly.

7. The new model proposed shows the direct impact of SCM practices on Organisational performance. It also shows the impact of Environmental Uncertainty on Organisational performance and Supply Chain Practices. This provides new avenues for thought and studies in supply chain studies.

5.2 IMPLICATIONS FOR PRACTITIONERS

The study has several important implications for practitioners

1. Today’s business is changing from competition between firms to competition between supply chains. So it is imperative for players to think on a larger scale in terms of
the entire supply chain performance to survive in the long run.

2. Even today SCM is wrongly interpreted as ERP or as logistics management or purchase management. Most firms are not clear on what to do to improve their performance as a player in the supply chain. This study provides key areas for firms to concentrate on while bettering their supply chain practices.

3. The study provides a valid scale to measure the flexibility of the supply chain and the competitive advantage of the firm. Most studies focus on SCM metrics which measure the internal performance of the firm, but not the flexibility and the competitive advantage of the firm.

4. The study shows that an uncertain environment is not a handicap for business. On the contrary, uncertainty should be countered by proper and efficient SCM practices. This will lead to a healthy performance by the firms.

5.3 LIMITATIONS OF THE RESEARCH

The research had the following shortcomings

1. The number of observations was limited (75 firms). So revalidation of the constructs was not carried out for other data sets. So the instrument used in this research needs to be revalidated in further studies in other industries as well.

2. Since small firms were considered, most of the respondents were the owners who had limited exposure to supply chain
concepts. So a detailed explanation of each section of the questionnaire was needed before obtaining responses from them. Any lack of understanding on part of the respondents could have introduced wrong responses from them, affecting the results propounded in this study.

3. Because of time limitation, this study did not consider other dimensions affecting the supply chains. These dimensions are left for future research by other researchers.

4. Due to limited time and tedious data collection needed for each questionnaire, only 75 questionnaires were collected from small manufacturing firms in and around Coimbatore. These are assumed to be representative of the entire population of small manufacturers in South India. Manufacturing units in other cities are neglected.

5. The study has converted the second order construct (SCM Practices) into a first order construct due to the limitations of VisualPLS software in computing bootstrapping scores for second order constructs.

6. Only a section of the supply chain is studied in this research. An end-to-end study is not conducted.

5.4 Recommendations for future Research

The limitations mentioned above lead us to the possibility of better research in future studies.

1. A scale becomes a benchmark if it can be generalized across industries. Future research can study supply chains using the scales used in this research to validate it across industries to confirm its usability.
2. Future research can conduct invariance tests on the scales, to validate them for different organization sizes, different structures, different organization structures, etc.

3. Future research can use other dimensions to research SCM activities of firms. Information sharing seems to be left out of the SCM practices even though it is so vital to the performance of organizations. The effects of information sharing on other dimensions can be directly studied in future research.

4. Service industries can also be studied for SCM activities as service sector is the biggest sector in India today accounting for 52% of the GDP. Some industries like health care, insurance, banking, education, etc are potential areas of study.

5. Future research can be conducted by dividing the organizations based on performance. High and low performers could be compared for their SCM activities undertaken.

6. The study used only first order constructs. Second order constructs can be used if bootstrapping feature is added into Visual PLS software package.

7. Individual sub-constructs can also be analyzed for their impact on organizational performance and competitive advantage.

8. Future research can study a supply chain from end to end to provide a better assessment of the performance of the supply chains.