

Adriana Csikósová*,
Mária Janošková,
Katarína Čulková

Technical University of Košice,
Faculty BERG,
Institute of Earth Sources,
Košice, Slovakia
* e-mail: adriana.csiksova@tuke.sk

Prediction of Developments in the Textile and Clothing Industry in Slovakia by Selected Indicators of Financial Analysis

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Abstract

The textile and clothing industry in Europe can be considered as a not profitable sector. The goal of the contribution is an evaluation of selected indicators of financial analysis, credit score and bankruptcy models as well as strategic analysis in selected companies of the textile and clothing industry in Slovakia. The next goal is an outline of development possibilities of the sector in the future. During the research we used data from the five most important companies doing business in the textile and clothing industry in Slovakia. The data obtained were processed by the bonity and Altman index, providing the possibility to determine possible future development in the industry. The results show a decrease in the number of textile and clothing companies in Slovakia. Such results can be used for the setting of scenarios of development, which show that the Slovakian textile, clothing and leather industry should multiply its effort to maintain its position on the international markets.

Key words: clothing industry, textile industry, financial analysis, credit score, bankruptcy models, strategic analysis, Slovakia.

Introduction

Throughout the 20th century, the global textile and clothing industry experienced major geographical shifts, new forms of governance, changing producer and buyer relations and unevenly distributed outcomes for countries, firms and workers [1]. Within the framework of Europe, the industry is exposed to pressure of competition, mainly from the side of Asian producers, but also due to the favouring of exporters from Poland and Hungary, as well as the lower cost of production in Romania, Latvia, Estonia and Ukraine [2]. The industry, due to the globalisation, is also exposed to the negative influences of economic crises in Southeast Asia and Russia. In Western Europe the industry remains sluggish, since sales have increased in traditional textile segments, mainly due to the development of online sales. The textile – clothing sector is marked by increasing replacement with synthetic fibres. From the view of demand, the general situation in textile consumption seems to be less favourable in the Eurozone, where in 2017 there was slightly better sales growth, and young consumers allocate more resources to textiles. On the other hand, global textile production is set to fall sharply, and there is expected to be a repeated decrease. The slight recovery of global textile production is expected in the EU, given the notably more beneficial weather conditions.

Similar as in developed EU countries, Slovakia has also seen a general trend

of development in the textile and clothing industry but with a gradual decrease of production, connected to structural changes orientated towards the limitation off-standard product production with lower value added. The development during recent years has also been influenced by the economic transformation and internal problems during production placement on the world markets.

From 1990, the industry has seen a depressive development in Slovakia, which has resulted from a decrease in production in the world, the breakdown of markets in countries with the Council of mutual economic assistance, and the insolvency of clients and consumers. The lack of using capacities with a high rate of fixed costs results in the loss of companies, and it consequently does not create sufficient finance for the rapid restructuring of the majority of companies. High dependence on foreign sources of financing (bank credits and bonds) together with the high interest in domestic banks deepens the losses mentioned. In 1998 bank credits had increased to 3.1 bln Sk, which meant an annual increase of 0.147 bln Sk. Mainly the clothing industry had an influence on this growth, since indebtedness in the textile industry presented only an increase of 0.0032 bln Sk. The structure of the textile and clothing industry during the last twenty years has changed greatly. In 1989 Slovakia had 20-25 organisations in the industry, while presently there are over 200 organisations, but only with a little over 20 employees [3].

The Slovakian market is too small to use production capacities fully. Therefore, it is important to enter the markets in developed countries. Also a change of foreign trade orientation towards these markets is very important. Therefore, already in 1992 the Association of the Textile and Clothing Industry of Slovakia (ATCI) entered the European association EURATEX, which has the sole right to represent the interests of the textile and clothing industry in the EU. It enables to have access to trade information in the industry and helps to establish free access to markets in all EU member states to a full extent.

In present times textile and clothing products represent 5.9% of the whole of Slovakian exports, while the rate of total exports to EU countries is 82.1%. Textile and clothing products represent 4.5% of the total imports to Slovakia, while 59% of products are imported from EU countries. Approximately half of Slovakian textile and clothing goods are imported, while the other half are from domestic production. The Czech Republic, Hungary and Poland represent the biggest partners in export. In export EU zone activities of Slovakian companies are very low in Greece, Ireland and Portugal. Reserves of Slovakian textile and clothing industry are exported to markets in Scandinavia, Great Britain, France and Austria.

