



ISBN: 1646-8929

IET Working Papers Series
No. WPS03/2014

Adrian Götting
(email: goetting.adrian@web.de)

Structural Change in the Ruhr region: Problems, potentials and developments

IET/CESNOVA
Enterprise and Work Innovation pole at FCT-UNL
Centro de Estudos em Sociologia
Faculdade de Ciências e Tecnologia
Universidade Nova de Lisboa
Monte de Caparica
Portugal

Structural Change in the Ruhr region

Problems, potentials and developments ¹

Adrian Götting

Abstract:

Due to the decline of the heavy industries in the Ruhr region, the area has to reinvent itself. The orientation towards service industries proves to be a difficult task for the district and its population. This paper examines the challenges, problems and potentials of the Ruhr region against the backdrop of its economical history out of a sociological perspective. Thereby the economical situation and its outcome towards the population stand in the foreground of the paper.

Keywords:

Ruhr region, structural change, regional development, information technologies, migration, demographic change

JEL codes:

J11, O43, R52, R58, Y80

¹ Paper based in the report made for the course “Sociology of New Information Technologies” in 2013-14 at the Faculdade de Ciencias e Tecnologia Universidade Nova de Lisboa, under the supervision of Prof. Antonio B. Moniz

1.0 INTRODUCTION

The Ruhr region, which is located in the west of Germany and a part of the state North Rhine-Westphalia, consists of 15 cities. The area is the biggest agglomeration in Germany and the fifth biggest in Europe and has a population of 5,1 million people. While the history of the region was shaped by coal mining and the ferric industry, with the decline of those industries during the middle of the 20th century, the area has to restructure itself. This paper focuses on challenges, problems and potentials of the area with regard to structural change. Even though a sociological perspective stands in the foreground, it is essential to keep the historical and economical conditions in mind. Thereby the concern of this paper lies on an explanation of the developments that led to the current situation. Besides that, a closer look on structural change shall be given and furthermore, the characteristics of the population in the Ruhr region will be examined. With the decline of the old industrial fields and the orientation towards service industries and New Information Technologies, the area finds itself in a steadily transformation process. This paper generally examines the main task fields with regard to structural change by focusing on developments that effect the population of the Ruhr region.

Thereby the history shall be in the focus of the first chapter, due to the fact that the ups and downs in the heavy industries and the final decline of the industrial field give important hints referring to the mentality of the population. The turbulent history also shows that the citizens have more or less experienced structural change more than once in the past.

The next chapter focuses on topics within the scope of a restructuring of the region. Thereby certain service industries will be examined further and besides that, problems that the region faces will be addressed. In order to give a concrete example of what has to be done in order to achieve successful structural change, the district of Duisburg-Marxloh will be examined as well. Furthermore other former industrial regions (namely Manchester/Liverpool and Pittsburgh) will stand in the focus as positive examples for the Ruhr region.

In the last chapter the challenges with regard to demographic change and migration shall be examined, in order to give an idea of what problems and potentials the area has to face referring to their citizens. After that I will give my conclusion by evaluating the advance of structural change and summarizing the previous chapters.

2.0 HISTORY OF THE RUHR REGION

In this chapter the history of the Ruhr Region shall be examined. Therefore focus is put on the industry and the main sources of income of the area, in order to reveal the developments that made structural changes necessary.

Coal, which started to shape 300 million years ago beneath the earth's surface, became the basic resource for the Ruhr district for a long time. The beginning of coal extraction can be traced back to the late Middle Ages around the 13th century (Parent, 2000: 19). Since then coal winning became more and more important for the inhabitants of the district. Coal Shafts became deeper and the techniques to extract coal became more sophisticated, using human power and horses to get the mined coal through tunnels on the earth's surface. Initially the coal was used for regional purposes, for example as domestic coal or in order to heat the blacksmith's fire (Parent, 2000: 20). The beginning of the 16th century was shaped by difficulties within the German borders. The developments led to the Thirty Years' War from 1618 until 1648, which was motivated by religious interests and caused by tensions between the Catholics and the Protestants as an outcome of Martin Luther spreading his ideas of reformation. The war had devastating consequences for Germany and led to an economical stagnation that also affected the coal mining. Still, the situation improved and transnational markets got accessed. As a cause the Ruhr was made navigable with 16 locks (Parent, 2000: 20). Ruhr shipping reached its peak in the middle of the 19th century, when around 800.000 tons of coal was transported on the river.

Shortly afterwards, shipping got replaced by freight trains, using the growing rail network in order to transport coal.

