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THE SIMONYI KÁROLY FACULTY OF ENGINEERING, WOOD SCIENCES AND
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THE JÓZSEF CZIRÁKI DOCTORAL SCHOOL OF WOOD SCIENCE AND
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MANAGEMENT IN THE WOOD INDUSTRY PROGRAM

Doctoral Thesis

**Analysis of the Furniture Manufacturing Businesses,
with special focus on added value**

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Abstract

The doctoral thesis analyses the improvement of the profit generating competencies of the domestic furniture manufacturing industry. It aims at envisaging a broad industrial development perspective.

Based on the literature overview such key areas were identified, which play significant and direct role in the value creation of the businesses. During testing of the hypotheses, the theoretical influencing factors were confronted with the performance of the Hungarian furniture manufacturing SMEs. Based on the results all those areas could have been identified, where intervention is essential for industrial level progress.

Such special characters were defined, which serve as a basis for overall sectorial development. Based on a secondary financial statement analysis it was concluded that both from the input side of the raw materials, and from the side of the customers, there is a strong bilateral pressure on the furniture manufacturing.

Summarizing the characteristics of the management competencies and due to the challenges of the industry, the only way to move forward in value creation is by a complex approach of the entire industry. It includes an overall action plan, derived from the analytical phase. The thesis is outlining the fact-based industrial program.

1. Importance and background of the research theme

It is a national challenge to improve the performance of the Hungarian furniture manufacturing. On one hand the country has valuable wood, as natural resource, which is providing sustainable and quality raw material. On the other hand, with the connecting industries it represents a large share of the employment.

Currently such industries are in the focus of the national economic policy, which achieve high added value. The labour-intensive, traditional branches suffer from the lack of preference. Though it is a national priority to realize re-industrialization, such industries come to the front like automotive, electronics, machinery, which look statistically more attractive. It goes also in hand with the subsidy prioritisation. Therefore, following the example for the earlier amortized textile industry, the furniture manufacturing is also among the endangered ones. It is despite of the wood resource, the centuries-old tradition and heritage, the high quality education. It is not what is determined after such influencers for the furniture manufacturing.

In order to make the furniture industry attractive again, the profitability and added value have to be increased. To achieve its presence and share has to be improved in the growing segments and markets, the added value has to be improved and the related management competencies have to be developed. The objective of the thesis is to observe how the current players of the furniture industry meet those above mentioned expectations and where are the intervention needs.

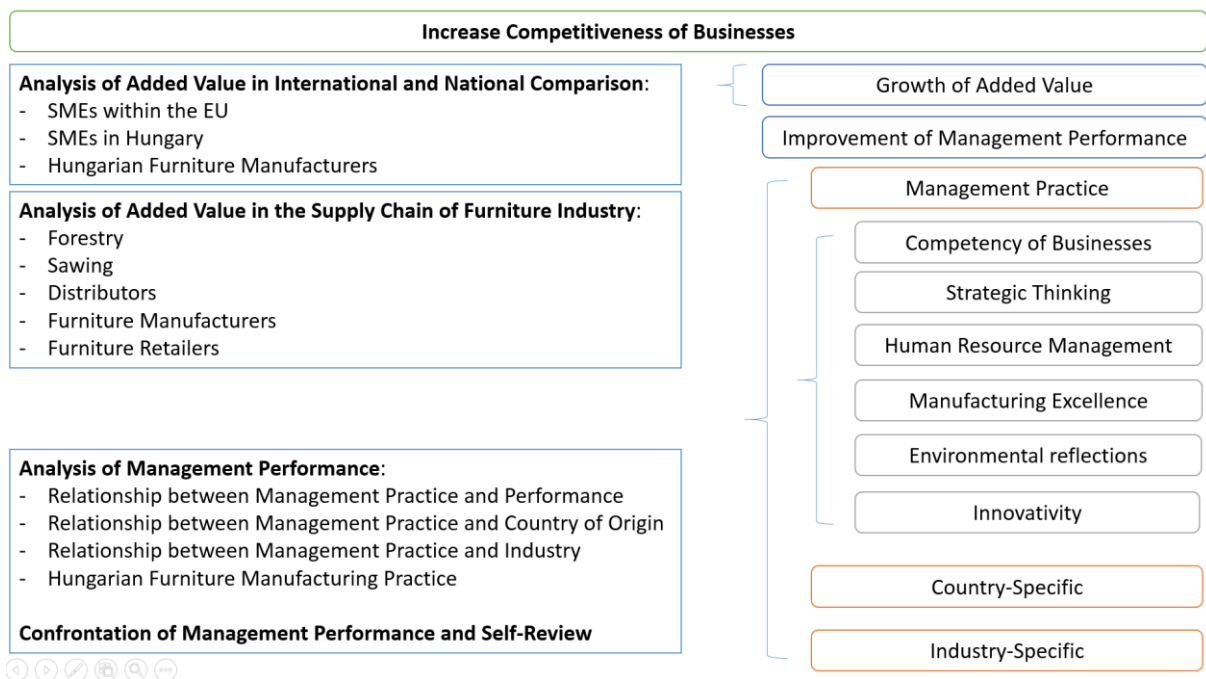
It is also a focal point that the Hungarian furniture manufacturing businesses have to be competitive in the international environment. Therefore analyses will be broadened also to the foreign markets, and for purchasing and sales sides.