During recent years, the situation in the Slovakian textile and clothing industry has been the following:

- Cheap imports of clothes from China – from 1st January 2005 quotas on imports from China were cancelled
- Growth of wages – approaching the EU average
- Changes in the prices of raw materials and energy, connected with the increasing cost of transport and production,
- Changing currency,

The above-mentioned influenced all textile and clothing companies, where a number of companies went bankrupt or recorded serious problems, caused by:

- Poor estimation of development and structure of demand,
- Poor, small or too big investments,
- Underestimation of marketing and quality of products,
- Underestimation of innovations [4].

■ Literature review

Recent years have been testing times for the Eastern European clothing sector. Following two decades of deepening integration of European production networks, the sector has been struggling with the removal of trade quotas, increasing competitive pressures and the global economic crisis. Curran and Nadvi studied how changes in the European Union's regime for preferential market access affect the trade profile and upgrading prospects of the garment industry, where shifting trade preferences play a key role in determining structural transformations within the industry [5]. This calls for more careful consideration of trade regimes in the textile industry. Smith et al. researched changes in the East European clothing industry, drawing on the experience of the Slovak Republic, where regional economic transformations resulted in regional concentrations of clothing production, where sustained employment during the 1990s and tightening of competitive pressures unravelled these regional production systems [6].

In the US, trends of the textile manufacturing industry were studied by Burris as a country with an advanced economy, showing the expansion of global trade and global textile manufacturing industries, which have become economically reliant upon each other for their own domestic industry survival [7]. Recessions and economic slowing within regions and countries have now become interconnected with the affects being felt,

simultaneously resulting in economic recovery taking many years.

As for Asian countries, Hamid and Aslam investigated intra-regional trade effects of the ASEAN Free Trade Area on the textile and clothing industry by focusing on trade competitiveness and complementarities [8]. The results show that most ASEAN countries compete predominantly in the trade of unprocessed products or raw materials and that product diversification has enabled ASEAN countries to actively export to the global market. In this way ASEAN countries have become a regional hub for the textile and clothing industry. Hamid et al. deals with the development of an innovative cost effective bentonite adsorbent coating (BAC), and simple mathematical equations are applied to enumerate coating requirement in treating textile effluent [9]. Their model could be used in the removal and recovery of cationic dye (organic pollutant) in the textile industry on a large scale. Vietnam's textile and clothing industry plays a major role in the country's economy and is its largest manufacturing sector [10], providing direct and indirect employment; moreover, it is the principal source of foreign exchange. Success has been assisted by a number of positive factors, including joining the World Trade Organization (WTO) in 2007, an industrious and talented workforce, low labour costs and increasing access to international markets, especially the USA and Europe [11]. Vietnam has become the second largest source of foreign textiles and clothing in the US market and has established a strong presence in the Japanese and European markets, especially for clothing. The industry's development has also been helped by the government's policy of encouraging the private sector, even though Vietnam continues to be a communist controlled country.

Firms in the textile and clothing industry operate in competitive international markets characterised by liberalised trade and have to address rapid changes in consumer preferences and production technology [12]. Hence, improving competitiveness is crucial for textile firm survival. The competitiveness of textile firms often depends on them meeting their production potential [13]. Therefore, the textile industry needs sustainability. Palan shows that the sustainability indicator depends on the concentration and inequality indices [14]. Trade policy

and rules create strong regional patterns in global clothing production networks. Also, the trade regimes, preferential market access, regional trade agreements and rules of origin structure the division of labour, developmental opportunities and constraints in various clothing producing regions [1]. The textile industry does not always reap the benefits of the resulting international trade integration; rather there is a negative relationship between vertical specialisation and relative real wages, especially in this industry [15]. In this area Kapelko and Lansink showed a small overall productivity increase for both textiles and clothing firms due to positive technical change, despite declines in technical and scale efficiency [16]. In the present world, the textile and clothing sector must be investigated from the point of view of the competitive position, where the degree of internationalisation of the firm positively influences the efficiency, since when the company increases its expansion, experience and skills, efficiency also rises. Especially, developing countries must undergo industrial upgrading due to the challenges of globalisation's [17], where the government should play an important role to reshape the competitiveness of textile companies, with the aim of integrating with the global market.

