

UNIVERSITY OF LJUBLJANA
FACULTY OF ECONOMICS

MASTER'S THESIS

**THE PERSPECTIVES OF THE TEXTILE INDUSTRY
IN THE REPUBLIC OF MACEDONIA**

Ljubljana, July 2016

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INTRODUCTION

The textile industry is one of the most important industries in Macedonia in building of the GDP. The textile export is approximately one fifth of the total Macedonian annual export. Because of the great importance for the overall economic performance and external position of the country, this industry is particular interesting to explore and research. The textile industry has been one of the main industrial branches beside the agriculture in the Republic of Macedonia since the World War II. It has helped the country develop progress and create jobs for many decades.

Currently, the world is facing one of the greatest world crises since the Great Depression. Global economic conditions have a direct impact on the Macedonian economy as well as influencing the export performances and the export prices. Despite the crisis, the country managed to improve its external position by improving its export performance. If we keep in mind that Macedonia is an export oriented country, we can realize that the foreign demand is very important for the country. Textile industry contributed to this among others. It is one of the most important industry sectors by the number of the companies and people employed in this sector. The textile industry represents 18% of the total exports in average. Also, it comprises around 3% of the Macedonian GDP. According to the latest structural data available, in 2011 there were about 800 companies employing more than 40.000 people, which was 8,6% of the total number of employees in Macedonia in 2011.

What actually gave me the motivation to write this thesis is the fact that the textile industry has been in a steady decline since the Macedonian independence but the possibilities still exist and need to be explored and exploited? The Macedonian land, especially in the central and eastern part along the river of Vardar, is fertile and used to be planted with cotton that was used for the textile industry. Now, only few hectares of the land are planted with cotton in efforts to revive the tradition.

The biggest part of what is left of the once huge textile factories now is situated mostly in the eastern part of the country. The reason for this is probably the fact that most of the population in the eastern part are very poor and seek their existence in the agriculture and textile.

The purpose of this master thesis is to explore the development of the textile industry in the Republic of Macedonia. The theses will focus on the contribution of the industry to the economy, industry's development and special focus will be given to 3 cases of companies (Alkaloid Berovo, Zona Triko Vinica & EAM Shtip), which are at the moment among the most important ones in the sector. The purpose is to thoroughly evaluate the strengths and weaknesses of the industry and the 3 core companies. Additionally, due to the nature of the industry we would like to examine the possibility of reaching higher export performances

by means of: better cost management, employment increase, better understanding of the trade regulation, its potential government support for encouraging the export, better use of the technology as well as the know-how, human resource management improvement, and supply chain management improvement.

The major research questions that this master thesis will strive to answer are:

- How can the country better use its own resources in the textile industry?
- What can be implemented to increase the production by lowering the costs?
- How can the factories develop by implementing better technology and know-how processes?

In this master thesis, qualitative and quantitative research methodology will be implemented. It will rely mostly on professional literature from domestic and foreign authors, articles with international recognition related to this subject as well as financial statements from the relevant textile industry subjects. The literature will be the base for description, analysis and evaluation.

The data sources will be: libraries (domestic and foreign), e-libraries (EBSCO, JSTOR, Oxford Journal Online, Springer Ling, Wiley Online Library, etc) as well as the official web sites of highly recognized institutions (European Commission, Euro Stat, World Bank and the State Statistical Office of Macedonia)

This quantitative analysis will be based on the primary data and projections provided by the textile factories as well as statistical data collected from relevant sources, such as the State Statistical Office and National Bank of the Republic of Macedonia. For getting a clearer picture of the current situation of the textile industry in the country, a comparative analysis will be included.

In addition, primary data collection will be performed by conducting interviews with the management of three textile companies. The interviews will primarily help conduct the SWOT analysis.

The goal of this master thesis is to give a clearer picture in the current situation of the textile industry in the Republic of Macedonia and to explore the possibilities that can help improve it. This thesis will have a deeper analysis of the textile industry in Macedonia, its export performances as well as the import dependence of raw materials.

The thesis will be divided into three bigger chapters.

The First chapter will deal with trends and the structural characteristics of the Macedonian foreign trade. We will have a look at the Macedonian economy since the

independence of the country in 1991 to the present. We will analyze the general trends in Macedonian trade and the trade openness. Here we will use data from the Macedonian State Statistical Office as well as the National Bank of the Republic of Macedonia. Further in the chapter, we will explore the Macedonian export as well as the Macedonian import with a focus on the country's biggest trade partners and sectors division.

The Second chapter, which will be divided into five parts, will analyze the textile industry in the Republic of Macedonia. In the first part the focus will be on the participation of the textile industry in the GDP creation. The following part will be a quick overview of the textile factories in the Republic of Macedonia. Part three is be about ecological and the environmental aspects followed by part four, which will concentrate on agreements on free trade and free economic zones. And in the last part in this chapter the potential strengths and weaknesses of the textile industry in Macedonia will be explored.

In **Chapter three** we will create a deeper analysis of the three biggest textile factories in the country followed by a SWOT analysis for each of them separately. Here, we will use the financial sheets from the three factories as well as notes from the interviews with the leading managers and production workers. And at the end of the chapter we will sublime the characteristics of the factories and try to give suggestions for their improvement.

Finally, we will look into the opportunities and the threats for the textile industry development in Macedonia. We will analyze the far east threats and the far east competition as well as the need for technology modernization and know how implementation in the production processes. The potential gains and threats from the potential EU membership will be observed and explained.

1 ECONOMIC DEVELOPMENT IN MACEDONIA

The Republic of Macedonia is a country situated in the center of the Balkan Peninsula and is a connection between the far Eastern countries with the European countries. The country is surrounded with 5 other countries: Serbia and Kosovo on the North, Albania on the West, Bulgaria on its East and Greece on the South.

Macedonia has a population of 2,058,539 (2011 estimate), which ranks the country among the smallest European countries. The capitol city is Skopje with a population of 506,926 (official census of 2002) but with some other calculation it is estimated that the number is closer to 668,000 people, which is almost one third of the total Macedonian population (World Bank database, 2016).

1.1 Basic Macroeconomic Indicators

Macedonia got its independence in 1991. The Macedonian Economy went down during the 90s because of many different factors: the collapse of the joint market; the war in Bosnia 1992-1995, the Greek embargo 1994-1995, etc.

Table 1. Gross Domestic Product, 1991-2014

Series Name	GDP growth (annual %)	GDP per capita (constant 2005 \$)	GDP per capita, PPP (current international \$)	GDP, PPP (current international \$)
1991	-6.17	2936.79	5178.11	10296453541.75
1992	-6.57	2759.84	4977.04	9839774411.69
1993	-7.47	2569.44	4743.92	9321442318.74
1994	-1.76	2535.57	4781.01	9352440830.58
1995	-1.11	2510.67	4832.79	9441073847.83
1996	1.19	2534.25	4967.24	9727354779.61
1997	1.44	2556.33	5096.27	10036308244.08
1998	3.38	2622.86	5316.34	10548904448.95
1999	4.34	2715.97	5561.17	11118793451.20
2000	4.55	2821.61	6244.56	12564370091.63
2001	-3.07	2722.17	6285.02	12705711796.68
2002	1.49	2753.14	6378.59	12940285865.89
2003	2.22	2807.03	6683.54	13594137270.67
2004	4.67	2931.80	7217.97	14713420617.84
2005	4.72	3063.60	8210.64	16773465781.18
2006	5.14	3213.99	9160.82	18755221411.81
2007	6.47	3415.22	9672.58	19842582820.60
2008	5.47	3595.36	10791.20	22178785152.80
2009	-0.36	3576.11	11308.99	23284312111.08
2010	3.36	3689.91	11670.29	24069302031.80
2011	2.34	3769.95	11641.25	24049508705.17
2012	-0.46	3746.62	11874.10	24570713132.48
2013	2.67	3840.42	12468.36	25841206939.55
2014	3.77	3979.19	13142.42	27278745467.25

Source: World Bank development indicators database, *Gross domestic product, 1991-2014*, 2016.

The economy started to revive after these turbulences but was again interrupted by the war for Kosovo in 1999 and the Macedonian civil war in 2001. After the instability period, the

Macedonian economy started to soar up and stabilize regardless of some unsolved issues from the old transition period

The biggest problem in the economy still remains the enormous corruption and the big presence of the monopolies. According to the research of Garvanlieva et al. (2012), the relative size of the shadow (grey) economy in Macedonia has decreased over the last decade (2000-2010) from 34% of GDP in 2000 to 24% of GDP in 2010.

Still it is a very high percentage. Regarding the foreign debt, Macedonia is among the countries with the lowest indebtedness, although it has been steadily increasing during these last 5 years. The infrastructure is still far from developed, there have been some investments in the road and railway infrastructure in the last few years, but it still needs improvement. Macedonia has also been a candidate country for the EU since 2005. But the country has not yet started the accession negotiations.

From Table 1, we can see that the current GDP converted to international dollars using purchasing power parity rates shows increasing. The GDP annual growth rate has been the highest during 2005 and 2006 reaching above 5%. The biggest drop is in 2001 due to the Civil War in the country.

The GDP showed some positive tendencies in 2014, and it is expected to grow further on. Regarding the GDP per capita, the country is showing some progress but the progress is slow. In 2014, the average GDP per capita expressed in constant prices, was 3979 US dollars.

1.2 The Early Beginnings and Developments of the Macedonian Textile

The Macedonian textile sector as it is today went through many different historical and economic phases. During the late 19th century, Macedonia was a country with lots of small towns and developed trade network. The most developed branch was agriculture and people satisfied their needs through their own production of food. The beginning of the textile industry in Macedonia emerged during the Ottoman occupation on the country and the need for army clothing and people's needs for fabrics.

In the very beginning, the textile started to develop in the region of Bitola and the first products were actually woolen products. But the biggest factory in the village of Dihovo was closed in 1915 when the Bulgarian army, in control of Macedonia at that time, took control over it and shipped the machinery park to Sliven and Gaborovo in Bulgaria. Also, many other smaller factories producing woolen and cotton textile products were destroyed during the World War I (Occasional paper N.8, 2015).

The late introduction of the textile industry in Macedonia was mainly due to the lack of capital and skilled workers.

1.3 Macedonian Textile Industry During SFR Yugoslavia

During the times when Macedonia was a part of SFR Yugoslavia, the government of SFRY decided to invest in the textile industry in Macedonia. According to a certain five year investment plan, the following investments were made: production of electricity, metallurgy, chemist industry, tobacco industry, leather industry, food processing and textile industry. This investment highly contributed to the development of the textile industry as well as the employment rate. In 1947 the textile industry in Macedonia employed just 393 people, which was 5.3% of the total industry, a number that rose to 9,850 people or 32% of the total industry employment after the textile capacities in Tetovo and Shtip were built (Occasional paper N.8, 2015).

1.4 The Role of the Intermediaries

The sale intermediaries played a very important part in the textile and clothing industry during the SFR Yugoslav period. During that time in Macedonia there were two such intermediaries: Intex and Makotex. Their job was importing raw materials and exporting finished goods. Intex during that time was a representative of a large conglomerate of 25 factories among which the biggest were "Makedonka" and "Astibo". In fact, the government urged the smaller producers to join "Intex". The job of "Intex" among else was to promote Macedonian companies at international fairs and provide its members with information about new machinery and technologies. In 1987 there were about 29,000 people employed in "Intex" (Occasional paper N.8). But when the transition came and the factories started to shut down, the number of employees started to decline and eventually "Intex" broke down to many smaller companies.

Today, what is left of "Intex" are 15 people employed in those smaller companies (Occasional paper N.8).

1.5 Macedonia in the Early Transition

At the beginning of the transition process the accent in Macedonia, just like in all transitioning countries, was put on loosening up the prices, balancing the budgets in order to stabilize the macro economy, and privatization of state-owned enterprises (Roland, 2000).

Transitioning countries took serious structural reforms: launching privatization and dismantling the former state monopolies; setting up a market environment through reform of the banking and financial sector, coupled with tax reform; developing the social safety

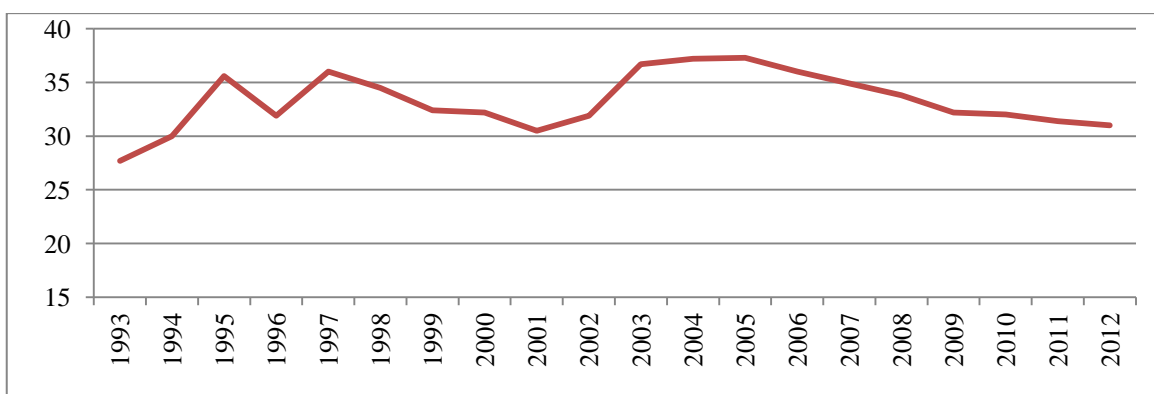
net to cushion the impact of the austerity measures and the structural transformation; initiating an industrial policy, in order to identify the “winners” and “losers” within industrial activity (restructuring, defining activities in need of support, launching appropriate policies such as subsidies, protective tariffs, environmental issues, etc.) (European Commission, 2011).

In Macedonia there was a prevailing opinion that the government should not be involved in any restructuring program, so new owners, having completed the privatization process in their companies, were to take on all the necessary reforms at micro level. The only program implemented by the government was the so-called restructuring of the fourteen biggest loss-making companies, under close and rigid monitoring by the World Bank (Shukarov, 2012).

