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# Introduction

The current situation of the textile and clothing industry in the European Union is still quite difficult; for the most part it is the result of the expansive development of the Asian industry as well as the more the liberal policy of the European Union and WTO, which has decreased the protection of the internal market. A consequence of this was the expiry of the MFA in 2005 (the Multi-Fibre Agreement regulated trade in the textile and clothing industry for over 30 years, primarily limiting excessive exports to Canada, the USA and the EU from emerging countries). Further consequences of this

# Innovative Activity in the Small Business Sector of the Textile and Clothing Industry

#### Abstract

The current situation of the textile and clothing industry in the European Union is still quite difficult. For the most part, it is the result of the expansive development of the Asian industry. The European Union undertakes actions to lead to modernization of the SME sector in the field of production and the implementation of new technologies. In spite of large pressure on the side of European Commission ( it deals with the improvement of innovation position all enterprises in textile industries), above the half of the enterprises are not interested in financing and developing their innovativeness in Poland. Our country is at the "grey" end on the background of other European countries. This also relates to the R+D activity which is led by only 13% SME in the textile industry (for the comparison: Germany and Italian - 70%). There are many existing barriers and "external" threats, which are the direct reason of the bad situation in Poland (confirmed by own research). It can be resulted in deterioration of the conditions of the functioning this industry in the international arena and decreasing of its competitiveness. In the case of Poland (at the current level of innovative development), it spells a decrease in the number of the few companies left. Therefore, it nnecessary seems now, the creation substantial instruments supporting the innovative development of this industry in the several next years.

**Key words:** *textile and clothing industry, innovativeness of SME sector, competitiveness of SME sector, support of SME sector.* 

policy for the European textile and clothing market are difficult to predict. However, unfortunately, more and more market analysts assume that China and India are going to dominate the world trade of textiles and clothing.

Appreciating the gravity of the situation, in 2003 the European Committee took strong measures to develop guidelines for restructuring and modernising it. The main priorities for its development were presented in the document "The future of the textiles and clothing sector in the enlarged European Union", which led to creating a High Level Group in 2004, whose objective was, among others, to prepare projects for the development of this sector for the coming years [4]. Supported with financial resources, determined steps were taken to stimulate initiatives which should facilitate the adjustment process of the industry to the new challenges of the modern economic reality. The main objective of the changes was to improve the competitiveness of regions especially dependent on this sector through supporting them in research, innovation, professional training and the development of small businesses, as well as through the creation of the Pan-Euro-Mediterranean Free Trade Zone [2].

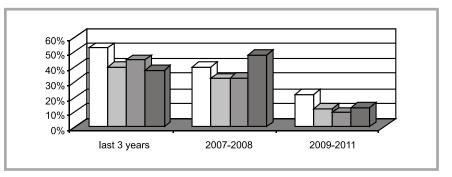
Up until the end of 2004, changes in this sector had been quite energetic and drastic. They included not only modernisation in manufacturing and the application of new technologies, but they were largely connected with the introduction of new forms of business organisation together with the reduction of production and marketing costs, personnel training or seeking more effective sources of raw materials. Unfortunately, these changes resulted in large employment reduction. According to EU statistics, in the years 1999 - 2004 approximately 25% of employees lost their jobs in this sector. The largest drop was noted in Germany (26%), Poland (28%), and Great Britain (51%). The restructuring process in some countries caused employment in the textile in clothing industry to be marginal, in particular in countries such as Sweden (1.2%), Luxembourg (2.5%), the Netherlands and Finland (2.6%), Austria (4.1%) and France (4.5%). The largest employment in this industry can still be found in Italy (11.3%). Romania (24%), Poland (10.4%), and Bulgaria (29%) [3]. Currently, in the EU-27 countries the average employment level is 7.9% of the total employment in the industrial sector of the member countries, which shows its continuing considerable importance.