The textile industry is, according to Reis et al., influenced by cotton and petroleum prices, which affect cost behaviour in textile companies [18]. As such, the possibility of cost increases occurring merits consideration with respect to the end consumer, despite its detection not being possible by the techniques employed in this study. Cotton fibre is an essential raw material for the textile industry. Fibre length, which was found negatively related to excessively high temperature, determines yarn quality to a great extent. In this area Dai et al. investigated the effects of global warming on cotton fibre length and its mechanism [19], finding that global warming would bring unfavourable effects on cotton fibre length, which thus requires action in advance to minimise loss in cotton production. Also, hemp influences the textile and clothing market Pergamo et al. studied the development possibilities of hemp in the textile world, researching methods aimed at the reevaluation of agronomic techniques, starting with the choice of fibre and varieties and the adoption of different systems of harvesting, conditioning, maceration and transformation of the hemp

plant, with the aim of measuring the relevance of culture for businesses and territories from a sustainable competitive perspective [20]. It represents not only a business opportunity but also a model of sustainable development.

Industries currently face pressure to implement environmental initiatives from both government regulations and global competition in addition to customer pressure. Hence, organisations are forced to implement sustainable practices to improve their environmental performance over the economic, not excluding textile organisations [21]. Moreover, in area of the textile and clothing sector, it is necessary to examine the interplay between trade and the environment [22]. There is a dilemma due to the choice of various approaches, including a primary survey of different stakeholders and the large-scale modelling of economy-environment inter-linkages. The interplay between the costs involved in meeting environmental regulations and the potential price-premiums that cleaner products would get in the international market is analysed in order to assess the future trade prospects for textiles.

The need to conduct research in the textile and clothing sector results from textiles and clothing use in various areas. Textile effluent treatment plant sludge can be potentially reused in building materials. Its suitability was studied by Balasubramanian et al. with the possible manufacturing of non-structural building materials with economic feasibility [23]. The commercially new bio-based polyamide 56 (PA56) Terry by Cathay Industrial Biotech (Cathay Biotech) is used in fibre and textile products. This PA is based upon a new bio-based and renewable diamine – 1.5-pen-tanediamine (5DN) – also produced by Cathay Biotech, offering the market significant improvements in moisture management, strength, comfort, flame-resistance and sustainable characteristics [24].

Methodology

While Chava and Jarrow [25] agree with Shumway [26] that the academic models of Altman etc. cannot be used properly in industrial conditions, Shumway's model does give a more accurate prediction, most likely due to the limited number of bankruptcies in the databases previously available, and the subjects analysed being from a post-communist country. Further-

Table 1. Research methods.

	Index of bonity – IB	Altman index – Z score
Data used	Balance Sheet Loss and Profit Statement	Balance Sheet Loss and Profit Statement
Period covered	2013-2015	2013-2015
Frequency	Annually	Annually

more, hazard and other similar models cannot be used, but academic Altman, IN, or the bonity index can be mostly used for evaluation of industrial companies.

In Slovakia, companies after transformation to adapt to a market economy are still fighting with payment inability, which can be reflected by bonity, and because in Slovakia companies are using mostly the Altman Z score for prediction, as other prediction models have considerable limitation for use in Slovakian conditions [27].

The overall situation in the textile and clothing industry in the world and in Slovakia has played an important role in the determination of the contribution goal. The main goal of the paper is to predict the development of the textile and clothing industry by way of various development scenarios in Slovakia using the bankruptcy and bonity indexes.

The main goal was achieved by the following processes:

- primary strategic PEST and SWOT analysis, helping to find possibilities and threats of the industry in Slovakia,
- financial and economic analysis of the situation in the industry [28],
- consequent internal analysis with the aim to find the reason for the present situation and finding possibilities and capacities for future development.

After all the analyses, the research provides suggested and possible scenarios for future development in the textile and clothing industry in Slovakia. Mainly three possible scenarios are suggested – optimistic, pessimistic and stagnated, together with conditions for scenario achievement.

Data

During the research process of the collection and categorisation of information, we used data from official statistic information SR [29] and EU [30], data from the Ministry of Economy in the Slovak Republic [31]. For calculation of selected financial indicators and prediction indexes, we used data from financial

statements of the companies analysed, obtained from the publicly available database Register of Financial Statements in Slovakia [32].

Strategic and financial analysis was made for five selected companies that have a very strong position in the industry, mainly two textile limited companies (s.r.o./Ltd.) and three clothing joint stock companies (a.s.), for three consequent periods (years). The sample itself is due to the limited data availability for the period analysed. In the contribution we also used data of own research dealing with the limitation of the bankruptcy model used in post-communist countries [27], as well as actual data and information of sector analysis according Trend Analysis [3] and medium values of financial indexes of economic activities in Slovakia [33]. For evaluation of the present state of the sector, we used trend analysis of selected economic development indexes in a time sequence and their comparison. Finally, the synthesis of factors that could influence the improving of the competitive position of the sector was considered.