2.1 Industrialisation

The industrial revolution, which started around 1830, had a crucial impact on coal mining in the Ruhr-region and changed social, technological, economical and political conditions in Germany and other states. Within the scope of industrialisation, the development from an agricultural state to an industrial state took place. Characteristics in the Ruhr region were the drastic increase of coalmines, expansion of the iron industry, the steel industry and the chemical industry. While the villages were shaped by half-timbered houses in the first half of the 19th century, within the scope of industrialisation the landscape changed to an industrial cityscape. Furthermore, the rail network got extended to all relevant areas of the region. The extension of the rail network was one of the most important factors in order to take industrialisation further. Besides that, more and more people came to live in the Ruhr district and the area became an economical centre. Thereby the population number rose from 400.000 in the 1850's to 3.8 million in the year 1925. The drastically risen demand for mineworkers got covered with Polish, Masurian and Silesian workforce. Most of the workers were attracted by ad campaigns. Due to the fact that those people mostly came from very rural areas, many of them had certain difficulties to get used to the industrial Ruhr region ².

In general the working class had to face difficult social circumstances. The developments led into some sort of social fight, in which the working class organized more and more in order to improve their living conditions. The most crucial problems were extremely low wages, not enough living space, restrictions with regard to organisation and bad hygienic conditions. Due to a fast economical development and more profits on the part of the entrepreneurs, the risk for the mineworkers increased. The more and the faster the coal got extracted, the higher the risk for the workers got. Thereby the safety conditions got improved and tightened, but still accidents and death causes were likely.

² <http://www.route-industriekultur.de/index.php?id=14948>; 22.02.2014

Besides that, the basic problems with regard to the living conditions of the workers stayed unimproved.

2.2 The First World War

With the beginning of the First World War in the year 1914, the social interests and difficulties of the previous years faded into the background. Many of the soldiers that fought in the war came from the Ruhr region; therefore workforce was missing in the production of the coalmines. The result was that the productivity regressed by half. In order to provide a remedy, women got introduced in almost all areas from the year 1915 on. Within the course of the war, prisoners from Belgium and the Netherlands were used as workforce below ground. Besides that, a crucial problem was that resources became scarce, due to the fact that the war demanded more and more weapons. Thereby the steel and ferric industry shifted almost entirely to the war economical production. An example is the August Thyssen AG, which didn't just produce steel and coal but also weapons and monition since 1916 ³. Within the course of the war, the tough operation on the home front, as well as ambitious weapon and monition programs led to disastrous living and working conditions followed by strikes until the war ended in 1918.

2.3 Weimar Republic

After the First World War ended with the defeat of Germany, the Ruhr district as well as the rest of the country had to face difficult times. In the context of the Treaty of Versailles, Germany was obliged to fulfil certain restrictions that had negative consequences for the economy. The conditions in the Ruhr area changed a lot after the war. One problem was the isolation from international markets accompanied by the fact that 80% of the ore reserves were lost because of the war. The military, which used to be the biggest client for the Ruhr industry,

³ http://www.ruhrgebiet-regionalkunde.de/aufstieg_und_rueckzug_der_montanindustrie/weltkriege_und_nachkriegszeit/erster_weltkrieg.php?p=1,1; 22.02.2014

couldn't be considered as such because of the Treaty of Versailles, due to the fact that Germany was obliged to reduce their army and arms production. Thereby the munitions industry collapsed, so that big parts of the workforce lost their jobs. Besides that, coalmines got shut down - in the year 1925 for example 34 pits got decommissioned ⁴. Therefore the agenda of the Ruhr industry in the mid twenties can be described as risk handling. Due to the fact that the Ruhr district was isolated from Lothringen, ore had to be delivered from Switzerland, while at the same time, the capital demand got covered with the raising of credits from the USA. Despite of all the difficulties, the Ruhr industry got able to compete with countries like England and France in the end of the 1920's. The time of the aspiring production stopped with the crisis of 1929, due to the crash of the New York stock market. Thereby most of the American credits got revoked. Until the year 1932 most of the production capacity in coalmining and ferric industry got annihilated. Thereby the unemployment rate increased in certain cities like Bochum to over 10%, which led to social and political tensions, due to the fact that the living conditions of the working class decreased drastically. In this crisis-shaken times, the party NSDAP, with Adolf Hitler ahead, gained more and more acceptance ⁵.

2.4 1933 - 1945

Ruhr industrialists supported Adolf Hitler financially and contributed to his seizing power in January 1933. International competition in the montane industry led to an alliance between the NSDAP and the industrials of the Ruhr region, which had advantages for both sides. Therefore huge state subsidies got realized and the arms industry became the engine of the booming economy. A logical ancillary effect was the disappearing unemployment. The Ruhr region served as the basis in order to make Germany able to carry out a war. Still, the economical boom of the 1930's was more or less just seemingly, due to the fact that the products mostly got to go to other parts of Germany, where they got

⁴ <http://www.route-industriekultur.de/index.php?id=14948>; 22.02.2014

⁵ <http://www.route-industriekultur.de/index.php?id=14948>, 22.02.2014

manufactured to become weapons. Due to the fact that the Ruhr district is too close to outlandish borders, no real innovations and investments got made.

The airstrikes on the Ruhr area mainly hit the population. The real destruction of industrial facilities started in 1944, nevertheless the costs caused by deterioration because of arm production were bigger. Therefore a need of innovation existed with regard to the Ruhr industry ⁶.

