Romania's Apparel Cluster

MOC Class Project 2010

Chris Lawrence-Pietroni

Frauke de Weijer

Adesina Lalude

Andrzej Baraniak

Dean Frankle

PART I: ROMANIA – COUNTRY LEVEL ANALYSIS

Romania is the 9th largest country in the European Union and the 82nd largest country in the world with a total area of 238,391 sq km (CIA, 2010) (comparable in size to the US state of Oregon). Situated in Eastern Europe, Romania borders Hungary, Moldova, Serbia, Ukraine and Bulgaria, as well as the Black Sea. Its capital and largest city is Bucharest with 1.9 million inhabitants. (RSY, 2007)

As of July 2009, Romania has a population of 22.2m (CIA, 2010) making it the world's 51st most populous country. It has a median age of 37.7, a population growth of -0.147%[1], and a life expectancy of 72.45 years. An estimated 29.6% of Romanians live below the poverty line (World Bank, 2010a), and 54% of the total population lives in an urban setting. Romania has a large diaspora, with around 2 million ethnic Romanians residing outside of Romania (EIU, 2010b).

History

At the end of World War II, part of present day Romania today was incorporated into the USSR. Romania was the most centralized of the communist economies and saw extreme industrial specialization. In the 1980s, increasing export of industrial output created chronic shortages of food, energy and clothing which contributed to a revolution in 1989 and the fall of the iron curtain. Romania subsequently embarked on a series of political and economic reforms with IMF assistance being received in the late 1990s (Borras & Tsaagdis, 2008) (EIU, 2010b).

Worth noting are the government's efforts in the liberalization of FDI policies and the privatization of State Owned Enterprises (SOEs) as per the Copenhagen Criteria. By 1991 Romania had finished incorporating its

[1] The low population growth is in part driven by a very low birth rate of 10.53 birth/1000 population (185th in world) and part by a very low fertility rate of 1.39 children born/woman (198th in world).

2,354 SOEs and by 1998 over half no longer had the state as a majority shareholder (Embassy of Romania, 2010). To date, hundreds of foreign companies have invested in and outright purchased former SOEs, mainly public utilities and firms in heavy industries like cement, metal, machine building, and petroleum (Earle & Telegdy, 2002).

In 2000, Romania started a convergence program for EU membership eventually joining in 2007 after major reforms were enacted, including the adoption of the entire Acquis Communautaire, which has brought Romania much closer to Western Europe in terms of its legal and regulatory frameworks. The reforms also included a revised constitution in 2003, and Romania now has a semi Presidential representative democracy where the Prime Minister is the head of government and the President the head of state. However, since joining the EU, Romania has continued to see political instability, most notably with the 2007 attempted impeachment of its president. (EIU, 2010b)

Economic Performance

After the fall of communism in 1989, Romania witnessed a decade of decline, while lagging behind its peers in terms of reform (EIU, 2010b). Romania emerged from a three year recession with strong domestic demand, high growth, and decreasing unemployment and inflation. However, from 2000 onward, Romania's economy was transformed as it set course for EU entry (growing at a CAGR of 6.24% from 2000-8).

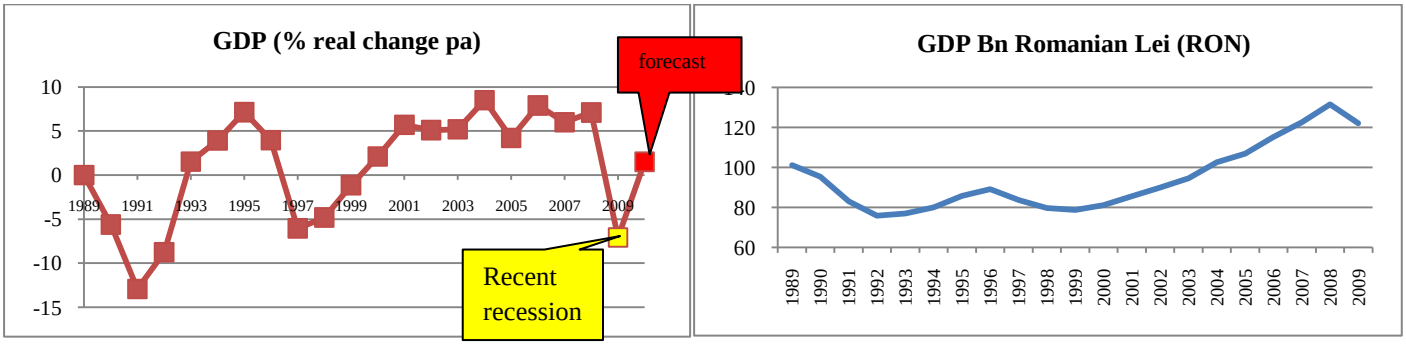

Figure 1: Trend in GDP (source (EIU, 2010a)

Services, industry and manufacturing play the most important role in the economy, and these have all grown over time, as figure 2 shows.

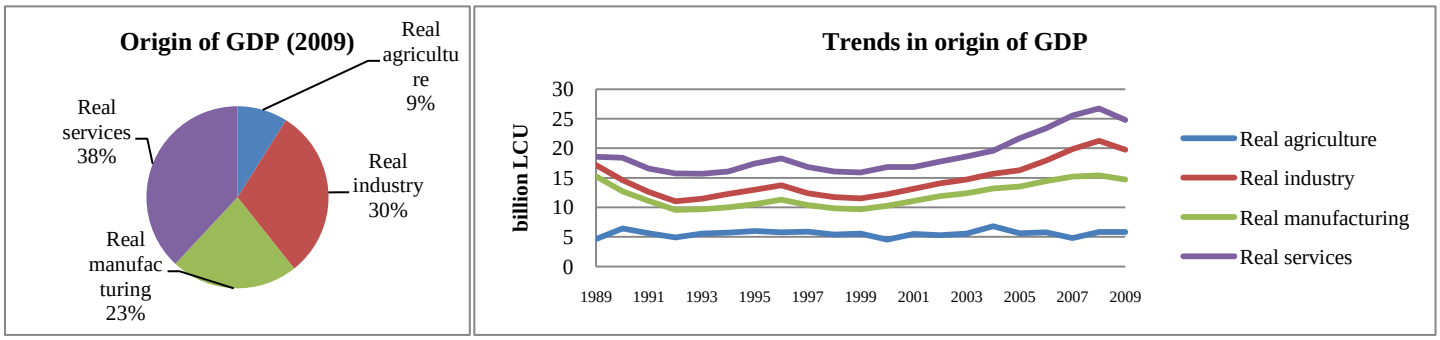

Figure 3: Source (EIU, 2010a)

Nowadays, Romania is the 11th largest economy in the EU by total nominal GDP ($251.7bn). GDP /capita in 2009 was U$7,912, e.g. the second lowest in the EU, ahead of Bulgaria. (IMF, 2009)

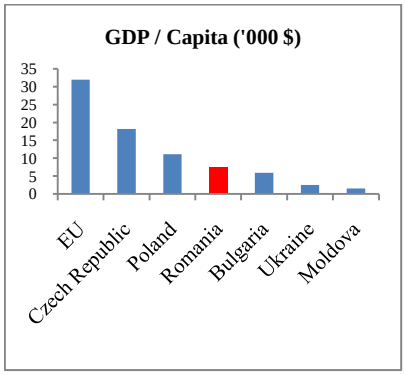

Figure 2:GDP/capita (Eurostat, 2010)

Although Romania has seen drastic improvement in GDP/capita since EU membership, it is estimated that Romania needs about 30 years to converge to the EU average if Romania could sustain 7% GDP growth rate, while the EU average growth remains at 2%. (CEU, 2010) Romania however did not sustain this growth rate in 2009, falling 7.1% versus an EU average of 4.0% during the global recession, thus convergence may now take even longer.

FDI -inflows

From 2002 onward Romania relaxed its FDI policies by treating foreign firms who invest in Romania exactly as domestic firms are allowing firms to freely transfer income abroad. As a result Romania has started to attract high levels of FDI. However, as shown in figure 4, its FDI inflows lagged substantially behind other Eastern European countries, notably Bulgaria.