Methods

During the research we used two main methods, mentioned in **Table 1**.

Due to the proven problems with bonity in the number of Slovakian companies, we selected the bonity Index to research the financial health of the company and possibilities for its further development [34].

$$IB = 1.5x_1 + 0.08x_2 + 10.00x_3 + 5.00x_4 + 0.3x_5 + 0.10x_6$$

where:

- x_1 = cash flow/debts ability of the company to pay debts from cash flow
- x_2 = total assets/debts influence of debt to assets
- x_3 = EBT/total assets EBT (earnings before taxes)
- x_4 = EBT/sales return on sales
- x_5 = stocks/sales
- x_6 = total sales/total assets turnover of assets

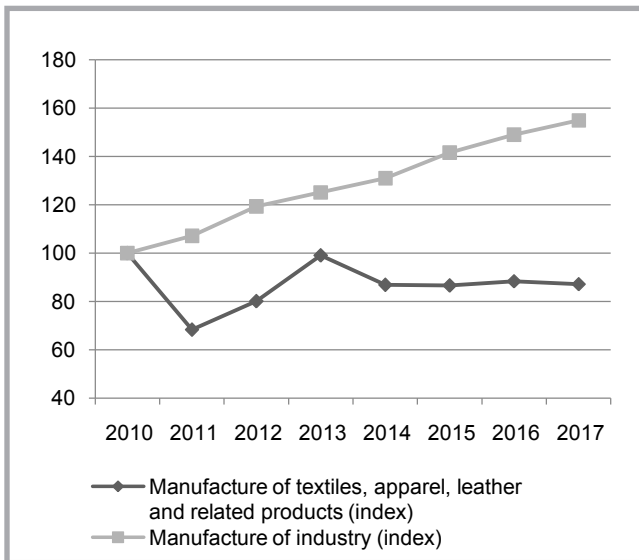


Figure 1. Manufacture of textiles, apparel, leather and related products (index).

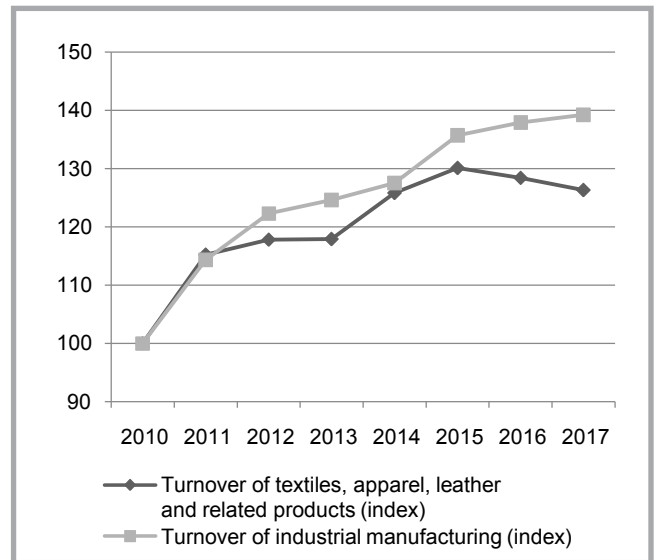


Figure 2. Turnover of textiles, apparel, leather and related products (index).

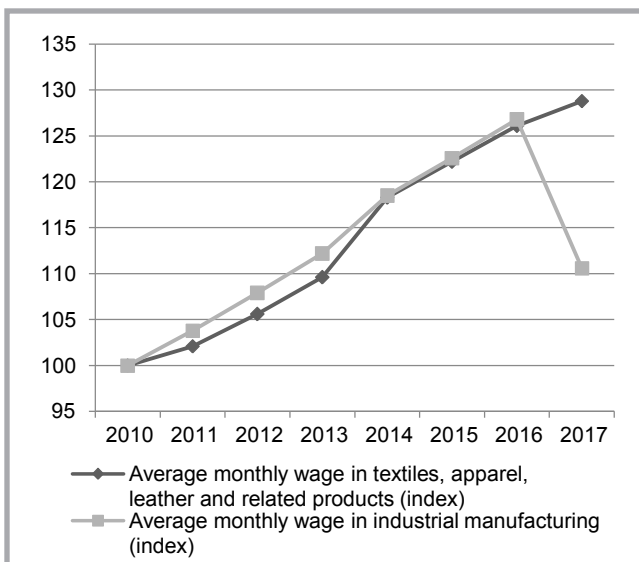


Figure 3. Average monthly incomes in textiles, apparel, leather and related products.