1.6 Macedonia After 2002

The GDP per capita is currently at US 3,616, which is still very far below the European average. However the figure shows that the country is in a steady economic growth. One of the main sources of growth is the liberation of the banking segment and the introduction of many smaller banks. Also, there have been few acquisitions from some of the world biggest banks like Steiermaerkische Sparkasse, Societe Generale Group, NLB Slovenia, etc. This has brought new banking instruments and many new credit lines that have injected fresh capital into the industrial sector. Since the transition process is almost over and the country is approaching the EU, there have been many foreign direct investments coming in the country in the last few years.

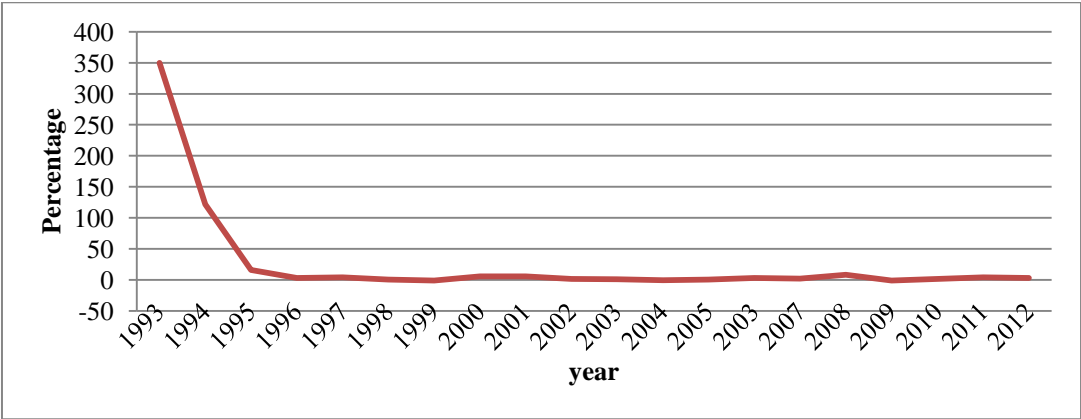
Figure 1. Unemployment in the Republic of Macedonia between 1993 and 2012 (in %)



Source: National Bank of the Republic of Macedonia, *Unemployment in the Republic of Macedonia between 1993 and 2012*, 2016

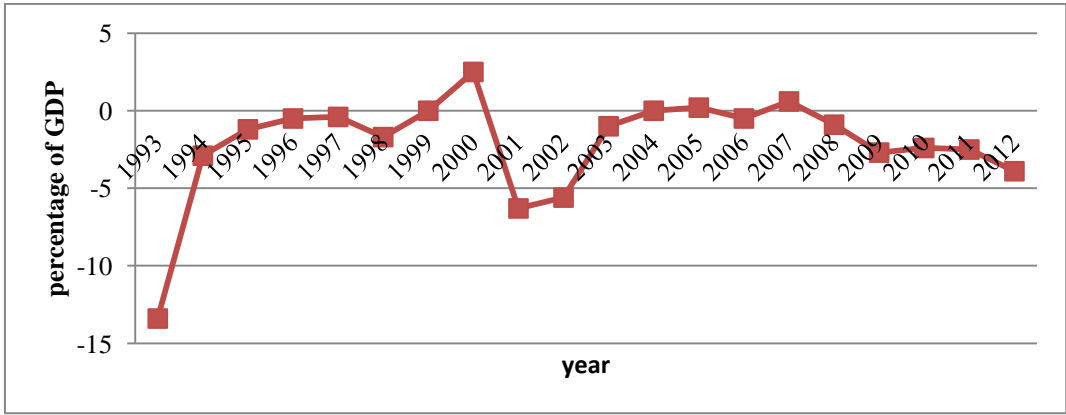
The total number of the labor force in Macedonia in 2012 is 942,420 out of which total 648,200 employed and 294,220 unemployed. From the total number 178,788 are with University level which is almost 19% and 24,479 with no or only primary education which is 25.6%. One of the biggest problems in Macedonia is certainly the unemployment rate (Figure 1). Almost one third of the total active population is unemployed even though this picture is not very objective because a very big part of this population is engaged in the informal sector. However, the numbers show a decline in the unemployment rate which is certainly a good sign for the Macedonian economy, even though there is still a long way before it reaches the European average.

Figure 2. Inflation in the Republic of Macedonia, 1993-2012 (in %)



Source: National Bank of the Republic of Macedonia, *Inflation in the Republic of Macedonia, 1993-2012*, 2016.

Figure 3. Budget Balance in the Republic of Macedonia, 1993-2012 (% GDP)



Source: National Bank of the Republic of Macedonia, *Budget balance in the Republic of Macedonia, 1993-2012*, 2016.

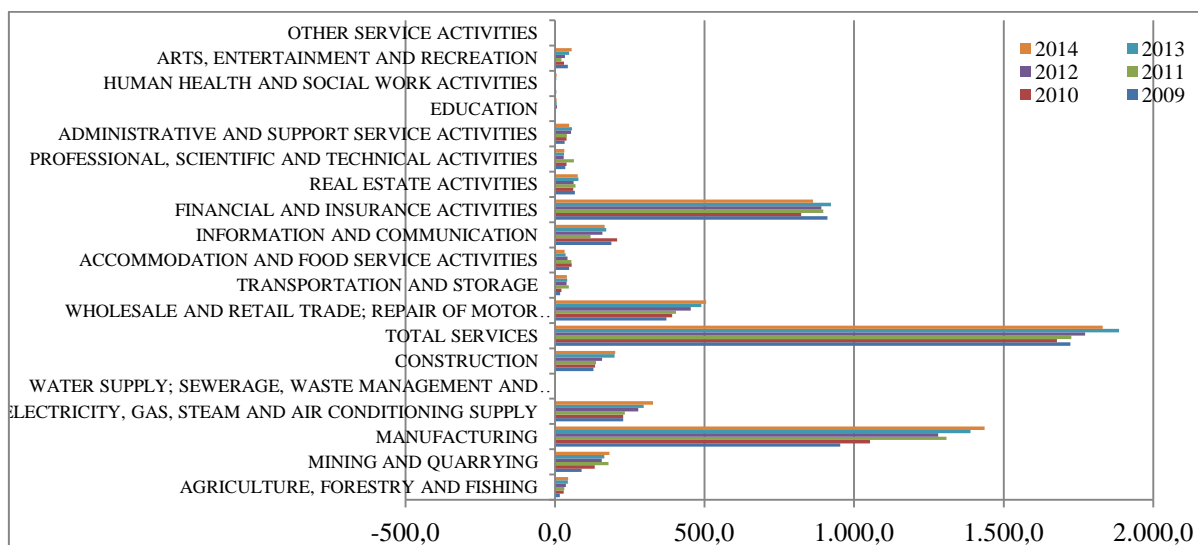
Since the hyperinflation in 1993 and 1994, the National bank of the Republic of Macedonia is keeping inflation at a steady level (Figure 2). Although by the law Macedonia has managed float exchange rate, the reality is that the rate has been relatively fixed, first to the German Mark and now with the Euro. However, the experts think that it is time for the country to focus towards the flexible exchange rate and higher inflation, which together with the reforms in the real sector, will help improve the economic growth. According to the view of Nenovski, 2010, the optimal inflation for the country would be between 6-7%, which is double more than the current 3.3%.

The budget balance in the Republic of Macedonia has been stable over the past 20 years except for 1993 due to the hyperinflation and 2001 and 2002 due to the Civil War in the country (Figure 3). In the last few years the budget deficit had been steadily growing and reached its maximum in 2012 as a result of public investments. The government believed that this was a policy to stimulate the economic growth of the country. We believe that the government should steadily decline the investments (especially the unproductive ones) and leave more room for the private sector.

1.7 FDI in Macedonia

FDI are a very important capital inflow to Macedonia. They are improving the technological level of the country because most of them bring new technologies that are mostly unknown to the country. They also bring know-how and new managerial skills to the host countries as well as a development to the human capital.

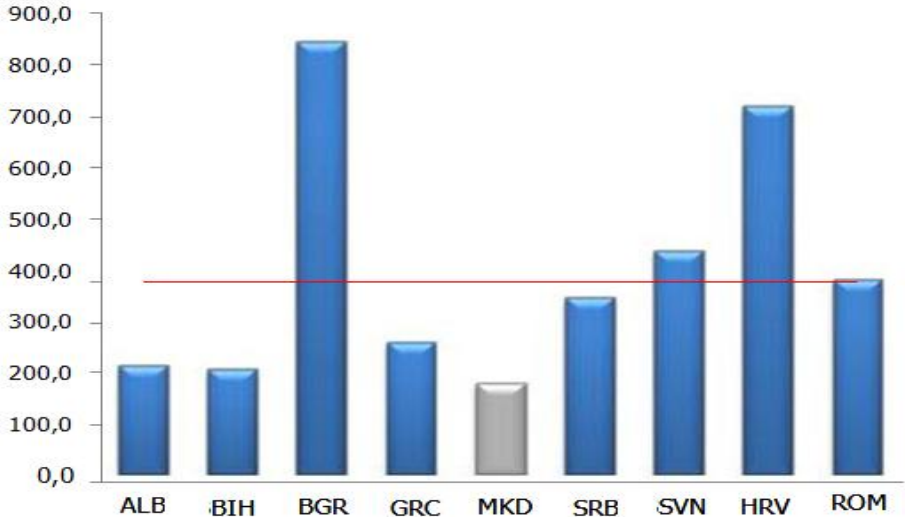
Figure 4. FDI in Macedonia Divided by Sectors, 2003-2013 (in mil Euro)



Source: National Bank of the Republic of Macedonia, FDI in Macedonia divided by sectors, 2003-2013, 2016.

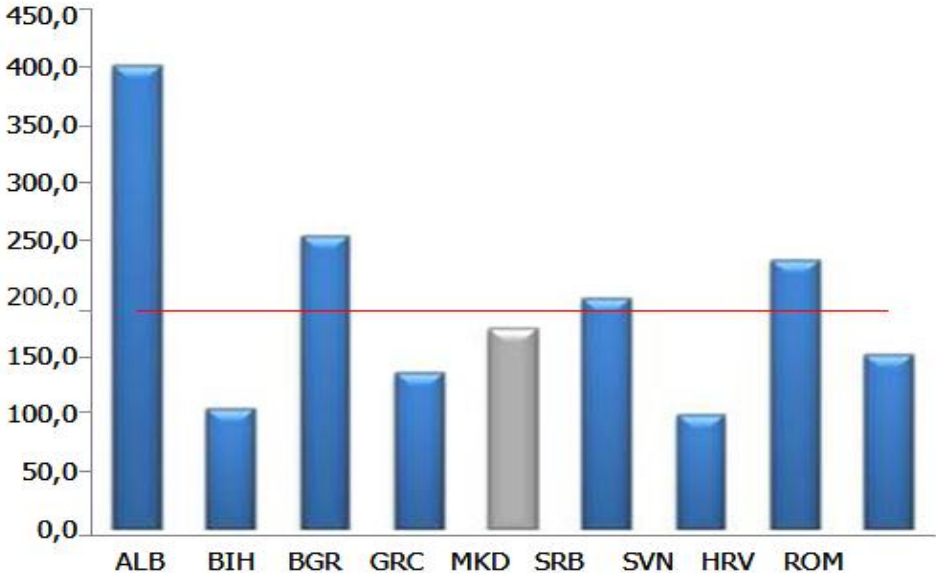
As we can see from Figure 4, the FDI have been directed towards the tradable sectors (agriculture and fishery, production and construction) in the last couple of years, which has contributed to the increase of the economy's export potential.

Figure 5. FDI in South-Eastern European Countries Per Capita 2003 - 2009 (in mil Euro)



Source: National Bank of the Republic of Macedonia, FDI in South-Eastern European countries per capita 2003 - 2009, 2016

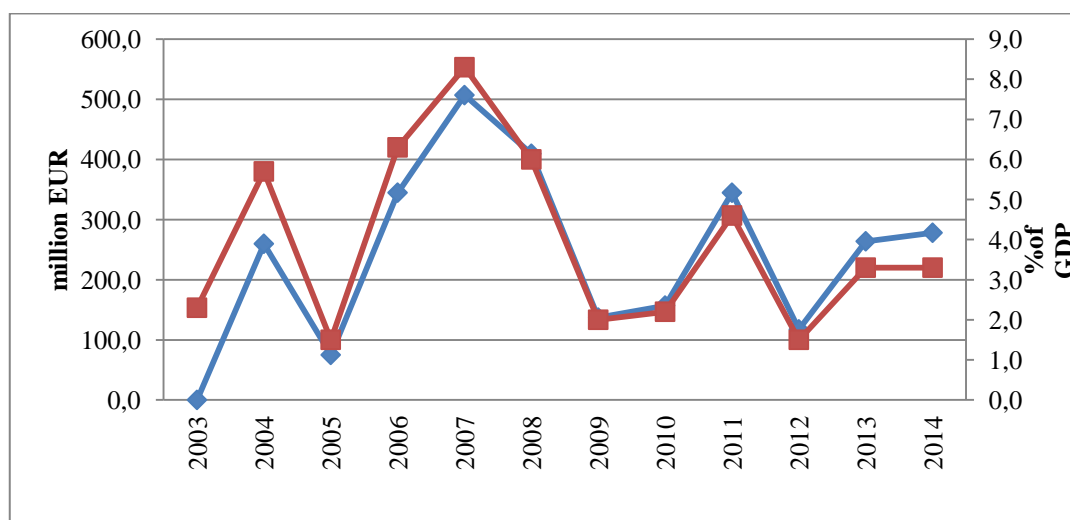
Figure 6. FDI in South-Eastern European Countries Per Capita 2010 - 2013 (in mil Euro)



Source: National Bank of the Republic of Macedonia, FDI in South-Eastern European countries per capita 2010 - 2013, 2016.

From Figure 5 and 6, we can see that the Republic of Macedonia is still lagging behind from the South Eastern European countries but the situation has been improving significantly during the last couple of years. With few exceptions, after the crisis, the situation with the FDI is quite similar in the entire region.

Figure 7. Foreign Direct Investments in the Republic of Macedonia
2003-2014 (in mil Euro)



Source: National Bank of the Republic of Macedonia, Foreign Direct Investments in the Republic of Macedonia 2003-2014, 2016.

The foreign direct investments in Macedonia in the last 12 years have shown a stable growth. In Figure 7 we can see that since 2005 the value of FDI has been gradually increasing, thus reaching 506.9 million Euros or 8.3% of GDP in 2007. Due to the financial crisis, the inflow of FDI sharply fell to 2% of GDP in 2009. There have been some improvement in the recent years, but still the country is lagging behind the countries in the region.