2. Defined task, hypothesis and methodology

The research field is the added value analysis of the Hungarian furniture manufacturing enterprises.

As a first step, the development of the international market will be researched, both with respect to volume and value changes, and also about relevant individual examples. It has relevance for us, how the Hungarian market changed in this turbulent environment.

The secondary data analysis of the market overview is followed by the development screening of the domestic players. Prior to that a literature overview provides input for the methodological approach. It is represented by the following chart



The theoretical framework set-up is followed by the added-value analysis – European perspective how the small- and medium-sized enterprises (SMEs) perform on the level of the European Union, than in the national environment.

Next step is the added value analysis of the Hungarian furniture manufacturing along the value chain. It aims at to reveal how the different players contribute to the added value, and what are the barriers for an improved performance.

Strongly related to the above analysis, financial statement analysis is followed, focusing on operating rates. It is based on the online statistical data of the European Union, and the results are confronted with the other research results.

The analytical phase is closed with a primary research of the management performance. With respect to added value, the management performance has decisive importance. The theme of the research is the observation of the Hungarian manufacturing SMEs management performance.

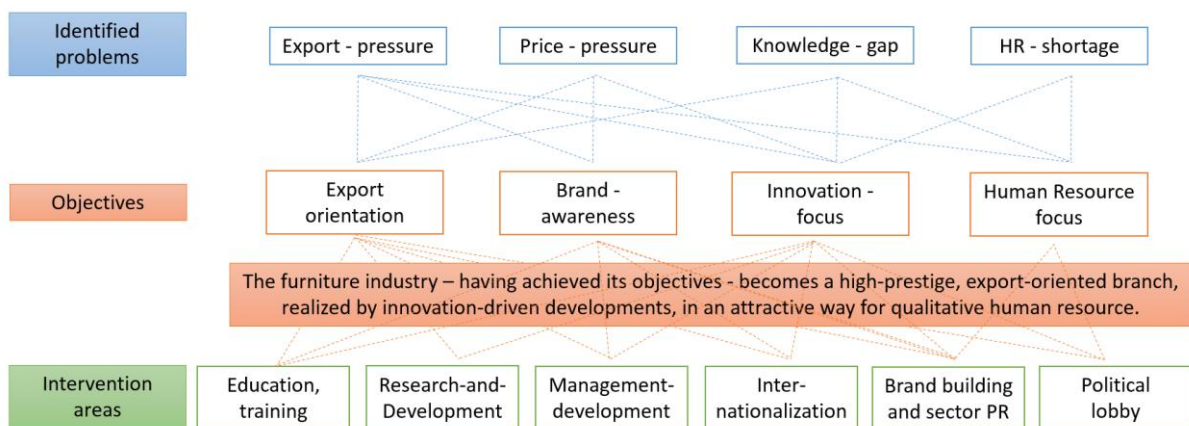
It is followed by testing of the hypothesis and then the summarizing conclusions.

In the closing chapter industrial recommendations are phrased, to increase the performance of the furniture manufacturing SMEs performance.

3. Conclusions

Based on the results it can be concluded that the Hungarian manufacturing businesses have to perform under bilateral pressure. It lead to a significant drop in the number of the industrial businesses and loss of development financial capacity in the recent 8 years. It can also be concluded that the management performance is strongly correlated with the added value of the businesses, and also with respect to it, Hungarian furniture manufacturing companies have disadvantage in comparison to other sectors and foreign competitors. This tendency resulted a devaluation in the eye of the national economic development policy.

From this captured situation SMEs are unable to recover on their own. It is essential yet not satisfactory to improve the management competencies, Industry-broad level of partnership is needed to put the Hungarian furniture manufacturing back on the growing path.



4. Scientific results of the thesis

1. thesis – there is a strong pressure on the Hungarian furniture manufacturing both with respect to raw material purchase and due to the growing concentration of the retail sector, even in international comparison.

In the decade following the turn of the century the firewood demand has grown by 50%, meanwhile the industrial utilisation decreased by 15%. Along with the new biomass plants the export demand has also contributed to the price increase, resulting in growing costs from the input side for the furniture manufacturing. Also during this period the retail constantly concentrated, the domestic market decreased, allowing furniture price inflation only significantly below the average price increase. It created a double-sided squeeze for the Hungarian furniture manufacturers, who concentrated dominantly on the domestic market. [1]; [2]

Based on the results it can be concluded that the added value improvement of the Hungarian furniture manufacturers is under pressure, causing challenge also on sectorial level. [3]; [4]; [5]

2. thesis – there is a strong correlation between the management performance of the SMEs and the achieved added value. The factors which influenced the performance the most significantly are the following:

1. innovation-orientation (patterns, investment in intellectual property rights, university co-operation, external consultants for innovation, innovation supporting funds)
2. external pressure (innovative key competitors, innovative sector suppliers, turnover from new markets, international competitors)
3. strategic thinking

All three areas are verifying the statements of the literature observations. The openness, the permanent learning, the external impulses contribute to the development, meanwhile the excellence of production has limited impact. [6]

3. thesis - based on the research results the small- and medium-sized businesses management performance is correlated with the country of origin.

