

**SOCIOSPATIAL IMPACTS OF DEINDUSTRIALIZATION:
THE CASE OF KARABÜK**

143578

**A THESIS SUBMITTED TO
THE GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
OF
THE MIDDLE EAST TECHNICAL UNIVERSITY**

BY

MURAT ÇEVİK
143578

**IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE IN REGIONAL PLANNING
IN
THE DEPARTMENT OF CITY AND REGIONAL PLANNING**

**T.C. YÖRSEKÖĞRETİM KURULU
DOKÜMANTASYON MERKEZİ**

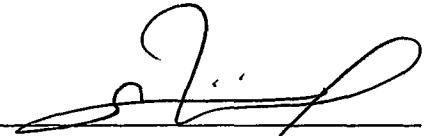
DECEMBER 2003

Approval of the Graduate School of Graduate School of Natural and Applied Sciences.



Prof. Dr. Canan Özgen
Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Science in Regional Planning.



Prof. Dr. Ali TÜREL
Head of Department

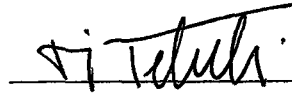
This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Science in Regional Planning.



Assoc. Prof. Dr. H. Tarık ŞENGÜL
Supervisor

Examining Committee Members

Prof. Dr. İlhan TEKELİ



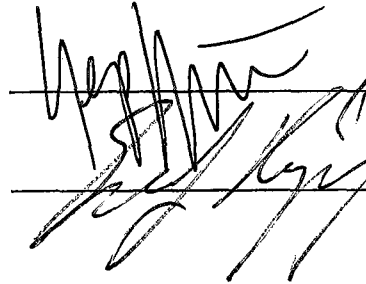
Prof. Dr. Ayda ERAYDIN



Assoc. Prof. Dr. H. Tarık ŞENGÜL



Assistant Prof. Dr. Serap KAYASÜ



Dr. Şeref Hoşgör

ABSTRACT

Sociospatial Impacts of Deindustrialization: The Case of Karabük

ÇEVİK, Murat

M.S., Regional Planning

Supervisor: Assoc. Prof. Dr. H. Tarık ŞENGÜL

December 2003, 160 pages

The main objective of this study is to evaluate the socio-spatial impacts of the restructuring of a locality, Karabük, which was shaped under a different development strategy, namely, import substitution industrialization strategy. Karabük case shows that establishment of Karabük Iron and Steel Factories was decided on the basis of political and social priorities of a period when there was limited competitive environment and such priorities have lost their primacy under the export oriented growth strategy in a highly competitive international environment.

The recent experience shows that Karabük fails to cope with this reality and the industrial base of the locality ever increasingly fails to support the economy of the city. The thesis is also an attempt to show the socio-spatial repercussions of this failure on the locality.

It will be shown that, closing down the Factories would have important negative impacts upon the whole city, rather moderate policies have been followed by various governments during the recent decades by partly placing the burden on the workers themselves.

In the long term, however, survival of the factory seems to be difficult, if not impossible. Therefore, the future for the city itself looks quite bleak.

Key Words: Restructuring, deindustrialization, socio-spatial development, KARDEMİR, Karabük



ÖZ

Sanayisizleşmenin Toplumsal-Mekansal Etkileri: Karabük Örneği

ÇEVİK, Murat

Yüksek Lisans, Bölge Planlama

Tez Yöneticisi: Doç. Dr. H. Tarık ŞENGÜL

Aralık 2003, 160 sayfa

Çalışmada temel hedef, yeniden yapılanmanın, ithal ikameci sanayileşme yaklaşımı çerçevesinde şekillenmiş bir yerleşim olan Karabük'ün, toplumsal-mekansal yapısına etkilerini değerlendirmektir. Karabük örneği, kısıtlı rekabet ortamının bulunduğu bir dönemin toplumsal ve siyasal öncelikleri doğrultusunda kurulmuş bulunan Karabük Demir Çelik Fabrikalarının, uluslararası rekabet ortamında dışsatıma yönelik büyüme stratejileri karşısında bu önceliklerini yitirmesi durumunu yansıtmaktadır.

Son örnekler, Karabük'ün bu gelişmelerle başedemediğini ve yerleşimin sınai temelinin, yerelin iktisadi geçim ve kalkınmasını artık sağlayamadığını göstermektedir. Bu tez çalışması, bu yetersizliğin yereldeki toplumsal-mekansal yansımalarını da gösterme çabasıdır.

Fabrikaların kapatılmasının kentin tümü üzerinde yaratacağı önemli olumsuz etkilerin azaltılmasının, çeşitli dönem hükümetlerinin, yükü kısmen çalışanların üzerine yıkan "orta" siyasalar uygulayarak gerçekleştirmeye çalıştığı da gösterilecektir.

Fabrikaların uzun dönemde yaşamının olanaklı olsa da zorlu olacağı görünmektedir. Bu nedenle, kentin geleceęi de çok hoş bir görünüm vermemektedir.

Anahtar Kelimeler: Yeniden yapılanma, sanayisizleşme, toplumsal-mekansal gelişme, KARDEMİR, Karabük



ACKNOWLEDGMENT

I would like to express my gratefulness and special thanks, first, to my family, being patient and helpful in all my education period; especially to my father, being helpful in the analysis of the case study with his deep knowledge, and my wife, being patient and helpful in the thesis research and writing process. This thesis would not be written if their support were not present.

Special thanks to all teaching and managerial staff of METU Department of City and Regional Planning, my thesis examining committee; Prof.Dr. İlhan Tekeli and Prof.Dr. Ayda Eraydın, (especially for their helps in my Regional Planning Masters Degree Programme studies), my thesis advisor Assoc. Prof. Dr. H.Tarık Şengül, especially to his patience in my troublesome thesis period, Assist. Prof. Dr. Serap Kayasü to all of her kindness and friendliness as my student adviser and teacher, and Dr. Şeref Hoşgör with his kindness, helpfulness and friendliness, with his technical assistance.

And my friends Res. Assistant Burak Beyhan, Res. Assistant N.Tunga Köroğlu for their moral and technical support. Special thanks to Assoc. Prof. Dr. Hülagü Kaplan, Gülçin Tunç, Barış Sanlı, Engin Çevik in helping the translations and proofreading of my thesis and my officer Hatice Dinç and project staff (K-Team) being patient and kind in my thesis period. Also I specially thank to the staff of Çelik-İş Syndicate Executive Board and Karabük Branch, staff of KARDEMİR Department of Human Resources, Nafiz Kayalı (former Governor of Karabük), Mayor Enver Tümen, Planning and Surveying Department of Karabük Municipality, researcher (honorary Professor) Uğur Barlas, Ahmet Akgün, Şener Akça and other tradesman of Karabük, whom I have interviewed.

And.. to all former and present workers and officers of Karabük Iron and Steel Factories who gave life to the Factories...

TABLE OF CONTENTS

ABSTRACT	iii
ÖZ	v
ACKNOWLEDGMENT	vii
TABLE OF CONTENTS	viii
LIST OF TABLES	xii
LIST OF FIGURES	xiv
CHAPTER	
1. INTRODUCTION	1
1.1. Aim of the Study	1
1.1.1. Assumptions	2
1.2. Method and Contents of the Study	4
2. CONCEPTUAL FRAMEWORK	6
2.1. A Historical Review on “Restructuring”	6
2.1.1. Periods of Economic Change	9
2.1.2. Social Aspects and Spatial Effects of Restructuring	10
2.1.3. A Short Evaluation of Effects of Restructuring on SoEs of Less Developed Countries	13
2.1.4. Production Reorganization	14
2.2. Deindustrialization	14
2.2.1. Definition and Process	17
2.2.2. Economic Aspects	18
2.2.3. Social Aspects	19
2.2.3.1. Individual	21
2.2.3.2. Household	23
2.2.3.3. Community	24
2.2.4. Spatial Effects	24
2.2.4.1. Settlement	25

2.2.4.2. Region	28
2.3. A General Overview of the Effects of Restructuring in Turkish Case.....	29
3. GROWTH OF KARABÜK AS AN INDUSTRIAL CITY	34
3.1. Establishment of Iron and Steel Factories in Karabük	34
3.1.1. First Studies to Establish Iron and Steel Industry in Türkiye	35
3.1.2. Karabük as the Location Choice for the Factory.....	37
3.1.3. Beginning of Production and Worker Migration	40
3.1.4. Managerial and Technical Structure Change	41
3.1.5. Reports and Projects Related with the Factories.....	43
3.1.5.1. Factories in the Reports of Foreign Experts	43
3.1.5.2. Factories in the Regional Planning Projects and Reports.....	44
3.2. Emergence and Development of Karabük City	47
3.2.1. Economic Activities	47
3.2.1.1. Manufacturing	48
3.2.1.2. Construction and Building	49
3.2.1.3. Commerce and Trade	50
3.2.1.4. Banking and Finance	50
3.2.1.5. Services	51
3.2.2. Social Change	51
3.2.2.1. Demographic Change	52
3.2.2.2. Change in the Employment Figures.....	56
3.2.2.3. Social Groups	58
3.2.2.4. Education, Health and Other Social Affairs	58
3.2.3. Spatial Change.....	59
3.2.3.1. First Settlement and Housing Areas	60
3.2.3.2. Industry, Commerce and Other Landuses	64
3.2.3.3. Land Values, Real Estate and Public Property	66
3.2.3.4. Planning Studies	66
4. RESTRUCTURING AND DEINDUSTRIALIZATION IN KARABÜK.....	68
4.1. Privatization of KARDEMİR	68
4.1.1. Decision, Process and the Reasons.....	68
4.1.1.1. Decision and Process	68

4.1.1.2. Financial Analysis.....	72
4.1.1.3. Reports on Privatization	73
4.1.1.4. Report for Regional (Re-) Development.....	76
4.2. Effects of Privatization	78
4.2.1. Economic Effects.....	78
4.2.1.1. Manufacturing	83
4.2.1.2. Construction and Building	84
4.2.1.3. Commerce and Trade	85
4.2.1.4. Banking and Finance	85
4.2.1.5. Services	86
4.2.2. Social Effects.....	87
4.2.2.1. Demographic Change	87
4.2.2.2. Change in the Employment Figures	89
4.2.2.3. Change in the Other Social Indicators (Divorce, Marriage, Death, Public Security and Suicide Figures)	93
4.2.2.4. Social Groups	99
4.2.2.5. Education, Health and Other Social Affairs.....	99
4.2.3. Spatial Effects	100
4.2.3.1. Housing and Residence Areas	101
4.2.3.2. Changes in Industry, Commerce and Other Landuse	103
4.2.3.3. Changes in the Land Values, Real Estate and Public Property	104
4.2.3.4. Planning Studies	105
4.3. A Comparison	106
5. EVALUATION AND CONCLUSIONS	109
5.1. Findings	109
5.1.1. Restructuring and Deindustrialization.....	109
5.1.2. Iron and Steel Industry	110
5.1.3. Karabük Iron and Steel Works.....	112
5.1.4. Karabük City.....	116
5.2. Evaluation	119
5.3. Concluding Remarks	123
REFERENCES.....	125
APPENDICES	136

LIST OF TABLES

TABLE

1. Change in the managerial structure	42
2. Production unit capacities and establishment years	43
3. Banks operating between 1950-1980	51
4. Population Change (1935-1980)	54
5. Distribution of the migrated families, to the town quarters of the city	56
6. Hometowns of the Workers in 1965	61
7. Houses built between 1939-1955	62
8. Present and needed industrial site in 1965	65
9. Net change between the proposed and actual shares by shareholders	71
10. KARDEMİR Technical Evaluation	75
11. Number of Closed and Registered Commercial Units (to the Karabük Chamber of Industry and Commerce Between) 1996-2000	79
12. Ratio of Firm Openings and Closings to the Total Openings in Province Center by Economic Activity Type	80
13. Banks Operating Between 1981-2003	86
14. Population change between 1980-2000	88
15. Reason and Number of the Employees Left KARDEMİR 1991-1995 .	90
16. Employment and Personnel Change in KARDEMİR (1989-1995)	91
17. Divorces by provinces of the region	94
18. Marriages by provinces of the region	95

19. Suicides by provinces of the region	96
20. Deaths by Provinces of the Region 1991-2000.....	97
21. Crimes Effectual to Public Security and Police Follow Up (1996-2001)	98
22. Residence Areas of Workers by Town Quarters in Karabük (2002)..	102
23. KARDEMİR Employees by residence areas (1997).....	102
24. KARDEMİR workers by residence areas (2002)	102



LIST OF FIGURES

FIGURE

1. Negative and positive effects of deindustrialization process	18
2. Spatial implications of forms of production reorganization	25
3. Number of units in the economic sectors by establishment years.....	47
4. Population change (1935-1980).....	55
5. Population increase rate (1935-1980).....	55
6. Active worker numbers in KARDEMİR between 1941-1979	57
7. Population by economic sectors (1965).....	58
8. Net Change in the Number of Firms by Economic Activity Type and Year.....	81
9. Net Savings by Occupation of the Head of Family (1996).....	82
10. Change in the Tax Revenues and Payments in Karabük Province (1996-2001).....	83
11. Change in the number of taxpayers in Province Center and Province Total	83
12. Annual average of the workers of KARDEMİR (1980-1994)	89
13. KARDEMİR Workers in the end of the years (1993-2002).....	90
14. Number of Employees Left KARDEMİR.....	91
15. Divorces by reasons (1996-2000)	94
16. Marriages by settlements, 1996-2000.....	95
17. Suicides by reasons (1996-2000)	96
18. Deaths by Some Special Reasons (1996-2000)	97
19. Landuse in the CBD	103

20. Land Values by Town Quarters (2002)	105
---	-----



CHAPTER 1

INTRODUCTION

1.1. Aim of the Study

The main objective of this study is to evaluate the socio-spatial impacts of the restructuring of a locality, Karabük, which was shaped under a different development strategy, namely, import substitution industrialization strategy. Karabük case shows that establishment of Karabük Iron and Steel Factories was decided on the basis of political and social priorities of a period when there was limited competitive environment, and such priorities have lost their primacy under the export oriented growth strategy in a highly competitive international environment.

The recent experience shows that Karabük fails to cope with this reality and the industrial base of the locality ever increasingly fails to support the economy of the city. This (disintegration) process finds the solution to put the costs, mostly, on the labour, and expand the response time to a long term, because of this problem. The thesis is also an attempt to show the socio-spatial repercussions of this failure, on the locality.

In line with the main objective of the thesis, it is also aimed

- * to expose the direct and indirect effects of economic and social (national) policies to Karabük
- * to expose the effects and dynamics in the emergence and development of the socio-spatial structure of Karabük city, in relation with the Factories.

*to designate the economic, social and spatial effects of the establishment process and restructuring in the region.