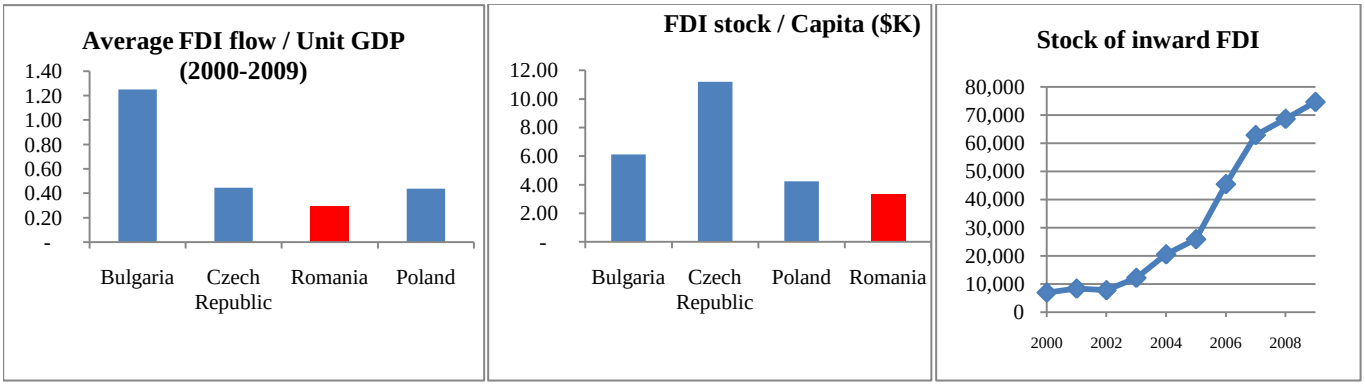

Figure 4: Foreign Direct Investment (EIU, 2010a)

Wages and Productivity growth

In the first decade of the 21st century, Romania experienced a dramatic economic transformation moving from a command to a market-driven economy. Structural adjustments caused massive layoffs in the first part of the decade (employment decreased by 14% from 2000 to 2005), but were mitigated by massive improvements in the productivity of the remaining labor force (53% cumulative increase of labor productivity from 2000 to 2005 in PPP terms) driven mostly by improvement in Total Factor Productivity (37% increase 2000-2005), with the remaining portion coming from capital accumulation and an overall effect on GDP growth being highly positive. In the latter part of the decade, the economy stabilized and while labor productivity increases remained robust (6.3% CAGR 2005-2008), they were driven mainly by capital accumulation, as TFP growth slowed significantly (1.9% CAGR 2005-2008). (Conference Board, 2010)

A troubling statistic is that productivity increases related to human capital development were lower in Romania (0.7% 2000-2008) than in other Eastern European countries such as Poland (1.1%) and Bulgaria (1.6%) (Conference Board, 2010). Romanian labor is also becoming uncompetitive due to high wage inflation. Over 2000-2008 period, Romanian real hourly wages increased 9.2% annually, compared with 3.2% in Poland and 3.8% in Bulgaria. Even though labor productivity in Romania also increased faster during that period (7.8% CAGR, vs. 3.3% for Bulgaria and 4.1% for Poland), Romanian wages outpaced labor productivity growth by

1.4% per annum (vs. 0.5% in Bulgaria and -0.9% in Poland), making Romanian labor progressively less attractive compared to its Easter European neighbors. (wage data from (EIU, 2010a))

Endowments

Romania is endowed with a strategic location, in proximity to Western Europe and to the former Soviet Union, and with access to the river Danube and the Black Sea, which are main trade routes. In addition, it has some coal deposits, some natural oil and gas[2], and some minerals. Furthermore it has a natural beauty and picturesque towns, a relatively sizeable domestic market and a large diaspora. (EIU, 2010b)

Macroeconomic Competitiveness

Social infrastructure and Political Institutions

Basic human capacity

89.5% of inhabitants in Romania are Romanian while 6.6% are Hungarian, and there is a substantial Roma population (2.5%). Over 91% of the population speak the national language, Romanian, while Hungarian (6.7%) and Romany (1.1%, a gypsy language) is also spoken. Romanian is closely related to languages like French, Italian, Portuguese and Spanish. (Wikipedia, 2010a). As a consequence, the majority of Romanians speak more than one language, notably English, French, German, and Italian[3]. These language ties with Western European countries support Romania's long-standing relationships with Western Europe.

Education

Breadth of access to education in Romania is satisfactory by European levels, with primary enrollment of 93%, secondary enrollment of 80% and tertiary enrolment of 74%. The quality, however, is significantly below European averages. Romanian grade school students score in the lowest quintile in math, science and reading tests, and rank 14 out of 17 countries in the region (PISA ranking). Additionally, no Romanian university is

2 These reserves are expected to be depleted in 14 years.

[3] 47% of Romanian's are conversational in at least one other language and 27% in two; with English (29%), French (24%) and German (6%) high on the list. (Commission, 2006). Italian is also widely spoken as a second language.

included in top 500 research universities in Europe and universities tend to favor theoretical rather than applied sciences (UNICEF, 2009). Due to poor quality of higher education, gifted Romanian students tend to choose foreign (mostly Western European) universities and often increase ranks of diaspora after graduation (Interviews, 2010). This brain drain exacerbates the problem of low availability of skilled labor in the country. The Romanian government has tried to address the issue of education quality, as well as issues of inequality in access to education, through increasing budget allocation to education (from current 3.5% GDP to target 6% in 2013) (UNICEF, 2009).

Poor quality of education translates into low levels of innovation in Romania. In terms of patents filed per capita, Romania with 1.6 patents per million inhabitants lags significantly below not only EU average (115), but its Eastern European peers like Czech Republic (10.8), Bulgaria (3.5) or Poland (3.4) (Eurostat, 2010)

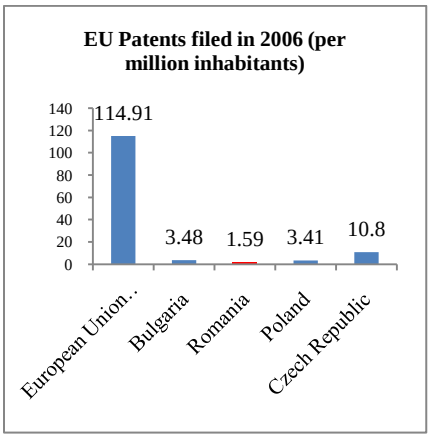

Figure 5: (Eurostat, 2010)

Political institutions

Romania is described as "Free" in the Freedom House Ranking, for both political rights and civil liberties, although with a score of 2.0 for both it is below Hungary, Slovakia, Slovenia and Poland, other Eastern European countries, who score 1.0. (Freedom House, 2010). According to the Economist, political stability in Romania is at "high risk" with a score of 5.8/10 and a score of 7.0/10 for potential economic distress. Both of these scores were an increase on 2007. (Economist, 2010).

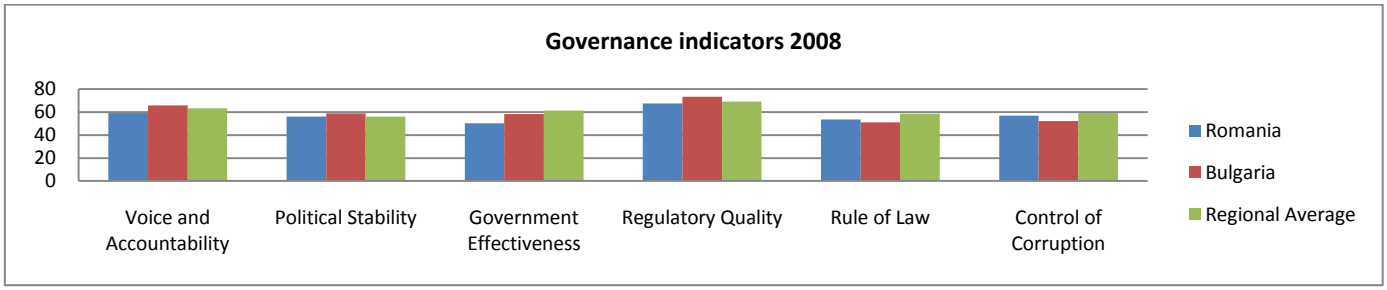

Figure 6: Worldbank Governance Indicators (WBI, 2008)

The World Bank aggregate indicator places Romania in the 50th percentile for government effectiveness in

2008, a fall from the 60th percentile (between 2003 and 2006) (WBI, 2008). As figure 6 shows, Romania's government effectiveness falls slightly below the regional average, though on similar levels to Bulgaria.

Romania has not been able to fully leverage the US structural and cohesion funds. As of mid 2009 Romania had not constructed a single kilometer of road since joining the EU, this despite a bevy of available EU resources. (EurActiv, 2009). Romania has been allocated the EU's 5th largest slice of structural funds. (EEA, 2009).

National Business Environment

Performance of Romania's regulatory business environment is mixed compared to the rest of European Union. On a positive side, it is relatively easy to start a business in Romania, which can be done in 10 business days, takes 6 regulations and costs on average 3% of income / capita. On the other hand, bankruptcy laws in Romania are not well developed, contract enforcement is difficult, and obtaining construction permits is also costly and difficult. A multitude of procedural requirements in operating a business is also reinforcing high levels of corruption in Romania, as economic agents may find it both quicker and less costly to obtain necessary permits in "informal" ways. Overall, Romania ranks 55 in World Bank's "ease of doing business" ranking, below Bulgaria (44) and Hungary (47), but above Poland (72), Czech Republic (74) and Moldova (94). (World Bank, 2010b).

Figure 7: World Bank – Doing Business Indicators (World Bank, 2010b)

In 2005, Romania adopted a 16% flat tax for both personal income and corporate profits. Since 2000, there has been a uniform rate of VAT. Although higher than Bulgaria (10%), the 16% flat tax is now one of the lowest in Europe, which improves the attractiveness of the business environment *(NBR, 2010) (NBB, 2010)*.