1.8 Exports and Imports

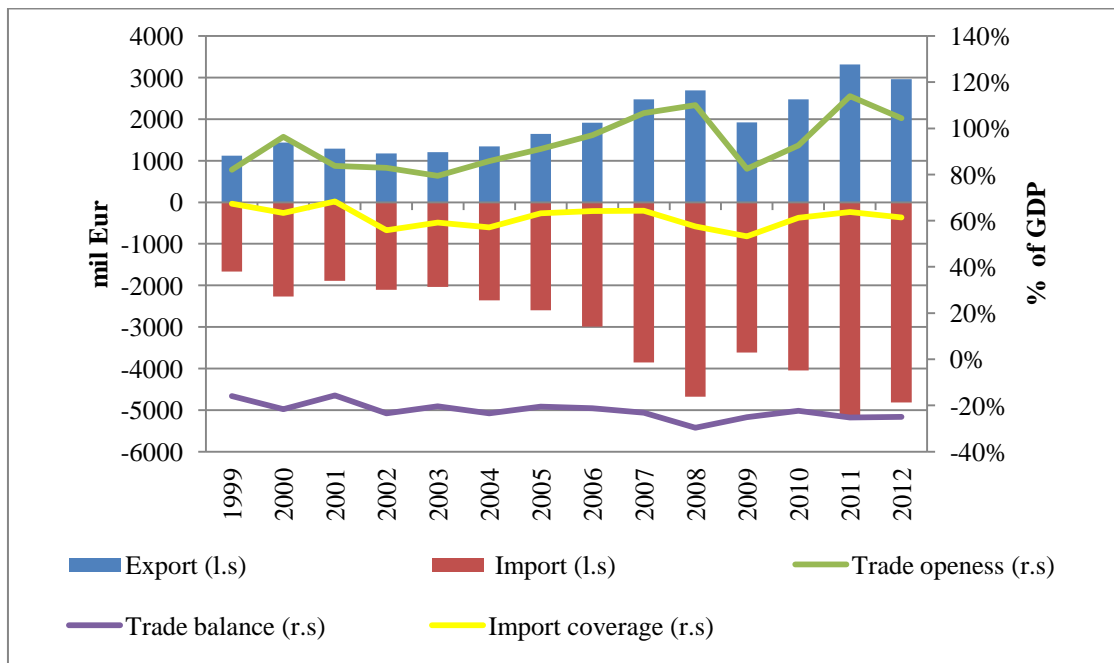
The structure of the world trade of goods and services has been oscillating a lot in the last 13 years. After surging back at the beginning of the 21st century, it kept a steady level till 2008 when it collapsed for approximately 20 per cent in volume in what was described as the greatest plunge since World War II. Having initially rebounded sharply in mid-2009, the growth in international merchandise trade than slowed again in 2010. In Figure 6 bellow we can see that the global crisis has left a marked impact on the dynamics of the global trade in the last couple of years.

1.8.1 Trends and Structural Characteristics of the Macedonian Export

After the 2001 Civil War in Macedonia, the export rate has significantly increased until 2008, when it was retarded as a result of the world economic crisis. In 2011 the Macedonian economy reached the highest value of export, but at the same time the highest value of import. Still the trade balance was lower for 4 p.p. compared to 2008, when the trade balance reached its peak (-29.7% of GDP). Still, the value of the negative trade balance was high. That is a result of the import dependence of the economy. Therefore, the trade openness reached the highest value in 2011 (113.9%), which shows that the Macedonian economy was actively engaged in the world trade. That means that every negative changes in the export demand and upward movement of the energy prices influence the trade balance. Additionally, the import coverage moves in average of 60% (Figure 8).

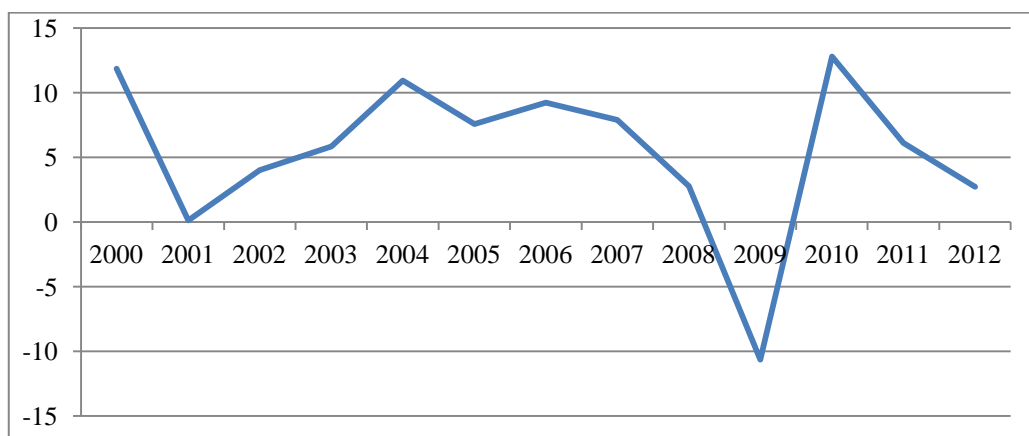
The trends in the global economy are very important in order to explain the foreign trade in Macedonia as well. The global manufacturing and trade cycle has begun to reaccelerate, particularly in the emerging market economies (Figure 9). Conjectural indicators suggest that many advanced European economies are also lagging behind the global upturn.

Figure 8. Foreign Trade and Trade Openness of Macedonia 1999-2012 (in mil Euro) (GDP%)



Source: National Bank of the Republic of Macedonia, Foreign trade and trade openness of Macedonia 1999-2012 (GDP%), 2016.

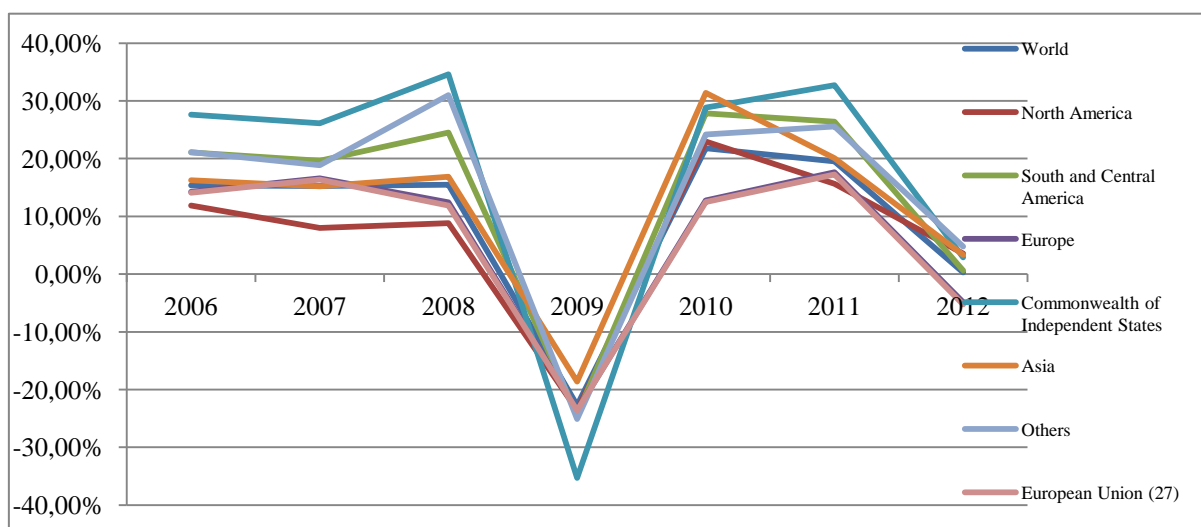
Figure 9. Percentage Change in World Trade Growth Rates of Goods and Services, 2000-2012 (in %)



Source: International Monetary Fund, *World Economic Outlook Database*, October 2013

Regarding the regions, the exceptional decrease was noticed in the Commonwealth of Independent States of -35.28% in 2009, while the region of Asia has the lowest slowdown in the volume of trade of -18,6% on annual basic. Still, the decline in the trade has high degree of synchronization across countries, as a result of the developed and closely connected financial market and transmission power of the informational technologies (Figure 10). The downfall of the total trade of EU was 23.62% in 2009 compared to 2008.

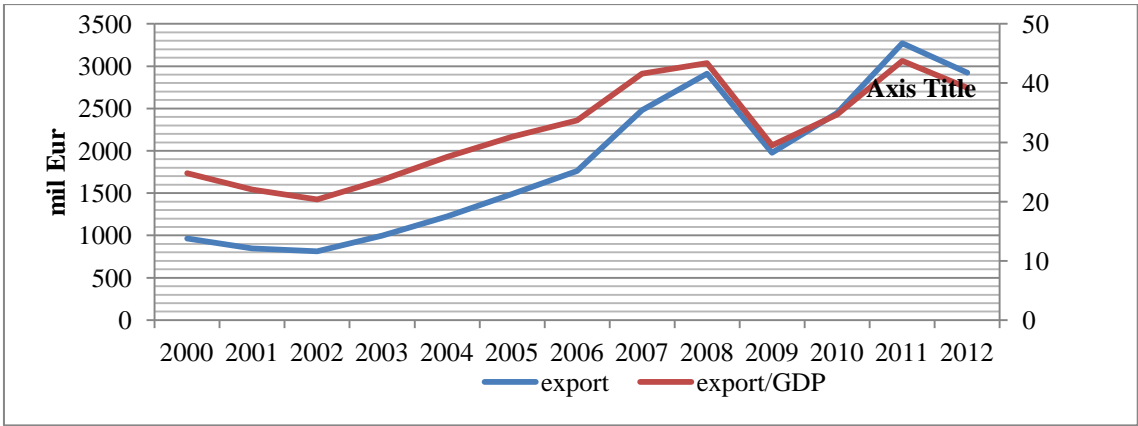
Figure 10. Annual Growing Rates of the World Trade by Region and Selected Economies 2006-2012 (in %)



Sources: Eurostat, *Comext database*; national statistics; Global Trade Atlas; IMF, International Financial Statistics database, 2016

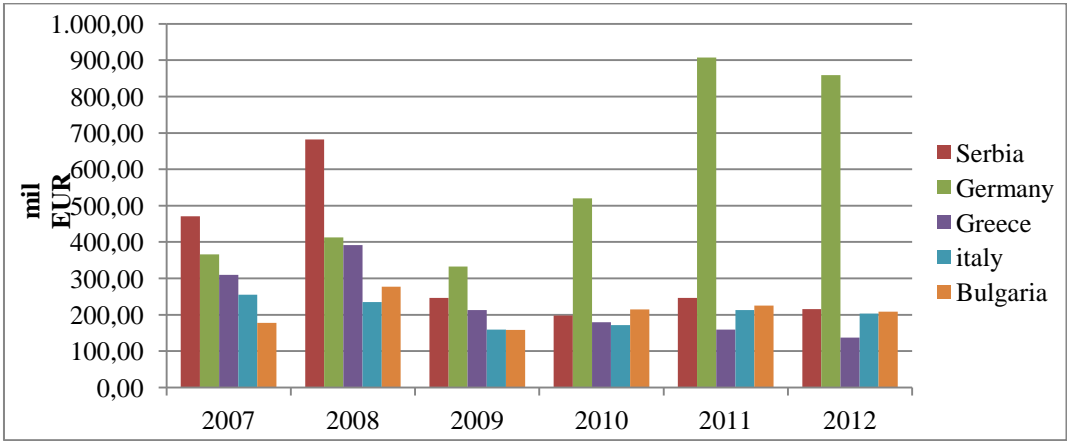
The Macedonian export reached its peak in 2011 with 3.269 million EUR, which is an increase of 65% compared to 2009. Since 2002 when the participation of the export in the total GDP was 20,3%, we have seen a dramatic increase in the next 11 years when the participation of the export in the total GDP reached 43,7%. Such positive tendencies are expected to continue also in the future mainly due to the expected increase of the prices of the metals as well as food which represent the main export products of the Republic of Macedonia but also because of the global economic improvement (Figure 11).

Figure 11. Participation of the Export in the Total GDP of Macedonia, 2000-2012 (in mil Euro)



Source: Adapted data available on State Statistical Office of the Republic of Macedonia, *Participation of the export in the total GDP of Macedonia, 2000-2012*, 2016.

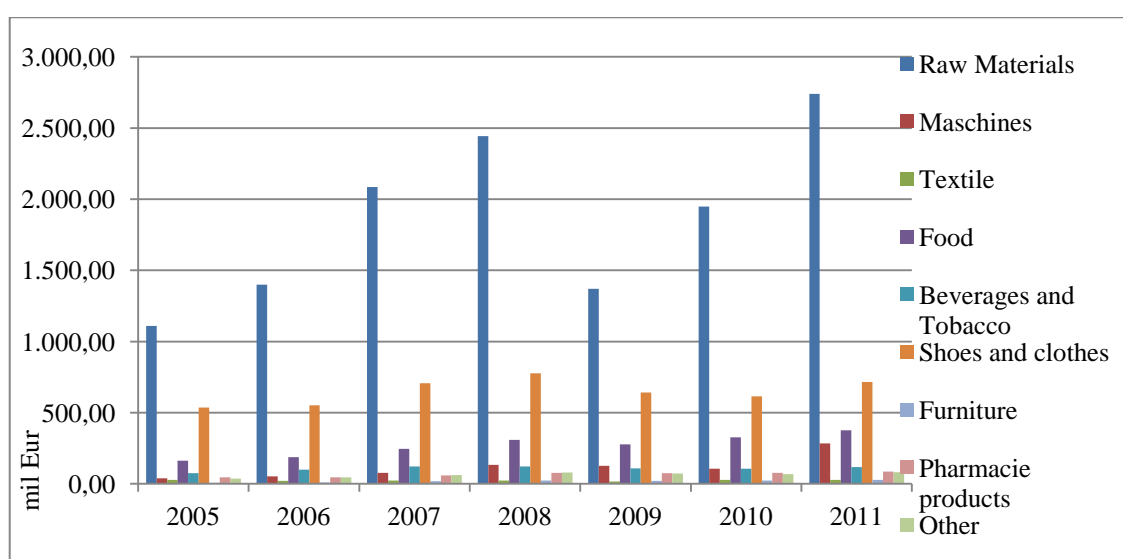
Figure 12. Macedonian Export towards its Biggest Trade Partners, 2007-2012 (in mil Euro)



Source: Adapted data from National Bank of the Republic of Macedonia, *Macedonian export towards its biggest trade partners, 2007-2012*, 2016.