2.5 After 1945

At first the production in the Ruhr region stood still after the war. Due to the fact that the infrastructure was nearly fully destroyed and almost no residence in the district remained undamaged, the authorities were over challenged beyond all measure. When the coal production started again in 1945, the main aim was to serve the population with coal. Still, there was a lack of mine workers since a lot of employable men were killed in action or prisoners of war. In the winter months of the year 1945, coal was essential for survival for the whole German population. After some disagreements with regard to plans considering the production in the Ruhr region, the USA and Great Britain began to consider the district and its industry as helpful in order to rebuild Europe. Therefore the intention to modernize the Ruhr industry got realized, so that the steel production of the years 1947/48 excelled the French production twice as much ⁷. Nevertheless the ultimate plan of the victorious powers to dismantle the Ruhr industry affected the population. Even though these plans never got realized, the workers were scared to lose their jobs. The economical re-emergence of the German republic began with the currency reform in 1948 and with the financial help of the USA, which got constituted in the Marshall plan of 1949. Through experiences made in the past, those responsible knew that a co-responsibility of the workers is important in order to achieve social equity and avoid tensions. Therefore the workers got acknowledged more codetermination. These fundamentals, paired with the aim to integrate Germany with regard to its

⁶ <http://www.route-industriekultur.de/index.php?id=14948>; 22.02.2014

⁷ <http://www.route-industriekultur.de/index.php?id=14948>; 22.02.2014

external policy, were the keystone for the upcoming economical boom. A consequence of the economical changes was a drastic modification of the landscape in the Ruhr area. The infrastructure got enlarged, so that the road network in the district became more and more dense. Besides that, due to the mechanization in mining, the working conditions for the coal workers improved noticeable in the end of the 1950's. Another side effect of the rising economic power was the explosion of the population number in the Ruhr region. In comparison to the pre-war years, the area gained one million more inhabitants, while during the mid 1950's, about 670.000 people worked in mining. Due to the fact that the local population didn't suffice to cover the demand for workforce, the first foreign workers from countries like Italy or Yugoslavia arrived in Germany by that time ⁸.

Still, in the following years, the Ruhr industry had to face difficult times out of various reasons. One factor was the rising meaning and delivery of petroleum, which was about to replace coal. Besides that, the prices for coal got lower and lower, thereby coal had difficulties on the energy market. As a cause, the sales decreased, which led to the first closings in the end of the 1950's. Until 1968 about 78 mines got closed and the decline of coal mining in the Ruhr region began. In order to avoid an extreme rise of unemployment in the Ruhr district, the German government developed the aim to regulate the closings of the mines and integrate the former coal workers in other jobs. Those responsible no longer tried to stop the crisis, but accepted the decline of the Ruhr coal industry; thereby structural change was made possible. Nevertheless, restructuring was a difficult task during the 1960's ⁹. Due to the fact that the ironworks industry was in a much better condition, companies in this sector defended their predominant position in the Ruhr region. Thereby it was made difficult for new kinds of technology to settle down in the area, because there was a lack of support or even signs of obstructiveness on the side of the ferric companies. Nevertheless, the car company "Opel" settled down in the Ruhr region and besides that, the

⁸ <http://www.route-industriekultur.de/index.php?id=14948>; 22.02.2014

⁹ <http://www.route-industriekultur.de/index.php?id=14948>; 22.02.2014

education system went through changes with the establishment of the first university (in the city of Bochum) in the Ruhr region ¹⁰.

2.6 The 1970's & 1980's

The first event that shaped the situation in this decade was the oil crisis of the year 1973. Even though the sales of coal increased as a consequence for a short time, this crisis meant the end of the unrestrained economical growth in the post-war era. Difficulties also occurred in the area of the ironworks industry. Even though this sector stood in contrast to coal in the previous years, certain developments led the industry in a comparable crisis during the 1970's. One negative factor for the ferric production in the Ruhr region was the competition, which emerged in African countries. Besides that, the chemical industry invented synthetic materials that were capable of replacing ferric in the car industry. Thereby ironworks got closed within the following years and a lot of workers in this section lost their jobs. While in the middle of the 1970's there were 20 ironworks actively producing in the Ruhr region, the number declined to 8 in 1988. With the closing of more and more ironworks and coalmines in the 1980's, certain areas of the Ruhr region, such as Duisburg-Rheinhausen, are facing huge economical problems, due to a drastic rising unemployment rate ¹¹. This developments led to a current situation, in which coal mining as well as the ferric production in the Ruhr region have more or less come to an end. The German government plans to fully stop the subsidies for these economical sectors within the next years. At the moment about 20.000 people are still working in the metal industry, while the coal industry of the Ruhr region nowadays only serves about 4.000 people as an occupation (Malley, 1999: 12).