Rule of law

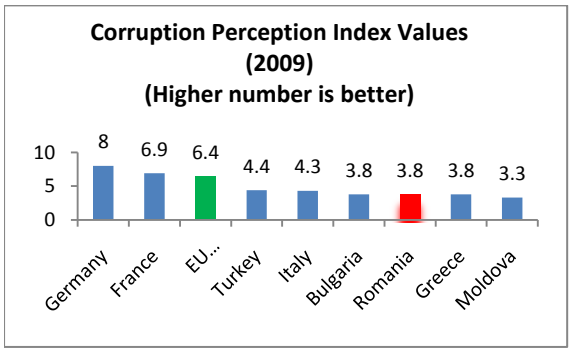

Figure 8: Transparency International (TI, 2010)

Communism in Romania left a legacy of endemic corruption which Romania is dealing with to this day. Transparency International rates Romania as one of the most corrupted countries in the European Union, alongside Bulgaria and Greece, and way below EU average (6.2) (TI, 2010). These high levels of corruption increase cost of doing business in the country, limit the beneficial effect of competitive forces, create management distractions and stifle entrepreneurship, all of which negatively affect the country's competitive position. Over the past decade, Romania has attempted to tackle its corruption problems, especially after joining the EU in 2007, and these efforts resulted in some degree of success, increasing Romania's score from 2.9 in 2003 to 3.8 in 2009 (TI, 2010). Conversations with Romanian officials, however, paint a less optimistic picture. While corruption is being tackled at the high administrative levels, there is little improvement in regional and local administration, which is most relevant to creating a robust business environment for SMEs (Interviews, 2010). Corruption, as well as judicial reform, remains among the issues monitored by the European Commission. (EIU, 2010b)

Macroeconomic policies

Romania adopted inflation targeting in 2005 which led to double digit inflation falling to below double digits in 2006 (inflation fell from 154% in 1997 to 9% in 2005 and subsequently to 4.8% in 2007). Interest rates are still high by EU standards (at 10.25% in August 2008 before falling dramatically to 6.5% by March 2010 to stimulate demand following the global recession) (NBR, 2010). However, the government has had relatively loose fiscal policies in recent years, in spite of signs that the economy was overheating, which has lead to increased inflationary pressure. This rate does need to be brought under control, if the planned ascension to the EU's Exchange Rate Mechanism in 2012 is to be achieved (EIU, 2010b).

Government spending continues to exceed revenues, and government deficits have grown in recent years. In 2007 the government deficit was 2.4%, up from 1.8% in 2006. Under pressure from the EU, the government has set a budget deficit target of 2.5% for 2009. The ratio of government debt to GNI has increased substantially over time. The persistently weak fiscal policy reduces creditors' confidence in Romania, which will make it increasingly difficult for Romania to finance its deficits, in particular during times of a financial crisis (EIU, 2010b).

Most of the banks are foreign-owned, though the government has so far resisted the privatization of the State Savings Bank. The interest spread in Romania in 2008 was 5.5, which is below the average of other lower middle income countries, and lower than Bulgaria (EIU, 2010b).

Microeconomic Competitiveness - Country Diamond

The country diamond is presented in figure 9. A brief description of the quadrants follows below.

Factor conditions

Labor costs, skill levels, diaspora, and linguistic ability

As discussed above, labor costs in Romania are low compared to the EU-average, but relatively high in comparison to its neighbors. As such, Romania is at risk of losing its labor competitiveness, while productivity increases are not making up for this loss. Secondary and higher education is of low quality, which leads to low skill levels in the country. However, Romania does boast a large diaspora, which it could draw upon to quickly upgrade its skill levels. Romania's population's strong linguistic ability strengthens its potential to establish relationships with western European countries.

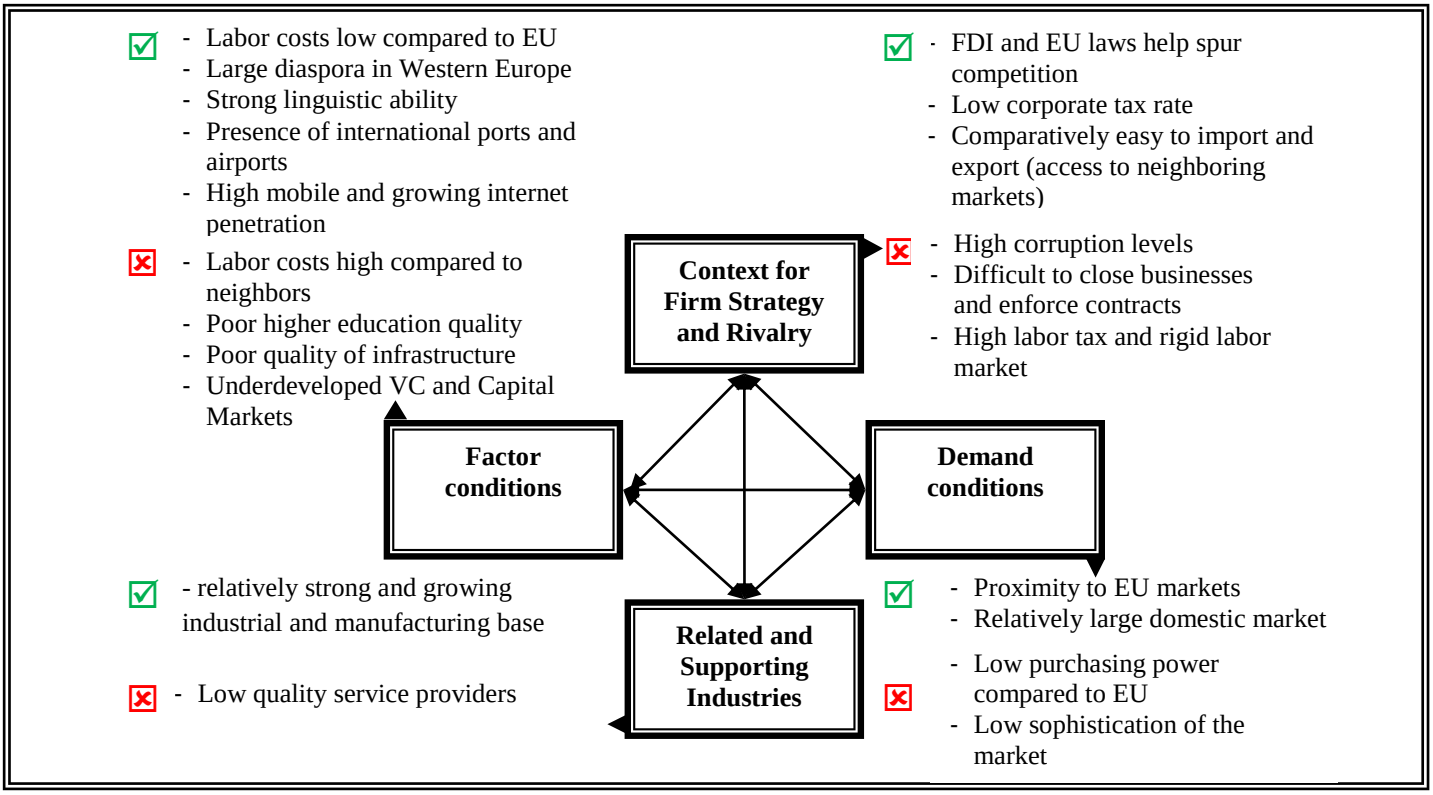

Figure 9: Country diamond (source: team analysis)

Capital and Financial Markets

The level of development of capital markets in Romania is not only well below Western European levels; it also lags its Eastern European peers. The Venture Capital market in Romania is practically non-existent, as it is in most Eastern European countries[4]. These low ratios of capital / GDP translate into lower availability of capital for Romanian businesses compared to businesses in other countries. However, penetration of capital markets in Romania is steadily improving, helped by privatizations[5] and FDI[6]. (Raiffeisen Research, 2008)

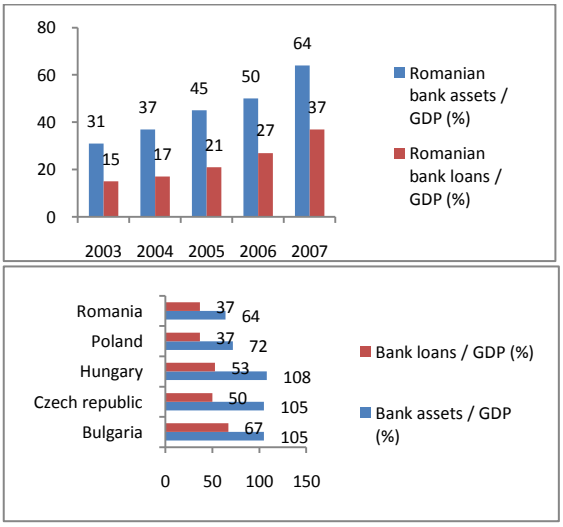

Figure 10: Financial markets (Raiffeisen Research, 2008)

Poor quality of infrastructure

4 The VC funds / GDP ratio in 2008 at only 0.2%, compared to 2.2% for EU-15 and 4.8% for Unites States (Eurostat, 2010).
5 The share of banking assets in state own companies decreased from 35% to 5% in 2001-2005
6 The share of banking assets in foreign-owned banks increased from 55% to 67% in 2001-2005

Romania does have access to international ports and airports, which provide access to main trade routes. However, its internal infrastructure is underdeveloped[7], and in addition its quality is low, and in need of repair. The U.S. State Department cites ageing and inadequate physical infrastructure as one of the top three threats to Romania's future. (Bureau of European and Eurasian Affairs, 2009)

Context for Firm Strategy and Rivalry

Laws affecting competition

The context for competition has been strengthened substantially by Romania's recent reforms, as described earlier. Most notably is has adopted EU competition policies, has privatized the vast majority of its SOEs, and liberalized FDI policies.