* to expose the effects of the transformation in the socio-spatial structure, by the evaluation of the (selected) qualitative and quantitative characteristics of the local community.

The scope of the study is formed considering the socio-spatial approach, discussing the society-space relations.

The main idea of the approach can be summarized as: space is a social product and in a way the “social” is also “spatial” (Lefebvre, 1991; Massey, 1984; Soja,1989). In other words, “just as there are no purely spatial processes, neither are there any non-spatial social processes” (Massey, 1984). Adding the “economic” (Anderson et al.,1983) in this relation, our socio-spatial analysis consider three inter-related main component.

The “social” consists of numerous inter-relations between individual and society and individuals, that create and effect “economical” activities which led to trade, industry and other economical institutions to be established on a “space” with “spatial” processes, mainly controlled and designed by the institutions in relation with the “social”.

1.1.1. Assumptions

As being established during the statist period as a part of the nation state formation process, it is impossible to understand the rationale behind the establishment of the Karabük Iron and Steel Works without paying attention to the priorities of the period mentioned above.

Establishment of the factories in 1937, was affected from the international relations, global economic structure and political territorial interactions of the pre-war period. As a new republic and a state, Turkish Republic decided to reach the “level of contemporary civilizations”, firstly with the investments on the strategically critical industries in the world and use national resources for economic independency. Considering these main concerns, Karabük Iron and

Steel Factories (and some other industrial establishments) emerged as a tool for this political approach, mainly in the period of import substitution policies.

Effects of the restructuring of Karabük Iron and Steel Works are interpreted in two different opinions. The first one is the thought stating the “decline” in the Factory as a result of the policies that prevents the Factories to be competitive, as this system which is productive is not cared and improved. Second, which is more liberal, is the answer of this decline lies in the wrong decisions in the establishment and development processes of the Factories, which were reported in different periods. Different writers and officers declare these opinions, both adding the effects of wrong political and managerial policies in the Establishment.

Two main assumptions of the can be noted as below:

1.Structural: *Establishment and development of Karabük Iron and Steel Factories, as the main and critical factor for the emergence, development and sustaining the life of Karabük region, depends on political and social concerns, more than economic targets.* Hence, Establishment becomes a socially, economically, politically and spatially important factor within the import substitution and independent economy oriented nation state development policies. Thus, sustaining this structure depends on the life of the designated economic, social and political forms and concerns, as economic efficiency do not have priority in this structure. Losing this political and social base, with the transformation in the social an political policies with economic regulations, causes being an “unrealistic objective” for this kind of “statist” economic institutions

2.Historical: *Two different periods of Establishment, having different political and economical structures, has affected the socio-spatial structure of the region, like the Factories.* In both periods, political and social concerns are observed to be active and effective “behind the scene” of economic policies.

In the thesis, above-mentioned assumptions are examined in two parts.

The first part covers the establishment and development of both Factories and Karabük City, between 1937 and 1980, coinciding with the term of import

substitution and state oriented economic and social policies (although there exist some efforts for liberal economic policy). In this period, a strong state power is behind the state owned enterprises (SoEs), also Karabük Iron and Steel Works, creating a strong political, social and spatial structure, locally and nationally.

Second period is 1980-2000 period, in other words, the term of neo-liberal economic policies, putting forward competitiveness, restructuring and market in a global scale. This period of “restructuring” and “globalization” effects the basis of the state owned enterprises with removing the political and social support behind, by “de-regulation” and “shrinking” of the “(welfare) state”. This “new” form resulting with a production reorganization, also effect KARDEMİR, like many other SoEs with the privatization, by enforcing the socio-spatial structure of the region to a transformation, offered by neo-liberal policies.

1.2. Method and Contents of the Study

Like its establishment in the second half of 1930s, the privatization of Karabük Iron and Steel Factories (KARDEMİR) became the beginning of a new phase for the economic, social and spatial structure of the region, in mid 1990s. After the dismissal of nearly 5000 workers within the privatization period, this redundant labor and local community faced with a transformation affecting their life and consecutively, the whole region. In the study, change in the socio-spatial structure of Karabük is evaluated, by examining the processes from the establishment of Karabük Iron and Steel Factories in 1937, to the privatization in 1995; and the present conditions of the settlement is analyzed within the conceptual framework.

As the first step, “restructuring” and “deindustrialization” concept with a socio-spatial view is examined, as the conceptual part of the study. The analytical studies, as the second step, contain the collection of the numerical data and surveying of the qualitative and quantitative characteristics of the province in the designated context, with the research on the development of the Factories and Karabük city. In the third step, evaluation and conclusions are formed by using the interpretations of the data and information used in the chapters and literature survey, within the aims and objectives of the study.

In the study, the emergence of Karabük as an industrial city, beginning with the early 1940s, and its development till 1980s is examined in a general content. The period beginning with the early 1980s, when privatization is used as a political and economic tool, and 1990-2000 period is examined in detail, focusing on the effects of the privatization and the beginning of the changes in the industry based production activities of the settlement.

The data collected periodically by the local and state institutions, especially State Institute of Statistics, is used for examining the case. Besides the historical, political and technical data, financial and technical changes in Karabük Iron and Steel Works constitutes the main firm-based data for the analysis, with the other information of the economic sectors in the city. Also, interviews with selected officers and workers of KARDEMİR, governor and mayor of the city, board members of local commercial institutions and syndicate, tradesmen and some other related person and researchers are used.

Conceptual framework of the study is explained, in Chapter 2, using the theoretical debates related with “restructuring” and “deindustrialization”. Definition and processes of deindustrialization, its economic, social and spatial effects, with the types and outcomes of restructuring and production reorganization, also tried to be explained briefly.

Information about Karabük province center, and Iron and Steel Factories, in a historical context, is given in Chapter 3. Development of the settlement with the growth and progress of the Factory is evaluated, till the privatization period which is interpreted to be the beginning of a deindustrialization period, in the region.

Chapter 4 gives the information about the restructuring and deindustrialization period of the case, beginning with 1980s and reached its peak with the privatization act in 1995, with its multidimensional effects to Karabük district and environs. Main focus of the chapter is on 1990-2000 period, when the effects were observed clearer.

In Chapter 5, the subject is evaluated within the aim and objectives of the study and conclusions are formed.

CHAPTER 2

CONCEPTUAL FRAMEWORK

Conceptual framework of the study focuses mainly on “restructuring” and “deindustrialization”, considering the theoretical debates on “(re) development” and “socio-spatial” concepts.

Hence, in this chapter, processes and effects related with these concepts are analyzed, in a view considering the economic, social (including political) and spatial sides. First, a general evaluation on the economic change and restructuring in the global and national scale, focusing on the manufacturing activity side is formed. Next, the definition, process and the outcomes of deindustrialization with some examples is given. Last part of this chapter contains a general evaluation of the Turkish Case, by three main components.

2.1. A Historical Review on “Restructuring”

“Restructuring, in its broadest sense, conveys the notion of ‘brake’, if not a break, in secular trends, and a shift towards a significantly different order and configuration of social, economic, and political life. It thus evokes a sequential combination of falling apart and building up again, deconstruction and attempted reconstitution, arising from certain incapacities of perturbations in established systems of thought and action. The old order is sufficiently strained to preclude conventional patchwork adaptation and to demand significant structural change instead.” (Soja E., 1989)

World economy has had depended mainly on agricultural activities, before the industrial activities has grown and spread all over the world, following the Industrial Revolution. With the rise of industry, agriculture - as the main sector

of economic space- faced with a fast decline in a relatively short period, in the 19th century.

Beginning with the first years of 20th century, industrial production increase – especially- in high income countries, while agricultural production decreased even in low income countries. Mechanization, technology (new techniques), changing farm size & area increased productivity in agriculture, but decreased employment. This period consists of the shift in agricultural workforce to the manufacturing sector as unqualified labour, needed as low-wage workers.

After the Second World War, main instrument of the development policies of the nation states was accepted as industry, and the main indicator of development as the ratio of the industrial workforce to the total national employment. Beginning with the early 1940s, the great level of the heavy industry investments, created urbanization and migration facts simultaneously, with the effects of the national development policies.

Heavy industrial establishments face with a great level of transformation and change with the rapid increase of population, compared to the previous periods. Social and economic effects of these establishments, developing as a great source of employment, not only seen in the city itself but also in its environs and the region. In addition, these regions where other sectors and public-private services were located close to the production areas and form an urban area, were placed in an important position in national scale when these establishments started production.

But, changes in the economical and social space, as an outcome of the transformations in the production processes and the social, economical and political relations in national and international scales, caused important effects in these production areas, in following decades.

In the post-war to 1980s' liberalization period, "industrialization" and "development" is thought to be identical and mean the same fact. Based on this understanding, ratios of the industrial workforce were taken as the development indicator for a country, as noted above.

Beginning with the late 1960s, industrial labour decline –especially clear in the manufacturing types having low technological input- has become the main fact and problem of the economy. The decline in the industrial workforce in the overall figures of the production, in the “industrialized” countries, was observed with the increase in the share of the service sector in total employment. Thus, productivity increase in industry results with the fast decline in the industrial employment and immediately there occur a shift to service sector, rising with the liberalization policies of 1980s.

Long structural problems, seen after the complex socio-economical conditions of early 1970s, have prepared a good environment for the policies and applications that deeply affect these areas. As an outcome of the privatization and reorganization actions, which is used as a tool for the neo-liberal politics intensified in the early 1980s, huge amounts of labour were made redundant in these mass production areas, which cannot stand against the destructive impacts of the changing economic conditions of the period. Especially, the increasing demand to the qualified labour with the increase in the service sector establishments supported by the new economic policy and technological developments has an important role in the decline of the demand to the industrial workforce.

Besides this shift to “white collars” from “blue collars”, also industrial foundations shift from some countries having high wage levels and unionized workers, to the less developed countries, in order to compete with the rivals in the global level by using low waged and disorganized workers of these countries. These conditions related with the flows and shifts in the global economy, affects many industrialized and newly industrializing countries. Many industrialized country firms left the production that they can not compete in the global market and search for new “competitive” type of high value added products, by using R&D facilities.

In general words, this shift from Fordist production to the flexible production has taken the benefits of the labour, also with de-regulation. The main source of this situation in the industrialized countries must be searched in the internationalization of the economic activities and the integration attempts of the

national economies with the global markets by the structural change in the “state”.

Trends in the world economy, in the second half of the century, can be summarized as the decline in industry, decline in agriculture and increase in services.

2.1.1. Periods of Economic Change

1923-1930's main economical tool was state economic enterprises, which has three types of main production activities; consumer products (sugar, textile, oil, etc.), intermediate products (iron & steel, petrochemicals, materials/ minerals) and investment goods (machinery) that had a less size of demand.

In 1940-1960 period, newly developing countries used import substitution policy, to create an industrial basis, which will serve first to their national market. The protecting measures, like custom duties, taxes, quota limitations enabled to increase the cost of production, from outside; so, with the support of the central governments' protective actions, national industry has found a way to rise and serve to the country. But in investment goods, especially in machinery, because of the less demand in the country, import from abroad is found to be more profitable, and international trade raise again with the export of special products of the country and get investment goods, especially for the newly developing countries. Private enterprises also found opportunities to grow, especially in consumer products.

Parallel to these developments, 1950-1970 period focuses on firms (private enterprise), in order to gain private industrial capital accumulation, considering national industrial policies, in 1960's. With the entrance of technological products and their usage in 1970s, a restructuring and hi-tech industrial development period began in the world economy. This period, besides these restructuring actions, is the emergence of the service sector, with an increasing ratio in the economy. Opposite to the decline in agriculture and industry, service sector shows a growth trend, especially in the beginning of 1980s.

State owned enterprises oriented economical activities faced with problems in this period, with the implementation of 1980s liberalization policies, targeting to

reorganize state structure. As there exist no motivation for increasing efficiency via size, scale, technology, especially in consumer goods, reductions of costs interact with uncompetitive costs and technological level. In intermediate products, the problem arose as export problems, in investment goods, insufficient demand and import of this type of products. Another problem was in the product diversity; as the same type of products were exported, especially in LDCs, in 1980s.

Beginning with the 1980s, entrance of global forces to the economy, with the liberalization and internationalization in the world economy, led to a series of transformation in the nation states' economic policy and activities. The dominance of the nation state in the national economy entered a period of change, and tended to be defined in relation to the emerging "New Global Economy" and "New World Order" arguments with the "post-industrial society" thesis.

Global forces with finance flows and de-regulation affect nation states and national economies. These forces change the structure of production system and the whole economy, with the increase in amount of capital, stock market increase, share holdings, bonds (government, banks, investment banks) and other actions. Late 20th century is also the time of change from comparative advantage to competitive advantage in economy, where new factors of production (environment, infrastructure, social structure, etc.) other than labor and capital are added in the production function.

2.1.2. Social Aspects and Spatial Effects of Restructuring

Changes noted above, started a new period, which has, deep social and spatial effects based on the economical restructuring in the whole world economy, known as globalization. With the internationalization of the finance and the emergence of multinational companies, regional economic unions and international trade organizations; national economic systems are forced with these global forces to adapt this conditions in order to survive in the new international economic order.

Industrial structures of the nation-states, having effective and productive industrial establishments, tend to start a "restructuring" process, in order to

establish a free economic structure to compete with the global rivals. Many country changed their industrial policy, established new industrial plants that also have or use R&D facilities, or reorganized present ones, to be competitive in the emerging fields of industry, mainly focusing on high value added technological products. But this support on new fields of industry disappeared in the “old” forms, working with relatively old processes, especially heavy industry plants, and plant closures led to huge amounts of unemployment in the “industrialized” regions of the countries. This process occurred in industrialized countries first, and then spread to the newly industrialized ones, which could not take suitable preventions. The entrance of low cost high value added products, using low waged and disorganized workers, especially in South East Asia, effected the global competition, and industrial capital of the countries leave the area of production that they are not (both economically and spatially) competitive in the world markets.

With the changing political and economical equilibrium in the world (the “fall” of the Soviet system in early 1990s and the emergence of the “Asian Tigers”), the labour market and the behavior of the capital was affected, especially in international scale. Change in the investment criteria of big scaled supranational capital and its national partners, in the emergence of the “new” industrial clusters other than the “old” ones, combined with the disorganized cheap labour possibility with the increase of the workforce coming out from the rural and redundant urban labour, creates a movement is observed in the (spatial) division of labour.

Moreover, the difficulty appears in the re-placement of this redundant workforce (fired with closure and privatization applications) in the new labour market. Besides the lack of education of this workers for the flexible production processes and new conditions of this system, as they have education and expertise in the (Fordist) heavy industry production processes, higher expectations from the worker in this new system, relative to the older, reveals another important handicap for this adaptation. In addition, low supply of work according to the highly increasing supply of qualified workforce in the new sectors, which expand the labour market, supports this increase in the unemployed ratio.