¹⁰ <http://www.route-industriekultur.de/index.php?id=14948>; 22.02.2014

¹¹ <http://www.route-industriekultur.de/index.php?id=14948>; 22.02.2014

3.0 STRUCTURAL CHANGE IN THE RUHR REGION

With the decline of the coal and ferric industry in the Ruhr region, the area had to face various problems. Due to the dependence of the population towards the heavy industry, it is a giant challenge for those responsible to avoid rising unemployment. As an area, which was mainly characterized by producing products that are no longer profitable, a transformation process is necessary. In order to adjust the district to the current economical conditions, in which service industries take on greater significance, certain circumstances have to change. In this chapter, difficulties within the scope of the prevalent givens in the Ruhr region shall be mentioned, as well as task fields and possible strategies in order to transform the district to a sustainable area. Yet, approximately the focus should lie on the changes that have already been implemented.

A crucial field for the Ruhr region is education. Due to the fact that the requirements in the coal and ferric industry didn't demand a high standard of education, there were no universities within the borders of the district in the first half of the 20th century. Therefore qualified executives had to be imported to the Ruhr region, because there was a lack of educated workforce in the area. The first university in the Ruhr region was build in Bochum, related to the education reform of the 1960's and 70's in the year 1962. After that, in 1968 the university of Dortmund was build. Nowadays there are five universities, one Art College and 15 other institutions of higher education ¹².

Since the year 1968, the German Government supports the Ruhr region financially in order to provide a good outcome with regard to structural change and in order to contain negative side effects. An important scope is the preservation and the extension of the infrastructure in the district. Thereby traffic mostly stands in the foreground of the purposes. These days it can be said that the Ruhr district has a dense net of streets, highways and rail networks. Besides that, Duisburg has the biggest inland harbour of Europe (Malley, 2001: 15). A further aim is the generation of a higher standard of residence quality in the area. Thereby the aim is to create more recreational space in the city scope.

¹²

<http://www.metropoleruhr.de/wissenschaft-forschung/wissenschaftslandschaft/hochschulen.html>; 24.02.2014

This should be achieved with the development of recreational parks and reservoir dams¹³. Another economic sector that has gained more and more importance is tourism. At that, city tourism can be divided into four parts, such as culture and events, business and conference tourism, shopping tourism and cultural sites (Neumann et al, 2012: 15). The different cities in the Ruhr region put a lot of effort in order to strengthen those aspects. With the creation of theatres and concert halls and certain events like the “ExtraSchicht”, a cultural program is provided. Other than that, the Ruhr region commands various shopping centres, such as the “Limbecker Platz” in the city of Essen or the “Centro” in Oberhausen. Nevertheless, the most lucrative section for the region with regard to tourism is located in the area of cultural sites. Those cultural sites mostly exist in the Ruhr region in form of old industrial buildings. Due to the fact the district is full with traces of the industrial past, it is likely and economical to use those in order to attract tourists. In order to do so, it is important to strengthen the interest of society in industrial history. Besides that, the local identity has to be reinforced and new city centres have to be created in the areas, which are hit heaviest by structural change. Furthermore an important factor is to gain new investors in the region; therefore the image of certain cities has to be improved. Moreover, a lot of the old industrial buildings have to be renewed to some extent (Neumann et al, 2012: 16). Concerning the developments, one can say that the economical sector of tourism has become bigger in the Ruhr region since the beginning of the 1990’s. Nevertheless, the region hasn’t reached a level, which would be appropriate for an agglomeration of this size. Comparing the different cities of the Ruhr region with each other, it gets clear that the city of Essen has slight advantages, even though in other cities, like Dortmund, a increasing tendency towards tourism can be noticed (Neumann et al, 2012; 72). In order to amplify the section of tourism in the future, cooperation between economy and politics is needed, while attention should be directed at certain characteristics of the Ruhr region, which are lucrative for tourism (Neumann et al, 2012; 75).

¹³ <http://www.ruhr-guide.de/freizeit/industriekultur/das-ruhrgebiet-die-entwicklung-und-der-strukturwandel/21960,0,0.html>; 24.02.2014

Even though in the sections mentioned progress is achieved to a certain extend, there are still various crucial problem fields in the Ruhr region. An example is the environmental condition of the district. Due to its coal mining history, the Ruhr region always had the image of a dusty, industrial place with a lack of nature and a grey sky. To some extend the prejudices about the area weren't causeless. And even though since the 1980's and the decline of the heavy industry a lot has changed, the region still faces severe environmental problems. More precisely, those responsible have to deal with high pollution with regard to water and soil (Malley, 2001; 24.02.2014). Still, those negative developments with regard to nature are transformable into a lucrative branch of industry. Companies in the Ruhr region that deal with environmental friendly redevelopment can now count themselves to the brand leaders all around the world. In the beginning of the 21st century, there were about 6000 hectare industrial fallow unused. Thereby work is in progress in order to restructure those areas and make them usable for other purposes.