Economic development strategies

Romania has not managed to create effective sub-national economic development structures. With a legacy of central planning up to 1989, it has since created sub –national structures with the intention of stimulating economic development. Romania established a national development agency and regional development agencies (RDAs) in line with the NUTS-II system. However, this was mostly driven by compliance with EU regional policies. These RDAs were not connected to realistic economic zones nor administrative boundaries. Pre-existing Economic Development Agencies at county-level had a more appropriate geographical scope but were still not linked to actual economic activity. Both institutions suffered from a lack of activity, and had little to no private sector involvement. (Borras & Tsaagdis, 2008). One interviewee stated: *"There is no real clustering structure, no real initiative from the government side or from the regional side. There is interest, of course, but there is no action in place."*

Demand Conditions

Romania has a relatively large domestic market, and it is quite strongly connected into European markets. However, the level of sophistication of the domestic market is still lagging far behind, not helped by the recent

7 Romania only has 4.38 km of paved highway per 1,000 people putting it behind regional neighbors like Armenia and Croatia and well behind the EU average of 9.107 km per 1,000 people. Romania is ranked 181 in the world with just 2.738 airports per million people making it third to last in the EU (Nation Master, 2008).

collapse in purchasing power in the global recession. Romania's entry into the EU, and its large diaspora does provide opportunities for an increase in sophistication in years to come.

Related and Supporting Industries

Romania has a number of different sectors it is engaged in, and has a relatively strong industrial and manufacturing base. However, Romania suffers from a lack of high-quality service providers *(Interviews, 2010)*, and low quantity of local suppliers *(GCI, 2009)*, which impedes productivity upgrading.

Recommended Strategy for the Country

Romania needs to make its **human capital more competitive** by improving the country's educational system. It should create incentive systems for schools and teachers that are linked to student performances on standardized tests, especially at primary and secondary level. Investment in technology (computers, internet access) needs to be increased along with the introduction of more vocational training programs. For tertiary education, Romania needs to channel resources towards two or three of the best institutions to increase their quality to top European standards, as well as endow more applied science programs.

Corruption needs to be addressed through a visible program (making corruption-related arrests and investigations well publicized) that reaches regional and local administration levels, to send a powerful signal that "rules of the game have changed." Public-private task forces should be created to identify and eliminate redundant and unnecessary procedures and bureaucracy around closing businesses, construction permits, etc. (best practices from other EU countries should become a benchmark).

Capital market penetration growth should be encouraged through government support and quality control of consumer credit databases.

Higher labor force participation should be encouraged to increase labor supply and put downward pressure on wages. Immigration law should be amended to invite skilled labor (e.g. positive points for graduate degrees in engineering) from non-EU Eastern European countries (e.g. Ukraine, Moldova).

Romania needs to further capitalize on EU membership, by **leveraging the EU structural funds and cohesion funds** which can be directly invested in infrastructure projects, and used to upgrade the transport links with Europe to reduce transaction costs.

The successful attraction of FDI alone is not enough to make Romania globally competitive. The country must also look **to cluster development and enhancement**. A successful cluster strategy for Romania will need to be comprised of two components, a government sector component and a private sector component. But, progress in these two silos separately will not be enough. Many of Romania's greatest competitiveness issues like the need to build and improve RDAs and IFCs require private sector and government cooperation.

On the government side, Romania will need to provide RDAs with effective authority for cluster development and provide training to RDAs and IFCs on cluster development. At the moment Romania's scarce resources are not being allocated as efficiently as possible. A strong national policy could do a great deal to build economies of scale in effort, not only for the apparel industry, but for all industries across Romania.

The second component of Romania's cluster development strategy needs to hinge on the private sector. Due to Romania's communist history much of its development policy is highly centralized with the federal government. Romania needs to move national development strategy away from the government towards RDAs, IFCs and private companies. Cluster champions within the private sector should also be identified.

More specific recommendations will follow under the Cluster Section.

PART II - APPARAL CLUSTER ANALYSIS

Romania's apparel cluster involves a wide variety of products, such as suits, dresses, lingerie, cotton wear, lingerie, swimwear, and outer wear including leather and fur coats, as well as home textiles.

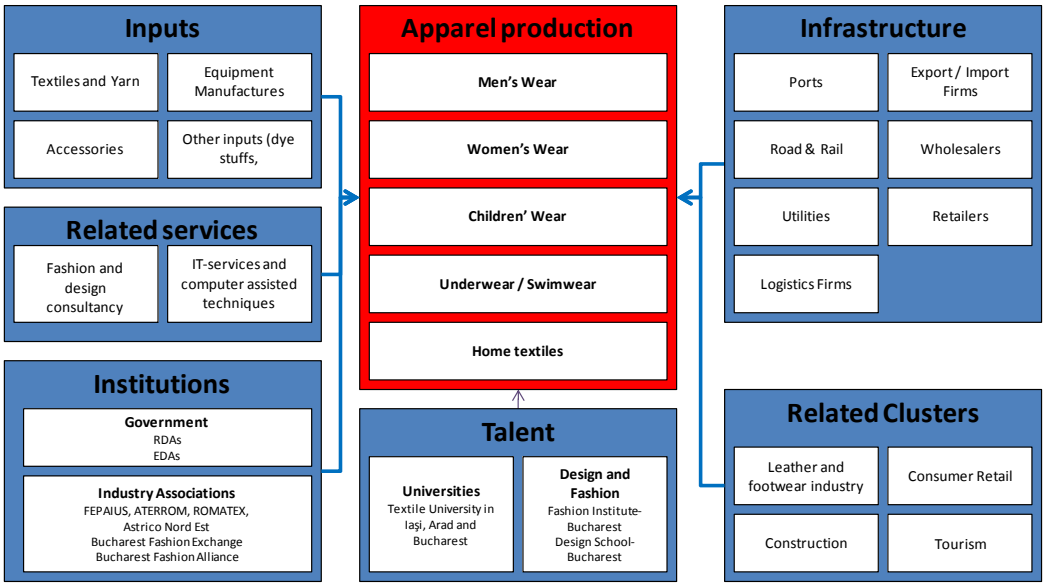

Figure 11: Cluster map (source: team's analysis)

Cluster Performance and Relative Positioning

The Romanian apparel industry grew rapidly from 1992 to 2004. Although this trend has started to reverse in recent years, the industry remains one of the most important sectors within the Romanian economy generating an export value in excess of $4bn in 2007 – second only to the metals and mining sector.

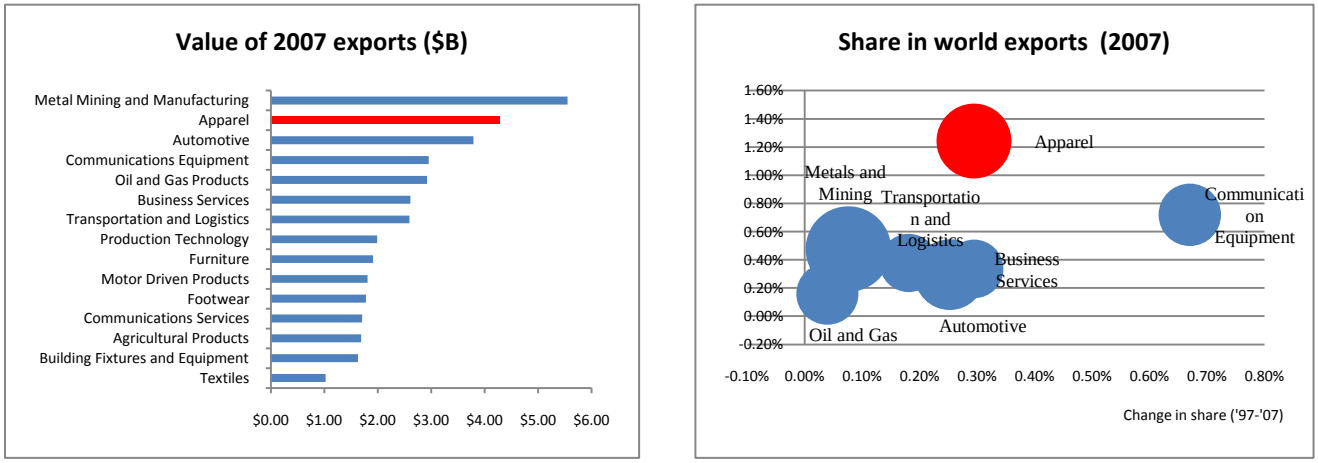

Figure 12 – Source: International Cluster Competitiveness Project (ICCP, 2010)

On the world scale, Romania remains a small player in this industry: in 2007 Romanian apparel accounted for only 1.24% of world exports albeit on a 0.29% increase since 1997. Around 80% of Romanian apparel production is for the export market (Reporter Economic, 2009) and part of the production for the domestic market is associated with a small number of domestic brands particularly in the leather and fur sub-clusters (Borras & Tsaagdis, 2008).