Social aspects of this new condition are also reflected as the new division of labour. Industrial workforce (blue collar) faced with a fast decline in 1970s, with the entrance of the industrial products, having competitive prices in the world markets. In addition, the rise of the service sector, as an output of this change supported by the technological changes and the global finance capital, increased the service workforce (white collar) all over the world. The redundancy of a high number of industrial workforce caused quantitative and qualitative social mobility and change in the social classes. With the plant closures, labour which has focused on manufacturing facilities and improved skills on this field are now unemployed and has no new place to “earn bread money” to survive.

Small amount of unemployed people could find new jobs in these new conditions, and the social life has changed. The heavy industry worker lost his relatively high wage and life standards, and move to another place for a new life or return to his village, near his family. This action results with the migration from the “old” industrial regions to the other regions or cities of the country. Migrants try to find jobs, but their new “home” is not ready for this occasion, generally. Then, they are forced to work with low wages with limited social rights, for the new industrial production units. Especially women and ethnic labor are employed in such works

As social actions have reflections on the space, this mobility and actions affect the spatial structures of the countries. Production reorganization not only leads to unemployment, but also migration of the citizens of the settlement or the region. The physical standards of the settlement change; other economic and social facilities, like trade and social works, also face with a decline and sometimes leave the area, as their income decrease with the number of consumers. This change in the spatial structure, with the restructuring in the industrial production, also has impacts on the regional structure of the countries. For example, the arguments on “Sunbelt” and “Rustbelt” in USA, reflects the importance of this kind of effects.

2.1.3. A Short Evaluation of Effects of Restructuring on SoEs of Less Developed Countries

In Less Developed Countries (LDC), post-war period represents the development of state owned enterprises (SoEs), in especially capital-intensive sectors (Boratav and Türkcan, 1993). These countries of Latin America, Asia and Africa, some of them previously colonial countries, formed different national structures by using SoEs as an important tool for national development and establishing an independent economic structure, by using industrialization as a tool. Although the prosperity and productivity of these attempts can be questioned, these activities took the economy of the countries to a level higher than the one private enterprises should take, if no SoEs has operated. In addition, some SoEs work for export in the competitive sectors for their production.

Operation of SoEs of this countries in the capital intensive, long run amortization capable and low financial profitable areas result with direct indirect resource transfers to the private enterprises (Boratav and Türkcan, 1993) and create externalities for them to use.

Depending on the establishment aims, policy and structure of production, management and national regulations, SoEs can both work highly productive or low productive by state's economic support. This condition is considered in the liberalization period.(for examples and further discussion: Boratav and Türkcan, 1993)

New liberal approach evaluates SoEs, as a source of capital input, depending on the thesis of productivity of the private enterprises are much more higher than SoEs in micro level, and the thought of seeing public property as a negative, but private property as a positive factor in economy.

In fact, SoEs of LDCs face with restructuration and modernization activities as the basis of the privatization process of liberal ideology, resulting with negative effects of free enterprise and international division of labour. In this new system, it is made impossible for the low developed economies, to reach the industrialization and economic prosperity, created by the productive sectors. (Boratav and Türkcan, 1993).

As a result, although different economic and political structures are formed by the national regulations, LDCs have created industrialization and economical development by the help of SoEs, which are forced to regulate themselves to the new global conditions in order to survive economically, but without social and national political concerns.

2.1.4. Production Reorganization

Every establishment has their original responses to the pressures, according to their policies, conditions and strategies. The reactions, as production reorganization, are generalized in three forms: intensification, rationalization and technological change and investment:

*"The three forms....briefly: **intensification** is defined as being changes designed to increase the productivity of labour but without major new investment or substantial reorganization of production technique; **investment and technical change** is where job loss occurred in the context of significant investment often related to changes between techniques of production; and **rationalization** is defined as a simple reduction in total capacity."* (Massey and Meegan, 1982)

These forms also have different affects and outcomes in different sectors and each used for reorganization of production with different reasons. Each usage of this forms effect the economical life of the region, relative to the strength of their social and spatial structures. Application of one of these forms to any suitable manufacturing branch can result with improvement of the production and increase the gains and incomes of both workers and owners, but in fact negative effect –especially- to the social space is more or less appear in all of them.

Firm or establishments, faced with economic problems or effected by the technological change in the sector, start to work on structural change and production reorganization to increase productivity and incomes.

2.2. Deindustrialization

Deindustrialization period experienced in many "Western" countries, UK in the lead, was observed in the other parts of the world with the spread of the policies and developments mentioned above. Recession in the manufacturing and heavy industry employment (and production), with the widespread of the usage of the information technologies and, employment increase in the other

production types using the new technological processes, caused transformations in the social structure of the settlements dependent to these large scale industrial establishments.

Deindustrialization, briefly defined as the absolute decline in the manufacturing employment, is a fact to be evaluated not only in economical area, but also in socio-spatial terms, because of its effects on social space.

In this period, noted above, local community and the industrial establishments, with the other sectors fed by the outputs of these two, face with problems which not completely reflected to the physical space like unemployment, in the lead. Intra-regional and out-regional population movements appear after the closures, with the migration of the new jobless people moving to the settlements they wish to find opportunities and jobs suitable for their capacity, ability, knowledge and living costs.

This motion starts a chain reaction; as the decrease in the quantity of the consumer/customers of the other sectors cause a decrease in the profits and sales, which force the shop owners in the trade and services sectors to reduce the workforce, to work with minimal loss, in order to survive in this emerging condition. Similar results observed with the privatization, as an outcome of the decrease in the total amount of production that affect the incomes and with the change in the quality of life in a spatial view.

In short, the decrease in the quantity of industrial workforce that help the settlement to survive, lowering the income gain from production in economical terms, also cause over estimated population mobility with its multiplier effect.

Mentioned condition mainly valid for the heavy industry establishments using a production process, which was not able to realize the structural transformation against the technological developments. However, qualified and less amount of labour being a need in the changing production processes, in the industrial firms that could make technological transformation, causes unemployment in a level; but the smaller firms in the same sector, because of the vacancies, can accept this unemployed labour. Addition of mergers and supranational connections to the occasion, impacts to the (spatial) division of labour and local labour market observed to increase.

Labour market, changed with the transformation in the production types and processes in the industrial sites, as big scaled employment resources finds a response in the local scale, related with the increase in the quality and quantity of the small and medium sized enterprises (SMEs).

For example, a worker fired from iron and steel branch of manufacturing after the privatization, can find an opportunity to be employed in an SME, working on the same sector in the same city or region, where the worker lives. Supply of this kinds of opportunities have an important role in decreasing the unemployment ratio and social problems.

Another case in the settlements, where the closed or privatized plants are established, is the fluctuations in the real estate and related activities. In general, relative decline in the incomes of the community changes the rental prices in the real estate market, in relation with the property ownership ratio, in the settlement. Reflections of this emerging condition, to the space, can be observed with the motion of the social classes in the urban space. Planned or not, this activity is reflected directly to the urban land use and indirectly to the city and regional plans, by affecting the investment (behaviour) on land and real estate.

As a result, deindustrialization causes big-scaled differentiations in the social space, because of the chain transformation in the production processes and relations, with its effects to the social structure of the settlements where manufacturing activities of qualified labour exist. Differentiations and movements occur in the space, by the social and economical deprivation of the communities from the gains of being manufacturing workforce, in short periods. Impacts of deindustrialization (which is an important fact in effects of economic policy to the social space), is important in determining the usage of human resources and living strategies of the local communities; an important factor in not only today's but also tomorrow's urban and regional development. This fact creates long-run effects despite being active in a period, obtain continuity in industrial production with "reindustrialization"; but this continuity happens, especially, in a branch or a firm other than the declining one. However, the observed change in both two cases, create deep impacts on local communities

and especially its reflections on the social space may result in regional and national problems, if not any prevention was taken.

2.2.1. Definition and Process

Deindustrialization is basically defined as; the long-term absolute decline in the manufacturing sector (Warn, 1988). This decline can be evaluated in terms of the share of the employment in manufacturing to the total employment of the designated area (town, country, region) with a focus on social scale or in terms of outputs in the manufacturing sector in an economical view.

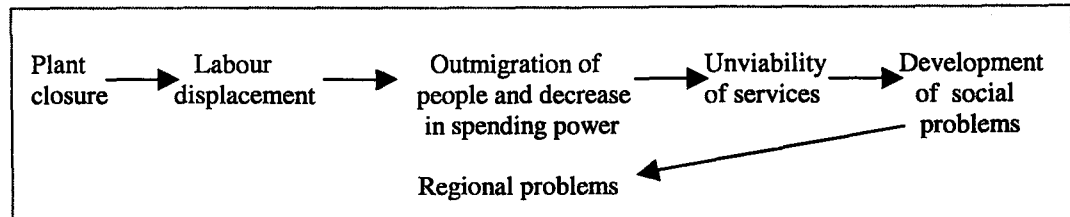
The shift has been characterized by plants relocating out of the country or in the Sunbelt, manufacturing jobs being replaced by robots, new employment opportunities expanding in the service sector, the pattern has increased employment of nonunionized labor, low wages with scarce benefits, and the dislocation of many unskilled and semiskilled workers have experienced economic and social dislocation. The resulting situation for our society is higher levels of unemployment, poverty, and even homelessness (Bensman & Lynch, 1987; Bluestone & Harrison, 1982).

...According to Perrucci, et al., (1988), by the 1970s "deindustrialization" in the Midwest had a dramatic impact on steel and automobile production, the region's two primary industrial sectors. Declining steel production, mostly in the Midwest, and imports led to 100,000 steel jobs lost between 1960 and 1980. By 1982, steel jobs were down 36 percent compared to 1976 (Congressional Quarterly, 1983). American automobile manufacturers such as Chrysler and American Motors were near bankruptcy in 1980-81. By March 1983, 300,000 automobile workers had been laid off, most never to return to work (Congressional Quarterly, 1983). The Office of Technology Assessment (1986) reported that as of 1984 the Great Lakes states (Wisconsin, Illinois, Indiana, Michigan, Ohio) had 400,000 displaced workers who lost their jobs between January, 1979 and January, 1984 because of plant closings, layoffs, and ending whole shifts of workers. The total number of displaced workers nationally was 1,299,000 so that approximately 30.0 percent of those displaced came from five midwestern states. A similar situation has been experienced in Indiana, where at least 208 plants closed between 1975-83, dislocating 37,691 workers (Perrucci, et al., 1988). (Torres, 1991;3)

Deindustrialization is noted to have both negative and positive processes, generally occurring parallel to each other (Warn, 1998; Rowthorn and Ramaswamy, 1987). In general, negative process is discussed, as it results with regional problems. When process is evaluated in macro-economical terms, positive process is in the front scene, especially by services employment side.

Deindustrialization fact can be examined in economical and social aspect sides, having spatial effects. Here, we focus on social aspects in three levels (individual, household and community) and spatial effects in two scales (city and region), noting economic aspects in general.

a. Negative effects



b. Positive effects

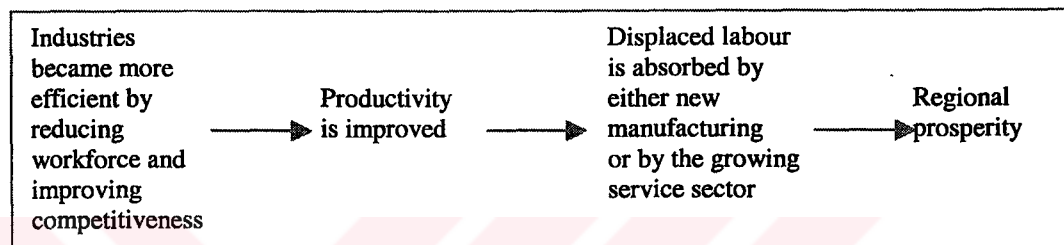


Figure 1: Negative and positive effects of deindustrialization process

Source: Warn, 1988

2.2.2. Economic Aspects

Economic restructuring in the world, having impacts on every sector was given in previous parts of this study. The outcomes of this restructuring are noted to be the main reason of the decline in the manufacturing, in the related literature.

This impact has different reflections and applications, in different areas and sectors. Increase in the labour productivity or decrease in the output of the industry, results with the job loss, in the designated conditions. (Massey & Meegan, 1982).

Besides the reorganization attempts in the manufacturing, also secondary industries and services affected from this decline, tend to adapt themselves to the new conditions to reply the increasing pressure of the unemployment in the manufacturing. Shift in the balance of employment to services (Ersoy et al., 2000; Fothergill et al., 1988) and failure of the economy to grow at a sufficient

rate to provide full employment (Fothergill et al., 1988) are two main economical aspects.

As high wages and uncompetitive measures, with the organized labour, creates less profit, the firm enters to the arena with more competitive prices in order to survive among its rivals by leaving these policies and improving its technology. Sometimes, they change their product type, which they cannot compete in the international markets.

Whether the firm or the economical institution reach their targets or not, the outcomes of the application of these policies are observed in the social space clearly, as the problem of unemployment. In another words, we observe “export of people and import of the jobs” (Rodwin, 1989:21)

As the bulk of the workforce in advanced economies is employed in either manufacturing or services, the evolution of employment shares depends mainly on output and productivity trends in these two sectors. In most advanced economies, labor productivity has typically grown much faster in manufacturing than it has in services, while output growth has been about the same in each sector. Thus, given the similarity of output trends in the two sectors, lagging productivity in the service sector results in this sector absorbing a rising share of total employment, while rapid productivity growth in manufacturing leads to a shrinking employment share for this sector. (Torres, 1991; 4)

2.2.3. Social Aspects

Social aspects of deindustrialization are mainly observed in the employment figures and its spreading effects, as unemployment. Especially, the migration and psychosocial problems of the jobless manufacturing workers seem to be one of the main social problems of the fact. Either intra-regional or inter-regional, movement of jobless means a pressure to the labour market and the social life of the destination area. Employment possibility of these people depends on the capacity of the labour market, and supply of suitable works to the unemployed.

Considering that, jobless worker having an ability and knowledge on the manufacturing job cannot easily adapt himself to the new jobs, mainly in service sector. Besides this technical adaptation, as the wages are lower –except some executive, technical and managerial positions- in the services sector relative to

his latest work, income level will decrease with this new condition. (Perrucci et al., 1988).

Here, we observe three main conditions introduced. The first is the economic problems that effect the people either he finds a job in the other sectors or not. It is not guaranteed for him to use his knowledge and ability he gained in manufacturing, in a "free" liberal economy, and he is introduced new form of work and instruments that are not easy to cope up with.