According to the European Committee, the further development of the textile and clothing industry will largely depend on maintaining constant innovation progress, which is confirmed by many experts dealing with these issues. According to the British, efforts should be directed mostly towards the small business sector. Actions should include the creation of "knowledge banks" which would make it possible to access the most recent innovative solutions, as well as the formation

of expert platforms which would be used for consulting on innovative technology implementation. Furthermore, the British believe that the development of small business innovation should be carried out in clusters established by similar companies from different industrial sectors; this would allow for a better use of patents produced in the textile sector. A similar opinion is expressed by the Italians, who believe that the driving force of this sector can be found in small business organisations, but only if they engage in innovative work in high technology fields. This development should be promoted by the creation of networks of connections between various local units, such as local authorities, companies in the textile and clothing industry, and local partners (research units). The target of this cooperation should be to form a local partnership aimed at improving the competitiveness of small companies, and as a result - that of every region in which the textile and clothing industry plays a major role, not only locally, but also on a European or global scale. The key to further expansion of this industry seems to be the connection between innovation (as a factor leading to an increase in the industry's efficiency and productivity, resulting in lower costs and prices) and the economic significance of small business in the European Union.

# Innovation as a source of competitive advantage - chances and barriers

According to the most recent research carried out in 2006 on a group of 1500 textile and clothing companies in four countries (Italy, Germany, Poland and Belgium) by the NATFINTEX Project, one may conclude that on average 85% of entities in this industry invest in innovations. This gives evidence of a large awareness of the importance of this factor among the owners of business entities in this industry. Textile companies are the most active in this respect (as many as 97%), while clothing companies are slightly less so (79% declared such activities). Innovation has the largest value for entrepreneurs in Germany (93.9%) and Italy (90.3%), whereas for those in Poland it has the smallest; only 50% of the entities surveyed in our country declared such activities, which means that exactly half of them conduct no innovation activities that would help to increase their competitiveness in European and global



*Figure 1.* Scope of innovations planned and introduced in textile and clothing companies; *Source:* Opportunities and Challenges for Financing Innovation in the European Textile and Clothing industry;  $\Box$  - product innovations,  $\Box$  - process innovations,  $\Box$  - organizational innovations,  $\Box$  - marketing innovations.

markets. In the near future this means a complete elimination of the Polish industry, not only on a global and regional scale, but – what is most important – on a national scale.

Another important issue is analysis of the types of innovative activities carried out and the tendency to continue them in the nearest future. It shows that in the last 3 years, most companies have "appreciated" product innovations (53%) and organisational innovations (45%), while process innovations have been introduced on a slightly smaller scale (around 40% - *Figure 1*).

The above data show that by the end of 2008 the overall level of innovative activities had become significantly lower, and at the same time the involvement of companies in marketing innovations had grown. The causes of this situation can be attributed to several factors: Firstly, the textile and clothing industry has been saturated with innovations and entrepreneurs who want to use their results to increase gains and expand their market. Secondly, the fact that most entities did not declare any intention to expand some of their innovative activities may be regarded as caution resulting from the uncertainty of access to external sources of finance in the future. If we take into consideration that the majority of the companies surveyed belonged to the small business sector (around 80%) and that the tendency decreases in time (only 21% declared they would conduct this kind of activity by the year 2011), then the hypothesis of financial barriers seems the most reasonable. In the case of small business, the need for substantial expenditure in the face of an uncertain future is one of the reasons why the level of investment in this industry may be severely impaired in the nearest future. As this research shows, the intention of expanding innovative actions in the period to the year 2011 was declared only by large companies (employing over 250 workers), the small ones having a conservative stance focused on survival. This situation is not conducive to improvement in the SME sector and, from a macroeconomic point of view, will result in deteriorating the situation of these companies in the international arena, decreasing their competitiveness. In the case of Poland (at the current level of innovative development), it will spell a decrease in the number of the few companies left.

Furthermore, the disproportion in the economic potential of Polish textile and clothing companies in comparison with Western European concerns suggests that one should view further possibilities fot the development and expansion of Polish firms in the EU market with caution. In effect, firms are forced to seek different means of external financing, such as issuing their own shares/bonds or using the offer of EU venture-capital funds, which means investing in riskier undertakings. Another way of seeking possibilities for further development and market expansion, which is more and more often chosen by SMEs today, is various forms of cooperation in interorganisational networks, mergers and setting up joint-ventures with foreign partners.