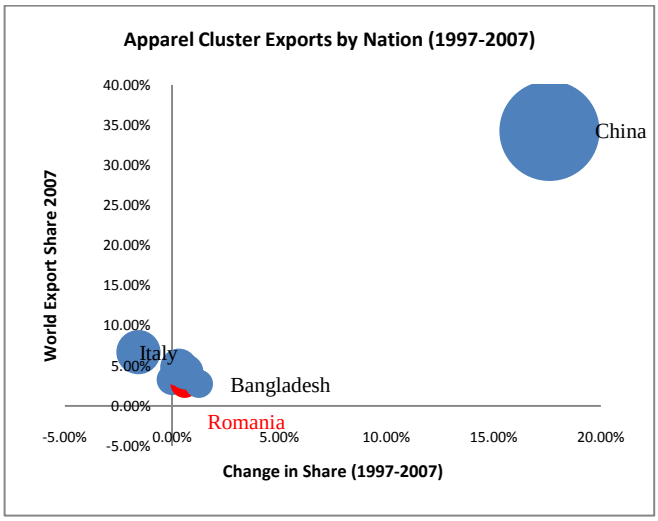

Figure 13: International Cluster Competitiveness Project (ICCP, 2010)

In 2006 Romania was the fifth supplier of apparel into the EU, after China, Turkey and Bangladesh. Romania's main trading partners are Germany, Italy, France, Austria, England, Holland and Belgium In communist times the most important export destination was the Soviet Union.

Geographical location of the apparel industry

In 2006 there were approximately 7000 apparel companies active in Romania, the majority of which were Small and Medium Enterprises (SMEs). The size of the companies range from mom-and-pop factories to companies with over 65 million US$ annual turnover. There is no clear geographical concentration of the industry as production is spread over the country (Doing Business Romania, 2010). The apparel industry does not really constitute a 'cluster', in the sense of a geographical proximity that provides a stimulating environment for enhanced competition and collaboration leading to productivity increases. The only region that is starting to show some elements of cluster-like organization and activity is in Bucharest.

History of Cluster Development

Apparel making in Romania dates back to at least to the 15th century with the emergence of the first guilds for woolen cloth, clothing and hat making, and the first textile mill opened in Timisoara 1867. With greater industrialization the cluster continued to develop especially in locations served by the newly built power

stations: Arad, Timisoara and Bucharest. Romania therefore had significant indigenous apparel industry before WWII (Borras & Tsaagdis, 2008).

The Communist Era and its Legacy

In 1948 all cooperatives and private companies passed to the state and became subject to central planning. During the 1970s Romania's production was focused increasingly on lohn contracts (assembly of imported inputs) for foreign companies include Marks & Spencer's and Elesse. By the early 1980s the textile and clothing sectors accounted for 12% of Romania's industrial output almost all of which was for export (LoC) (Mauresan). However, Romania was one of the most centralized communist economies, with high specialization and concentration, which hampered the emergence of cluster dynamics of constructive competition and collaboration. (Borras & Tsaagdis, 2008)

This era laid the foundations for the development of the apparel cluster in Romania over the subsequent decades. The legacy of the communist era was a vibrant, medium skilled, low value-add apparel industry which was well connected to European markets but with limited innate capabilities for effective upgrading.

Economic performance of the cluster

The growth in the Romanian apparel industry from the early 1990s onwards is based largely on a massive expansion of lohn contracts attracted by the relatively low labor costs prevailing in Romania.(Borras & Tsaagdis, 2008). Foreign Direct Investment surged, as described earlier, and many European companies started outsourcing production to Romania. This introduced new products, designs, technologies and quality standards into Romania, though it did lead to a decline in the indigenous textile sector due to foreign companies providing their own fabrics (Borras & Tsaagdis, 2008).

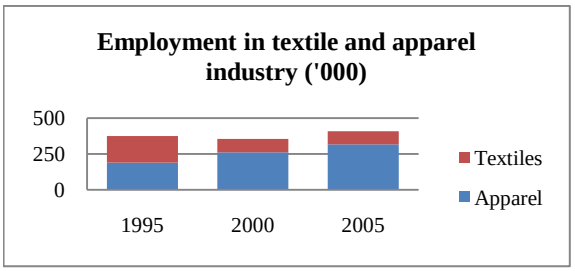

Figure 14: source (UNIDO, 2008)

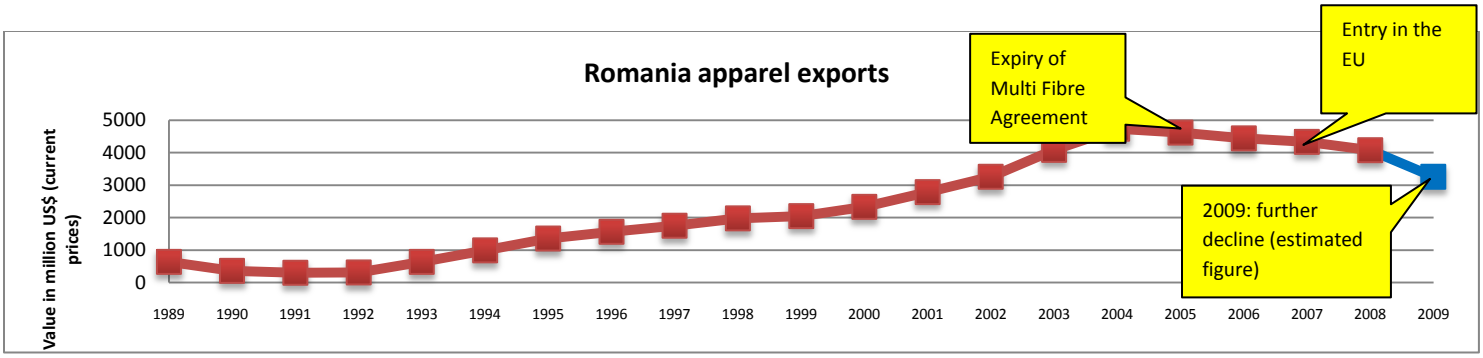

Figure 15: Source (EC, 2010)

This explosion of production in Romania must be seen against the backdrop of the quota system of the Multi Fibre Agreement, which limited production and export in a number of high-producing countries (notably China). The expiry of the Multi Fibre Agreement in 2005 led to a tremendous increase in apparel production in China, and Safeguard Agreements were negotiated under the WTO to mitigate these effects. Only since January 2009 has the apparel industry been entirely quota free. The main beneficiaries of the expiry of these systems are the low-wage economies from outside Europe (Bangladesh, Cambodia and Vietnam) and most notably China. (UNIDO, 2008) China now accounts for around 40% of world apparel exports which doubled in the period 1978-2007. (DCE).

The rapid growth in the apparel industry in Romania, combined with the large out-migration of labor, led to rather severe shortages in skilled labor, to the degree that a number of companies opted to import Chinese laborers (Reporter Economic, 2009) (BBC, 2007). Even medium-skilled labor became in short supply, amplified by the fact that wages in the apparel industry are 30% lower than in other industries in Romania. (EC, 2010)

Recent Trends

In recent years Romania's apparel industry has been in further decline. Although 2009/10 production and export data are yet unavailable, it seems the industry may have suffered an even more severe decline in the last two years. It is estimated that around 3000 of Romania's 7000 apparel companies have either gone out of business or been absorbed by others since the global financial crisis. In 2009 exports were expected to drop by 20% (Radio Romania, 2009).

There are three main reasons for this decline:

1) The expiry of the global quota systems and the increased competition from Asia.
2) The rise in wages in Romania due to its ascension into the EU, and its limited labor competitiveness vis-à-vis neighboring countries (Bulgaria, Ukraine).
3) The recent financial crisis and global downturn has led to a decrease in consumer demand, both domestically and in the export markets.

These recent trends have impacted Romania's apparel industry quite strongly as evidenced by a decline in exports since 2005. Romania's apparent vulnerability in the wake of these shocks is strongly linked to Romania's position in the global value chain, which the next chapter will explore in more detail.

The Global Apparel Value Chain

Apparel production goes through a number of phases:

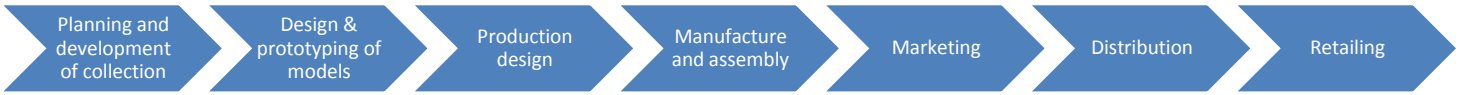

Figure 16: Steps in the Value Chain (Florentina)

The higher value added segments of the value chain are all in the services category; gathering of market data, product design and fashion, marketing, retailing and logistics. The textile and clothing value chain is strongly buyer-driven, dominated by large retailers, branded manufacturers and marketers which control global production networks and stipulate supply specifications. These large retailers do not own their own factories but organize and control production on a worldwide basis, and outsourcing of the manufacturing process to low-wage countries has become commonplace (see insert).

International production systems (source (UNIDO, 2003))
Assembly, Production Sharing, or Outward Processing a form of industrial subcontracting, in which garment sewing plants are provided with imported inputs for assembly, most commonly in export processing zones (EPZs).
Original equipment manufacturing (OEM), Full-package Supply a form of commercial subcontracting, where the supplying firm makes a product according to a design specified by the buyer; the product is sold under the buyer's brand name; the supplier and buyer are separate firms; and the buyer lacks control over distribution.