Second one, partly related with the first, is the employment of women, especially if men (as the "breadwinner") could not find any job to work, or income is not sufficient for living costs of the family. This results with the rapid increase in the ratio of the working women, as they are cheap and disorganized workers "willing to take what is given"; that is, more profitable and less costly for the services sector and some other industries (Massey and Meegan, 1982; Massey, 1984; Ersoy et al., 2000; Perrucci et al., 1988)

Thirdly, as the most negative impact, especially for the families, is the emerging psychological and behavioral problems, effecting the family and community life.(Ersoy et al, 2000; Perrucci et al., 1988). Behaviors like alcoholism, suicides, illegal actions' ratio can increase in this period of unemployment (Ersoy et al., 2000; Torres, 1991)

With all these impacts on social life and structure, deindustrialization cause a domino effect beginning from the fired worker to the all region, with its interrelations.

We can examine the social effects of deindustrialization in three main level: individual, household and (local) community. Here, individual is the person who lost his job because of the reorganization or closure of the plant he was working or the deindustrialization experienced in his home town or region and the household represents the family and close relatives, dependent to the worker. (Local) community in the settlements that lived the period stronger than the others, are evaluated in the community level.

2.2.3.1. Individual

The first effect of deindustrialization, when evaluated from individual side, is unemployment. Individual, once having the income to meet the basic personal and family needs and a level of living standards, reciprocal to his work, been able to develop different responses and behaviors to the new conditions he faced with. Depending on many different factors (social, religious and mental structure of the society and person, general economic conditions and health status), he tries to stay alive in the new conditions.

Person will start to search for a new job, if he do not have any other source of income different from the one supplied by the (ex-) work, with an anxiety for future and in a position with increasing problems. Besides, if the legal structure is not suitable that insurance is a "must" for health care, with the lose of health insurance supplied by the former workplace, this status will lead more problems and restrictions. Moreover, this will effect the inspection and medical treatment of the health problems that the jobless worker or family will face with, negatively. This health care issues of the redundant workers is noted and briefly explained by Torres (1991), using an example of USA, from Renner and Navarro (1989):

Renner and Navarro (1989) in their recent analysis of the growing population of underinsured and uninsured in the United States explain that the "deindustrialization" and shift of employment to the services have enormous implications for the health benefits coverage of the populations affected. This occurs in three different ways. First, the trend of "deindustrialization" results in a shift from union to nonunion labor, which has been partially responsible for the declines in the health insurance coverage of the Latino working population. Employees in unionized firms have better health benefits coverage and pay lower premiums than their nonunionized counterparts.

*...
In addition to differences among industries in the percentage of the work force covered by an employer group health plan, significant differences exist in the depth of services offered. According to Renner and Navarro (1989), group health plans in manufacturing are significantly more likely to cover maternity benefits, mental health care, dental care, and vision care than the non-manufacturing industries. (Torres, 1991)*

Secondly, the possibility to find some jobs in this search period, with lesser social and economical gains, like social security and satisfactory wages, relative to the former conditions or even within the lowest living standard levels of the

country. Because of the necessity to earn a living, in the economic difficulties he is in, although to start a work without questioning the appropriateness and continuity of this job, can also become a problem. As this type of works are usually part-time and low-waged jobs with lower social and economical benefits, like absence of insurance and other social security services, they are not able to give the satisfaction of work and help to establish the expected minimum living conditions. However, to a degree, it meets the basic needs of the redundant worker and his family.

But, this can be seen as a problem to be easily defeated by a new search for better jobs, within a better context in social and economic structure and conditions. Especially, if the person is in the economically active age group and do not have important health problems.

The problems, faced by the person who could not find even a temporary part-time job in any sector, have the risk of occurrence of more destructive or depressive problems. If the person have to earn a living for him and his family as he do not own an external financial and moral support from anywhere else, he has the risk of facing with lots of problems from important and permanent health problems to depressive sicknesses resulting with behavioral defects and offensive actions sometimes ending with criminal events. Especially, the people from ethnic and lower social classes living in poverty, face with these problems more enhanced than the other "citizens", as observed in the American experience:

The researchers found that, overall, the effects of layoff on mental health were consistent with the typical conceptualization of unemployment as a stressor (Dohrenwend, Dohrenwend, Dodson, & Shrout, 1984; Liem & Liem, 1988; Pearlin, Lieberman, Menaghan, & Mullan 1981). To be laid off meant worse mental health: more somatic complaints, more depression, and higher anxiety. A critical finding from the study is that the effects of anticipating layoff and especially of being laid off depended on one's race, one's education, and one's income. For the low income, the less educated, and especially the less educated black worker, the mental health impact of layoff was profound. It appears that being black and less educated is a special combination with adverse implications for mental health when economic times are hard. This finding might imply a similar situation for the Latino population which shares many of their socioeconomic characteristics with blacks.

Job loss has been found to contribute to a deterioration of mental health. Perrucci, et al. (1988) reported that displaced workers expressed greater depression and a lower sense of mastery over their lives than a control group

of workers. Similar results were found in other studies which, in addition, found displaced workers to suffer anxiety, paranoia and hostility (Brenner & Levi, 1987; Frese & Mohr, 1987; Joelson & Wahlquist, 1987; Pearlin et al., 1981; Warren, 1978).

Bensman and Lynch (1988), in their study on the effect of a steel plant closure in southeast Chicago on displaced workers, many of them Latinos, present an enlightening perspective describing their reduced health care access and health status deterioration after the plant shutdown. (Torres, 1991)

2.2.3.2. Household

Effect spreads in the household level. With the sharing of the problems of the dismissed worker in the family, same effects are reflected to the other family members and close relatives, depending on the structure of the household and family ties. Overcome and solution of the problems with a positive manner and outputs seem to be easier to put into practice in households having strong family ties and solidarity. Activity and participation of the whole family members for the contribution to the economical life and living of the family, when needed, is more easy and effective in this type of household structure. Especially, except the jobless man, employment of the woman (wife), the children or any other household member, to earn some money for the minimum needs, as a low-paid worker in services sector or other production fields, comes to agenda in this context.

However, a problem, this type of families are more open to live because of the close family relations, is the relative increase in the health problems of the family members.

Another case reported concerns a Latino worker whose little daughter developed a peptic ulcer and was constantly getting stomachaches and headaches as a result of the family instability brought by the father's unemployment. (Torres, 1991)

In a family, having less solidarity and loose family ties, some negative results with the increase in the in-family violence that tends to end with divorce, crime or suicide, which affect the community life, can be expected. Changes in the human relations of the person, who could not gain family and medical support in overcoming the problems he faced because of the redundancy, and behaviors to his family, may be the beginning of the period that will end with the break up of

the family. Tension to abnormal behaviors and defective actions like alcoholism, usage of drugs, public security related crimes and increase in these conditions, not only threaten the person himself but also his family as well.

2.2.3.3. Community

It is not possible for the community, formed by family and persons, not to be affected from these kind of or similar problems, in these conditions. Increase in the households living problems, and the reflection of the personal problems to the community as threats to the social life, public security and similar actions, has effects on the life and structure of the local community. It is clear that, especially when the families and workers who became redundant after the closure of the heavy industry plants creating high levels of employment, the problems lived (and to be lived in the future) are potentially ready to turn into social problems in a short period of time.

This transformation, to be reflected to demographic, health, security and economic activity indicators, will be observed in a broader area and scale with the effect of the migration lived. Increase in poverty, with the recession in the social and economic life of the local community, may result with the reflection of the personal and family problems to the physical space, transforming the settlement from a livable and healthy environment to a space of increasing urban tension and the intra-communal problems having pressures on physical environment. And this means, the fall of local community and the city, with an emerging social and spatial crisis, being not only a personal or family problem.

2.2.4. Spatial Effects

Spatial effects of deindustrialization can be examined in three scales. The first focuses on the spatial responses of the structural change in the firm and related activities or the production (re) organization, while the second is on the settlement having three sub scales: neighborhood, town quarter and the city. And then, region is considered as the third scale of spatial impacts of deindustrialization.

Production reorganization and its outcomes are also observed in spatial terms (Massey and Meegan, 1982; Massey, 1984). Intra- or out- movement of the

unemployed to the settlement, where reorganization strategies applied, creates a new spatial division of labour in all scales. Naturally, closure or improvement of one plant is not the only reason but with the chain reaction of this restructuring, many other settlements and regions forced to refresh their spatial structures.

Capital can leave the place where there is no more profit and opportunities for competitive prices. Especially, the decentralization of the firms, which result with the leaving of any branch of the management unit from its place or close them, affects the spatial structures and division of labour (Massey, 1984). Search of the firms for more profitable areas for investment results with the increase in the urban-rural contrast, and urban regions decline with the growth of more rural regions (Fothergill et al., 1988), in this period.

So, function of the cities begin to change (Fothergill et al., 1988; Ersoy et al., 2000).

<i>Forms of production reorganization</i>	<i>Output change</i>		
	<i>Falling</i>	<i>Stable average growth</i>	<i>Rising</i>
Intensification	Employment losses <i>in situ</i>		—
Rationalization	Employment losses <i>in situ</i> Plant closure Possibility of relatively small local gains as a result of concentration of capacity. No new locations		—
Technical change	(1) Employment cuts <i>in situ</i> or (2) New locations (i.e. some local gains) and closures	Any combination of <i>in situ</i> employment losses, new locations and plant closures to meet capacity requirements	

Figure 2 : Spatial implications of forms of production reorganization

Source: Massey and Meegan, 1982

2.2.4.2. Settlement

Effects of production reorganization and deindustrialization to the settlement can be examined in three scales. The first is the neighborhood, as the main unit for the urban analysis that contain individual and family, which is the first structure reflect these effects to the space. Second is the town quarters, made of different neighborhoods and various social and spatial layers and usages

inside. And the third one is the city, with numerous interrelations of social and spatial layers.

a. Neighborhood

Neighborhood, consisting of different family structures, is the main scale having similar specialties to household in social analysis (made in previous part). Considering the economic and social effects of deindustrialization, mentioned in the previous parts, change in the spatial structure of a neighborhood is designated here.

Firstly, in the neighborhoods having relatively high ratio of unemployed workers will face with changes more than others. Unemployed person loses economic support for housing and insurance for health, that helps the family live relatively more comfortable than some other families. With this loss, households may be forced to leave their house directly by the directions of the firm –if they are living in the houses provided by the company- or the homeowner if they could not effort to pay the rent for the house. This results with the migration of the family from the neighborhood.

By this relocation of the families, being important parts of the neighborhood life, there is two possibility: another family resides in the same flat or nobody lives in the flat for a long time, resulting with the lack of good care of houses and its environment. In addition, there is another side of the fact appears here: selling of the flats if they are the property of the establishment. This increases the problems by affecting the property and the real estate structure of the neighborhood. In general, if these housing sites, owned by the firm, are designed to contain same or similar social groups in the same neighborhoods, this may result with the emptiness of the whole neighborhood in a short period. If the new property owner(s) think and operate to change the design and implement a new (renewal) project for the neighborhood's physical environment, then not only the property and real estate structure change but also the relocation of the (homeless) unemployed families become a problem of a higher scale: town quarter and the city.

b. Town Quarters

These transformation and changes in the neighborhoods spread to the town quarters, that are constituted of many neighborhoods, by creating an exponential effect of both social and spatial scale. Dilapidation of the physical environment, created by the lack of good care in the housing sites, with the change in the property or real estate value levels, result with the population mobility in and between the town quarters.

Besides the housing areas and neighborhood life, other land uses of different economic and social activities also tend to change their responses to this emerging condition. Decline in the residents of the housing areas using the services as the consumers, means decline in the income and activity of the commercial and service activities, if not replaced with any other “new” residents. Rental of the offices or social service units owned by the establishments with the selling or rental of the housing sites, as a form of privatization, can be seen in this period.

As a result of this property and activity change in the town quarters, besides social and physical structure, land use structure tends to enter a new phase, when evaluated in the urban scale. Function and specialty of these sites may differ from the previous one, with the entrance of new forms of land use or socio-economic activities, transforming the role of the town quarter in the urban area. Thus, the city formed by town quarters of different social, economic and spatial structure begins to reorganize, to adapt this transformation, in order to survive

c. Urban Area (City)

Beginning from the neighborhood to town quarters, effects of the mobility of the unemployed families, property and real estate changes and land use transformation are analyzed in general. Urban areas live the changes similar to these processes, in a larger area and scale, with the mentioned domino effect. Increase in the physically destroyed or uninterested housing areas forces the local authority to develop plans for the renewal or regeneration of this areas, which are generally in the near periphery of the city center. Besides, the motion of the unemployed and the houseless to the low rental housing areas may

create problems in services and other urban land use, if they are not sufficient to serve to the new residents with the older ones. Spread of this condition to the other economic activity types may result with the “inner-city decline” (Fothergill, et al., 1988; Friedman, 1983) in both social and spatial terms. ,

This mobility also creates an increase in the demand to the affordable rental houses, and new residence areas with new forms of work for the redundant labour. Thus, the renewal and regeneration activities have to be enlarged with the planning of new urban areas, integrated with the urban core and other housing areas. This means, the physical environment and land use structure of the city begins to change, leading to a new “identity” of the city that need new forms of municipal and private services, with the change in the economic and social structure.

2.2.4.3. Region

Spatial effects of deindustrialization on the region, is a more complex question, opening new areas of problems and questions, when examined. But, in this part, we only deal with and summarize this condition, in a general sense, related with the effects of the deindustrialization of a city to the urban and rural areas of the region.

Main (social) factor for a region to be effected by deindustrialization is the migration of the households in and out of the region. Considering a relocation for the base industry of the city in the same region but in a rural or less developed urban area having low wage levels and locational advantages, only a small change can be observed in regional scale. All of the commercial and manufacturing units and employment migrates in-region means that there is not a net loss in the regional figures, except the relative development of the new location.

If the relocation targets any other location out of the region or plant is closed, then the region will lose not only a number of workers of officers, but also face with a decline in overall figures of economic and social development. In-region migration and increase in urban-rural contrast with this unplanned transformation effect the rural areas, closer to the closed plant and cost of life in

both rural and urban areas change in a short period of time (Fothergill et al., 1988).

2.3. A General Overview of the Effects of Restructuring in Turkish Case

The global restructuring in the world economic and political structure also has implications on the Turkish economic, political and social structure, as well. Facing with the changes parallel to the other countries (lead by Europe and USA), Türkiye entered a new phase beginning with late 1970s, shaping the country's socio-economical life.

In political and economic arena, January 24 Decisions became the main instrument of the liberalization of the Turkish economy, by using similar tools of the Western liberalization policies (like privatization). For the understanding of "development" of the national economy for the integration with the global economy and regional cooperations/unions (like EEC), different from the targets of the former period focusing on "independent" economic and social progress for national development, was another side of the fact.

This "operation" in the Turkish economic and political structure appeared parallel to the "restructuring" in the whole world, imported to the "third world countries" from and by the "developed" ones, in the early 1980s.