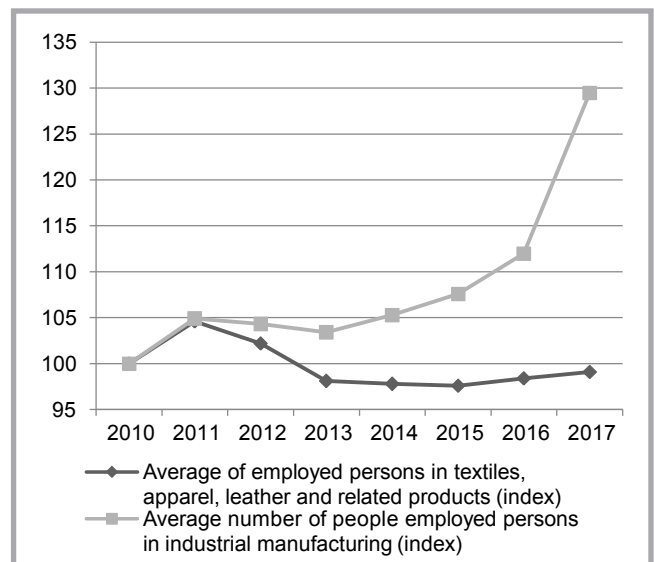


Figure 4. Development of employment in textiles, apparel, leather and related products.

The index considers weights, where index x_3 has the highest weight in the bonity of the company (mainly earnings before taxes, as well as x_4 (return on sales and assets)). The results are evaluated according to a rating scale from -3 to 3. The breaking value in the index equals zero. The value divides solvent companies from insolvent ones.

The second method was chosen due to the confirmation of the situation in the company, where we used the Altman Z score, evaluating possible bankruptcy or the financial health of the company. Evaluation by the Altman Z-score is necessary to make according to the legal form of the business (Table 2). The index serves for estimation of the possible

financial development or bankruptcy of the company over a period of 2-5 years. Since the companies analysed trade in shares, we used the corresponding Altman Z score:

$$Z_i = 1.2 A + 1.4 B + 3.3 C + 0.6 D + 1.0 E$$

where:

A = net working capital/total assets

B = gross profit/total assets

C = EBIT/total assets

EBIT (earnings before interest and taxes)

D = market value of equity/book value of total debts

E = total sales/total assets turnover of assets

Table 2. Rating scale Z-score [35].

Z-score value for companies traded on stock exchange	Z-score value for other companies	Value of financial health of the company
$Z > 2.9$	$Z > 2.9$	Financially healthy company
$1.8 \leq Z \leq 2.9$	$1.2 \leq Z \leq 2.9$	Zone of so-called "uncertain future"
$Z < 1.8$	$Z < 1.2$	Company is threatened by bankruptcy

Table 3. Values of indicators for textiles, apparel, leather and related products.

	2010	2011	2012	2013	2014	2015	2016	2017
Turnover of the manufacture of textiles, apparel, leather and related products (thousand €)	1.304	1.502	1.536	1.538	1.641	1.697	1.674	1.647
Manufacturing (thousand €)	54.716	62.545	66.942	68.158	69.790	74.267	75.434	76.165
Average persons employed in the manufacture of textiles, apparel, leather and related products (persons)	34.766	36.365	35.524	34.104	34.019	33.920	34.199	35.081
Average persons employed in manufacturing (persons)	430.658	452.006	449.126	445.301	453.535	463.606	482.500	476.308
Average monthly wage in the manufacture of textiles, apparel, leather and related products (€)	518	529	547	568	613	633	653	667
Average monthly wage in manufacturing (€)	771	800	832	865	914	945	978	998
Labour productivity in the manufacture of textiles, apparel, leather and related products (thousand €)	37	41	43	45	48	50	49	50
Labour productivity in manufacturing (thousand €)	127	138	149	153	154	160	156	158

Obviously from the evaluation we must conclude in the control of index development and in the case of its worsening, it is necessary to react immediately.

Results of development of business from the textiles and clothing industry

The following figures and table illustrate the development of manufacturing in the textile and clothing industry and related products, as compared to industrial production in Slovakian in 2010-2017. While textile and clothing manufacturing had similar development to that in industrial production to 2013, from 2014 there was stagnation in the sector analysed, whereas total industrial production in Slovakia showed a further linear growing trend, as illustrated by *Figure 1*.