3.1 Restructuring of Duisburg-Marxloh

In order to give an example for the problems that certain districts in the Ruhr region have to face, so as to point out which plans are developed to solve those problems, the district Duisburg-Marxloh shall be examined. Duisburg-Marxloh is part of the city of Duisburg and emerged in the beginning of the 20th century as a working class neighbourhood. Since the 1970's, the district developed to a sink estate, even though the district prospered since the Second World War. Structural change and the decline of the ferric and coal industry mainly had negative consequences for Duisburg-Marxloh. A characteristic of the district is its rising unemployment rate and a lack of jobs. Besides that, another characteristic is the demographic development of the area. While the German population in Marxloh is decreasing constantly, the outlandish citizens are increasing. Reasons are a constant negative natural population development and emigration on the side of the German population, which is more and more characterised by over aging. On the other hand the outlandish population (mainly of Turkish origin) is

characterised by a positive natural population development and immigration (Franke, 1999; 17). In the following, an example of a project that took place during the second half of the 1990's shall be given a closer look. Thereby the problems, potentials and strategies in order to restructure the district, which is just one of many, get clear. In the end of the chapter, the current situation and the actual success will be examined.

3.1.1 Problems

The district Duisburg-Marxloh faces manifold problems, such as tensions between Germans and non-Germans. Covert anti-foreignism is considered to be one of the biggest issues of the district, thereby the different groups live more or less totally segregated from each other. Another problem is the high unemployment rate, especially with the static job cutback of the "Thyssen AG". The unemployment does not just lead to a low purchasing power of the population, but also urges the German government to pay high transfer benefits to the dependent citizens. Besides that, the people that emigrate out of Marxloh are mostly high-income households, while the ones that are moving to Marxloh are primarily social disadvantaged demographic groups. A side effect is the rising uncertainty of the German population. Apart from this, the house situation in Duisburg-Marxloh is in a bad condition as well. The district consists of a lot of obsolete houses, while there is a lack of new buildings and investments in the area. Other than that, the district has a lack of green areas, but a rather high pollution, because of nearby industrial areas. Due to the decreasing buying power of the population, a lot of stores in Marxloh are closing, which again leads towards rising unemployment. In this regard, stores prosecuted by Germans get taken over by non-German storekeeper, which is a main reason for the on-going anti-foreignism. Another problem field is education. Because of a lack of preschool places, the integration of the non-German population often goes wrong in the first place. The level of education in schools is also rather low, because of massive language barriers. Furthermore the number of school dropouts is rather high. Paired with a lack of apprentice ship places, one can say

that the initial situation for young people in Duisburg-Marxloh is negative. All those problematic fields lead to a loss of image in the district (Franke, 1999; 18).

3.1.2 Potentials

Despite all the problems that Duisburg-Marxloh has, there are certain potentials, which are useful for a neighbourhood development project. First of all, the district has various fallows flex space, which can be used for improvement and reactivation. Other than that, the district has a convenient position and is reachable easily, due to a good traffic connection. Besides that, the housing stock is capable of restructuring and modernisation, as well as inner courtyards, which can be used for certain new building measures. Besides that, a rising commitment of the non-German storekeepers and a rising willingness of German entrepreneurs for investments are noticeable. Apart from that, it is theoretically possible to create more apprentice ship places for young people, especially in the versatile Turkish economy in Duisburg-Marxloh, moreover, the population has a potential of further education and a dense social network, which can be used. Additionally, the historical meaning of Marxloh and its urbanity can be used in order to improve the image of the district (Franke, 1999; 19).

3.1.3 Development goals and strategies

After the presentation of various concepts and programs, the project “Duisburg 2000”, which got decided in 1993 served as the basis for city-renewing programs in Marxloh. The implementation of the project ended in 1998.

Within the scope of this project, main aims considered the constructional and economical renewing of Marxloh. One specific aim was the integration of the citizens in city-renewing measures, as well as informing the citizens. Besides that, tenants and homeowners also got informed with regard to questions concerning the redevelopment, new building and constitution of their homes. Other than that a task was to renovate certain memorials and monuments to cultural and social facilities. In general, aims concerned the improvement of the

social infrastructure, as well as the improvement of the social structure. The plan was to enhance the connection between German and non-German citizens and at large optimizing the neighbourhood relationships in the district. Apart from that, certain measures in order to better the chances on the labour market for the population have been implemented. Those plans mainly considered employment and qualification measures. Another point was the citizen information, participation and activation (Franke, 1999; 19).

The different plans and measures are constituted in an overall model from the German party "SPD", made in 1996. Thereby the overall aims concerning the district of Marxloh, as well as other problematic areas of Duisburg and the Ruhr region in general, can be summed up in the following way: Firstly the renewing of the city stands in the foreground with regard to restructuring and conversion measures and the participation of the population in the planning process. In the field of employment and qualification it is planned to offer various methods connected to service industries and the social sector. In connection to the social structure, emphasis is put on certain free time and meeting facilities. Apart from that, social networks and the communication in the city shall be strengthened. Cultural aspects play an important role as well, therefore intercultural bounds shall be enhanced with the cooperation of German and non-German associations on certain individual projects. With regard to the local economy, offices for economical development are about to be established in order to counsel companies, entrepreneurs and people that are setting up their own business. Besides that, by doing so, the cooperation between companies should be enhanced, while homeowners and financial institutions shall be counselled as well. The field of habitation is mainly characterised by plans concerning the modernisation and renewing of houses and the counselling of tenants and homeowners. Other than that, measures with regard to an improvement of the residential environment and the composition of the public space shall be implemented as well. To integrate the population it is planned to inform every citizen as good as possible and besides that, to publish a bilingual journal, in order to avoid language barriers with regard to the non-Germans. In the foreground of all plans, programs and projects stands the peaceful cooperation

of all parts of the population, as well as the bond of the young citizens towards their city (Franke, 1999; 21).