Original brand name manufacturing (OBM) is the upgrading by manufacturers from the production expertise of OEM to first the design and then the sale of their own brand products.

The commercial buyers in these global clothing value chains are extremely demanding, and are increasingly insisting on lower prices, better quality, shorter lead times, smaller minimum quantities and supplier acceptance of as much risk as possible (UNIDO, 2008)

Romania's position in the Value Chain

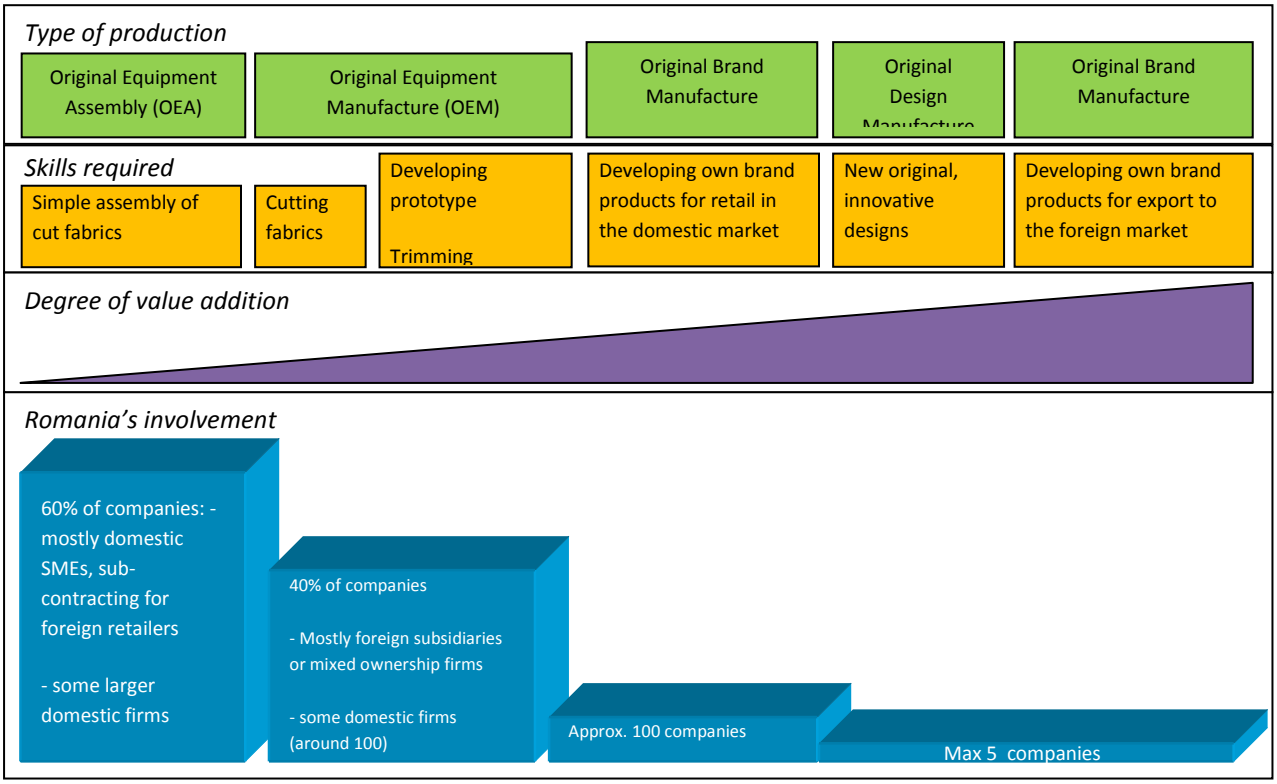

Figure 17: : Romania's position in the value chain in 2010 (author's estimates, based on numerous sources (Interviews 2010) (Radio Romania 2009) (Reporter Economic 2009) (Just-style 2006) (Borras & Tsaagdis, 2008))

Romania is predominantly involved in the assembly-mode of production (e.g. lohn contracts). A number of companies have managed to forward integrate into the value chain, but until now this remains the exception.

As figure 17 shows, around 60% of the firms are involved in assembly, and around 40% in OEM production, and only a handful of companies are producing under their own brand names. (ibid)

Involvement of domestic versus foreign firms in the industry

There is a relatively equal distribution of local and foreign ownership in the industry. Around one-third of the companies involved in the apparel industry are foreign-owned subsidiaries, around one third are operating on a mixture of domestic and foreign capital, and one-third are purely domestically owned companies. (ibid)

Domestic companies often act as sub-contractors for foreign retailers, with the vast majority not moving beyond the assembly stage. The major constraints for upgrading for these SMEs are their low managerial capabilities, obsolete machinery and technology, and limited access to skilled labor (Interviews, 2010). However, a small number of domestic companies have managed to upgrade their technical skills and have moved into OEM production. This upgrade came with an increase in technological capabilities, an increase in quality standards and an increase in reliability of supply. These companies are focusing on continuing to produce for foreign retailers, rather than producing their own brands. (ibid)

This stands in contrast to a number of domestic companies that have started to produce their own brands for the domestic market, particularly but not exclusively in fur and leather wear (Borras & Tsaagdis, 2008) (Interviews, 2010) (Doing Business Romania, 2010). These companies were riding the wave of the increase in consumer spending that came with the ascension into the EU, and they have been badly affected by the recent global downturn (Interviews, 2010). A number of interviewed experts also pointed to the on average low quality of goods produced for the domestic market, with the notable exception of a number of companies (Moda, Mister's) that have successfully marketed their own brands on the European market for years (Reporter Economic, 2009).

Number of firms

In 2006 the total number of companies was around 7000 firms (Borras & Tsaagdis, 2008), which dropped to around 6000 firms in 2008, due to the bankruptcy of many small firms. The head of the Employers Federation for the Light Industry estimated that another 1000 companies would disappear from the market by the end of 2009, while another industry expert estimated that around 50% of all small companies had left the industry by mid-2010 due to the global economic recession (Interviews, 2010). The companies most affected were the

smaller, domestic companies, that act as sub-contractors to foreign firms and those that produce for the domestic market (Interviews, 2010).

In summary, recent trends have led to a restructuring of the Romanian apparel industry:

1) a decline in number of small, domestic companies, and
2) an upgrading in the value chain for a number of domestic companies.

Related industries and clusters

With the onset and rapid growth in lohn-production the local sourcing of inputs, such as textiles and leather, declined as foreign firms tend to import the required inputs. However, Romania still does have an indigenous textile industry, as well as a leather industry. With more companies ready to upgrade to an OEM production system, the demand for local textiles is expected to increase. Industry experts view investment in the textile industry as an interesting business opportunity (Reporter Economic, 2009).

By contrast, the growth in the apparel industry has created business opportunities for local production of accessories. In recent years the domestic sourcing of accessories has gone from 0% to almost 100%, with the only exceptions being non-standard and high-fashion items (Interviews, 2010).

Leather and footwear industry

Slightly further removed from the apparel cluster is the leather- and footwear industry. Most of the IFCs of the apparel industry are joint between the leather/footwear and apparel cluster, which provides opportunities for leveraging the symbiotic relationships created in the footwear cluster. In addition a good number of apparel companies are also involved in leather and footwear, which provided opportunities for mutual transfer of skills, technologies and marketing opportunities. This sub-cluster is quite heavily concentrated in the northwestern part of the country, and has established strong ties with European producers; in particular with Italy. Italy has been actively involved in establishing a strong leather- and footwear cluster in Timisoara (see insert).

Case study: Timisoara leather cluster

The Italian region of Montebelluna faced higher production costs and intense competition from Asia. In response, Italian companies helped to develop a shoe cluster in Timisoara, Romania which had a long tradition in shoe manufacturing and low wages.

Initial successes led more and more companies to outsource increasing number of manufacturing operations to Timisoara (Romania), dubbed "The Newest Venetian Province." The Timisoara cluster benefitted from high volumes, technology transfers and process improvements.

The relationship led to a continued growth of Montebelluna cluster. The symbiotic relationship built over two decades makes it less beneficial to move production to other low-cost countries.

Source: EU Cluster Observatory

Retail market for apparel

In 2009 Romania made the biggest leap on the Apparel Index[8] up to second place after Brazil, signifying a large growth in local consumption of apparel (ATKearney, 2010). This trend is mirrored in the growth of large foreign retail chains that established retail shops in Romania in recent years[9]. However, anecdotal evidence suggests that many of these companies have had to close shop again in the recent downturn (Interviews, 2010).

Construction and tourism

The recent surge in demand for garments, combined with a boom in construction, has led to the opening up of a large number of retail shops of European brands in Bucharest, and the branding of Bucharest as one of the fashion capitals in the world (BFA, 2009). These developments can lead to a boost in Romania's attractiveness for tourism.