Similar development can be observed in turnover development (*Figure 2*), where a growing trend to 2015 was replaced by a decrease in 2016 and 2017. However, turnover development in industrial production increased.

Average monthly incomes increased in the total industrial production as well as in the textile and clothing industry (*Figure 3*); but while in industrial production the trend increased from 2010 by 29.5%, in the textile and clothing industry it was only by 28.8%, and the difference in the absolute value of average incomes in 2017 was up to 331 EUR.

The development of employment in industrial production compared to the employment measure in the textile and clothing sectors is given by *Figure 4*. While in industrial production the index grew, stagnating in the last two years, in the sector analysed, it decreased from 2010.

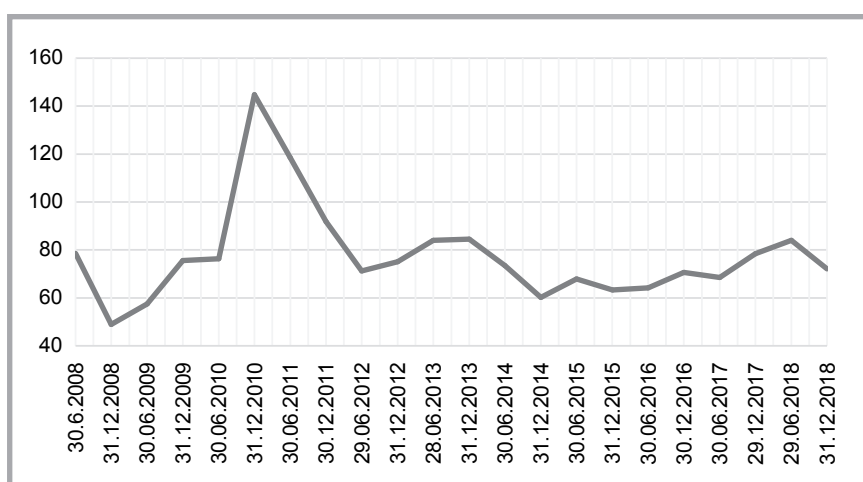


Figure 5. Development of cotton prices [36].

The development of sales in the areas of textiles, clothes, leather and leather products, reflecting demand in the sectors' products, follow the sales of industrial production. But in these areas a decrease was still recorded from the end 2007. And during the next years, development stagnated. Only in 2011 was slow growth recorded. The development of domestic sales has a different trend, where at the end of 2007 a rapid decrease was recorded. As for sales from small trade, development increased only in 2007 and 2008. In all other years a negative situation was recorded. This situation was caused by various factors, one of which was high unemployment, and people went to buy abroad, mainly to Austria, Hungary, Poland or the Czech Republic, where they could find a cheaper and mainly more modern assortment.

Table 3 illustrates values of indicators for textiles, apparel, leather and related products compared to those for industrial manufacturing [35].

The development of indicators in the sector analysed is given by the raw materi-

al most used in the textile and clothing industry, which is cotton, followed by polyester, viscose, nylon, etc. All materials mentioned became more expensive in the last period. *Figure 5* illustrates the development of cotton from 2015 to 2018 in US\$/libra. At the beginning of the period analysed, the price of cotton recorded during the period analysed reached maximal values. The reasons for such price growth had been flooding in Pakistan, strong rains in China, and India stopped the export of cotton due to its shortage. Also bourse speculation resulted in a price increase. Polyester and viscose increased in price as well, similarly by approximately 30%.

As for the results of development in the sector in terms of prediction indexes, *Table 4* provides results of index bonity calculation for the companies from the textile and clothing industry analysed.

The companies analysed can be divided into the following groups according to the bonity index:

- Worsening bonity index – TIMM Slovakia, s.r.o.

Table 4. Bonity Index. *Source: Authors' own calculation based on financial reports of companies.*

Year/company	2015	2016	2017
OZETA NEO, a.s.	-2.584	-2.382	0.049
ACCORD, a.s.	0.563	0.522	0.599
MAKYTA, a.s.	-2.024	1.708	0.993
TIMM Slovakia, s.r.o.	0.316	-0.135	-0.178
GLEISTEIN Slovakia, s.r.o.	0.595	0.660	0.876
Verbal evaluation			
OZETA NEO, a.s.	Extreme bad situation	Extreme bad situation	Certain problems
ACCORD, a.s.	Certain problems	Certain problems	Certain problems
MAKYTA, a.s.	Extreme bad situation	Good situation	Certain problems
TIMM Slovakia, s.r.o.	Certain problems	Bad situation	Bad situation
GLEISTEIN Slovakia, s.r.o.	Certain problems	Certain problems	Certain problems