3.1.4 Efficiency review, perspectives and further development

In order to control the success of the project, certain indicators can be measured. In general it is more or less possible to compare the aims of the project with the results the project has actually brought. Apart from that, the employment rate can be measured, in order to see which level of success the arrangements with regard to qualification and education rendered. Moreover, it can be determined how many new jobs have been created and how many investments have been made in the district. But those indicators are restricted on measurable factors. Indicators that are more subjective, such as the quality of living or the sense of life, cannot be operationalized. Due to the fact that those factors play a major role in Duisburg-Marxloh, it is difficult to control the success of the project in general (Franke, 1999; 22).

In the end of the 1990's, scepticism arose, whether the project will be concluded or not. Those responsible expected the problem of the coexistence of German and non-German citizens to become bigger, due to the fact that the Turkish population is increasing more and more. The trends with regard to employment and economy developed in a negative direction as well, besides that, the emigration of high-income households seemed inexorable. Other than that, those responsible struggled with plan to integrate the population in their plans, which would have been a crucial factor in order to reach success. Thereby, the taskmasters didn't expect a positive outcome of the project. Major problems were mainly the lack of public relations activities and too less workforce in order to realize the plans (Franke, 1999; 23).

3.1.5 Current situation

All in all, the situation in Marxloh hasn't really improved. The percentage of foreigners is the second highest in Germany (after Berlin) and it is still a

challenge to create a harmonic coexistence between Germans and non-Germans. An example is the construction of a mosque in the district, which caused arguments between the different groups. Still, there are many outlandish businessmen that established themselves in Duisburg-Marxloh (Range, 2012; 17). The economical situation and the circumstances with regard to employment didn't really improve as well. Thereby the unemployment rate in the district is still extremely high. Nevertheless the citizens of Marxloh identify themselves with the district, even though the image is still not good. Due to the high percentage of outlandish citizens the average age in Duisburg-Marxloh is very low, these conditions can be used in order to improve the economical situation in the district (Stadt Duisburg, 2007; 20). Summed up it can be said, that there are different institutions that are trying to improve the situation in Marxloh. Nevertheless, the fact that the current situation in the district doesn't distinguish much from the situation about 20 years ago, shows how difficult the implementation of structural change is in regions, which used to rely on coal mining and ironworks.

3.2 Comparisons

The Ruhr region is not the only area in which a structural change because of economical developments is necessary. In most cases the transformation from an industrial region on to an information society takes place. Thereby service industries gain importance, while agriculture and industry take a back seat. Most of the jobs that are located in the area of service industries can be called knowledge intensive. Research and innovative ideas come to the fore more and more. In this chapter, comparisons to regions that are situated in transformation processes similar to the Ruhr area shall be drawn.

3.2.1 Manchester/Liverpool (Northwest-England)

The region of Northwest-England was a prosperous and world's leading industrial base until the beginning of the 1930's. The main economical fields of

the region were heavy engineering and shipbuilding. The decline of the mainstays of Manchester and Liverpool began with the Great depression in 1929. After the war, Manchester began to play an important role with regard to informatics and computer science. Even though the collapse of the old branches couldn't be stopped, the outcome the structural could be subdued. Nevertheless, the population of Manchester shrunk about 45%, but since the beginning of the 21st century, growth can be noticed again (Evers-Wölk, 2013; 27).

The structural crisis in Liverpool is comparable to the events in Manchester, only in a more distinct way. The economical and infrastructural problems started within the 1950's. A reason for the developments was the loss of importance as a harbour town and a commercial city; therefore the unemployment rose in certain districts of the city to about 90%. Even though, service industries gained importance in Liverpool, the city is numbered among the ten poorest cities in the United Kingdom (Evers-Wölk, 2013; 27).

Nowadays the area around Manchester-Liverpool is a centre for art und culture, media management, science and education, high technology, health and an important financial and commercial centre. With the University of Manchester and the Manchester Metropolitan University, two of the biggest and most prestigious universities of the country are located in the region. Besides that, the area is a good example for a long ranging, future oriented dealing with nature. Even though the area around Manchester and Liverpool faced problems, comparable to the ones of the Ruhr region, the transformation process seems to develop in a more successful direction. Especially with regard to an integration of the population, the area serves as a good example for the Ruhr region (Evers-Wölk. 2013; 28).