Here, the economic, social and spatial reflections of this restructuring on - especially the SoEs related topic of- the Republic of Türkiye is evaluated, considering the special conditions of the country and the framework of this study.

Economic restructuring, developed and used by the supporters of the neoliberal policies in the country, parallel to the change in the (national) political structure, attempted to develop the private sector with global linkages and transform the import substitution oriented economic policy, to "globally integrated" and "export oriented" activities. This policy began to be implemented in the second half of the 1980s by the privatization acts, focusing on the establishments of SoEs of different sectors in the first step, which are told to have low productivity and high losses.

Rather than the improvement of the technology and workforce by introducing new “contemporary” techniques, labour and manager involvement in the production and some other tools for the establishments to be competitive and productive in their sectors for the regional and national development, a different type of action is preferred, depending on the political base of the neoliberalism. State is thought to “shrink” in function, starting with the economic activities.

SoEs of Türkiye, were seen as the main component of the economic and social development of the Turkish nation state, beginning with the establishment years; but considering and not omitting and thinking the private enterprises, as an important tool of the economic and social welfare of the country.

Except some attempts for the improvement and support of the private enterprises in different sectors of industry, in 1927-1980 period, main production activity of the country continued to be directed and developed by the state institutions.

By undertaking the implementation of the neoliberal policies in 1980s, SoEs faced with financial and structural problems, with the “cutting” of the public finance instruments, resulting with crisis in late 1980s (Türk-iş, 1998). They were evaluated in the privatization attempts, considering the problems told by the bureaucrats and politicians of the term:

1. High level of political and bureaucratic pressure,
2. Over employment
3. Insufficient technology used
4. Insufficient administrative and managerial status (Atasoy, 1993)

After the legalization of the privatization decisions and institutions were formed for the actions, many SoEs are included in the privatization program and privatized by using different methods, after 1985.

Using privatization and some other (de-) regulations in the economic and legislative area, as a tool for the “restructuring” without any suitable structural plans in order to compensate the sudden and hard effects of the new phase did not give the expected results. The social and economic organization of the

country was not developed and prepared to meet the new condition. Not only economic or legislative problems, but also social problems and struggles as a reaction to this condition, emerged in many social classes and groups in the whole country, as well.

Naturally, these problems made the privatization process longer than expected, and the results much more different from the ones in the other countries, because of the different social, political and economical structure of the country. Political concerns of the authorities, in the privatization processes, result with the expectations to be met in the long run by the effects of the strong social responses and reactions to the implications. As the social and legislative infrastructure of this kind of actions were not present in a state oriented social and economic life approach, political authority chose to support some SoEs with some economical and legislative tools for a period, till they are ready to operate in the economy, as a private enterprise. This action is not only a behavior having economic concerns, but also social and political anxieties, in order to decrease the social and political resistance, as well. Besides, the decisions for privatization or plant closings may also negatively affect the settlements' social and spatial structures, where economic and political life operates, and this may spread to the whole country, but not in favor of the state or the political authority.

Besides the process of the restructuring in Turkiye, the process and impacts of deindustrialization also have similar and different results other than the ones lived in the "developed" countries.

The specialty and difference of the Turkish Case lies in the social structure issues, as the social processes are different then the other countries, which faced with the same restructuring actions.

Turkish social structure has elements similar to the other countries of the world, in functions, but they have differences in actions and structures. Similarities appear in the product control processes and functions of some main social classes and groups, although they seem different (Kıray, 1999). This condition is explained by two views: a Weberian point of view as "difference in values and religious system" and the other, a Marxian view as "Asian type production style". (for further discussion: Kıray,M., 1999 , p.117-125).

Modernization attempts with the establishment of Turkish Republic created many positive results in the social life. But, similar to the Ottoman period, main approach of the society and some institutions continued focusing on the dominance of state and its organizations. In short, “dominance of state authority” in all dimensions of life continued, although there were attempts to develop democracy and participation in a national structure, in different periods.

Another point is the continuing social relations with rural areas (as the contemporary society is the child of an agricultural society), even in the city, with different forms. Country is told to be “artificial urbanized” but not have a civilized social structure and not fully industrialized (Kıray, 1999). But, this strong relations with the rural helps to sustain the family ties as an important social factor, in recession and crisis times.

As the basis of the social structure, family has an important role in the development of the Turkish society. Large and rural family transformed to the nucleus family with urbanization, and economic developments in the country. Coming from the social heritage from the ancient Turkish traditions and beliefs, creating the Turkish family lifestyle, family ties are closer than the “Western” countries having a more individualistic and competitive social structure.

Changing political and economic structure in Türkiye, also have spatial implications. Main point, related with our subject is the change in the policies of public lands, besides the impacts on urban and regional level, which is read from the changes after some “local” investments.

Public lands, especially the ones owned by the Establishments included in the privatization program faced with selling of their land, which have large areas and high land values, in total. This action is open to land speculation and loss of the resources for common usage areas in education, health and recreation facilities.

The change from “public” oriented to the “private” oriented economic policies and from “society” to “individual”, coming from neoliberal ideology can be read in the privatization processes in Türkiye.

Lack of regional policy, as developed before 1980s, and transformation in understanding of “development” results with rapid and huge changes in spatial processes, from local to national. Free enterprise and investment opportunities with cheap land, given to both national and international investors (and co-operations of both) are reflected to the space, in a partially planned organization.



CHAPTER 3

GROWTH OF KARABÜK AS AN INDUSTRIAL CITY

3.1. Establishment of Iron and Steel Factories in Karabük

The Bank of Industry and Mining (Sanayi ve Maadin Bankası) is established in 1925; according to the decisions of the first National Economy Congress of the Republic of Türkiye (established in 1923), held in February 17-March 4 1923, in İzmir, which constitutes the national economy policies and application methods of the new Turkish State. The Law of Support for Industry (Teşvik-i Sanayi Kanunu) in 1927, follows the Law (no.786) for the Establishment of Iron Industry (Demir Sanayiinin Tesisine Dair Kanun) in March 17, 1926, which gives responsibility of the establishment of Iron and Steel industry to the state. A total of 18 million TL from budget was assigned, to spend in four years for the research, installation and management of coal and iron ore mines with iron industry in the Blacksea Region (Türk-İş, 2003). But these efforts to establish national industry by the state, also with supports to private enterprise, failed (to act nationwide) because of many reasons, mainly the lack of capital source and accumulation. (Karabük Governorship, 2003)

Although some enterprises (mainly in İzmir and İstanbul) benefited from this support law (Erder, 1968), this effort could not reach its goal in the designated period. With the acceptance of the statist model, the state institutions undertake the required investment for the national heavy industry. This decision is validated with the 1st Five Year Plan in April 17th 1934, focusing on the heavy industry, having strategically importance, at first.

Search for the studies to establish iron and steel industry was carried on parallel to these developments, has started just after the Izmir Economy Congress.

3.1.1. First Studies to Establish Iron and Steel Industry in Türkiye

Iron and steel industry is a strategic heavy industry type, because of its close relations with (national) defense, construction and other main manufacturing types, besides being an important indicator of development, with an increasing level in hundreds of years, especially in defense and national economic policy.

Positioning iron and steel industry in an important strategic place with the mining of some special mines (like chromate and manganese) results with increasing interest of the states, to the resources of this mines and related manufacturing industries, evaluated in the “national power” context, defined by various researchers, like Stiglitz. (Çinkı, 2003).

Considering this “national” approach, new “independent” Republic of Türkiye have started activities for the implementation of the development policies, beginning with the mining and heavy industry foundations.

Main political aims in the establishment of Karabük and other two following (Ereğli and Iskenderun) Iron and Steel Factories, completing the “national iron and steel industry triangle, are noted to be as;

- a) national defense,
- b) industrialization,
- c) establishment of railway network, and
- d) mechanization of agriculture (Erkün, 1985),

similar to the ones based on the approach, noted above.

In 1925, Ministry of Economy started the studies to determine whether foundation of Iron and Steel Industry in Türkiye would be possible within the frame of economical principles. For this purpose, Dr. Lucius has been invited from Luxemburg to investigate oil reserves, and also Professor Dr. Granigg has

been invited from Leoben Mining School in Austria to inspect iron ore and coal mines.

Dr. Granigg has been appointed to inspect whether Türkiye has sufficient iron ore and coking coal reserves to establish iron and steel industry in Türkiye. Furthermore, it was his responsibility to search and find out the best suitable area to establish and operate iron and steel industry economically.

A General Directorate has been formed within Ministry of Commerce, according to laws 757 and 786 noted above, during the studies of Dr. Granigg. Our mines have been inspected with the participation of other experts; coking tests of Turkish coals by Maurice and Koppers in Belgium and Germany resp., and iron ore analysis by Medinger in Luxemburg. However the studies had not been continued and establishment of Iron and Steel Industry had been suspended until 1928.

A meeting was held with the participation of General Staff, in early 1928, to examine the establishment of iron and steel industry. No result has been obtained due to non-availability of the funds in the budget.

Above-mentioned studies commenced for the third time in 1932 with a Russian delegation. The report, presented by Russian delegation, indicated that, according to Customs Statistics of 1929 and 1930, 150.000 TPY steel could be easily sold, 300.000 TPY blast furnaces would be required in consideration of future needs, important by-products for chemical industry would be produced by coke plants which would be necessary for Blast Furnace operations. Furthermore; together with Sulphuric Acid Works and other small manufactures in the environment, the investment would be economical.

The first steel factory established for military purposes in Kırıkkale (Ankara), in 1932, by General Directorate of Military Factories was not an integrated plant. (Later directed by MKE, in 1950)

In 1933, as the First Industrial Five Year plan was being prepared, *“the state was willing to proceed with the projects, although only 60% of the iron ore could be supplied domestically from Torbalı, Ovacık and Faraş, while 40% was expected to be imported from Tunisia, Spain or Greece”*, showing the state

policy of basing the national industry on domestic raw materials (Erder, 1968) and import the less amount of the ore -if needed- from the countries other than the "industrialized" ones..

After the commencement of the first studies related with establishment of iron and steel industry in 1925, selection of suitable site location has been discussed and several different opinions have been expressed. A group formed by US. Economists, Russian delegates and representatives of Sumerbank and General Staff reviewed the proposals for site location. Eventually, a delegation of Sumerbank and General Staff held a meeting to take final decision for site location of heavy industries and to scrutinize the troubles, Karabük was chosen , although different locations in the region are proposed by the foreign experts, for the location of the first Iron and Steel Factories of the Turkish Republic.

3.1.2. Karabük as the Location Choice for the Factory

Karabük and its environs are told to have a settlement history, far away to Paphlagonian times, understood from the archeological ruins found in the settlements of the sub-region. Region was a settlement area in Roman, Byzantian, Seljuklu and Ottoman times (Barlas U., 1986). In the beginning of 1900s, Karabük was a village of Öğlebeli, a sub district of Safranbolu District, having 13 (in some documents 18) houses and a population of 100 in 1935 (Findıkoğlu, 1963). First step of the development of the settlement begins with the establishment of the Ankara-Zonguldak railway line and the station building, named with the name of the Karabük village, in 1935.

The location of the Iron and Steel Factories in Karabük is discussed and criticized, beginning with the establishment decision and the installation process has started. The reasons for the location are simply given in the related documents as follows:

- a) coal mining reserves near the region,
- b) being situated on the railway route,
- c) being suitable for inhabiting and settlement

d) being suitable for heavy industry in geological aspects, (Erkün, 1985; Karabük Governorship, 2003)

and the possibilities to supply;

e) water and other materials needed ,

f) workers from environment,

with;

g) strategic defense (Erkün, 1985) and

h) being situated close to the port, as iron ore will be imported (KDÇİ, 1987).

Besides these,

i) low land costs in the area

can be added as another factor.

The reports of the initial studies written by the experts from different countries, mainly focuses on Ereğli sub-region of Zonguldak , for the establishment of the first iron and steel factories of Türkiye, like Hines-Kemmere report in 1933 (Çelebi, 1979) and Russian team proposal of Tefen, 30km.s from the coast on the Filyos River railroad (noting Karabük as the less desirable alternative, if Tefen is rejected.) (Erder, 1968). It is also noted, in the First Five Year Industrial Plan that, considering a minimum amount of production of special products and defense issues, settlements in Ereğli sub-region, which is not so far away the coast, should be remembered for the establishment (Çelebi, 1979 from Oral K., 1975).

These reasons for the location of iron-steel factory in Karabük brought about various discussions. Under the conditions of the period, an evaluation of the factors influential in the choice of factory's construction place results in to pay attention to these issues.

Main reason for the location seems to be coming from the military side, based on the “defense” issues (being far away from the cannon shot from the sea and air pocket on the area which the planes of the period could not fly securely).

When looked at its map, it is seen that Karabük is located at a point where rivers intersect. This locational feature of the city makes it an open target and this contradicts with the idea of a “strategic site”. Besides this, the point that the military techniques that will be introduced in the future will remove this factor designating the construction site of the iron-steel factory in a short period of time underestimated by the authorities of the period.

Secondly, the import of iron ore issue comes to agenda. As the iron ore mines in Divriği has not been founded yet, in the decision for the establishment of the Factory, this resources has not been evaluated in the location decision (Erder, 1968; Erkün, 1985), and as iron ore was considered to be imported, in the foreign expert reports.

In the report that was prepared by Prof. Grannig, it was stated that the existence of the iron ore is not so important for the foundation of this industry and that this industry could be established and managed by importing the iron ore as in the cases of Belgium and Britain in Europe. As a result, these statements prevented the authorities of the period to held deep investigations and researches, in the first steps.

Third factor is the fact that Karabük is on the railway route. This was evaluated as a factor in the construction of Iron and Steel Factory. However, after the factory began production, this fact became a point, which was mostly criticized. Karabük was connected to Zonguldak that is 100 km far away, by a single track, which is used to bring iron ore and coal, and to send a part of the products. Since the single track transportation was not sufficient for the bringing of iron ore from Divriği (Sivas), which is 1150 kilometers from Karabük, and for the provision of necessary raw materials, iron and steel factories could not work with their full capacities for long years together with the effect of other reasons. (Karabük Governorship, 2003).

In transportation side, another mismatch in location issue was noted to be the dismissal of the advantages of easy sea location to access the markets of the country; İzmir and Istanbul (Erder, 1968).

3.1.3. Beginning of Production and Worker Migration

With the establishment decision of the Factory, the question of worker supply has come to the agenda. Although there exist rich craft workshops in the surrounding settlements like Safranbolu and Bulak, there were nobody worked in the establishment or production of any heavy industry factory before, in the whole region and country. Another reason that makes finding workers for the building up the factory was the negative thoughts about the industrial workmanship, in the society, thinking this activity as a disgraceful job in 1930 and 1940s' socio-cultural system (Yazıcı, 1992). Besides the workers, educated personnel for managerial and technical positions were not present, as there were no highly educated stuff.