Institutes for Collaboration (IFCs)

Industry associations

The two leading Romanian IFCs in the textiles and apparel cluster are The Romanian Textiles Association (ATEROM) and FEPAIUS (the employers federation for textiles, knitware, garments, leather and shoes)[10]. The focus of work is on policy development, advocacy and the collation and provision of relevant industry information (FEPAIUS, 2010). This has included extensive collaboration and attempts at knowledge transfer

[8] The Apparel Index analyzes market growth and consumer indicators for 30 emerging market countries.
[9] Examples are Mango and Kiabi (Just-style, 2009) (Just-style, 2008)
[10] Other examples of IFCs areRomatex, and www.romtexiles.com – a web-based business marketplace developed by an Italian/Romanian partnership; and Astric Nord Est which focuses on connecting potential customers and Romanian producers in the knitwear sub-cluster (Astricone)]

with partners across the EU most notably through the EU funded PARTEX[11] program (Aterom, 2005). However, by their own and other industry assessments, this activity has had limited impact to date: "*not very effective…no real impact on the market."* (FEPAIUS, 2010) (Interviews, 2010) (Reporter Economic, 2009).

Bucharest seems ahead of the game, and is actively focusing on upgrading the cluster, in particular in terms of design capabilities. Bucharest hosts a design school and fashion institute. The Bucharest Fashion Alliance and the Bucharest Fashion Exchange regularly organize fashion shows and expos for niche marketing. Recently these institutions and FEPAIUS have agreed to strengthen the collaboration with French garment industry associations, including the joint organization of trade events, the exchange of information between firms on market opportunities, and the creation and implementation of training. (Just-style, 2010) (BFA, 2009). FEPAIUS now encourages companies to enter into designing their own brands, and market these internationally.

Skills development institutes

Romania hosts a number of educational institutes with a focus on the textile and clothing industry, such as Lasi, Arad and Bucharest Universities. However, these institutes are producing generic engineers, not skilled technicians, and are therefore not streamlined with labor market demands. Romania suffers from a severe lack of skilled labor, but almost all training is conducted on the factory floor, which is a heavy investment for companies (Interviews, 2010).

Government institutes

There is little evidence that RDAs or other government initiatives played any significant role in the development of the apparel cluster. According to industry experts, the apparel industry is "*not a priority for the government,"* partially because *"it's an industry they are embarrassed of because it comes with the cheap labor label."* (Interviews, 2010).

[11] PARTEX is the Pan-European Federations of Clothing Textile and Leather Industries Networking and Knowledge Building Programme.

Cluster diamond

The cluster diamond is presented in figure 18, followed by a brief description of its quadrants.

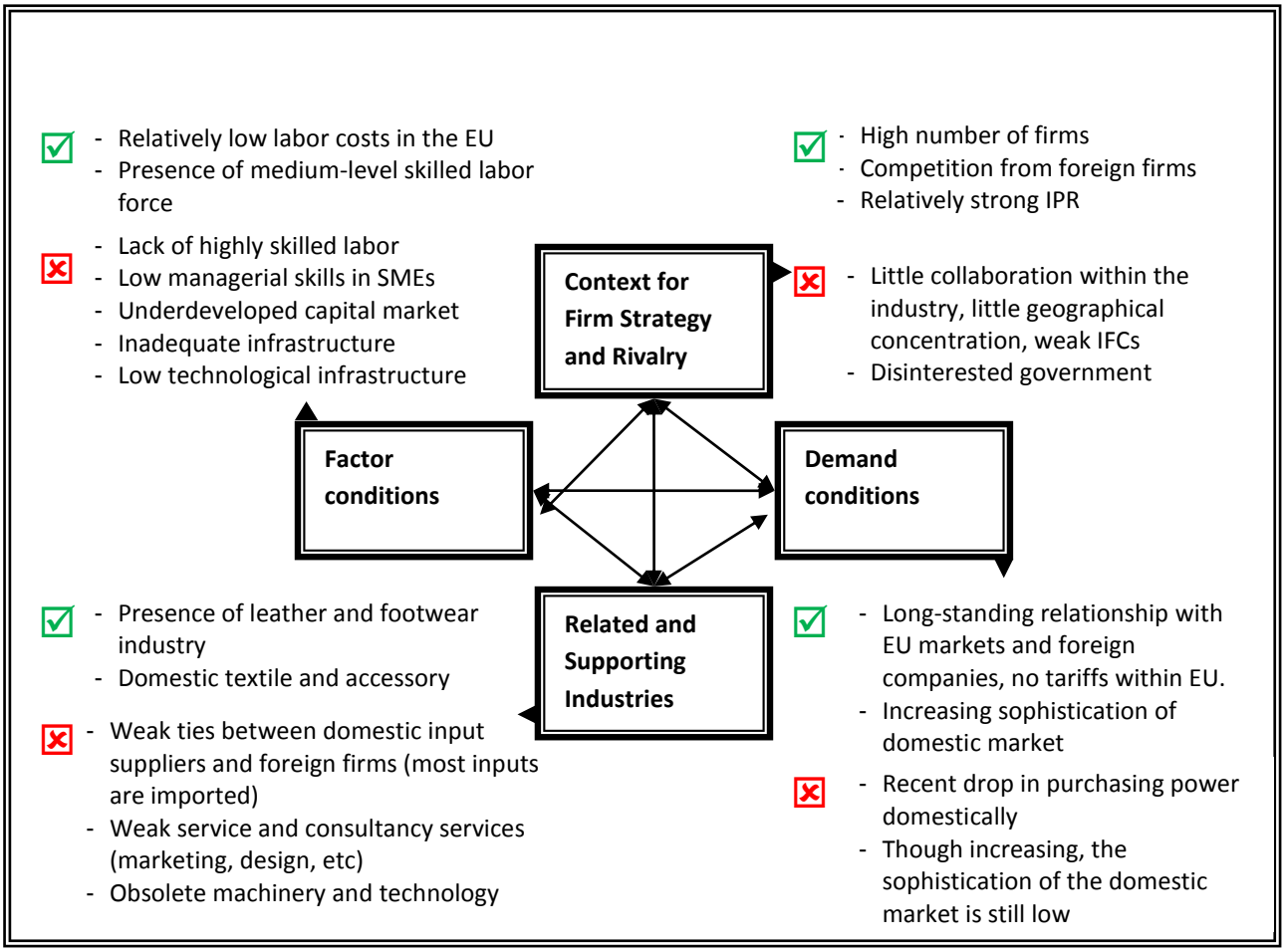

Figure 18: Cluster diamond (source: team analysis)

Factor conditions

Labor costs are still relatively low, though rising and rising faster than productivity. There is real a risk that low-cost labor based production will relocate to other countries, in Asia or in the region (Moldova, Ukraine). There is evidence that this is already happening[12].

The inadequate infrastructure also poses additional transaction costs, reducing Romania's competitiveness. The lack of skilled labor, managerial capabilities, access to capital, and a risk-taking spirit pose serious constraints for upgrading in the value chain and increasing productivity levels.

[12] Alison Hayes and Teba Industries are quoted in an article announcing plans to relocate from Romania, citing high labor costs (Diplomat)

Context for firm strategy and rivalry

The macro-conditions for competition are strong, as the country section described. Also at the industry level the conditions are good, with a high number of firms competing, both domestic and foreign. The high levels of FDI in recent years have seriously increased the level of completion. However, the lack of geographical concentration, the lack of collaboration within the cluster, and the lack of a constructive dialogue with the government hamper a more productive cluster dynamic. Companies still compete on the basis of price, and are not yet focusing on ways to collaborate towards increased productivity.

The only exception is Bucharest, where firms are starting to collaborate more actively, and the IFCs have taken on a stronger, and more targeted role. The emphasis is on expanding the retail market, strengthening ties with foreign producers and the development of local design capability.

Demand conditions

One of the main advantages Romania has is its long-standing relationship with Western Europe, and in particular with Italy, Germany and France. Having been tapped into that market, and having built strong relationships with foreign retailers has exposed Romanian producers to more sophisticated markets. However, the local market is still quite unsophisticated and production for local markets is of lower quality than the exported goods.

Related and Supporting Industries

The relationships with local suppliers is still a weak part of the cluster, but the presence of a textile, leather and accessories industry provides real opportunities for leveraging. If the sector manages to raise its productivity levels and upgrade in the value chain the demand for local supply of inputs will increase. In addition, Romania can leverage the relationships the footwear and leather industry has developed with foreign companies.

Conclusions and Recommendations

A number of shocks have hit the Romanian apparel industry in recent years, and the future of the industry will depend largely on how Romania responds to these shocks.

Romania needs to build on its current strengths, and mitigate the risks it faces. The most important advantage Romania has in this industry is its close proximity to the European market. This matters in terms of physical distance and low transaction costs (allowing for quick turnover times and small minimum quantities); in terms of proximity to the final customer and their demands (allowing for a rapid response to changes in market trends); and in terms of its long-standing relationships with the European major retail companies (allowing for the emergence of relationships of mutual interdependence).

The largest risk Romania faces is the ever-increasing competition from Asian countries, in particular in the low-end market segment. Romania with its rising wages will not be able to compete very well in this market segment, and will therefore have to focus on the medium- and high end of the market. In order to do so Romania will have to increase its productivity levels significantly, and prepare itself to become competitive in this market segment.