Table 5. Altman Z-score. *Source: Authors' own calculation based on financial reports of the companies.*

Year/company	2015	2016	2017
OZETA NEO, a.s.	0.610	1.085	6.546
ACCORD, a.s.	1.566	2.184	2.070
MAKYTA, a.s.	1.423	1.768	2.186
TIMM Slovakia, s.r.o.	1.406	1.778	1.421
GLEISTEIN Slovakia, s.r.o.	3.307	3.798	3.516
Verbal evaluation			
OZETA NEO, a.s.	Threat of bankruptcy	Threat of bankruptcy	Financial health
ACCORD, a.s.	Uncertain future	Uncertain future	Uncertain future
MAKYTA, a.s.	Uncertain future	Uncertain future	Uncertain future
TIMM Slovakia, s.r.o.	Uncertain future	Uncertain future	Uncertain future
GLEISTEIN Slovakia, s.r.o.	Financial health	Financial health	Financial health

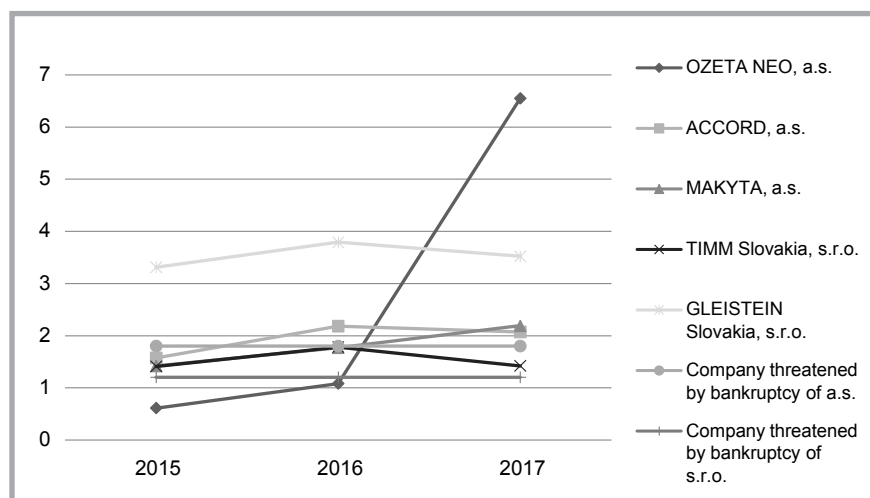


Figure 6. Development of Altman Z-score. *Source: Authors' own calculation based on financial reports of the companies.*

- Improving and stagnating index – GLEISTEIN Slovakia, s.r.o.; ACCORD, a.s.
- Unstable index development – OZETA NEO, a.s.; MAKYTA, a.s.

Generally speaking, the index confirms that the textile and clothing companies have either a bad situation or they are fighting with some problems.

The Altman Z-score is based on rate financial indexes, used mainly for analysis of the financial situation in the medium term, uncovering of the possible threat of bankruptcy. In this way it presents an indicator for rapid reaction against bankruptcy. **Table 5** provides results of the index for the companies analysed. The biggest jump was recorded in OZETA NEO, a.s., where between 2015 and 2016 the company overcame the zone of bank-

ruptcy and entered into that of a financially healthy company. This was caused mainly by decreasing the debt value in the periods analysed. From 2014, debts decreased from 13.446.660 EUR to 1.443.047 EUR in 2017, while equity remained the same.

Division into groups is as follows:

- Financially healthy company – GLEISTEIN Slovakia, s.r.o.
- Improving results – OZETA NEO, a.s.
- Companies with uncertain future situation – ACCORD, a.s.; MAKYTA, a.s.; TIMM Slovakia, s.r.o.

■ Discussions

According to the findings, we have given an outline of development in the sector. In the case of optimal development, all the companies analysed could survive and achieve better results. For achievement of optimistic development, it is necessary to use the strengths and opportunities of the companies offered by the surroundings. There is a need to continue the trend of decreasing the indebtedness of the companies, as in the case of OZETA and NEO, which are able, in spite of negative economic results, to pay all credit. Also other companies decreased indebtedness in the period. It is also necessary to continue with exports abroad, which is important not only from the point of view of the biggest markets, but also from that of tax savings, since exported products to the EU have no value added tax (principle of taxation in local consumption). Companies purchase production stocks mostly outside the EU, while value added tax in EU increased and companies can decrease costs through VAT. Moreover, there is a necessity to find new markets for the companies analysed, which means using a marketing strategy for market expansion. Clothing companies should expand by finding new markets according to the purchasing power of inhabitants, since mainly in countries with higher purchasing power is there the possibility to sell more luxurious products. Textile companies should be orientated towards countries with a developed shipbuilding industry, since they produce mostly ropes.