As we can see from Figure 12, the European Union remains the main exporting partner of the R. Macedonia. In the last 6 years, Macedonia has predominately exported its goods to the neighboring countries such as Serbia, Greece and Bulgaria but has also been having strong export relationship with Italy and Germany. In 2007 and 2008 most of the Macedonian goods were exported to Serbia (470 million and 682 million EUR), while in the last 3 years the export has mainly turned to Germany and in the last 2 years it has reached 520 million and 907 million EUR respectively. The other 4 countries have kept a steady and quite similar level during the past 3 years. Only the export towards Greece has slowed down in the last couple of years mostly due to the crisis in the country.

Figure 13. Macedonian Export Divided by Sectors, 2005-2011 (in mil Euro)

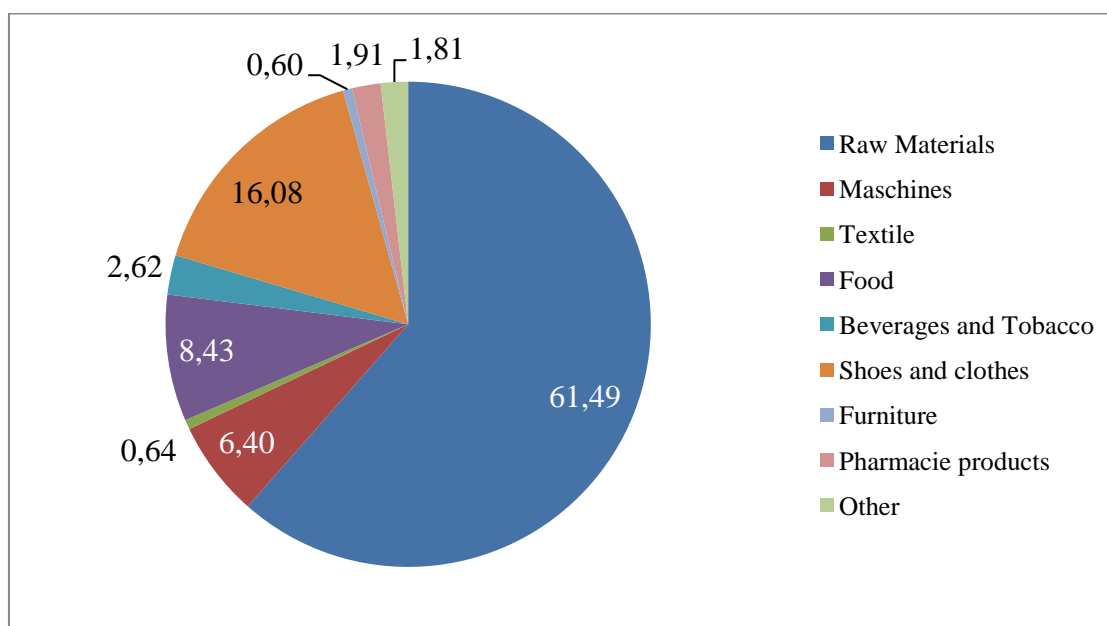


Source: Adapted data from the National Bank of the Republic of Macedonia, *Macedonian export divided by sectors, 2005-2011*, 2016.

The main exporting products of Macedonia in the last decade have been raw materials such as iron, steel and ore minerals. Clothes and shoes take the second place with a value just over 700 million Euro per year. In the last year due to the foreign investments we can see a big growth in the machine exporting sector with an increase in 2012 over 2011 of 170%, from 105 million Euro to over 285 million Euro. However, the textile industry, what once was the main Macedonian industry, has been stagnating at only 28 million Euro in the last couple of years (Figure 13).

In order to have clear picture about the structure of the exported goods, in Figure 14 we present the different sectors that participate in the Macedonian export.

Figure 14. Macedonian Export Divided by Sectors, 2011, (in %)



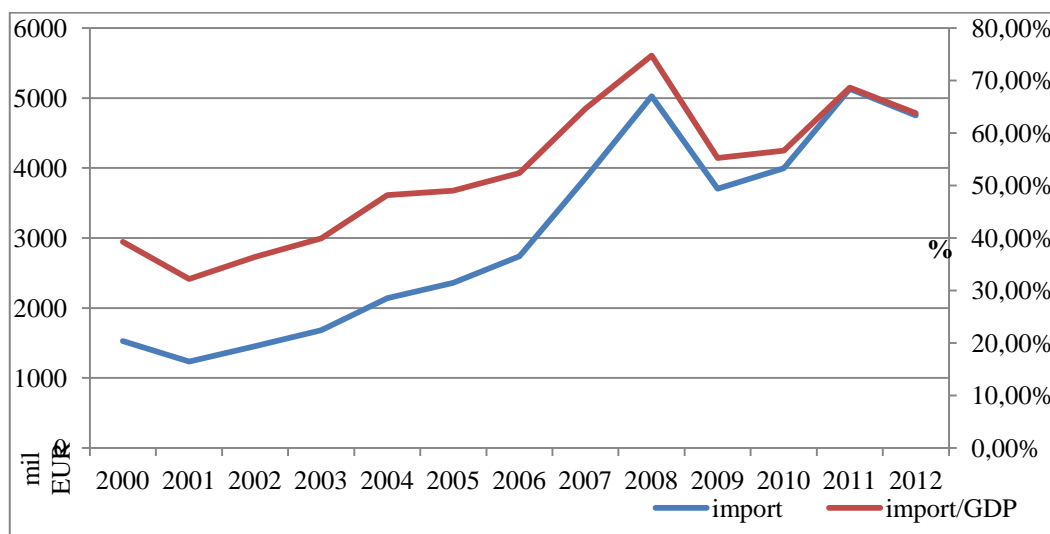
Source: Adapted data from the National Bank of the Republic of Macedonia, *Macedonian export divided by sectors, 2011, 2016*.

1.8.2 Trends and Structural Characteristics of the Macedonian Import

In the last 12 years the Macedonian import has been steadily growing with an exception of 2009 and 2010 when it dropped for more than 38% because of the world crisis. Since the import has been on a recovery and has reached over 5,100 million EUR in 2011 or 68.25% of the GDP in the same year. The increase of the value of the export in regards to the GDP shows improvement which is a negative economic indicator during the analyzed period because it reduces the value of the GDP (Figure 15).

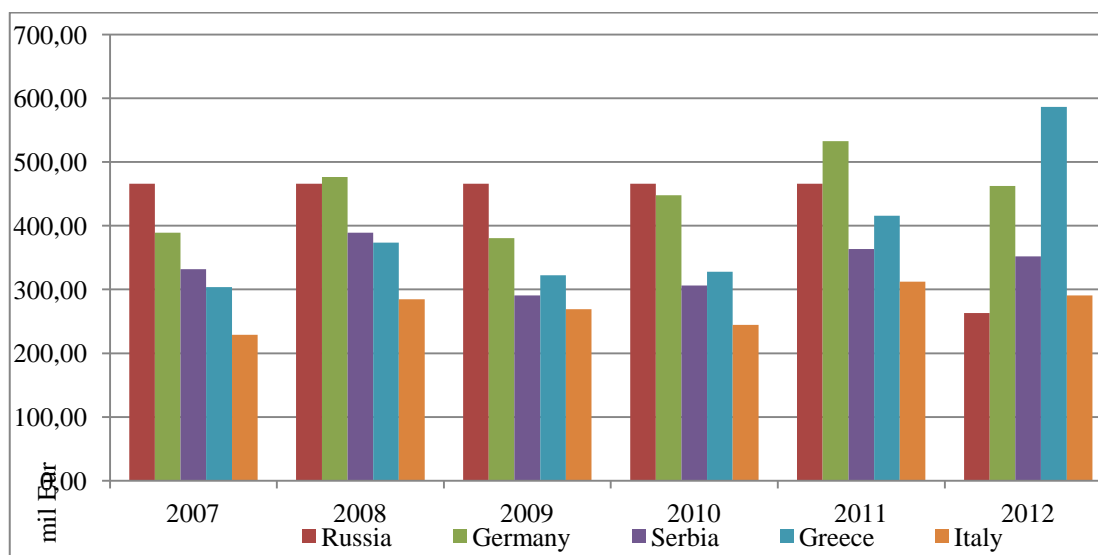
Same as with the export, the main importing partner of the R. Macedonia are the European countries. We can see in figure 16 that Macedonian export has been having a steady grow in the last 6 years and has been focusing more towards the neighboring countries such as Greece and Serbia but also Germany is playing a crucial role with more than 20% of the total Macedonian export in 2012.

Figure 15. Participation of the Import in the Total GDP of Macedonia, 2000-2012 (in mil Euro) (in %)



Source: Adapted data from the State statistical office of the Republic of Macedonia, *Participation of the import in the total GDP of Macedonia, 2000-2012*, 2016.

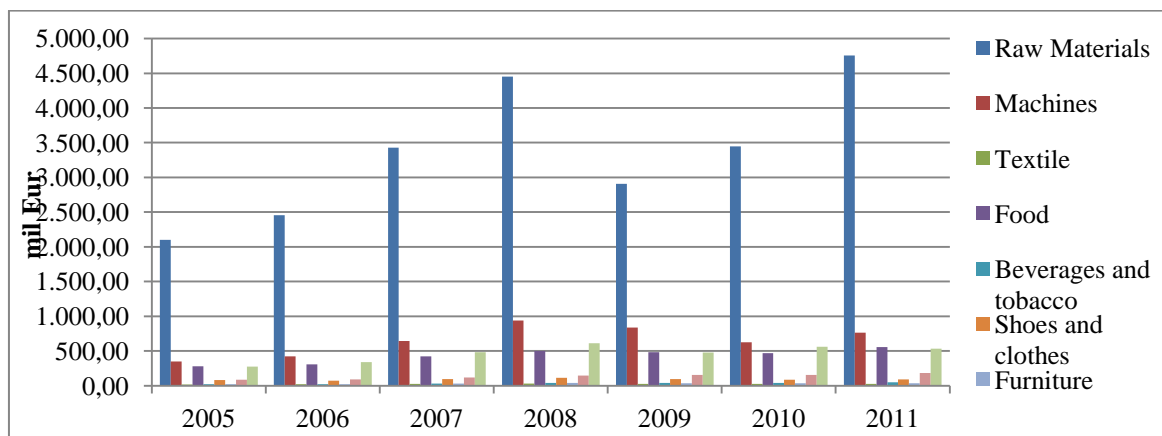
Figure 16. Macedonian Import from its Biggest Trade Partners, 2007-2012 (in mil Euro)



Source: Adapted from the National Bank of the Republic of Macedonia, *Macedonian import from its biggest trade partners, 2007-2012*, 2016.

The oil and oil derivatives still remained Macedonian main imported product with over 4.7 billion Euro for 2012. Among the highest ranked are also the automobiles and agricultural machines with over 765 million Euro as well as food products with 558 million Euro.

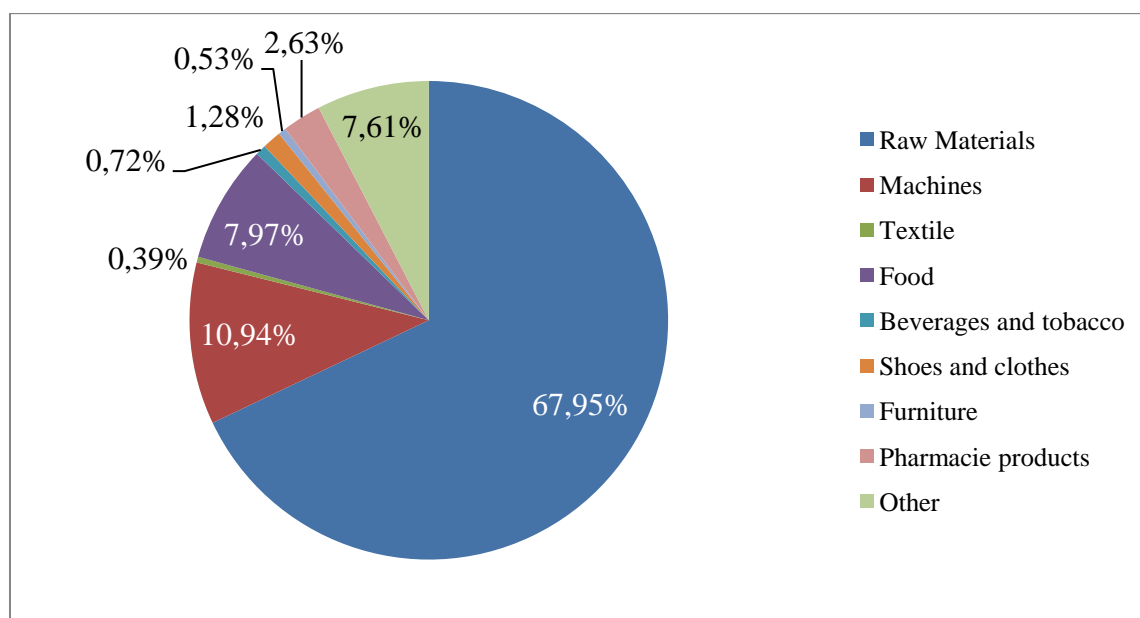
Figure 17. Macedonian Import Divided by Sectors, 2005-2011 (in mil Euro)



Source: Adapted data from the National Bank of the Republic of Macedonia, *Macedonian import divided by sectors, 2005-2011*, 2016.

Same with the import, we present the relative share of the different categories of goods in the total value of the Macedonian import for 2011 in the Figure 18.

Figure 18. Macedonian Import Divided by Sectors, 2011 (in %)



Source: Adapted data from the National Bank of the Republic of Macedonia, *Macedonian import divided by sectors, 2011*, 2016.

1.9 Bilateral, Regional and Multilateral Agreements on Free Trade and Free Economic Zones

Free trade agreements are very important for the garment industry. Macedonia has concluded three multi-lateral free trade agreements: with the European Union (EU) countries the agreement for stabilization and association (SAA), which was signed on April 9, 2001 and entered into force on April 1, 2004. Although SAA entered into force in 2004, the parts regulating trade and trade issues entered into force on June 1, 2001 by a special Interim Agreement on Trade and Trade-related Issues between the Republic of Macedonia and the European Community. The second is the European Free Trade Association (hereinafter: EFTA) (The EFTA States Iceland, Liechtenstein, Norway and Switzerland signed a free trade agreement with Macedonia in Zurich, Switzerland, on June 19, 2000 and the agreement entered into force on May 1, 2002). And the third is the Central European Free Trade Agreement (hereinafter: CEFTA) (membership started on January 1, 2006, and will end as soon as Macedonia enters the European Union) (US department of State, 2016).