3.2.2. Pittsburgh (USA)

The region of Pittsburgh had the most important steel industry of the United States until the beginning of the 1980's. Within the scope of the economical crisis, the branch collapsed almost entirely in less than two years. The city had about 420 thousand citizens and 120 thousand people lost their jobs due to the

developments until 1982. Caused by the decline of the steel industry, the region positioned their industry anew with focus on health, education, financial services and advanced technology. The development in Pittsburgh is now seen as a prime example for a successful structural transformation. A crucial factor for this success is the speed of the economical crisis, which forced the people to deal with the situation and bond them together. Therefore a community feeling and the motivation of the society played an important role. Similar to the Ruhr region, Pittsburgh also strengthened their education system, so that there are two universities located in the city nowadays (Evers-Wölk, 2013; 37).

It is difficult to convey the successful strategies of those regions to the Ruhr area, due to the diversity of the individual conditions. Nevertheless the developments can be used in order to examine useful methods that could be used in the Ruhr region in other forms. Thereby the exchange and the absorption of knowledge should stand in the foreground, in order to persist successful structural change for all parties.

4.0 DEMOGRAPHIC CHANGE AND MIGRATION

Demographic change and migration are big issues for society in the Ruhr region. Generally it can be said that demographic change is a crucial topic for many Western states. Germany has the same nationwide problems, since the 1970's, the birth rate is lower than the mortality rate. Even though the natural population decrease is thereby nothing new, the outcome of this problem is still uncertain. Withal the demographic change hits the different regions in Germany in respectively different way. Experts assume that the Ruhr region is hit harder than many other areas in Germany and that the outcome of the demographic change will occur earlier. In this chapter, issues that the Ruhr region has to face with regard to their population shall be examined from a sociological perspective.

Until the year 2015, the population of the Ruhr region will highly probable shrink about 7% in comparison to the population number in 1998 (Brauser &

Hoppe, 2002; 3). Alongside the population decrease, an inconvenient age structure can be noticeable in the Ruhr region. Thus the number of people, which are over 35 years old, is higher than the number of people under 35 years of age. Besides that, the people that leave the Ruhr area are mostly well educated and young. Another issue is the high number of migrants in the district, which birth rate is, in contrast to the German population, higher than their mortality rate. Migrants have played a role in the social structure of the Ruhr region since the middle of the 20th century.

In the 1950's mainly people from Poland came to the district to work in the coal industry. In the 1960's and 70's people from Anatolia found their home in the Ruhr region. Now, 50 years later, most of those "non-Germans" live in Germany since three generations, so that they became an inherent part of the district. The non-German population contributes an important part to the economy in the region and besides that, is very much necessary in order to avoid the negative consequences of the non-existent German population growth. Nevertheless, migration in the Ruhr region is accompanied by certain problems. As mentioned in a previous chapter, feelings of insecurity occur between the German and non-German groups.

A crucial reason for a negative attitude between the groups is segregation. A reason for segregation can be the structure of housing space, so that the different groups live segregated from each other. Even though this happens mostly unintended, the outcome can be negative. Consequences could thereby be an economical decline for the districts with a majority of non-German population as an aftermath of low purchasing power, loss of attraction and emigration of high-income households. Further consequences can be a disinvestment of house owners and a break away of the employment sector, because of a lack of economical strong households. Thus parallel societies emerge, with lower chances with regard to social and spatial mobility, which leads to lower chances with regard to economy and cultural and social integration (Brauser & Hoppe, 2002; 17). Thereby the social segregation has negative effects and increases the discord between the German and the non-German groups.

Overall the amount of foreign people in the Ruhr region is about 10%, while the nationwide German average is 8,9 %. At a first glance it looks like the percentage

is very low for an urban region. Reason for this low amount is the fact that many foreigners have taken out the German citizenship. Thereby the biggest foreign group is the Turkish society, which represents about one half of the overall number of non-Germans in the Ruhr region (Brauser & Hoppe, 2002; 37).

All in all it can be said that the non-German society is very important for the Ruhr region. In order to cushion the outcome of the demographic change, it is necessary to gain immigrants. Nevertheless, migration is a big problem field for the area, due to negative feelings between the German and non-German groups. Unemployment is a factor, which increases the tensions and because of the high unemployment rate, the situation in the Ruhr region is particularly difficult. Nevertheless the relationship between the two groups is getting better and the migrants integrate more and more. It is the task of the German government to seize measures, which are helpful in order to improve the situation for the migrants further.

5.0 CONCLUSION

The developments in the Ruhr region have changed the population structure of the district. The area doesn't consist of a homogenous working-class society, but is shaped more individually than it used to be. Besides that, because of a noticeable demographic change, the age distribution changed, so that the Ruhr region is now struggling with an aging population. Furthermore the amount of foreign people is rising more and more, which has negative as well positive effects, but is in any case necessary, with regard to the negative population development of the Germans in the region.