To overcome this problems, convinced people had been used in the bulding the main units of the factory and in a period as the work goes on, labour migration to Karabük began (Yazıcı, 1992).

The period, beginning with the migration of (a total of) 400 brick workers from Artvin and Erzurum in 1938, continued with the raising quantities, having a total of 4000 workers, ten years after the first migration. For the Factory, not only worker gain, but also continuous employment of them has become an important problem, beginning with the first years. (Yazıcı, 1992 from Kessler, 1949)

According to Fındıkoğlu, number of workers in 1944 was 3812. Their distribution to homelands was; Thrace (58), Aegean (453), Eastern Anatolia (160), Central Anatolia (706), Northern Anatolia (2346), Eastern Mediterreanean (62), Foreign Country (27). (Fındıkoğlu, 1961). In this period, a relatively small but important migration, that helps the villagers to contact with the outer world, to the villages of Karabük has been observed. (Yazıcı, 1992)

Effects of the establishment were felt in near villages, as the factory buildings raise and this activity began to create attractiveness in different ways. For example, villagers of Bulak, being known as masters in building craftworks, like

carpentry, masonry, woodworks, began to leave Istanbul and other cities and return to Zonguldak region firstly with the construction of coal mining site and now for Iron and Steel Factories, as their ability raised value in their hometown, creating a good job opportunities for all. (Barlas U, 1986)

In the first years of the production, because of the lack of sufficient experts, foreign experts and technical personnel were used with Turkish engineers, middle and high school graduates for sub-managerial positions, till professionals, educated in Europe (especially Germany) in 1940s, have returned and began work. Qualified and intermediate labour source was the apprentice schools, where later turned to craft schools (today's industry high schools). Technical expertise in the Factories could be (completely) Turkish in 1970s, when related management and engineering field education in universities of the country reached a higher quality and quantity and graduates begin to be employed in the state enterprises.¹

3.1.4. Managerial and Technical Structure Change²

A Bill related to establishing of heavy iron and steel industry in Türkiye passed on March 17, 1926 as Law No. 786; the same law was put into force after it was issued in Official Paper dated March 29, 1926 and No. 334.

Upon signing a credit agreement with English Government for 2.5 Million Sterling on November 10, 1936, the contract was awarded to Messrs. H.A. Brassert. Foundation ceremony was held on April 3, 1937 in the presence of the then Prime Minister İsmet İnönü in Karabük, a small village of Zonguldak on the wide rice fields between Soğanlı and Araç streams, which join in Filyos River. Thus, heavy industry in Türkiye has been triggered with the conversion of rice fields to steel plants.

Technological erection works of the first integrated iron and steel works commenced on March 1, 1938 and with intensive and enormous efforts of Turkish engineers, technicians and workers together with English supervisors.

¹ From the interview with Suavi ÇEVİK, former Budget and Interior Control Director of Iron and Steel Factories (1976-1989)

² In this part, information is mainly taken from KARDEMİR website (<http://www.kardemir.com>).

Power Plant was taken into operation on June 6, 1939 and other plants became operative successively within 3 years.

Iron and Steel Works carried on its operations being a subsidiary corporation of Sümerbank until May 13, 1955 and named "Iron Steel Factories Foundation Management".

Karabük Iron and Steel Factories, which added Divriği Iron Ore Mining Company of Etibank in 21.06.1955, in its structure, and began to work as a General Directorate, has lead, the establishment of 3rd Iron and Steel Factory in Iskenderun and heavy industry in Türkiye, with the training of high qualified assembling experts.

In 1976, General Directorate has been moved to Ankara and Karabük Iron and Steel Factories is organized as a branch, in managerial terms, till the privatization in 1994. For a year, Factory was managed as General Directorate of Karabük Iron and Steel Works Co.Inc till 30.03.1995 when named as KARDEMİR Karabük Iron and Steel Industry and Trade Co. Inc with the resolution of Council of Ministers Official paper, Jan 3 1995, No. 22160.

Table 1: Change in the managerial structure

Approving authority and date	Date of validity	Status
Law No.786, Official Paper dated March 29, 1926, No.334	-	Foundation of Iron and Steel Works
-	03.04.1937 13.05.1955	Subsidiary Corporation of Sümerbank
-	15.05.1955 21.01.1976	General Directorate of Turkish Iron and Steel Works-Karabük
Resolution of Council of Ministers No.7/10799; Official Paper dated January 21, 1976, No. 15475	21.03.1976 07.03.1994	General Directorate of Turkish Iron and Steel Works-Karabük Iron and Steel Works
Resolution of Council of Ministers dated March 7, 1994 No.94/5422; Official Paper dated June 29, 1994, No. 21975	07.03.1994 30.03.1995	General Directorate of Karabük Iron and Steel Works Co. Inc.
Resolution of Council of Ministers Official Paper dated January 3, 1995, No. 22160	30.03.1995	Kardemir Karabük Iron Steel Industry and Trade Co. Inc

Source: KDÇİ, 1987; KDÇİ, 1988; TÜMAŞ, 1997, Kardemir 2003

Capacity and establishment years of the production units is shown in the table below:

Table 2: Production unit capacities and establishment years

Production Unit	Capacity (tones/year)	Establishment Year
Coke	1.160.000	1939
Sinter	1.340.000	1939
Liquid raw iron	600.000	1939
Pig iron	440.000	1939
Log Steel	600.000	1940
28" Trio Roll	150.000	1940
34" Block Roll	515.000	1959
28" Duo Roll	445.000	1960
K.H.H.	300.000	1965
Steel Construction	20.000	1966
Log Moulding	32.500	1967
Pig items moulding	2.500	1967
Steel items moulding	3.500	1967
Moulding	3.500	1967
Metal moulding	500	1967
Machine factory	4.000	1967

Source: KDÇİ, 1987; KDÇİ, 1988; TÜMAŞ, 1997; Kardemir, 2003

3.1.5. Reports and Projects Related with the Factories

As a crucial investment of Turkish Republic, Karabük Iron and Steel Factories has an important position in the reports focusing on the economic development of the country, and the regional planning projects, developed for the heavy industry and mining region of the country, Zonguldak.

Except the ones for the establishment of the Factories, reports related with the position and activities of the Factories, were written in different times, by foreign experts, besides the Turkish professionals. Additionally, reports on Zonguldak Metropolitan Area Regional Plan, and Western Blacksea Region report, by Department of Regional Planning in Ministry of Settlement and Reconstruction are important for the Factories and Karabük city, although they could not be implemented completely.

3.1.5.1. Factories in the Reports of Foreign Experts

With the beginning of the production in Karabük Iron and Steel Factories, not only the foreign experts worked in the establishment processes, but also the

ones from other countries were interested in the subject, with different reasons. Some of these reports are formed by the experts who were invited by the Governments in different times, and some others reported depending on the bilateral or international agreements, which Türkiye is one of the parties (like International Bank for Reconstruction and Development, later World Bank).

One of these reports seems to be more important, still questioned and discussed on it: Thornburg Report. Max Weston Thornburg, a U.S. economist, comes to Türkiye in 1946, after the 2nd World War, in order to write a report on the economic development of Turkish Republic. This term is the beginning of the close relationships between U.S.A. and Turkish Republic.

In this report, which is observed to have a purely political frame more than an economic research content, Türkiye is proposed not to continue to establish a national industry but focus mainly and only on agricultural production, with related small manufacturing activities. Karabük Iron and Steel Factories is told to be discharged and some parts might be managed with cooperation by American experts and industrialists. In the report, all the industrial products and materials is noted to be provided by U.S.A. (Thornburg, 1946 transl. Artuner). This report is noted to be an introduction to create a base for the Marshall Aid and beginning of American political and economic operations on the resources of the Republic of Türkiye. (Çinkı, 2003)

3.1.5.2. Factories in the Regional Planning Projects and Reports

Besides the general reports on Turkish economy, that also include Karabük Iron and Steel Factories in their content, some regional studies also deal with Karabük, in 1950-1980 period. Two of them have prior importance: Zonguldak Regional Plan Study, and Western Blacksea Region, Regional Development, Urbanization and Settlement Structure Report, by Department of Regional Planning in Ministry of Settlement and Reconstruction.

Zonguldak Regional Planning studies, covering the province including Karabük district, had begun with the introduction to the representatives of the related establishments, in 1961. In different steps, contribution of experts from other institutions (DPT, etc.) and foreign organizations (like OECD and U.S. AID) was taken, in order to increase the accuracy of the plan.

The Plan is based on the comprehensive planning approach, aiming to produce plans for a balanced social and economic development in the whole country, by setting coordination and interrelation between the separately produced different scaled plans and projects (İİB-BPD, 1964). Plan formulates targets and strategies, depending on the aim noted above, by defining the region as the main operational unit, to evaluate the resources in all scales comprehensively, considering the spatial scale with the social and economical side, for 1960-1980 period.

Targets of the Plan are noted as follows:

- to relate population increase with development ratio and set a balance in long run,
- to develop regional infrastructure to serve the Plan targets,
- to decrease the income differences in the region,
- to get the highest gain from the future investments,
- to support urbanization and increase the non-agricultural employment opportunities,
- to support the activities, which sets balance, between public and private sectors,

This planning study, develops proposals of the three heavy industrial establishments in the Zonguldak Metropolitan Area (Karabük Iron and Steel Works (KDÇİ), Ereğli Iron and Steel Works (ERDEMİR) and Turkish Coal Works (TKİ) in Zonguldak, and determine social and economical priorities for the development of the region. Establishment and improvement of Ereğli Iron and Steel Works (ERDEMİR) and other public and private investments, mainly planned and noted in the national development plans and metropolitan area plan reports, helped the region to emerge as the first industrial region of the Republic.

In the Plan, Karabük Iron and Steel Factories is evaluated in the “Iron and Steel Sector” part, with Ereğli Factories. After detailed information about the

Factories, evaluation and proposals for Karabük Factories and City are formed. Evaluation and critics for the Factories mainly focuses on the production problems like non-productive production in some units and price policy. It is noted that, stocks of the Factories increase immediately because of the unavailability of proposed quantity of the sales, as the prices are higher than import prices. This is explained to be a result of high production and transportation costs of the Establishment and the lack of a professional marketing organization, in steel. In by-products side, it is noted to differ. For example, coke production represents high production costs but low prices that result with losses. Considering these conditions of the Factories and market, it is suggested that, the monopoly of the Factories in price designation in the sector must be redefined and controlled for the sake of national economy.

Another important point is the possibility of the escape of experts and well-educated workers to Ereğli Factories, because of the wage policy of the Establishment.

In addition, some other suggestions for Karabük and environs were developed in the report. The important ones can be noted as follows:

- a) development and improvement of a project for Filyos sub-region, not supporting Karabük and Safranbolu as urban centers,
- b) organize activities and form institutions for the import of scrap iron,
- c) organization of coordination and cooperation with other national industries and private sector enterprises for the usage of different mines and chemicals for the sake of national economy,
- d) financial and technical improvement activities for Factories.

Another study about the region is the “Western Blacksea Region – Regional Development, Urbanization and Settlement Organization” report of Ministry of Settlement and Reconstruction, Department of Regional Planning, in 1971. This study focuses on the region’s physical, social, economical conditions and develops synthesis with development proposals for the region, including Zonguldak, Bolu and Kastamonu provinces, for an integrated and comprehensive overview for future planning activities.

In the report Karabük city, and Iron and Steel Factories is evaluated as a part of the heavy industry in the region. Technical improvement for the Factories and chemical improvement for the inputs, especially Zonguldak coal, are the main suggestions for the Establishment. In addition, references to the Zonguldak (Metropolitan Area) Regional Plan were made in the Report.

3.2. Emergence and Development of Karabük City

Karabük, being a village of Safranbolu in early 1930s, became an important settlement and heavy industry center of the region and the country in a short period, with the beginning of iron and steel production activities. The villagers of Karabük, and the workers of the factory, migrated from different cities and villages of the region and the country, form nucleus of the settlement. With the increase in activities of the factories and the population, different economic units of commerce, trade, services and other sectors were established in the settlement.

3.2.1. Economic Activities

In 1937-1950 term, as being the beginning of the establishment of the Factory, main activity is the Iron and Steel Industry facilities. 1940-1950 period is the opening of the public establishments and some other commercial units in the settlement. According to the data of 1980 General Industry and Business Census, by SIS, in 1945-1949 period , one commercial unit and one restaurant is added to the two commercial units established before 1923. A total of three commercial unit, one restaurant and three public service unit serves to the city, in the beginning of 1950. As the demands of the workers and other staff of the Factory is supplied by the units in the Factory site, in this term, number of economical institutions could not increase rapidly, relative to number of labour. But, after 1955-1959 period, the number of units (especially commercial and trade) in all sectors begin to increase in different levels, having the highest level in 1975-1979, till 1980, as the settlement became a district and private mills began to operate.

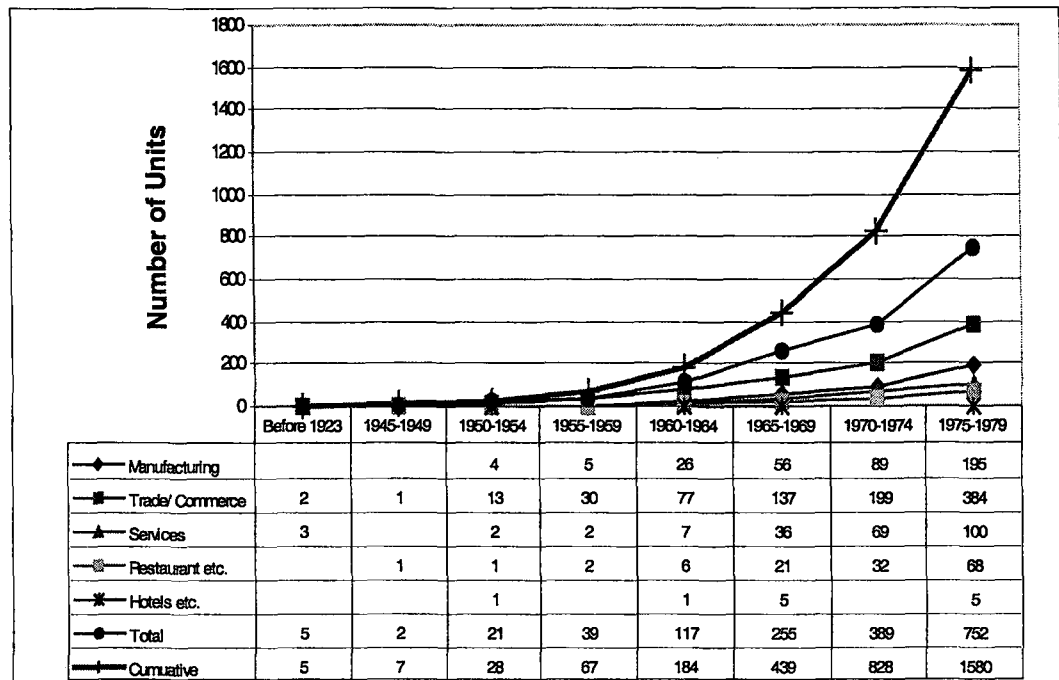


Figure 3: Number of units in the economic sectors by establishment years

Source: SIS, General Census of Industry and Business, 1980

3.2.1.1. Manufacturing

First and the biggest establishment, determining the main economic activity of the city, is the Iron and Steel Factories, founded in 1937. Second, rolling and molding mills in the metal product and by-products sector. And, the forestry establishments are the third important manufacturing establishments. Besides these large establishments, small and medium sized craftwork units also operate in the city.