CEFTA member states include Macedonia, Albania, Moldova, Serbia, Montenegro, Bosnia and Herzegovina, and Kosovo. Macedonia has trade surplus in the trade in CEFTA-2006. Kosovo, as the most important exporting partner, crates over 90% of the value of total surplus in CEFTA - 2006 , i.e. trade surplus in 2011 – 305.93 million Euros can be fully explained by the surplus with Kosovo – 386.84 million Euros (December 2013). But, the member countries of CEFTA - 2006 do not exploit the real economic potential of the region. This situation is due to the problems of their undeveloped economic structure (Kikerkova, 2009, pp. 162-167).

In addition, Macedonia has signed free trade agreements with Turkey and Ukraine. In April 2011, the Euro-Mediterranean convention on preferential rules of origin was adopted by the Council of the European Union. The contracting parties to the Convention are the European Union, the Faroe Islands, EFTA states (Iceland, Lichtenstein, Norway and Switzerland), the participants of the Barcelona process (Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, PLO, Syria, Tunisia and Turkey) and the participants of the EU Stabilization and Association Process (Albania, Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Serbia and Kosovo). In order to fully utilize the benefits of this convention, Macedonia needs to sign free trade agreements with the Mediterranean countries. This is very important for the textile industry, since Macedonia does not produce its own fabrics.

Regarding the free trade zones under the Law on Technological Industrial Development Zones (hereinafter: TIDZ), the zones are used for facilitating economic activities, which are performed under special conditions, including tax and other incentives for zone users.

By 2006, with further implementation of the strategy for accelerated economic development put forward by the Government of the Republic of Macedonia and with the Government's top priority for attraction of more FDI, the Zones have been blessed with new historic opportunities to speed up the overall progress of Macedonian economy.

The aim of the TIDZs is to support the development of high modern technologies enforcing the highest environmental standards. The TIDZ are being managed by the Directorate as a representative authority of the Government of the Republic of Macedonia. At the moment there are four operational TIDZ: Skopje 1 and Skopje 2, one in Shtip and one in Tetovo. Another seven are being currently in the planning phase.

Some of the characteristics of the zones are: 100% foreign ownership, 0% tax and customs duties, no labor restrictions, no municipality taxes, symbolic land lease rate and direct State Aid in amount up to 500.000 EUR are only some of the many benefits that the Government of the Republic of Macedonia provides in order to attract foreign investments. The Development Zones are not primarily focused towards a specific industry. Their main purpose is creating jobs and reducing the unemployment rate of the country. Investors in Technological Industrial Development Zones can benefit from incentives in the TIDZ (Baechtold, 2012).

2 TEXTILE INDUSTRY IN MACEDONIA

This chapter will cover the role of the textile industry in the Macedonian economy as well as its involvement in the GDP and the job creation. It will analyze the opportunities and the weaknesses of the textile industry and it will give a picture of the current operational textile factories in Macedonia.

The textile industry plays a very big part in the Macedonian economy. It is one of the most important industry sectors by the number of the companies and people employed in this sector. The Macedonian textile and clothing sector is one of the biggest players in the Macedonian economy regarding export. It represents 18% of the total exports in average as we already analyzed in the previous section. According to the latest structural data available, in 2011 there were about 800 companies employing more than 40,000 people, who are 35% of the industrial employment (Hristova and Majhosev, 2015). The textile industry in Macedonia offers the European countries many opportunities over the Far East countries because of its closeness such as:

- Much cheaper transport: according to the direct information gathered from few Macedonian transport companies, the distance between Macedonia and the German border is approximately 1,300km, which can be covered in 2 days driving. The tariff of the transport companies in Macedonia is 1.200 Euro for 42 m³ per truck for transport to

Germany, which makes the transport very cheap compared to the Far East, for which mostly boat transport is used and costs are 70 Euro per m³, which equals to 2,940 Euro for 42 m³ for transport to the north German harbor Bremen.

- High flexibility, meaning lower quantities possibilities: from the interviews with the purchasing managers, we know that the west European markets order goods mostly from the far East countries. But in order to achieve low price, the minimum order quantities have to be at least one container per shipment which requires big storages for the purchasing companies. Macedonian companies can deliver less than one truck in 2 days, which is easier for the customers to keep low inventory and thus lower the costs for it.
- Easier communication because of the distance: the travelling time between Macedonia and Western European markets is less than 2 hours flight. It also takes for the DHL post only 1 day to deliver a shipment, which gives the Macedonian companies a good flexibility to adjust quickly to all of the customs' needs and wants.
- Good and modern equipped factories: in the last decade the Macedonian banks have introduced many credit lines for modernization and new equipment for the Macedonian companies. This has greatly improved the poor situation of the old Macedonian textile factories and many have used this opportunity to improve and modernize their machineries.
- Custom free goods with EUR 1 document: the EUR 1 is a document used in international commodity traffic. This form is recognized as a certificate of origin in legal sense. This form states which products are covered and can benefit from lower or none rates of duty. Textile goods are among the no duty products.

2.1 Participation of the Textile Industry in the GDP Creation and Employment

The growth of the Macedonian textile sector underwent diverse historical and economic phases. In the following section we will only concentrate on the growth and dynamics of development of the textile industry in Macedonia.

The first textile enterprises were established in the 1880s in the villages in the region of Bitola – Dihovo, Magarevo, Trnovo, and their main activity was production of woolen products. In socialist times, the textile and the apparel industries in Macedonia grew continuously in the period from 1946 to 1989. The growth was particularly strong between 1960 and 1970, the index rising from 35 to 100. Although the growth in the industrial production in these industries and especially in the textiles sector slowed down in the 1980s, the positive trend lasted until 1989.

The decline of the Macedonian apparel and textile industry after 1989 is evident if compared to the total Macedonian industry. While in 1990, the share of the production of textile fibers and fabric industry in the total Macedonian industry was 6.3% in the 2000, it

was 2.3%, while the share of the production of the industry for production of finished textile products dropped from 10.5% in 1990, to 6% in 2000. Therefore, in 1990, the relation of both sub-sectors in 1990 was 1:1.4 and in 2000, it changed into 1:2.6. In 2003, the gap has widened to 1:3.5 (unknown author, 2005). The participation of the textile industry in the total exports has been in a constant decline as we can see in figure 15.

Table 2. Participation of the Textile Industry 2003-2010 (in %)

Participation of the textile industry in...	Total GDP - Value Added	GDP of the manufacturing industry - Value Added	Total investments in fixed assets	Investments of the processing industry	Total exports
2003	2.8	14.9	1.6	8.9	32.3
2004	2.8	16.3	1.5	9.9	31.9
2005	2.8	15.2	1.6	10.3	26.4
2006	2.9	16.4	2.6	11.7	20.3
2007	3.1	18.4	4.0	10.4	19.2
2008	3.1	17.8	2.6	7.7	23.3
2009	2.2	15.4	n/a	n/a	19.4
2010	2.3	n/a	n/a	n/a	18.7

Source: Adapted data from State Statistical Office, Economic Chamber of the Republic of Macedonia, *Participation of the textile industry 2003-2010*, 2016.

The textile industry is the most widespread branch of Macedonian economy with a share of more than 18% of the industry's GDP in 2007 (Table 2). Since then, there has been a slight decline in the numbers but it is still well over 15% in 2009. The textile industry employs close to 40,000 people, which is 8,6% of the total number of employees in Macedonia in 2011 (Table 3).

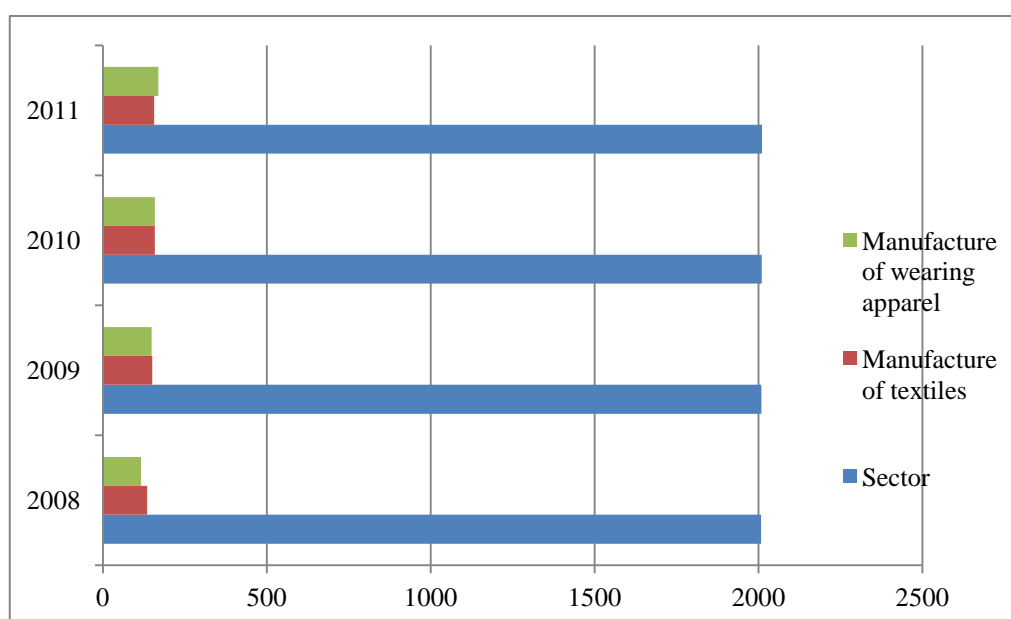
Regarding the wage, the textile industry along with the shoe industry in Macedonia is at the lowest level. The average net wage in Macedonia is considered to be somewhere around 350 EUR according to the National Bank of Macedonia, which puts the textile industry way below that level. From 2013 there has been a law for a minimum wage in Macedonia but for the textile industry it was set to around 149 EUR with an agreement to increase steadily in the next years. Nevertheless, the textile industry is still among the least paid industries in the country. The average net wage per employee can be seen in the Figure 19.

Table 3. Number of Employees in the Garment Industry,
2006-2011

Description	2006	2007	2008	2009	2010	2011
Total number of employees in MK	418,192	434,041	434,858	426,252	435,078	458,873
Employees in manufacturing industry	108,994	113,088	107,706	104,751	101,093	100,878
Manufacture of textiles	5,314	5,292	4,535	4,362	3,714	3,158
Manufacture of wearing apparel	35,070	38,556	35,638	35,376	34,680	32,525
Manufacture of leather and related products	5,345	5,735	4,645	5,769	5,628	4,154

Source: Adapted data from State Statistical Office, Economic Chamber of the Republic of Macedonia, *Number of employees in the garment industry, 2006-2011*, 2016.

Figure 19. Average Net Wage per Employee, 2008-2011 (in mil Euro)



Source: State Statistical Office, *Statistical Yearbook*, Average net wage per employee, 2008-2011, 2012.

2.2 Overview of the Textile Factories in Macedonia

The textile industry in Macedonia has been in a constant development over the past decade mostly due to the increased investment in modern equipment. The biggest part of the textile industry in Macedonia, almost 93%, is based on a Cut, Make and Trim (CMT)

production, meaning only confection and packaging. According to the official statistics (NBRM, 2016), about 800 entities are actively involved in production of textiles, wearing apparel, dressing and dyeing of fur.

Table 4: Business Entities Active in the Manufacture of Textiles, Wearing Apparel, Dressing and Dyeing of Fur, 2012.

Size	Number of companies	%
>250	21	2.6
50-249	77	9.6
10-49	151	18.9
1-9	551	68.9
Total	800	100

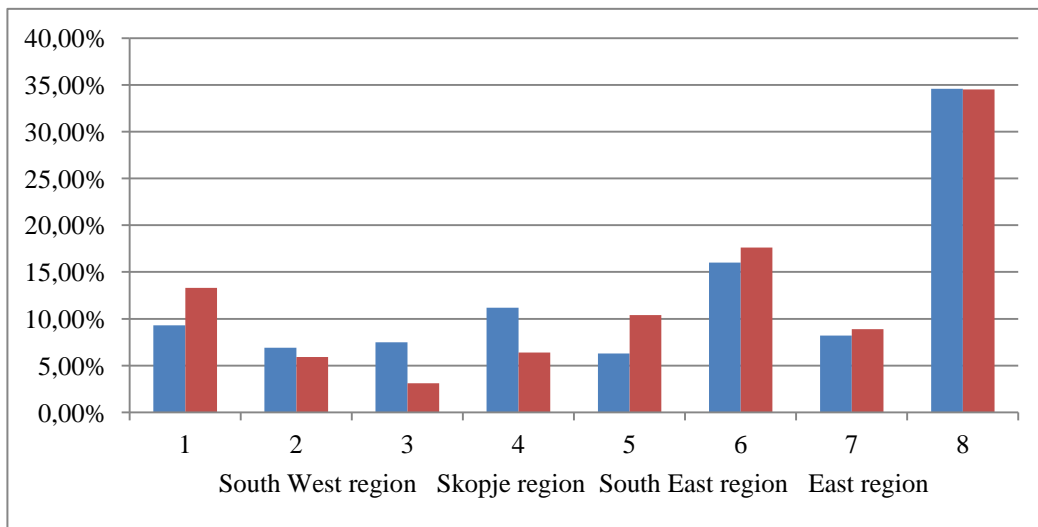
Source: Adapted data from Ministry of Economy, Brochure: *Macedonian textile and clothing industry*, 2012.

In this thesis the focus is only on the factories that are doing the complete product from scratch. Here we will give brief overview of the main textile factories currently active, and in section 3 we will focus on the biggest three:

- A.D. Alkaloid Berovo - founded in 1961. Since 1990, it's been operating as a joint stock company. The complete shareholders' capital has domestic ownership. The main activity is fabric weaving and production of baby articles. Alkaloid Berovo is one of the oldest weaving factories in Macedonia and survived the turbulent times of the privatization during the nineties.
- Zona Triko Vinica DOOEL – complete domestic ownership. Focused mostly on fabric knitting and the production of underwear for men, women and children. Zona Triko has greatly expanded its production over the last decade mostly because of the penetration in new markets, especially in West Europe. With a production of over 800,000 pieces per month, the factory has also included many collaborators, such as smaller sewing companies to help with the overwhelming production.
- EAM Shtip DOO - complete domestic ownership. Focused on knitting and producing T-shirts. It started small and focused only on T-shirts but has since expanded to baby products as well. It is one of the most modern and best equipped factories in the country.
- A. D. Frotirka Delcevo - founded in 1961. It's been operated as a joint stock company since 2000. Complete domestic ownership.