Another issue is the emigration of young, well-educated people that seek to work in other regions than the Ruhr area. In order to make structural change work, problems concerning these issues have to be solved, migrants have to be integrated properly and tensions between German and non-German groups have to be avoided. It is overall of importance, to increase the attraction of the Ruhr region, which still doesn't have a good image, in order to address young people and increase the purchasing power of the citizens. Other than that, one can say

that the old industrial fields, such as coal mining and ironworks are no longer promising from an economical perspective.

The future of the Ruhr region lies in the service industries and the change towards those branches is done gradually. Thereby a lot of useful projects have been implemented, with regard to future orientated technologies, searching for solutions to problems that have to be solved in the upcoming years. An example is the project “InnovationCity Ruhr”, which is executed by the city of Bottrop and has the aim to restructure the city with regard to environmental and energy saving measures.

Cities like Duisburg and Dortmund also begun to concentrate on certain technologies (Duisburg: Environmentalism technology; Dortmund: high technology). Summed up it can be said that certain connections have to be made in order to achieve a sustainable dealing with the challenges of structural change. Especially with regard to the social conditions in the region, the generations, the different groups of different social origin and the past and the present of the region have to be connected (Evers-Wölk et al, 2013; 52). Therefore it is possible to realize certain ambitious projects in order to improve the economical and social conditions in the Ruhr region.

So far, after the decline of their economical main sources, the region has brought up some promising new fields and those responsible showed that they are on the right path with regard to the dealing of the industrial past of the area. Thereby tourism, with the focus on renewed industrial buildings that are now transformed into historical sights, has become a serious economical field. Besides that, the number of universities increased drastically or in other words, universities have not been existent in times of the industrial prime of the region. Still, problems have to be solved for example with regard to the environment.

All in all one can say that the restructuring of the Ruhr region won't just take a couple of years, but decades. Even though structural change has more or less always been a part of the region's economy, in this case, the society has to change with the economy in order to allow new branch of industries. So far, the population considered structural change as a threat rather than a chance (Malley, 2001; 73). It is the task of those responsible to change the negative

feelings towards structural change into something positive, in order to achieve a positive outcome for all parties involved.

References

Brauser, Hans Ludwig, Dr. Andrea Hoppe (2002) *Ethnisches Mosaik des Ruhrgebiets – Typisierung der Stadtteile und Potenziale der Migranten*; Projekt Ruhr GmbH.

Breit, Ernst (1979) *Neue Informationstechnologien*; Gewerkschaftliche Monatshefte, Ausgabe 10/1979.

Evers-Wölk, Michaela, Dr. Nolte, Roland, Dr. Göll, Edgar & Kamburow, Christian (2013) *Erfolgreiche regionale Transformationsprozesse – Mögliche Zukünfte für die Region*.

Franke, Thomas (1999) *Entwicklungspotentiale in Stadtteilen und Stadtteilzentren*; : Friedrich-Ebert-Stiftung - Bonn, 1999 - (Reihe "Wirtschaftspolitische Diskurse ; 126) - ISBN 3-86077-753-X
Electronic ed.: Bonn : FES Library, 2001

Götting, Adrian (2014) *InnovationCity Ruhr: A prime example for social and technological innovation*, *IET Working Papers Series*, WPS01/2014, 23 pp.

Heinze, Rolf G. (2004) *Regionale Innovationssysteme: Eine Wirtschaftssoziologische Betrachtung*.

Malley, Jürgen (2001) *Strukturwandel, Tertiärisierung, Entwicklungspotential und Strukturpolitik : Regionen im Vergleich: Ruhrgebiet, Pittsburgh, Luxemburg, Lille* ; Friedrich-Ebert-Stiftung, - [Electronic ed.]. - Bonn, 2000. - 85 S. = 280 Kb, Text . - (Reihe

"Wirtschaftspolitische Diskurse ; 130). - ISBN 3-86077-910-9
Electronic ed.: Bonn : FES Library, 2001.

Neumann, Uwe, Trettin, Lutz & Zakrzewski, Guido (2010) Tourismus im
Ruhrgebiet – Chance für kleine Unternehmen?; RWI Heft 70.

Parent, Thomas (2002) *Das Ruhrgebiet: Vom "goldenen" Mittelalter zur
Industriekultur*; DuMont Reiseverlag.

Range, Peter Ross (2012) The German model – In the Turkish district;
Handelsblatt

Other sources:

MetropoleRuhr (2010) Der erste Weltkrieg; http://www.ruhrgebiet-regionalkunde.de/aufstieg_und_rueckzug_der_montanindustrie/weltkriege_und_nachkriegszeit/erster_weltkrieg.php?p=1,1.

MetropoleRuhr: Von der Pinge zur Industriekultur: Geschichte des Ruhrgebiets
<http://www.route-industriekultur.de/index.php?id=14948>.

MetropoleRuhr (2011) 21 Hochschulen, 600 Studiengänge, unbegrenzte
Möglichkeiten.

Stadt Duisburg (2007) Sanierungsverfahren Duisburg-Marxloh –
Abschlussbericht.