Information about the Iron and Steel Factory was given in the previous chapter. Here, rolling mills and other manufacturing activities are studied in a general view.

Rolling mills first started work in 1950s, founded by the former foremen of the Establishment trained in the job (Erder, 1968 from Esen F.), with the economic liberalization and the support of private enterprises attempts. In 1968, 15 of 17 rolling mills, working with the scrap iron as the main input of production, were operating in the city. Iron blocks named "log", incandescently melted in the arc ovens, drawn into the lathes to form thin construction steel, in these mills. Different types of construction steel, like circular and "lama" in different cross-

sections and U and T cross-sectioned (in two mills), were produced in these mills. A total of 550 workers were employed, earning daily 13-30 TL, in these mills, in 1967 (İller Bankası, 1967).

Other important manufacturing establishments were in forestry and craftworks. Timber production units and the State Forestry Enterprises Karabük Branch were important in the process and marketing of timber works of the region, and export of the products to other regions, especially İstanbul.

Craftworks in the city grew with the increase in the number of consumers, which are the citizens of Karabük city. Also, with the close interaction and relations with the mills and Iron and Steel works, craftworks as small and medium sized enterprises, became important in the economic life of the city, that create, educate and use the manufacturing workforce of the region.

Factory and workshops of the city in 1965, is reported as follows: 1 Factory, 15 rolling mills, 6 private timber factory enterprise, 10 lathe workshops, 5 molding workshop, 3 timber workshop, 4 furniture workshop, 5 briquette workshop, 6 embossed iron workshop, 15 stove and bedstead workshop and 15 repair shops for automobile and agricultural machines (İller Bankası, 1967).

3.2.1.2. Construction and Building

Construction sector is active in a large area in Zonguldak, Bartın and Karabük region. This dynamism in the region, besides supplying construction sector additional job opportunities, is an interesting data reflecting the people of the region has an accumulation to own a house. (TUMAS, 1997)

Materials used in this sector, like wood, cement, brick and construction iron is supplied in the region. In addition, artisans and workers educated in the sector live and work in the region. Because of these, construction costs are relatively low.

Activity of this sector in Karabük is relatively high. With the increasing population, construction activities also increase in the city. As an important renewal and planning movement acted in the city, for a long time, urban and building structure changed from low storey to high storey buildings. Because of

this, construction sector was seen as an employment-creating sector in the local economy.

According to employment data of 1965, construction sector is in the third order, in the ratio of the workers employed in the city.

3.2.1.3. Commerce and Trade

From the beginning of growth in 1940s till 1960s, as the population has been consumers, the needs of the city has been traded from environment and other cities of the country, with a ratio of approximately %70, all of the clothing and %70 of the food materials. Karabük had close trade relations with its hinterland, Safranbolu, Eskipazar and Eflani, where especially production and trade of the main agricultural products were made. (İller Bankası, 1967)

Shopping was made in the bazaars, where the producers from the hinterland and environment of the city comes and sells food, beverages and craftworks, in certain dates. Commercial establishments were less in number. Trade and commerce activities in the city were limited with wholesaling and trade of iron and timber, contracting and food wholesaling. (İller Bankası, 1967)

After 1950, we observe a steady increase in the number of commercial units and trade enterprises in the city, from 13 openings in 1950-1954 to 384 openings in 1975-1979 period, having the second order in the employment figures. According to 1965 data, retail and food trade were the first two sectors in the employment figures of commerce and trade.

3.2.1.4. Banking and Finance

Banking and finance activities appear to develop in early 1950s, when Karabük became a district center and commercial activities increased with the establishment of new units.

First bank established in Karabük is Yapı ve Kredi Bankası A.Ş. Karabük Branch, which is a private bank, in April 30th 1951 and following, T.C. Ziraat Bankası A.Ş. Karabük Branch in 01.10.1952. Most of the banks operating in Karabük, established in 1960-1980 -economical peak period of the city-, were state supported and some others were private. Main operations were for the

commercial units as trade credits and, workers, managers and officers of the Factory as personal or family bank accounts.

Table 3: Banks operating between 1950-1980

Name	Branch Name	Opening Date	Closing Date
Yapı ve Kredi Bankası A.Ş.	Karabük	30.04.1951	
Türkiye Cumhuriyeti Ziraat Bankası A.Ş.	Karabük	01.10.1952	
Sümerbank A.Ş.	Karabük	12.12.1954	11.01.2002
Türkiye İş Bankası A.Ş.	Karabük	03.11.1960	
Akbank T.A.Ş.	Karabük	08.06.1964	
Türk Ticaret Bankası A.Ş.	Karabük	15.11.1965	14.08.2002
Türkiye Vakıflar Bankası T.A.O.	Karabük	16.12.1965	
Türkiye Halk Bankası A.Ş.	Karabük	21.06.1968	
Türkiye Emlak Bankası A.Ş.	Karabük	02.10.1970	09.07.2001
Pamukbank T.A.Ş.	Karabük	04.09.1972	
Etibank A.Ş.	Karabük	04.12.1972	28.12.2001
Şekerbank T.A.Ş.	Karabük	04.10.1976	

Source: Türkiye Bankalar Birliği

Financial operations of Karabük Iron and Steel Factories were mostly made with two public banks, Ziraat and Vakıflar, because of their operational advantages of having a state-owned structure.

3.2.1.5. Services

In this period (1950-1980), as all the service facilities were organized, and operated by local or central authorities, there were not a high number of private service sector firms, except some in transportation. Moreover, in the residential area of the Establishment, all services were organized, and coordinated by the related units of other public institutions.

3.2.2. Social Change

Social change in Karabük reflects the effect and opportunities of Iron and Steel Factories, in every period of its development process. This change can be evaluated by using the demographic indicators and the development in social services, infrastructure, social groups and classes.

3.2.2.1. Demographic Change

Karabük, a town quarter having 13 houses and a population of 100 in 1935 census, had reached the population of 6825 person with an increase rate of 844.64%, which is 43 times of the national annual increase rate (19.59%) in 1935-1940 period, with the establishment of Karabük Iron and Steel Works in 1937. Number of workers in the Factory building and other operating units in 1941, when the establishment started to operate, was 3120. It is not hard to designate, this rapid increase was a result of the migration from the near town and villages to work in the other sectors of this developing city and the families of the workers coming to live with them.

After 1940, annual increase rate lost its speed and 1945 population was found as 10682, with an increase rate of 89.59% in 1940-1945 period. Main reason of this fast decline in the increase rate is thought to be the effects of the economical policies and political approach applied nationwide, because of the Second World War period. Besides, end of the establishment and building activities of the Factories and the stabilization of the worker quantity is another condition affecting the increase rate of the population and migration.

Ten-year period between 1945-1955, reflects an increase rate similar to the national figures. Following the administrative changes that make Karabük a district of Zonguldak province, population figures can be evaluated in urban-rural differentiation, beginning with 1950. Annual increase rate, which had a relative decline, is found to reach 137.45% in 1945-1950 period. 1950-1955 period is observed to have a population of 49.654 with an increase rate of 169.86%, more in rural, having an urban population of 9778 (46%) and rural population of 11460 (54%) in 1950. Rural increase rate, which is found to have an increase of 3 times more than the previous period, is relatively high, referred to urban population. Urban settlements have 31% and rural settlements have 69% shares in the total population of Karabük district. This increase in the rural settlements can be interpreted as the inter- and intra-regional migration to the surrounding villages to work in the factory or the other sectors, besides the natural increase. Also, the effects of the national policies and conditions that tend to make changes in the national economic structure (mechanization in

agriculture, liberalization, private enterprises, etc.) and its effects to local and regional social and economical life, must be considered.

When the period following 1955 is examined, increase in urban population with the decrease in the rural population is observed. Despite the increase in the Urban population which was 15624 in 1955, reached 31440 with an increase rate of 139.9 % in 1960, rural population reached 34806 with an increase rate of 4.5%, which is 48 times lower than the rate of the previous period (217.7%). Shortly, according to the 1960 census data, urban and rural population ratios reached close levels (47% urban, 53% rural), with a high decrease in rural and an increase in urban population figures. In this period, effects of urbanization based development and capital accumulation approach with the improvement of the public investments on national industry are also important points.

Increase in the urbanization ratio continued in the period following 1960, with the help of the policies focusing on planned development and urbanization based capital accumulation. In the arrangements noted in the targets of the regional and metropolitan planning studies, developed in the political framework of this period, industrialization and urbanization couple was supported. Especially, Zonguldak Metropolitan Area Planning Study, dated 1964, has an important role in the development of Karabük and its environment.

There exist a reverse picture in the urban and rural population of 1960-1965. Urban population reached 46169 with an increase rate of 6.8% to the share of 55% and rural population to 38288 with an increase of 19.1% to a share of 45% of total population, relative to the previous census period. Rural population lived an important loss in the increase rate of 2.5%, which is 16.6 points lower than the previous period's rural population ratio, despite the figures of urban population performed an increase of 68.4 %. Urban-rural ratio, which was 55/45 in 1965, changed to 63/37 in 1970, benefiting the urban population.

Population change of 1970-1975 period represents an increase of 12.5%, a relatively low value to previous periods, in urban population figures. A higher increase rate value (38.1%) is observed in rural, but this tendency did not continue in the following periods. 1970-1975 period can be interpreted as a temporary increase term in rural and a standstill term in urban population progress. Urban-rural ratio of the period is 60/40 and has a relative increase in

rural side, according to the previous period. Population data of 1970 shows the transformation of the village of Karabük, having a total population of 103767 (24999 urban, 38768 rural). These numbers reflect that in every year, nearly 3140 people were added to Karabük's population, in 33 years from the establishment of the Factory. If the number of the workers in 1941 is thought to be 3120, we can say that every year, a quantity of population that is equal to factory workers was added to the city.

In 1975-1980 period, the recession in the increase rate of the 1970-1975 period, leaves its place to an increase of 39.1%. Rural population behaves opposite to the urban population and shows an important decrease to 1.3%, reverse of the 38.1% increase of 1970-1975. In this period, increase rate of total population falls to 24.55%, with the effect of the rapid decline in the rural population figures.

Table 4: Population Change (1935-1980)

Census	KARABÜK (Center)								TÜRKİYE	KARABÜK
	Urban Pop.	Urban Incr. %	Urban %	Rural	Rural Incr. %	Rural %	Total	Pop. density	Annual Rate %	Annual Rate %
1935	100						100			
1940	6 825						6 825		19.59	844.64
1945	10 682						10 682		10.59	89.59
1950	9 778		46	11 460		54	21 238	29	21.73	137.45
1955	15 624	93.73	31	34 030	217.68	69	49 654	67	27.75	169.86
1960	31 440	139.85	47	34 806	4.51	53	66 246	89	28.53	57.66
1965	46 169	76.85	55	38 288	19.07	45	84 457	114	24.62	48.57
1970	64 999	68.41	63	38 768	2.49	37	103 767	140	25.19	41.18
1975	69 182	12.47	60	46 906	38.11	40	116 088	157	25.00	22.44
1980	84 137	39.14	64	47 212	1.30	36	131 249	177	20.65	24.55

Source: SIS Census Data and www.Karabük.gov.tr

Karabük is a settlement taking migration until 1945. Between 1970-1975, migration lost its speed, mainly because of the decision of decreasing the worker quantity, given by the Iron and Steel Factories. The migration in the

following years is also related with the vacancies in the Factory and the employment possibility and wish in the service sector in the city.

A recession in the population increase in 1970s is fixed, in the analysis made parallel to the natural increase data comparison with Türkiye (TUMAS 1997b). This means that, after 1970 Karabük city loses its attractiveness and in 1980s migration values change to negative; in other words Karabük begins to give migration. This status reached its top level in 2000, as 2000 census data shows. After the privatization and the decrease in the labour, which is the main economical and social factor in the city life, many people left the city.

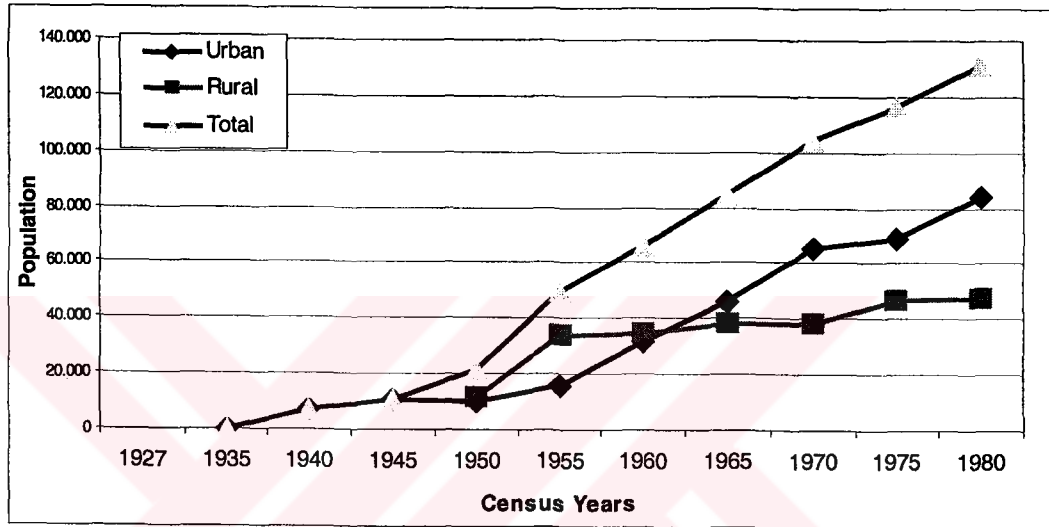


Figure 4: Population change (1935-1980)

Source: SIS, Karabük Governorship

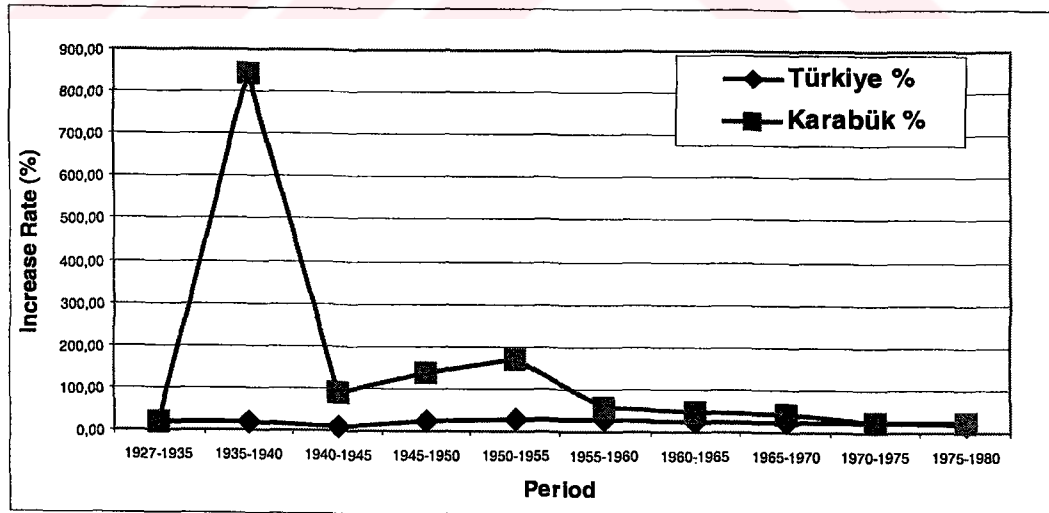


Figure 5: Population increase rate (1935-1980)

Source: SIS, Karabük Governorship

According to the analytical study, made by Barlas, in 1988, the native population is higher in the oldest settlements Öğlebeli and Karabük and secondly Soğuksu. Other residential districts have high levels of migrants. These migrants' home province is fixed as Çankırı (%31 ,50) , rural Zonguldak (% 27,10), Kastamonu (%12,00), and the regional distribution is in-province %13,00, Karadeniz Region % 14,10, Doğu Anadolu Region %3,30, İç Anadolu Region %7,60 and other regions %4,40. (Barlas H.Ü., 1988). These ratios show the migration, in the attractive times of the city.