- Comfy Angel Prilep - mostly specialized in production of bedding. Founded with foreign capital investors. The main office is located in UK.
- Tetex A.D. Tetovo - founded in 1951. Since 2007 it's been operated as a joint stock company with mixed capital, domestic and foreign, from Norwegian investors.
- Vetex AD Veles, established in 1973, transformed in a joint stock company in 1991 and in May the same year it split into two companies, Vetex AD and Triko AD. Veteks AD has been listed on the local stock exchange since 2002

Figure 20: Division of the Textile Companies by Regions in Macedonia, in 1980 and 2010



Source: Adapted data from Ministry of Economy, Brochure: *Macedonian textile and clothing industry*, Division of the Textile Companies by Regions in Macedonia, in 1980 and 2010, 2012.

As we can see from Figure 20, most of the factories in Macedonia are located in the eastern region of the republic. The location of the textile companies had not changed in the period between 1980 and 2010. This also means that much more textile workers are stationed in the eastern part than in the western. The figure also shows that the region around the capital city of Skopje is not focusing on development of the textile industry. This unfortunately was not the picture in the past when many big factories were also operational in the western part of the country but after the privatization period (when many of the textile factories were closed) now the eastern part is what is left of the once big and mighty Macedonian textile industry. The reason for this can be the bigger investment in textile education in the city of Shtip such as the opening of a textile faculty which attracts many of the students who are not willing to migrate to the capital because of their financial status. Also, there are many small sewing companies that have been employed by bigger foreign companies to do only the assembling and sewing job. This has become very popular in the eastern part of the country in the last 10 years. The western part of

Macedonia had many big factories such as; Tetex -Tetovo, Gotex- Gostivar, Okitex - Ohrid, etc. But none of them survived the transition period and there has been no interest in reopening them by the Government nor by investors so far. Western Macedonia has also a problem with finding trained work force that will be employed in the factories. Most of the young population has either migrated to the capitol or has left the country in search for a better life.

2.3 Potential Strengths and Weaknesses of the Textile Industry in Macedonia

The textile factories in Macedonia have significantly improved their equipment in the past decade with the help of the Macedonian Government via the available credit lines such as EBRD, IFAD, IPARD program, etc. Using this, the factories have purchased equipment from some well-known brands, such as Brother and Juki (sewing machines), Picanol and Sulzer (weaving and knitting machines), etc.

Macedonia is a future aspiring county for EU membership and as such it still has a very cheap labor, which directly influences the cost and the price of the textile goods exported to the EU countries. The closeness to the EU countries also means quicker delivery time and high flexibility, which allows the EU customers to adjust their orders in time. In the last decade, Macedonian factories have updated their technology and adjusted to the EU quality standards.

The production has also been modernized by implementation of modern know-how as well as by following new trends in the development of the final products. There has been increased investments in computer technologies and education of the employees, implementation of design studios in the creation of the products, all in order to meet the enlarged demands of the potential buyers.

These investments have given the opportunity to the textile factories in Macedonia to respond much faster to the customer's requirements. The fact that the country is geographically very close to the west European countries increases the chance to react to the customer's necessities faster than the countries from the Far East Asia. This proximity to the European markets as well as the good transport connections (app. 2 days travel) gives the opportunity to the Macedonian textile industry to play a very big part in the west European textile markets.

Another strength of the textile industry is the stable macro-economic and financial environment, due to the low inflation rate and the constant exchange rate of the MKD (Macedonian currency - denar). The cost of labor in the textile industry is very low

compared to the other industrial branches, which helps the industry to maintain low production cost.

This modern time is a perfect opportunity for a change of generations in the Macedonian textile industry. The development and implementation of computers and modern technology have attracted more educated young people to be a part of the textile industry.

One of the biggest weaknesses of the textile industry in Macedonia is certainly the availability of the labor force. This can be easily noticed in the eastern part of the country, where most of the educated young people are fleeing to the capital city or out of the country in search of better paid jobs.

Another weakness is the high dependence on cotton. In the past, there used to be large cotton plantations in the eastern part of Macedonia and many cotton mills as well, which gave enough supply for the whole textile industry. But in the last 20 years the cotton has not been cultivated in the country. This was the case until last year when few owners of the textile factories started cultivating cotton for their own needs, but expressed readiness to invest more in this agricultural branch. With increased investments, there will be enough cotton to support most of the Macedonian textile cotton demands.

But maybe the biggest weakness of the textile industry is the lower productivity in various sectors. Without achieving economies of scale, Macedonia cannot compete with the far Asia prices for final products. In order to accomplish this, Macedonian entrepreneurs need to work together and to increase the export of the textile goods by entering new markets in western Europe.

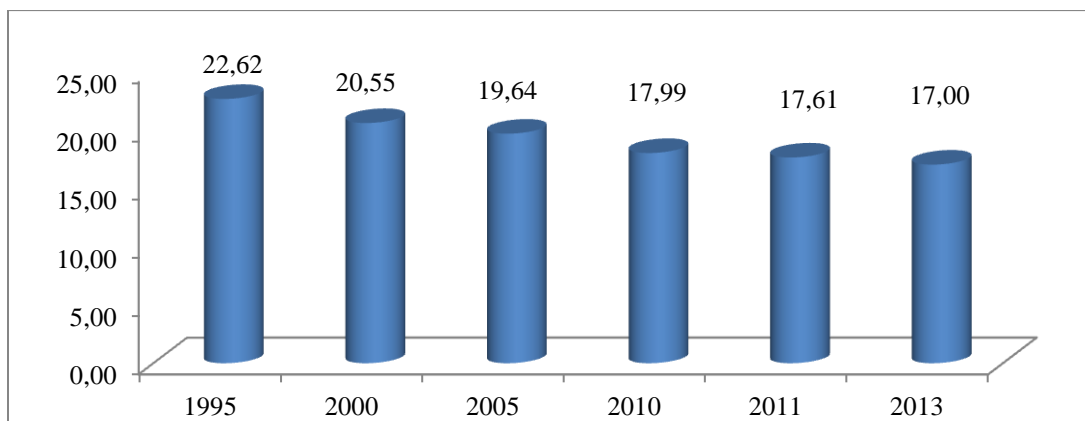
2.4 Ecological and Environmental Aspects

Macedonia has environmental problems typical for the region, including air and water pollution - especially around Skopje - and disappearing forests. Of particular concern is air pollution from metallurgical plants. Existing data on air pollution and gas emissions are incoherent and fragmented. However, due to decline of industrial production from the early 1990s, the emission of pollutants has decreased by 50%, according to the State Agency for Statistics (Figure 21), and has not risen significantly ever since. The industry is, nevertheless, major air polluter, with significant environmental pressure originating from the metallurgic sector.

Major polluters of surface and ground waters are household and industrial sewage systems, while in the agricultural areas polluters are livestock waste from farms and farming industry (milk and meat industry, slaughterhouses, etc.). Waters are directly discharged without any treatment. Zinc, lead and cadmium are recorded in the river of Vardar,

downstream from smelter facilities. Cadmium was found in several other rivers, in concentrations above the norm, as well as phosphorus and nitrates.

Figure 21. PM 2.5 Air Pollution in Macedonia, Mean Annual Exposure (Micrograms per Cubic Meter), 1995-2013



Note: The years are selected according to available data

Source: World bank database, data.worldbank.org, PM 2.5 Air pollution in Macedonia, mean annual exposure (micrograms per cubic meter), 1995-2013, 2016.

The chemical industry, leather production, food production and metallurgic industry are all severe polluters of the water, among them most dangerous being copper mine and metal resurfacing factory. The thermal power plants provide Macedonia with 80% of its energy demands, while the rest is being covered from hydro-electric plant production.

About 50% of the state territory is agricultural land. The use of pesticides and reports on its proportions are scarce, although existing reports show that pesticide use significantly dropped since the mid 1980s over ten years (from 2,700 tons to 659t). The overall conclusion is that the air, water and soil are severely contaminated, and even the protected lake Ohrid suffers from eutrophication due to waste water inflow.

Reports on climate change consequences show expectations of general temperature rise, mostly in the summer periods, with intensive decrease of precipitation in all seasons except winter. Ohrid and Prespa lake regions are expected to have mildest response to global changes of the climate, while alpine regions (high mountains' altitudes) are expected to have a dramatic response. Macedonian high mountain ranges, therefore, would suffer the same consequences as other mountain regions of the world, i.e. snow and ice melting and loss of alpine ecosystems biodiversity.

3 CASE-STUDY OF THE THREE BIGGEST TEXTILE FACTORIES IN MACEDONIA

As we have already mentioned before, Macedonia was one of the textile industry centers in South East Europe during the period after World War II. This all changed after the transition period, which lasted throughout the 90's and the first decade of the 21 century. During this time many of the biggest textile factories were closed and many people became redundant. Some of the biggest factories like MAKEDONKA - Shtip were employing over 7,000 people and its facilities covered an area over 5 km². Today, the only one of those old factories (Alkaloid -Berovo) is still working with the same name and facilities. The rest of the factories have been restored and reopened under different names and with changed production lines.

In this chapter, three of the biggest textile factories (Alkaloid - Berovo, Zona Triko Vinica and EAM Stip) in Macedonia will be analyzed through SWOT analysis using their balance sheets and their financial report data (given in Appendix 1). The analysis will be supplemented by primary data obtained from the interviews with the CEO's and the production managers.

We have to note, that the accessability to financial statements was very restricted. In order to satisfy the requirements for the quality of the master thesis, we obtain the financial statements directly from the Central Register of Republic of Macedonia and paid for it. The latest data from the Central Register are for the years 2012 and 2011. The data used in following are completely taken from the financial statements. We are aware of the poor data is some of the statements, but that is general problem. The Central Register of Republic of Macedonia does not create a template in which the companies should present their financial condition. That might create insufficient analysis. In order to get a clearer picture and make the SWOT analysis more precise and accurate, we overcome the flaws by proving additional information from the interviews with the management and frequent personal visits to the factory.

3.1 Alkaloid-Berovo

3.1.1 Company Description

Alkaloid-Berovo was founded in 1961. It is classified as a middle sized company according to the annual turnover and the number of employees. Alkaloid-Berovo is the only factory that withstood the transition period, as we have previously mentioned. The factory was first established as a part of the company Alkaloid and it was suited for producing sanitized materials, such as sanitized gauze, sanitized bandages and other woven sanitary materials aimed mostly for the hospitals in the neighboring countries. The main

market at the beginning were the former Yugoslav countries. In 1990, the state owned company was transformed into a shareholders company and bought by the management and few outside investors that still run it today. These few people own the majority of the company shares and with large investments have kept the factory alive during the transition period. Since 1961, the number of employees has been decreasing with the constant modernization of the processes. In 1990, the factory had over 650 employees in the production process. Today, the factory still uses the old premises but has significantly invested in the machinery park and therefore modernization of the production processes has considerably reduced the working force. 90% of the total production is exported to the western European markets like Germany, Austria, the Netherlands and Switzerland.

The main product of the factory is the woven fabric and articles created from it. In the early beginnings of the factory, the main products were woven blankets, which were exported mostly in western Germany. With the changing in the management structure in 1995, new opportunities were created. The machines were altered into producing baby articles such as woven diapers, which are mainly placed on the Dutch and German markets. Today, the factory has partly modernized its machines and is mainly focused on baby articles, which takes about 90% of the production, and the other 10% are sanitary materials and working clothes. The production starts from cotton yarn to the very final product including packaging. That means that the final product has to pass through many separate production departments and quality control sections.

Today, the factory employs a total of 108 people, out of which 84 work in production, 8 people are in the administration and the others are allocated in the other sectors. The factory is able to accommodate to the needs of the markets and to implement second or third work shift if necessary. For this, the factory usually hires temporary workers to cover for the overproduction. One of the main reasons for the reduction in the work force are the new weaving machines, which were bought over the last 4 years. The old machinery park of the factory contained over 150 weaving machines mostly from the early 60s, which ran on too much electricity and were side-producing too much waste from the cotton yarn. These machines needed one employee in each shift per machine. In the last 4 years, the company has replaced those 150 machines with 10 new Picanol weaving machines, completely digitalized and modernized. Those new machines have the capacity to replace the old 150 machines, use much less electricity and be operated by one operator and one engineer in one shift, which significantly reduces the need for work labor. Table 5, shows us that the property of Alkaloid Berovo is significantly declining in 2012 compared to 2013. It is a decrease of 41,1% in the amount of 16.960.014 mil MKD. More specifically we can see the change in the sub category buildings and equipment.

Another important information that we can see from the balance sheet is that even though we see a decrease in the current assets, the structure is improved. The cash is more than doubled and the short term receivables are increased in comparison to the decreased value

of the inventory for more than 30%. In other words, the company is much more liquid than before. Regarding the liabilities, there is no precise structure which of them are short term and which of them are long term liabilities but in general there is no significant change in the total value of the liabilities in the observed years.

Finally, the biggest changes are made in the assets side of the balance sheet which reflects on the increase of the shareholder's equity.

In the last two years, Alkaloid Berovo has been certified with a BSCI certificate. This certificate is a proof that the factory:

- is implementing all security procedures for workers' protection,
- is equipped with all security equipment,
- provides suitable facilities for the workers' well-being,
- makes sure that the workers stay in good health,
- does not have child work force exploitation, etc.

Table 5: Balance Sheet of Alkaloid Berovo, 2012-2013 (in mil MKD)

ASSETS (in MKD)	2013	2012
1. Property, plant and equipment	41,493,191	24,533,177
- Land	2,308,169	2,308,169
- Buildings and equipment	39,185,022	22,225,008
2. Current assets	277,736,911	287,636,478
- Inventory	31,800,094	45,737,674
- Short term accounts receivable	30,555,498	27,209,398
- Cash	7,746,390	3,589,264
- Deposits	207,634,929	211,100,142
2. LIABILITIES	10,411,905	10,168,233
3. STOCKHOLDERS' EQUITY	325,513,036	316,344,171

Note.*61 MKD = 1 EUR

Source: Financial statement from Alkaloid Berovo

Every 12 months there is an audit done by the company SGS from Bulgaria, which inspects the factory and makes sure that it can maintain the certificate. Many foreign

companies such as Prenatal from Holland demand that every supplier has this certificate in order to cooperate with them.