‘In many cases not only the applicability of practices but also the relevance of theories stop at the borders’. [11]

It can be concluded from the research that the Hungarian SMEs have the weakest performance in five cases out of the 6 observed indicators. The Hungarian producing SMEs are exploiting the potential originating from suppliers and customers at the lowest level. However, the weak management performance is the highest risk for the national economy. [5]

4. thesis – there is a strong correlation between the performance level of the small- and medium-sized businesses and the economic sector

The competitive environment, the technological orientation, the internalisation of external knowledge are essential with respect to the development of a company. [12] In those sectors, where the previous attributes are more characteristic, they have a positive impact of the competitiveness of the firms, assisting organisational improvement. [13] The openness of a sector, the international character, the innovative players do contribute to the competitiveness, resulting in more dynamic development of business management, as compared to those who cannot absorb so much new know-how from the new markets. [14]

It has the message that the traditional production-oriented industries – which are more labour intensive and less technology oriented – face high risk of disadvantage, or in positive term, do have significant learning potential, by management know-how transfer. Though the risk of not successful application of modern management technologies can lead to growing gap versus the other industries. [6]

5. thesis – based on the research it can be concluded that the Hungarian furniture manufacturing small- and medium-sized businesses management performance lags behind that of the Hungarian other sectors and also of the international competitors.

The most decisive disadvantage of the Hungarian furniture manufacturing lies in the production strategy, co-operation with universities and laboratories, in intellectual property

rights investment and in application of external innovation-experts. Exactly in those four areas, where the correlation determinant showed the highest value - in case of the first hypothesis testing – with the business performance. [6]

6. thesis – management of the Hungarian furniture manufacturing businesses lack the adequate and sustainable answer for the business environmental challenges.

The surveyed furniture manufacturing enterprises' management had a more positive picture of himself or herself, as the average. Meanwhile the industrial results lag behind the other sectors' with respect to added value, the interviewed players of the furniture industry see the disadvantage of their situation mostly in the external environmental conditions.

It is necessary to develop the management competencies of the Hungarian furniture manufacturing small- and medium-sized businesses. Management competency has to be improved in the circle of the Hungarian furniture manufacturers.

5. Publications

- [1] Barta B., 2014. November International comparative analysis of the Hungarian furniture manufacturing profitability (A hazai bútorgyártás nyereségességének nemzetközi összehasonlító elemzése - Makrogazdasági döntések - hálózati szinergiák c. előadaskötet), 10 pages
- [2] Barta B. 2015. April Profitability, added value in the furniture manufacturing (Nyerességesség, hozzáadott érték a hazai bútorgyártásban - "Tudomány és Felelősség" – előadaskötet), 11 pages
- [3] Barta B. 2016. Comparative analysis of Hungarian furniture production (Nyerességesség összehasonlító elemzése a hazai bútorgyártásban - Faipar - a faipar tudományos lapja c. szaklap), 2nd Issue, 11 oldal
- [4] Barta B., Pakainé Dr. Kovács J., 2015. Added value among furniture manufacturing SMEs - Wood Research, 4. szám, 7 oldal
- [5] Barta B., 2015. September 4. Comparative analysis of added value, with special focus on furniture manufacturing SMEs - 8th Geoffrey J. D. Hewings Regional Economic Workshop, 7 pages
- [6] Barta B., 2015. May 7-9. Measurement of business efficiency, with special focus on audit methodology (Vállalati hatékonyság mérése, különös tekintettel az audit módszertanra - XII. Jedlik Ányos Szakmai Napok), 19 pages
- [7] Barta B., 2015. February 19. Do the wages depend purely on collective bargaining? (Valóban csak a kollektív béralkútól függ a bérszintünk? – portfolio.hu), 3 pages
- [8] Barta B., 2015. April 5. Whom to favour the state subsidy? (Kit szeressen az állami támogatás? – portfolio.hu), 4 pages
- [9] Barta B., 2015. April 29. Is this the way to close the gap? (Így akarunk felzárkózni? – portfolio.hu,) 5 pages
- [10] Barta B., 2015. December 5. Family businesses facing challenge of succession (Hatalmas döntés előtt a családi vállalkozások – portfolio.hu), 3 pages

Further references

- [11] Hofstede, G., 1993. Cultural constraints in management theories. *Academy of Management Executive*, 7(1), 81-94.
- [12] Berchicci, L., 2013. Towards an open R&D system: internal R&D investment, external knowledge acquisition and innovative performance. *Research Policy* 42 (1), 117–127.
- [13] Morales García, V.J., Moreno Ruiz, A., Montes Lloréns, F.J., 2007. Effects of technology absorptive capacity and technology proactivity on organizational learning, innovation and performance: an empirical examination. *Technology Analysis & Strategic Management* 19 (4), 527–558
- [14] De Loecker Jan - Detecting Learning by Exporting - Princeton University, NBER and CEPR December 4, 2012