Romania is currently highly dependent on foreign contracts, which is a vulnerable position. There is a real risk that companies currently producing in Romania will relocate to lower-wage countries. There are two ways of dealing with this vulnerability; either through creating a stronger inter-dependence with these companies, or through creating a stronger independence by building one's own brands. The authors argue that Romania needs to focus largely on creating an inter-dependence, rather than on increasing independence. However, Romania can consider taking some small steps in this direction, building initially on the domestic market and then branching out to export markets later.

In sum, Romania requires a two-pronged approach to remain competitive in the global apparel industry, with the strongest emphasis on the first pillar:

I: Deepen interdependency – in an OEM production mode

Romania needs to strengthen its position within the global value chain, based on a strategy of strengthening the interdependency with the European producers and entice them to stay in Romania. In order to do so it must seriously upgrade its productivity levels. Furthermore it must do so in such a manner that it benefits the main European producers and disincentives their departure. This means that it must upgrade its quality standards, its reliability of supply, its ability to perform more technically advanced tasks, and its ability to take on supplier risk; all in accordance with retailer demands.

II: Upgrade in the value chain – in an OBM production mode

At the same time Romania can start to take small steps to reduce its dependency of foreign companies. It has already started to do so, through the establishment of domestic brands while riding the wave of the surge in domestic demand. However, the recent collapse of domestic purchasing power has significantly hampered these initial steps.

Specific Recommendations

Objective I: Deepen interdependence with foreign retailers

1) Upgrade technology and productivity in the sector
    a) Government funding for the creation of Textile and Apparel Institutes for technology development through government funding
    b) Link these Textile and Apparel Institutes with the Universities in Bucharest, Lasi and Arad.
    c) Develop collaboration networks with similar institutes abroad
    d) Promote collaboration between these Institutes and the Private Sector
2) Increase IFCs' focus on strengthening interdependency with foreign retailers
    a) Build stronger relationships with Apparel Retail Associations in the EU (expand on the experience with French industry associations)
    b) Market Romania's strengths in apparel production;
        i) Reliability of supply and responsiveness to demands

ii) (soon to be) upgraded technological capabilities

iii) Strong IPR (as compared to China)

3) Promote geographical concentration and deepen cluster interaction

   a) Promote the development of localized branches of the IFCs in areas with immature clusters

   b) Create incentives for investment in apparel and related industries (textile, accessories, services) in immature cluster areas

4) In collaboration with the IFCs, build skill levels for the industry:

   a) Encourage the return of the diaspora, through information and awareness campaigns, and job market information exchange and referral systems

   b) Upgrade the curriculum of the Textile Universities to produce a highly skilled labor force

   c) Develop scholarships and student exchange programs with foreign universities

   d) Government investment in Vocational Training Institutes for producing a medium-skilled labor force in line with industry demands

   e) Provide tax incentives for in-company training and internships

5) Develop a subsidized program for employee exchange between Romanian and foreign companies

Objective: Upgrade in the value chain

1) Strengthen and support recent initiatives in the Bucharest cluster through providing government support to IFCs initiatives around:

   a) EU trade fairs, Fashion shows, Romania expos

   b) Marketing of Bucharest as a Fashion capital

   c) Exploring niche market opportunities in EU

2) Build trade relationship with former Soviet republics through trade missions, expos, and trade fairs

3) Strengthen the Bucharest Fashion Institute:

   a) Provide budget support to the institute

   b) Develop scholarship and internship programs – in collaboration with private sector

4) Provide funds for a regular 'Romania design' competition

BIBLIOGRAPHY

Reporter Economic. (2009). *The gaps in Romanian Economy have occurred due to the lack of a clear, short, medium and long termed vision that generates strategies, objectives and policies.*

Astricone. (n.d.). http://www.astricone.eu:8989/iCluster/index.jsf

Aterom. (2005). *Romania – Country Report.* Retrieved from www.perfectlink.org/romania.htm

ATKearney. (2010). *Emerging Markets Offer Growth Opportunities for Apparel Retailers Battling Declines in Domestic Consumer Spending.*

BBC. (2007, January 25). *Chinese in Romanian job protest*.

BFA. (2009). *Magazine of Bucharest Fashion Alliance.* Retrieved from http://www.bucharestfashionalliance.ro/

Borras, S., & Tsaagdis, D. (2008). *Cluster Policies in Europe; Firms, Institutions and Governance.* Edward Elgar Publishing Ltd.

Bureau of European and Eurasian Affairs. (2009, March). *Romania*. US Department of State: http://www.state.gov/r/pa/ei/bgn/35722.htm

CEU. (2010). Retrieved April 24, 2010, from http://web.ceu.hu/cens/assets/files/publications/Exec_Economy_Romania

CIA. (2010). *World Factbook*. https://www.cia.gov/library/publications/the-world-factbook/geos/ro.html

Commission, E. (2006). *Europeans and thier Languages.* http://ec.europa.eu/public_opinion/archives/ebs/ebs_243_en.pdf

Conference Board. (2010). *Conference Board.* from http://www.conference-board.org/economics/database.cfm.

DCE. (n.d.). *http://www.dce.gov.ro/sne/Textile_cloting_and_leather.htm*. Retrieved 2010, from Slide 16.

DED. (2009). *Romania at a Glance.* Development Econonomics Database, LDB.

Diplomat. (n.d.). *The Diplomat - Bucharest, at* http://www.thediplomat.ro/features_0606_5.htm.

Doing Business Romania. (2010). *List of companies in textile and apparel industry*. at www.doingbusiness.ro

Earle, J. S., & Telegdy, Á. (2002). *Privatization Methods and Productivity Effects.* Kalamazoo: W.E. Upjohn Institute for Employment Research.

EC. (2010). *European Commission Trade.* Textiles and Footwear: http://ec.europa.eu/trade/creating-opportunities/economic-sectors/industrial-goods/textiles-and-footwear/#_statistics

Economist. (2010). *Economist - ViewsWire.* http://viewswire.eiu.com

EEA. (2009, June). *Distribution of the Structural Funds 2007-2013 allocated to transport*. European Environment Agency: http://www.eea.europa.eu/

EIU. (2010b). *Economist Intelligence Unit - Country Profile.*

EIU. (2010a). *EIU database*. http://www.library.hbs.edu/go/EIUcountrydata.html

Embassy of Romania. (2010, April). *ECONOMIC RELATIONS*. Washington: http://washington.mae.ro

EurActiv. (2009, April). *Romania's road network 'a shambles'*. EurActiv: http://www.euractiv.com/en/transport/romania-road-network-shambles/article-181788

Eurostat. (2010). *EUROSTAT.* http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/.

FEPAIUS. (2010). Information note.

Florentina, A. *The value chain approaches - managerial tools for the romanian garment enterprises.* Romanian American University.

Freedom House. (2010). *Freedom in the World ranking.* http://freedomhouse.org/

GCI. (2009). *World Economic Forum.* Global Competitiveness Index: http://gcr.weforum.org/gcr09/

ICCP. (2010). *International Cluster Competitiveness Project*. http://data.isc.hbs.edu/iccp

IMF. (2009, October). *World Economic Outlook.*

Interviews. (2010). Authors' interviews with industry experts.

Just-style. (2009, October 6). *France: Kiabi opens first store in Romania.* www.just-style.com

Just-style. (2010, March 31). *Romania: Clothing bodies agree alliance with France.* www.just-style.com

Just-style. (2008, July 7). *Spain: Mango steps up global expansion.* www.just-style.com

Just-style. (2006, november 29). *Will Romania's EU entry harm its apparel industry*. www.just-style.com

LoC. (n.d.). *Federal Research Division of the Library of Congress*. http://countrystudies.us/romania/50.htm;

Mauresan, M. (n.d.). *Romania's Integration in COMECON: The Analysis of Failure.* http://ideas.repec.org/a/rej/journl/v11y2008i30p27-58.html]

Nation Master. (2008, December). *Transportation Statistics*. Nation Master: http://www.nationmaster.com

Radio Romania. (2009, 6 9). *Radio Romania - Business Club.* The textile industry in Romania.

Raiffeisen Research. (2008). *www.rzb.at/eBusiness.* CEE Banking Sector Report.

RCB. (2010). *Romania Central Bank.* www.bnro.ro

RSY. (2007). *Romanian Statistical Yearbook*. (Romanian National Institute of Statistics) http://www.insse.ro/cms/files/pdf/en/cp2.pdf

TI. (2010). *TRANSPARENCY INTERNATIONAL.* Retrieved from http://www.transparency.org/.

UNICEF. (2009). *UNICEF country profile – Education in Romania.*

UNIDO. (2008). *Globalization, the Changed Global Dynamics of the Clothing and Textile Value Chains and the Impact on Sub-Saharan Africa.*

UNIDO. (2003). *The Global Apparel Value Chain: What prospects for upgrading by developing countries.*

WBI. (2008). *WBI governance indicators*. http://info.worldbank.org/governance/wgi/sc_country.asp

WDI. (2010). World Development Indicators.

Wikipedia. (2010a). http://en.wikipedia.org/wiki/Romance_languages

World Bank. (2010a). *World Bank - Country Brief.* Retrieved from http://lnweb90.worldbank.org/eca/eca.nsf/Countries/Romania

World Bank. (2010b). *World Bank Doing Businesss Index*. www.doingbusiness.org

Note:

No members of the team spent any time in Romania during the course of this project work.

Three interviews were held with industry experts, who wished to remain anonymous.