Table 6: Income Statement of Alkaloid Berovo, 2011-2013 (in mil MKD)

REVENUES	2013	2012	2011
Sales revenues	123,517,770	110,444,514	122,288,268
Financial revenues	9,588,511	9,630,147	9,884,650
Total:	133,106,281	120,074,661	132,519,515
EXPENCES	2013	2012	2011
Operational expenses	120,603,038	122,468,297	116,121,715
Financial expenses	984	0	207,175
Total:	123,604,559	120,306,219	116,328,890
Net income before taxes	9,501,722	0	23,882,003
Taxes	332,856	211,489	645,553
Operative loss		231,558	
Net income (profit)	9,168,866		23,236,450
Net loss		433,047	

Note: *61 MKD = 1 EUR

Source: Financial statement from Alkaloid Berovo

Another important certificates that the factory possesses are the OSC blended and OSC 100%. These certificates show that the factory can use blended organic cotton or 100% pure organic cotton. This certificate is issued by CERES Germany and is being renewed every 12 months. This certificate is also subjected to audits, during which the premises of the factory are being examined. In order for the factory to be able to produce from organic cotton, a special warehouse must be provided, where the organic cotton will be separated from the normal one. The workers are also being educated and trained to manipulate with

the organic cotton in order to avoid contamination. During the last few years, the demand for organic products has been increasing. Since the certificate was being obtained in 2013, that has been reflected on the increased revenues which have been increased in 2013 compared to the 2012.

The introduction of the certificate was not the sole reason for the increase of the revenues in 2013. Another important reason were the decreased purchase prices of the cotton yarns in the world stock markets compared to 2012 when the prices were significantly higher. That at the same time can explain the decreased sales revenues in 2012.

On the other side of the income statements, the expenses were decreasing in 2013. That can be related to already mentioned reasons: decreasing of the price of inputs and reducing the labor force. Understandably, 2013 was a profitable year for Alkaloid Berovo. The made changes and investments in the company, suggest that the company has long term vision for its future in the textile industry in Republic of Macedonia.

3.1.2 SWOT Analysis of Alkaloid-Berovo

The following analysis of the factory is based on the financial data sheet as well as interviews with the management and the people in the production sectors. As one of the biggest strengths of Alkaloid-Berovo we can most certainly put the closeness to the West European markets. The majority of the production, about 90%, is placed on the German and the Dutch markets, and in the last couple of years on the Austrian market as well. The orders are usually processed in 4 weeks' time and the delivery only takes 2 days. This means that even though compared to the far east production, Alkaloid may be a bit more expensive due to the higher costs for labor, nevertheless, the possibility quickly to adapt to the needs of the customers is what gives the factory competitiveness over the far east. The possibility to add second or third shift improves the delivery time and increases the customers' satisfaction.

Using the financial sheet of Alkaloid-Berovo, we can see that the company is functioning only by using its own finances because there are no long term debts as well as no loans from its business partners or banks - financial expenses are very low (Table 6). This is one of the main strengths of the company. Here, we can add that the factory is the sole owner of the premises it uses, which diminishes the renting costs. Also, the current assets are much bigger than the property and equipment, which means that the company has very large capacity to service its own activities (Table 6).

Another quality that the factory has is the experience of the work force. Many of the people working in the factory have been there for over 30 years now and that gives the

production more routine and speed. On the other hand, the machinery sectors are being operated by younger and more educated people who are able to cope with the new technology machines.

Probably the main reason that the factory is holding well over the last 20 years is the fact that this is the only weaving factory in Macedonia. There are other smaller weaving production sites but none of them is completely equipped to create a final product from cotton yarn as Alkaloid Berovo.

Table 7: SWOT Analysis of Alkaloid Berovo

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> - Proximity to western markets - Only weaving factory in Macedonia - Own finance 	<ul style="list-style-type: none"> - Big part of the machines are very old - Old factory premises - Weak infrastructure
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> - Good reputation - Chance of improvement via investing - Good flexibility 	<ul style="list-style-type: none"> - Location for work force - No interest in textile education - Ecological regulations

One of the weaknesses of Alkaloid-Berovo is the fact that although the weaving machines have been modernized, the remaining part of the production machines still needs to be invested in. The department for fabric dyeing is in poor condition and needs new machines as well as the machines for warping of the cotton yarn.

A second weakness are the factory premises. A large portion of the factory needs to be completely renovated and invested in. So far, only the weaving sector has been completely renovated and modernized.

The fact that the company does not have long term debts and owns its premises gives the company a good financial position, thus creating a good reputation for future bank loans and borrowing.

Another great opportunity would be investing in the other parts of the factory, thus modernizing it, increasing the production, decreasing the producing time and by that, improving the delivery speed. Also, the factory has an opportunity to quickly reconfigure

the machines if a new product is needed. That way, the machines can be adjusted to producing any kind of a weaving product that the market requires and needs.

The fact that the factory lies in a small city up in the mountains makes it very hard for the company to find new quality work force. In the last decade there has been a trend in Macedonia for the young people to move in the capital city of Skopje in search for better jobs. This is mostly due to the problem with the minimum salary in the textile industry. The young people do not have interest to study textile and invest in the know-how because the factories take mostly workers with low level of education in order to be competitive with the prices of the final product.

Another threat that the factory is currently facing are the waste waters that are being dumped in the local river. The government has become stricter in the regulations for pollution of the environment and therefore the factory is now obligated to invest in improving the waste station for cleaning the water or face high penalties.

From the above we can conclude that Alkaloid Berovo has survived through some turbulent periods including the denationalization of the factory. It has resisted some tough periods by adjusting the products according to the market needs. With the help of the old management it transformed the production and changed the output from textile sanitization materials to baby textile products and articles. It also invested partly into new machinery park as well as renovation of some of the facilities. The future plans of the management is to keep investing into other parts of the production and by conquering new West European markets, the company shows that despite the heavy competition from the Far East countries, it will try to use all of the advantages and keep the factory expanding.

3.2 Zona-Triko Vinica

3.2.1 Company Description

Zona-Triko is a knitting factory situated in the city of Vinica, eastern part of Macedonia. The premises are located in the old Triko factory, which was closed during the transition period of Macedonia. Zona-Triko was established in 2006 and is in complete domestic ownership.

Using the financial sheets, we can see that the company is steadily increasing its employee number, which in 2013 was 241. This means that the factory is expanding and is showing great potential for the future.

As a main products of the company, we can put the man and women knitted underwear as well as children knitted cloths. The company has been exporting the goods mostly in the

west European markets such as Germany, France, Holland and few east European countries. German companies are the biggest participant with over 70% of the total sales.

In Table 8 we can easily notice that the financial indicators for Zona Triko significantly decreased in 2013. One of the factors causing this is the loss of one of the biggest customers for children underwear on the German market. However, the management has tried to replace this customer by a couple of smaller clients, which covered at least a part of the lost capacity. The increase in the number of the employees shows that the company is moving in the right direction.

Table 8: Balance Sheet of Zona Triko Vinica, 2012-2013 (in mil MKD)

ASSETS	2013	2012
1. Property, plant and equipment	223,261,843	222,705,669
- Buildings and equipment	222,573,271	222,320,691
- Intangible assets	66,371	0
- Long-term financial assets	622,201	384,978
2. Current assets	308,549,567	281,116,558
- Inventory	249,567,460	168,555,266
- Short term accounts receivable	57,438,082	99,809,619
- Cash	1,544,025	12,598,955
- Prepaid costs for future periods	13,464,144	7,455,749
LIABILITIES	2013	2012
3. Short-term liabilities	371,803,083	238,787,835
4. Long-term liabilities	156,712,751	257,919,851
5. Other liabilities	83,296	83,296
6. STOCKHOLDERS' EQUITY	16,676,424	14,486,994

Note: *61 MKD = 1 EUR

Source: Financial statement from Zona Triko Vinica

What we can see from the balance sheet in Table 8 is that the assets of Triko Vinica are increase in 2013 compared to 2012. The increase is mostly in the long-term financial assets. The inventories have gone up 48% in the year 2013 and the cash has been reduced drastically which shows us that the factory is facing a certain liquidity problem.

On the other side of the balance sheet, short term liabilities are also significantly increased in 2013 for over 55% which greatly endangers the liquidity of the company.

Table 9: Income Statement of Zona Triko Vinica, 2012-2013 (in mil MKD)

REVENUES	2013	2012	EXPENCES	2013	2012
Sales revenues	402,652,764	431,442,330	Operational expenses	379,482,324	404,942,995
Financial revenues	213,223	196,753	Financial expenses	22,701,625	20,004,254
Total:	402,865,987	431,639,083	Total:	402,183,949	424,947,249
			Net income before taxes	682,038	6,691,834
			Taxes	361,244	418,834
			Net income (profit)	3.207.940	6.273.000

Note: *61 MKD = 1 EUR

Source: Financial statement from Zona Triko Vinica

The factory also possesses an OSC blended and an OSC 100% certificate issued by CERES Germany. It is audited every 12 months by SGS Bulgaria and in order to reduce the costs, Zona Triko and Alkaloid Berovo usually have the same auditor from SGS do the audit in both of the factories in the same week. In the interview with the management, we were told that during the last 2 years, more than 60% of the men and women underwear products that Zona Triko produces have been switched to fully organic products due to the wants and the needs of their customers. Beside this, in 2014 the factory also obtained an BSCI certificate, which shows that the factory is fulfilling the security standards for their work processes. Since this is quite a young factory, it has been fully modernized from the beginning of its working. The owners have invested heavily into modern machinery park as well as suitable and fully equipped premises. The factory is equipped with machines for complete products from scratch. This means that the products are made from cotton yarn to a fully packed final product. The factory also possesses a section for printing of the knitted fabric giving the customers opportunity for creative designs.

But despite the introduced standards and made investments, we can see that the sales revenues have gone down 6,6% in 2013. Finally, the profit is significantly decrease in

2013, for almost two times compared to 2012. Again we note that the income statement is only for two years. Usually it takes time for the investments to be effectuated into positive results for the firms.

Financial indicators for Zona Triko Vinica are also extracted from the information given from the Central Register of Republic of Macedonia. The data shows that financial security has been improved in 2013 compared to 2012 and the numbers of employees is increased. Level of credit worthiness had worsened; days of debt repay had been prolonged from 215 to 358; and the current liquidity had worsened that we already have stated previously. That directly has influenced the decreasing of the total profit per employee in euros for more than 22 times. The company has serious problems with liquidity and might face serious problems in the future if the indicators do not improve.

Table 10: Financial Indicators for Zona Triko Vinica, 2012-2013

	2013	2012
Financial security	3,10	2,80
Level of credit worthiness	77,70	122,40
Current liquidity	0,40	5,30
Days of debt repay	358,00	215,00
Total assets turnover	0,74	0,84
Total profit per employee in Euros	21,64	481,13
Total number of employees	241,00	212,00

Source: Data from the financial statement of Zona Triko Vinica

3.2.2 SWOT Analysis of Zona-Triko Vinica

The distance from the west European markets gives Zona-Triko a great advantage over the far east competition. The production time is 6-8 weeks and the delivery takes 2-3 days to reach the final customer. The company owns the factory premises, which makes the access to the bank loans much easier.

Another strength of the factory is the fact that the production has become highly efficient over the last couple of years, with the ability to maximize both productivity of the workers and machines for maximum profits. The low price of the final products is one of the

weaknesses of the company. In order to maintain the regular income for covering the fixed and the operational costs, the company must produce and sell large quantities of products. Another weakness is the differentiation of the final products. The factory produces products with different configuration and different materials. If it needs to produce many different products at once, it means that the machines must be constantly adjusted, which absorbs time and reduces the productivity.

The location of the factory in a small city in the eastern part of the country, where the qualified labor force is reduced, can lead to difficulties with finding suitable workers for the specific positions. The company has already established itself with some of the biggest companies in Germany. This can be used as a great reference in entering new markets in west Europe. It also has the ability to employ second and third work shift thus doubling or even tripling the production capacities if needed.

Table 11: SWOT Analysis of Zona Triko Vinica

Strengths	Weaknesses
<ul style="list-style-type: none"> -Fast production time -Own premises -High efficiency 	<ul style="list-style-type: none"> - Low price of the final product - High product differentiation - Needs more workers
Opportunities	Threats
<ul style="list-style-type: none"> - Experience - Can easily increase production capacities - Can exploit more workforce 	<ul style="list-style-type: none"> - Low wages lures away the workers - Dependence on cotton prices

The factory has very big production capacity but in order to satisfy a very large group of west European big clients they have dispersed their production through many smaller companies in Macedonia. This is done in order to expand their ray of products because the factory is not equipped to do certain processes like embroiding or printing. But this can in many cases be a reason for compaints from the final customers because of the weaker control. The best way for the company to increase its revenues and reduce the production costs would be to focus only on the major clients and reduce the ray of the products only to those products that can be made in the factory in large quantities. This way an economy of scale can be achieved.

Much of the confectioning is being done by other smaller confection companies because the factory itself has a smaller confection section. This can also be expanded in the near future and so, the costs can be reduced and the quality control can be done inside the factory. Recent increase of small confection companies in the east Macedonia lures away the experienced sewing workers from Zona Triko. Other companies give the workers

higher wages but our research has shown that the workers minimum work normative is much higher in the other companies and the work conditions are worse than the one offered in Zona Triko. From the interview with the factory chiefs, we have established that many of the workers who leave the factory for another company, after couple of months return to the factory. However this still creates a problem for Zona because sometimes it happens that during the busiest months, up to ten workers leave the company and create a shortage of workers, who cannot be replaced in a hurry. As a countermeasure, Zona Triko has started cooperation with other small confections, increasing the capacities in that way.

Another threat is the great dependence of the company on knitting cotton yarn. The monthly expenditure is between 15-20 tons, which is one full container. In the previous 4 years there has been enormous fluctuations in the cotton price. In 2012, the cotton price was over 4 times higher than the current one of 0.80 USD per kg. The customers of Zona Triko are mostly companies with catalogue sale, meaning that the prices must be guaranteed throughout the whole year. That led to huge drop in the company financial power and high dependence on bank loans. The company has financial power to make cotton supplies for 3 months upfront but this is not enough to prevent future cotton price shocks.