Referring to the results of our own research in the years 2005-2007 in the textile and clothing industry<sup>1</sup>), i the abovementioned worries can be confirmed. Apart from the lack of capital, Polish firms indicate that the main problems and "outside" threats to the textile and clothing industry are: 1) increasingly strong competition - Western and Asian; 2) lack of pro-development governmental policy supporting the industry; 3) lack of legislation protecting Polish textile and clothing companies and the internal market; 4) economic and structural changes connected with the accession of Poland to the EU and the necessity of adaptating to new requirements and standards (*Figure 2*).

Interpretation of the above results of our own research study is as follows:

Competition from Asia. The greatest threat for the firms studied is primarily imports of cheap textile and clothing articles from China. The more sceptical businessmen expect an early end of the European textile and clothing industry, which will become dominated by Asian countries. Nowadays, the share of imports of textiles and clothing from China to the EU amounts to 70%. The threat from Asian firms also lies in acquiring Western know-how as they begin to introduce more technologically advanced high quality articles on the market. Besides this, it is predicted that in the near future Asian firms will often decide on direct investments in the Middle East in the cheap and medium-priced clothing segment.

Western Competition. Strong in capital and technology, western competitors will penetrate more and more intensively into the Polish textile and clothing market.

**Gray market**. Low capital barriers of entry to the "cheap" segment contribute to the ruination of the market and of the clothing distribution sector. Unfortunately, textiles and clothing from China, Thailand, Pakistan and Russia sold in bazaars in small cities and villages are still creating a gray market.

**Illegal importation of textiles and clothing**. Illegal imports still take place, and while it is difficult to estimate their scale, respondents claim this is one of the main reasons for the degradation of the Polish textile and clothing industry.

Economic and structural changes connected with the accession of Poland to the EU. In the opinion of businessmen, these changes entail, unfortunately, higher costs of adaptation to the legal, economic and technological requirements of the EU market. Labour, media and protection costs of the environment are bound to grow the most.

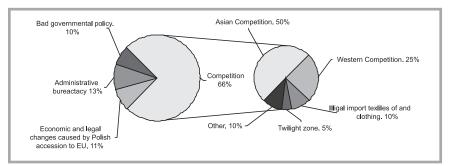
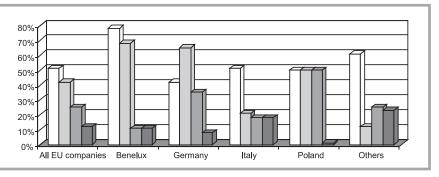


Figure 2. Opinions of managers and businessmen on the subject of the main problems and threats in the textile and clothing industry; **Source**: own study.



**Figure 3.** Sources of research and development activities in EU countries; **Source**: own work on the basis of: Opportunities and Challenges for Financing Innovation in the European Textile and Clothing Industry, NetFinTex, own research, 2006;  $\Box$  - own R&D activity,  $\Box$  - cooperation with external organisations,  $\Box$  - support by associations, business support institutions,  $\Box$  - outsourcing.

**Liberal policy.** In this case, the low 9% import rate to the EU are unprofitable. In addition, the high 30% export rate to emerging countries and the annulment of quantitative quotas by the WTO have enabled greater imports of textiles and clothing from China

**Bad governmental policy**. The respondents emphasised that there was a lack of a suitable governmental policy which would limit bureaucracy, as well as diminish the general level of taxation and the amount of legal regulation relating to economic activities.

Furthermore, there are no system solutions for financing innovations in the industry and improving competitiveness.

Another problem is the lack of qualified personnel. Fewer and fewer persons want to be educated in textile and clothing sciences, and there are few qualified teachers who would teach about the modern technical park using new methods.

Therefore, the creation of instruments to help in the development of textile and clothing companies as well as comprehensive solutions for the sector (including better access to resources) in the nearest future seems to be a priority. Positive examples of this are the emerging producer associations or clusters promoting – directly or indirectly – the development of innovative activities in the small business sector of the textile and clothing industry.

### Creation of innovative activities through the development of R&D

Surveys show that over 70% of German and Italian companies conduct research and development (R&D) activities. Significantly below this level are the Benelux countries (around 50%) and Poland, where the factor is less than 13%. This is reflected in the importance rating of the factor. About 50% of companies believe that it is important from the point of view of competitiveness. A large emphasis on the R&D sector is found primarily in German entities (in contrast to Poland); their R&D activity focuses mainly on their own research facilities (institutes) and the employment of a group of specialists researching new solutions. Furthermore, it is important for them to cooperate with external research institutions (which is done by over 40% of companies), as it is believed that they constitute a vital

source of information about new innovative solutions (*Figure 3*). The largest coefficient of use of both R&D methods was revealed by Benelux and German companies. Business support organisations (business chambers and associations) are involved in R&D development support on a decidedly smaller scale, providing support services. Outsourcing also has a relatively low impact on research and development activities conducted in EU companies.