Generally, it is better if companies find new markets, mostly in the Eurozone, with the aim of limiting exchange rate differences. Companies could use tools of the pro-export policy of the Ministry of Economy SR. On entering new markets, clothing companies should use the

positives of products, which means the quality and production of luxury products in small series or to order. To produce in a big series, companies do not have capacity, and are not able to compete with Asian countries. Clothing companies could cooperate with art schools, not only to have cheap and original designs but also to influence the education process. Further advantages in Slovakia are still not too high wages, which can increase the cost of production.

In the case of negative development, only the strongest companies could survive. According to the analysis, we found better results on average for ACCORD, a.s. in the clothing industry and GLEISTEIN Slovakia, s.r.o. in textile industry. Generally, the reasons for bankruptcy are not removing weaknesses and not avoiding threats from the surroundings. In the industry the biggest threats are the following: not adapting to the market situation, not improving the management system, increased wages, and a high turnover of employees towards other industries (which could cause a decrease in unemployment). An important factor is also increased commodities prices when initiating production, either directly or as a cost in goods. In the case of the present trend in commodity development, which is increasing, the companies would not be able to produce at the present cost level. Hence, products would be more expensive, and thus wh.

Regarding stagnation in the development of companies, in the first period the situation may be good, but in the following it could worsen. They would not be able to make any steps to improve the situation. In this case, we can generally say that companies are not using their strengths and they are not trying to limit their weaknesses. Moreover, they do not use opportunities offered by the surroundings and they do not avoid threats.

The problems of the companies presented herein according to the results achieved are caused mainly by the management system. Furthermore, according to the financial analysis and the bonity and bankruptcy models, the whole sector recorded similarly poor or similarly good results. It is also clear from the Altman Z-Score that ACCORD, a.s., TIMM Slovakia, s.r.o. and GLEISTEIN Slovakia, s.r.o. had a negative trend in the period of crisis. But on the other hand OZETA NEO, a.s. and MAKYTA, a.s. had a pos-

itive trend in this period at the same market conditions.

The textile and clothing industry should adopt correct and qualitative management. Most probable optimistic development is in ACCORD, a.s., GLEISTEIN Slovakia, s.r.o., OZETA NEO, a.s., and MAKYTA, and a.s. TIMM Slovakia do not have any discernible development. Hence, the companies should change the system of management.

■ Conclusions

The textile and clothing industry can be considered as unprofitable sector of industry. To achieve success in the sector can be done in no simple way. The industry is very much dependent on the labour force and development of commodity prices. Also, the industry cannot easily compete with such giants as China. There are a number of brands from Western Europe which are produced in China with aim of decreasing costs, increasing profits and competing with other products due to the price. These are the primary reasons that in Europe during transition to other sectors with higher value added, the position of the textile and clothing industry has decreased, and is still decreasing. Presently, it is not possible to produce large volumes of textile and clothing products in Europe. Such trends of decreasing of the number of textiles and clothing companies has also been recorded in Slovakia, which is confirmed by the trend in employment in the sector, which during the last ten years has decreased by 50%. But opportunities for the industry still exist. However, it is most important to change the management system, orientate production towards smaller series with higher quality, improve sales, stop producing stock, improve the punctuality of product deliveries, use the Euro to decrease exchange rate risks, etc.

In the increasingly strong competitive environment, the Slovakian textile, clothing and leather industry should multiply efforts to maintain its position on the international markets, to resist Asian expansion, to use new possibilities fully and to meet new market demands. Since Slovakian textile and clothing industry recorded low work productivity in comparison with other countries, the use of reserves could present rather important possibility of work productivity increase. Also, Slovakian producers should improve by full confection and orienta-

tion towards modern and luxurious products that decrease the rate of wages in relation to sales. The present competitive advantage of a cheap labour force is only temporary since also the wages of employees will rise to be in line with EU countries, which could lead to the transition of foreign investor production towards Eastern Europe and Asia.

This contribution is limited to the area of the textile and clothing industry in Slovakia from the point of view of selected financial indicators. The analysis and prediction were conducted only for representative firms of the sector only in years where data were available. There is still space to conduct further similar research to compare with the situation in other European countries and with other sectors.



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