Finally, we can sublime that Zona Triko Vinica still has a great potential for growing and expanding. So far, the company has established a good reputation among some of the most esteemed textile companies in western Europe. That gives them an opportunity via some improvements better to counter the far eastern threats that have been growing in the last decade.

3.3 EAM Shtip

3.3.1 Company Description

EAM - Shtip is a weaving factory located at the outskirts of the city of Shtip. The factory premises are part of another big factory, Makedonka, which collapsed during the transition period. Today, only the halls of one of the biggest Macedonian factory Makedonka remains. EAM Shtip is a young company specialized mostly for T-shirts and baby clothes. In 2011, the owners bought 2 big halls from the trustee of Makedonka and invested about 800.000 EUR in new machines. From there, the company has developed steadily in the last few years and with turnover from 1.1 million EUR, it has become one of the biggest textile exporters in Macedonia. Over 95% of the total revenue of the company come from the export and only a small part is being sold on the domestic market.

The factory increased its capacity during the second half of 2014 by opening two new halls with machines and increasing the number of the employees. That can not be seen from the

current balance sheets for 2012 and 2013. In these two years, current assets had increased and property, plant and equipment has decreased that might suggest that some of the older machines has been sold in order to make new investments.

Table 12: Balance Sheet of EAM Shtip, 2012-2013 (in mil MKD)

	2013	2012
1.ASSETS		
I. Property, plant and equipment	30,721,140	35,642,761
II. Current assets	30,652,330	15,528,439
2.LIABILITIES	14,513,244	11,433,362
II.STOCKHOLDERS' EQUITY	46,588,201	39,737,838

Note.*61 MKD = 1 EUR

Source: Financial statement from EAM Shtip

Table 13: Income Statement of EAM Shtip, 2012-2013 (in million denars)

REVENUES	2013	2012	EXPENCES	2013	2012
Sales revenues	65,240,088	57,515,847	Operational expenses	57,010,962	55,677,625
Financial revenues	0	0	Financial expenses	1,337,472	1,033,343
Total:	65,240,088	57,515,847	Total:	58,348,434	56,710,968
			Net income before taxes	6,891,654	804,879
			Taxes	41,291	37,239
			Net income (profit)	6,850,363	767,640

Note.*61 MKD = 1 EUR

Source: Financial statment from EAM Shtip

If we compare the data from the income statement from 2013 and 2012, we can see that the company increased its activity, as well as sales revenues for 13% in 2013 compared to 2012. One of the biggest indicator for the improvement of the use of resources can be seen by comparing the net profit, which rose from 767640 million denars in 2012 to 6850363 million euros in 2013. That is 8 times bigger profit for one year. Another positive indicator is the number of employees which has increased from a total of 61 to 90 people in the company. The average net salary is 185 EUR, which is above the average of the textile industry in Macedonia. After our interviews with few of the employees, we can conclude that the working conditions are highly positive, the overtime job is paid and the relationship between the owners and the employees is very cooperative.

3.3.2 SWOT Analysis of EAM Shtip

EAM Shtip specialized in producing T-shirts. This gives them possibility to quickly respond to the buyers’ needs and preferences. The company has already established itself as a quality name in the former Yugoslav countries as well as in the western European market. Some of the biggest brands they have been cooperating with are Mercedes Benz, BMW, few beer companies in Croatia, etc.

Table 14: SWOT Analysis of EAM Shtip

Strengths	Weaknesses
<ul style="list-style-type: none"> -Big array of possibilities -Established with high brands -No long term debts 	<ul style="list-style-type: none"> - Small capacities - Lack of managerial staff - High price of final product
Opportunities	Threats
<ul style="list-style-type: none"> - Proximity to textile educational center - Chance for cheaper expansion - Modern printing machines - Own premises 	<ul style="list-style-type: none"> - Tough far East competition - Long time for new projects

One of the strengths of the factory is certainly their array of possibilities. The factory is equipped with modern machines for embroidery, which can accommodate fast to any customer needs and wants as well as various printing machines from hand printing to roll print. This gives the company an option to not just use the machines for their own purposes, but also to rent the modern machinery to other companies in the neighborhood, thus making extra profit.

In the last couple of years, the factory has established a well known brands that helped increase the price of the final product. Since the capacity of the factory is still very limited,

this has proved to be the right step towards balancing between the total costs and the total production capacity.

The financial indicators show that the company does not have any long term debts, which signals that they use their own capital. This helps them to be more flexible and easily adjust to the customer needs. The distance to the west European markets is another big strength of the company. The production time usually takes 4-6 weeks and the delivery time is 2-3 days, which is a big advantage over the far east competition.

The company also has several weaknesses. First, the small capacity of the production and small array of products is currently something that is being worked on. The factory is specialized in the production of T-shirts but in the last couple of years the company is also developing baby program such as baby bodies and bodysuits, baby pajamas and baby bibs, etc. The company has invested in new machines for baby push buttons and zippers as well new sewing machines for baby articles.

Another big issue is the lack of managerial staff. Currently, all of the work is being going through the owner of the factory. During the busiest months of the year this is a real problem because it takes longer for certain new projects to take place. The company needs to invest into project and sector managers to speed up the development process. Due to the low capacity of production, the prices of the articles are still way too high compared to the far east competition. This can be resolved in a couple of years with the increase of the production. Nevertheless, the factory is capable of producing high quality products, which compensates for their higher price.

This company also has several opportunities. First, the Textile Faculty in the near city opened in 2008 as well as the Faculty of Natural and Technical Sciences in the city of Shtip improved the qualification of the labor force and allowed EAM Shtip to employ young and highly educated people. This gives the company a great opportunity for future development.

The location of the factory is one big hall which is a part of another much bigger old and closed factory. Most of the halls are unoccupied, which gives EAM a chance for a cheap expansion of the capacities by renting or buying the nearest hall. Also the investment in modern printing machines gives the company an opportunity to print not only for personal needs but also to provide printing services to other companies in Macedonia.

Maybe the biggest threat that this fairly young company is facing is the competition coming from the far east, which offers much lower prices but also much lower quality. EAM can solve this if they start using their own brand, which can be offered as a higher quality product. The lack of high profile assistant managers is another problem which

prolongs the time needed for entering into new projects. As we mentioned before, all of the work is managed by one person and that significantly slows the initiation as well as the implementation of new projects such as the development of baby articles or baby clothes.

3.4 Comparison of the Three Factories

In Table 15 we have a clearer picture of the attributes of each of the three factories. Besides the fact that the three factories are in the eastern part of Macedonia, not many similarities can be found between them. Alkaloid Berovo is the oldest and EAM Shtip is the youngest factory. However, these three factories are currently taking the biggest part of the textile industry in the country. By modernizing and improving the know how techniques, they will start to attract more and more highly educated employees, which on the other hand will give the young people motivation to choose textile industry as a higher degree of education.

One of the main strengths is that all of the three factories have a great positioning which gives them edge compared to the near and the far east competitors. They all have a delivery time of approximately 2-3 days by truck.

Alkaloid Berovo compared to the other two factories has the oldest machinery park and oldest premises which need urgent investment. EAM is the youngest factory and the best equipped of them but has also the lowest production capacity which is slowly increased over time and investments. Zona Triko has currently the biggest capacity with a solid machinery park and owns the biggest premises.

Comparing the factories, we have concluded that only EAM has established well known brand products so far. This has allowed EAM to sell the final products for higher price compared to Alkaloid and Zona Triko and thus make up for the lack of the production capacities. Alkaloid Berovo has launched its first baby brended products in 2015 so it is still to early so see the final results because the brend is still in the break through phase.

Macedonia offers great opportunities for textile development. In the last decade there have been government investments in textile education which has increased the quality of the younger labor force. So far the three factories have profited from such government initiative. Maybe the biggest opportunity this three factories have in the future is the possibility for joined collaboration. From our visits we have seen that the factories already have undertaken smaller joined projects. Most of the articles produced in Zona Triko and Alkaloid Berovo are being printed or embroidered in EAM Stip. Another opportunity that the factories are considering is planting its own cotton and by joined work lowering the costs for planting and harvesting the raw cotton. Thic cound greatly influence the production costs for the three factories.

Table 15: Comparative SWOT Analysis of the Three Factories

	Strengths	Weaknesses	Opportunities	Threats
Alkaloid Berovo	<ul style="list-style-type: none"> - Proximity to western markets - The only weaving factory in Macedonia - Own finance 	<ul style="list-style-type: none"> - Big part of the machines are very old - Old factory premises 	<ul style="list-style-type: none"> - Good reputation - Chance of improvement via investing - Good flexibility 	<ul style="list-style-type: none"> - Location for work force - No interest in textile education - Ecological regulations
Zona Triko	<ul style="list-style-type: none"> - Fast production time - Own premises - High efficiency 	<ul style="list-style-type: none"> - Low price of the final product - High product differentiation - Lack of labor force 	<ul style="list-style-type: none"> - Experience - Can easily increase production capacities - Can exploit more workforce 	<ul style="list-style-type: none"> - Low wages lures away the workers - Dependence on cotton prices
EAM Shtip	<ul style="list-style-type: none"> - Big array of possibilities - Established with high brands - No long term debts - Own premises 	<ul style="list-style-type: none"> - Small capacities - Lack of High efficiency managerial staff - High price of final product 	<ul style="list-style-type: none"> - Proximity to textile educational center - Chance for cheaper expansion - Modern printing machines 	<ul style="list-style-type: none"> - Tough far East competition - Long time for new projects

However, the current centralization of the labor force that is happening in Macedonia in the capitol city of Skopje surely hurts the production capacity of the factories. Many of the younger textile students feel that the salary in the eastern part of the country is much less than what they could earn in the capitol so after finishing faculty they immediately move to Skopje in search of a better paid job. This has been significantly increased during the last few years and since Zona Triko and Alkaloid Berovo are very old factories their labor force is also consisted of older workers and need refreshment; they are the ones that are facing the biggest problems. EAM Shtip on the other hand is a young factory with average age of employees between 40 and 45 years meaning that they have not been affected so much by this.

Another threat is the big dependence on the current cotton prices. The factories tend to keep certain cotton stock but it usually isn't enough for 2-3 months of continuous work. Since cotton is a stock market commodity the prices tend to fluctuate daily. This problem can be significantly reduced by having its own cotton production. This is something that is still in the beginning phase.

And finally the major threat is the far eastern competition. The factories have to keep up fighting the extremely low prices of the final articles that are being conducted by the competitors. The very low labor cost as well as their proximity to big raw cotton markets gives the far eastern countries enormous cost advantage over the European producers.

What connects all of them is the fact that they are all very dependent on current cotton prices. EAM Shtip has made the biggest step towards independency from the cotton price by investing in large portions of land near the factory and planting them with cotton. Still, this quantity is not even nearly enough to cover the factory's yearly cotton requirements. Given the fact that Macedonia has predominantly warm climate which suits the cotton plants, followed by the fact that the cotton as an agricultural plant needs no big investment and is quite easy to develop, the future of the Macedonian textile industry lies in the renewal of the cotton fields in the country. One big problem that each of these factories are facing is the lack of highly qualified labor force. The centralization in Macedonia has led all of the young people to move towards the capitol city of Skopje in search for better jobs, leaving the rural areas depleted of qualified workers. The opening of the textile faculty near Shtip has slightly helped towards improvement of the situation, but it will take more to lure young people to stay and work in these factories.

CONCLUSION

Despite the positive developments, in our opinion, the problem lies in the low competitive strength of the textile industry. The country must make “internal devaluation”. That would mean restructuring of the production, especially regarding creation of domestic brands, increasing the variety of products and investing into promotion on foreign markets. Further on, the productivity and efficiency can be boosted by modernization of the physical capital (new technology and equipment), increase of the quality of the human capital, usage of domestic inputs and increase of innovativeness of domestic producers.

In long term, new measures can be taken regarding expanding new markets, especially to Asian countries, which have strengthened their purchasing power in the past two decades. Macedonia must explore the opportunities that are offered by the agreements of free trade, especially trading in the geographical terms of CEFTA (stands for Central European Free Trade Agreement, signed in 2006 by Albania, Bosnia and Herzegovina, Croatia, Macedonia, Moldova, Montenegro, Serbia and Kosovo). That, of course, must be supported by Government measures, such as lowering the prices for the energy, supporting the export and promotion of domestic brands and most importantly improvement of the road infrastructure of the country.

This master thesis will be of practical value to the development of the textile industry in Macedonia and also to any investor which would like to invest in the textile industry in Macedonia. It will also provide the large picture of the investment possibilities and future developments in this particular area.

Today, when we talk about the textile industry in Macedonia, we usually refer to the many small companies in the eastern part of the country doing only confectioning work for

European clients. The potential for expanding to a complete production does exist and the possibilities are huge but what is lacking are the big investments in the production facilities. Many foreign companies use the cheap labor and make only the confectioning of their final products in Macedonia. This is a very frequent occurrence around the city of Shtip. It has provided many families with work and means for life, but what is wrong is that the foreign owners pay only the minimal salary that the government has established. The only way this can be improved is by investing in complete production facilities.

In the beginning of this master thesis we asked how the country can make a better use of its own resources in the textile industry. Well, for a small country like Macedonia the biggest potential is certainly its geographical positioning. Being rich with fertile land in combination with over 280 days of sunshine, warm climate and cheap labor force can certainly bring a lot to the cotton farming. The country has land more than enough to meet its yearly cotton industry demands by planting and cultivating various types of cotton. Another resource of great value is the cheap labor force that Macedonia currently possesses. Compared to other European countries, Macedonia is among the bottom countries for salary per worker. This enables the country to be able to compete with middle and far east textile competitors.

Another question of high essence was what the production can implement to increase the production by lowering the costs. Here the answer is very obvious. In an developing country like Macedonia the answer is modernization. Only by introducing new technologies, new know-how and new working techniques can the production be increased and the costs be reduced. By introducing new technologies and new machines, the waste will be reduced, time needed for production will also be reduced and so the total production will have great benefits.

During our research for this thesis and our interviews with the factories we have concluded that with the modernization and the constant development of the biggest factories the whole area around them is coming to life. The introduction of new technologies drives the younger generation and motivates them to stay or to come back to work in the area where the factories are. Many smaller companies like lumber mills, dye stores, thread manufacturing companies, shipping companies, etc. profit from the cooperation with the factories.

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