The development of research activity based on support and assistance from external institutes and research facilities has been found to occur in about 50% of total business entities. However, as the authors have established, surveys into the textile and clothing industry show the significantly lower level of under 30%. Of course, there are differences between countries - this kind of R&D is most popular in the Benelux countries and the least popular in Italy. The reasons for such stark differences between the forms of innovative activities are, among others, the structure of the population surveyed. Clothing companies are, for the most part, small businesses, while typical textile enterprises are mostly small and mediumsized companies. The latter are more inclined to cooperate with external business support organisations than micro companies. This is due to their higher flexibility resulting from their relatively larger financial assets and organisational possibilities. This hypothesis is confirmed by the companies observed: the vast majority of micro companies are located in Poland, Italy and Germany, whereas small and medium-sized companies are mostly based in Benelux. This region is also the most advanced in terms of in-house R&D innovation activity in the textile and clothing industry. As was stated earlier, the weak support for R&D activity development from producer associations (business chambers, legal institutions) in Europe is definitely the "weak link" of the industry. It is very interesting, though, that Poland is not at the tail end in this respect: about 50% of companies (above the EU average) have declared that they cooperate with external institutions in R&D activities, which is definitely a positive signal for local textile industry, yet this kind of support must constantly be deepened and strengthened. From the EU point of view, the insufficient level of involvement of R&D supporting organisations (about 22%) requires the creation of conditions and the encouragement of entrepreneurs to increase their efforts for the development of broadly defined external institutions. Mutual experience exchange becomes very important in the face of huge competition from Asian countries. Such a need is also recognised by the European Committee, which was manifest in the creation of a High Level Group in 2004, composed of representatives of the industry under study from EU member countries. One of the recommendations proposed by this group of "wise men" was the establishment of the European Technological Platform, which would support innovations in the industry and improve the supply network, according to the strategic priority of the Information Society Technologies Programme (information and communication technologies for networking companies). The creation of such cooperation centres, both on a regional and European scale, should bring the results expected in the following years. It is a fact that the support policy for the textile and clothing industry is becoming an element of regional policies at a European level, which seems completely justified due to the external hazards.

# Summary

The European textile and clothing industry is currently at a stage of profound internal changes. After years of recession, starting from 2005 the industry began to grow gradually, which was characterised by increasing employment, production and sales. Even though the growth of each factor was not large (0 - 3%) [1], according to the Committee, it was a signal of improvement and growth in an industry which was going through an economic crisis. It is not, of course, a complete success, because the industry's development calls for further actions assisting the improvement of its competitiveness in the international (global) arena. Efforts must be directed towards the development of innovative solutions (technical, technological, organisational, process, etc.), the establishment of an appropriate mechanism ensuring the industry's development (mostly financial), which would be fully accepted by the European Union, and the creation of networks of enterprises and business support organisations forming larger producer groups with a certain critical mass and an appropriately designed development strategy capable of facing competition from outside Europe. Apart from that, according to the European Committee, the possibility of strong improvement of the situation of the textile and clothing industry should be sought in the creation of regional technological platforms and the development of Strategic Research Agencies, whose main objectives would be broadly defined innovative activities encompassing the supply and implementation of new solutions for this industry, together with massive commercialisation (mostly in the clothing industry), which would allow for switching from mass production to "mass" attention to individual customer needs. All the above-mentioned elements provide a kind of remedy for the overall bad situation in the European textile industry. Poland's involvement as an active member of this process should also result in the "reactivation" of our local industry (assuming the good will of our neighbours). After all, we have a lot of experience in this industry, and even if we do not have a substantial innovation potential, sizeable EU assistance (such as structural funding) should contribute to the reduction in the gap between Poland and western countries. Innovation, as it turns out, is the only "remedy" to improve the competitiveness of all the Polish (European) economy at large, and not only the textile and clothing industry.

# Editorial notes

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