Table 5:Distribution of the migrated families, to the town quarters of the city

Town Quarter	Native (%)	Migrated (%)
Adatepe	0,00	100,00
Atatürk	0,00	100,00
Bayır	0,00	100,00
5000 Evler	12,50	87,50
Ergenekon	50,00	50,00
Fevzi Çakmak	42,90	57,10
Hürriyet	0,00	100,00
Karabük	66,70	33,30
Kartaltepe	25,00	75,00
Kayabaşı	25,00	75,00
Kurtuluş	0,00	100,00
Namık Kemal	33,30	66,70
Öğlebeli	66,70	33,30
Soğuksu	62,50	37,50
Şirinevler	20,00	80,00
Yeni	16,70	83,30
Yenişehir	33,30	66,70
Yeşil	0,00	100,00
YüzüncüYıl	0,00	100,00
Total	20,70	79,30

Source : Barlas H.Ü., 1988

3.2.2.2. Change in the Employment Figures

Change in the employment figures of the case is studied in two main parts: First is the Karabük Iron and Steel Factories and second is the others (including public services and institutions), in the settlement.

Employment in Iron and Steel Works, represents a continuous increase in 1940-1975 period, with a relative decline in 1945-1950 term. In 1970-1975, we observe that this increase in number of workers slow down and the tendency of increase become constant, except the increase in 1975 and decline in 1979. We can also find out the effects of the economical and political changes in both country and the Factory management. For example, the sudden changes and fluctuations appear in the terms 1944-1950, 1959-1962, 1968-1972, 1976-1979 which are social, economical and political turnpoints of Turkiye.

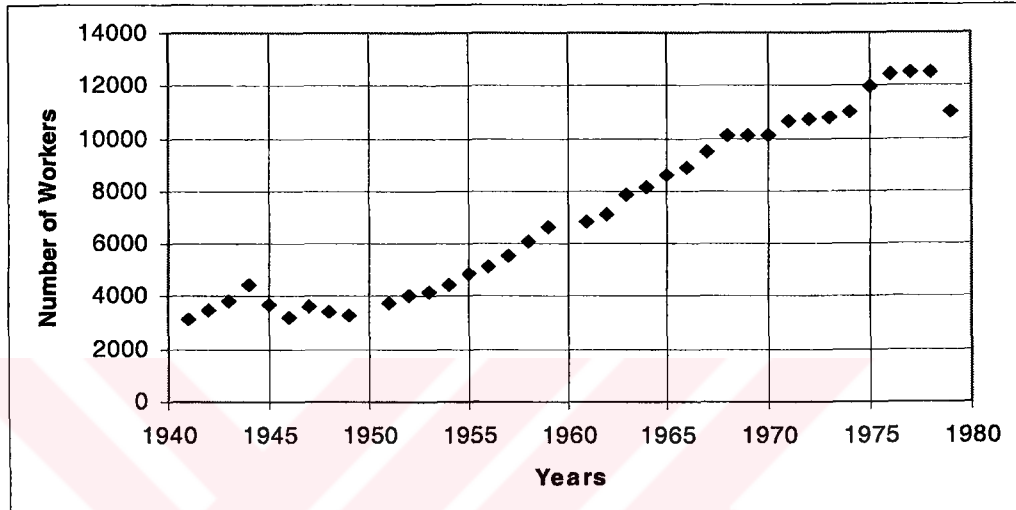


Figure 6: Active worker numbers in KARDEMIR between 1941-1979

Source: YAZICI, 1992 from ÇELİK-İŞ, 1989

Karabük, performs the characteristics of an industrial district in all sides. As seen in the employment figures of the city, in 1965, in nearly 30 years after the establishment, the settlement became a manufacturing and industry center. Base sector of the economy is manufacturing with different scaled establishments having more than half of the total employment (%64.6). Employment in other sectors, that are mainly serving to the dependent population of the manufacturing workforce and industrial activities of the city, each have less than 10% share in total employment.

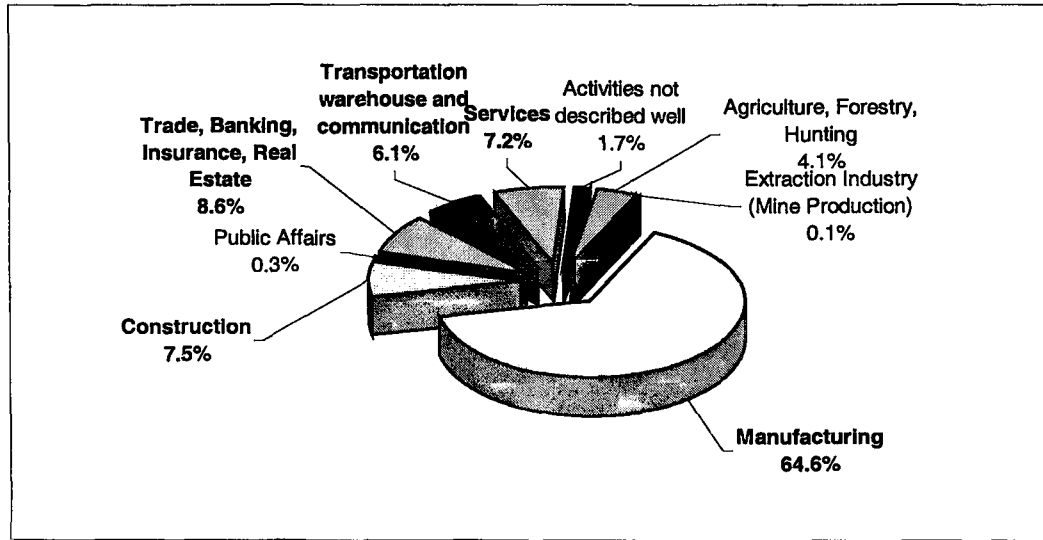


Figure 7: Population by economic sectors (1965)

Source: İller Bankası, 1967 (1965 values)

3.2.2.3. Social Groups

Social groups in the settlement emerged, can be examined in three main levels: high, middle, and lower. As there is no wealthy person or big capital/property owner in the city, like Safranbolu, high-level social groups only contain managers, administrators and engineers of the Iron and Steel Works and the high rank officers of Local Government. Small enterprise owners, low rank officers of the Factory and TCDD with other local government and municipality officers constitute the middle class and workers of the public institutions, local tradesman and permanent workers are in lower class.

3.2.2.4. Education, Health and Other Social Affairs

Activities related with education and health, begins with the establishment of the Factory buildings. The first school is Demir Çelik Lisesi, established in 1939, as a primary school, but later converted to high school with the increase in primary schools in the settlement. Vocational education for the Factory was given in the technical and crafts schools and courses. In 1939-1980 period, 4 vocational high school, 6 high schools (including TED Foundation high school), 20 primary schools (including TED Foundation Primary School) were established and operate in Karabük city (Barlas H.Ü., 1988). This change also observed in the increase in the number of educated persons and experts.

Health facilities were not wide and developed in the city, till 1960s. Municipality Hospital, established in 1959, and Demir-Çelik Hospital, organized by the functional change in the socio-cultural center of the Establishment built in 1942, were the first medical centers of the city. In 1967, there were 2 hospitals, three pharmacy, a private operator and two practitioner doctor work in the city (İller Bankası, 1967).

There were some clubs and entertainment centers in the city, with some sports areas and cinemas (two in Yenışehir 4 in total), designed and managed by Municipality and related units of the Iron and Steel Works.

3.2.3. Spatial Change

Spatial development of Karabük is shortly explained in Karabük Governorship website as below:

The development of Karabük from 1937 to present carries the footprints of all the periods of the history of the Republic. The adventure of the factory's establishment and Yenışehir reflects the politics marked with state control and central planning in the years with "İsmet Pasha", and the signs of this politics can be observed in the heavy industrial city of Karabük. Although the city plan of Karabük could arise under the free and uncontrolled conditions during the planning process of Yenışehir and the factory, the city plan which was valid till 1950 was prepared by a foreign specialist. For this reason, Karabük became the first and only city that started from zero in the framework Republic's state control based politics. These features survive today in the district of Yenışehir and around the station and the factory. The footprints of the principles of central planning and politics based on state intervention, which began to demolish dating from 1950 and the period of "free enterprise" period replacing this, can also be observed in Karabük. The increase in the number of factory workers and technicians for several reasons resulted in an increase in the population and this brought up a housing need. Because of the absence of the Second Five Year Development Plan and the encouragement of free enterprise without any control in 1950's, private mills, which transformed log iron to construction iron, appeared rapidly and that caused the destruction of the city's settlement structure. Besides, marketing of the products of Iron-Steel Factory by private sector caused a flow of capital to Karabük. (Karabük Governorship-2003)

Karabük enjoyed its most wealthy years between 1963 and 1970. In that period, the city grewed in an enormous speed and the city plan, which was prepared earlier, turned out to be valid. The apartment housing on İstasyon and Ankara streets began in that period. In 1967, the new city plan was made through a competition, which was organized by İller

Bankası. In the same period, İller Bankası gathered a broad scoped study and the projects that entered the competition in a book. (Karabük Governorship-2003)

Karabük began to lose its importance dating from 1970's. Capital owners of Karabük that had gone quite wealthy began to move to İstanbul and the other big cities in order to gain a better social life. Karabük Iron-Steel Factory that had already become a school during both the construction and the production periods of İskenderun Iron-Steel Factory gave many of its trained workers, who constitute the cultural structure of the city, to İskenderun. In this period, when reached to 1980s, Karabük began to face a rapid transformation process, which would not recall the past in all aspects. Beginning from 1976, in parallel with the chaotic period of the political life of Türkiye, the necessary conditions for the decline of Karabük were created. The city that was once the heart of Türkiye's Iron-Steel Industry and market lost its importance by the establishment of İsdemir and Erdemir and the many private factory that began production in İskenderun, İzmir, Denizli and İstanbul.

(Karabük Governorship, 2003)

3.2.3.1.First Settlement and Housing Areas

With the building of the Factory and sites, Karabük faced with the highest population density in its history. High external effect of this investment, made by state, results with the replacement of the 13 housed village with a developing and expanding settlement.

Fındıkoğlu,(1943) divides Karabük into four parts:

1. Old Karabük Village: An old village from Ottoman State period, having 15 houses and population of 150 in 1950 and 2 kilometers away from the Factory.
2. Town: The first center of the city, where railway station and municipality is settled and bazaars were set up , having a history of half a century. The area is between the old Karabük Village and Yenışehir..
3. Ötebük : Former rice fields of Karabük, Öğlebeli and Kapılıköy villagers, where Iron and Steel Factory with Chemical Material Factories has been established. Three kilometers southeast to the Yenışehir.

4. Yenişehir: Main area and the modern settlement of the new Karabük city, settled three kilometers northwest of the Factory, with a good panorama. (Erkün,1985)

First settlement areas of Karabük are the residential and industrial areas began to develop in 1945. In the first years of the growth of Karabük City, Bayır, Fabrika, Kayabaşı, Yenişehir and Yeşil residential areas emerged with the population increase. In 1960 six new town quarters; Ataturk, Ergenekon, Hurriyet, Kartaltepe, Şirinevler and Soğuksu; after 1960 Çakmakküme (Fevzi Çakmak) and the villages Oglebeli and Karabük are added as town quarters to the settlement.

Between 1955 and 1965, number of houses built was 5000; shops and offices 600 and public establishments were 100. In Karabük, brick, stone and briquet was used as building material in constructions and adobe is widespread in the outskirts of the city. Steep and rough topographical structure of the city affects the settlement structure. (İller Bankası, 1967)

Table 6: Hometowns of the Workers in 1965

QUARTER/ VILLAGE	WORKER
Çamlık	1033
Kartaltepe-Istasyon	1830
Kayabaşı	1600
Yeşil	602
Soğuksu	397
Kapullu Village	677
Zarazobran Village	385
Kılavuzlar Village	81
Bulak Village	103
Cumayarı Village	44
Safranbolu City	1105
Çevrikköprü (Konarı) Village	229
Yazıköy Village	181
Karaevli Village	258
Workers House (İşçi Sarayı)	250
Worker Houses in the Factory	1000

Source: İller Bankası, 1967

In the first years, it is told that, railway cars were used for shelter. Only a building, owned by Kirişçi Osman from Safranbolu, used for the housing need of British officer and engineers of Brassert Co., was later used as the district head office (kaymakamlık). Later, land of Doruklar and Kapullu Villages, where later

Yenişehir and Şirinevler quarters had grew, were bought to be the housing areas owned by the Factory. (İller Bankası, 1967)

Housing activities in Karabük has two parallel processes. The first one is the houses built by Iron and Steel Works, for their managers, officers and workers, which have an important role in the development of the modern, planned urban life in Karabük. Secondly and parallel to this process, generally squatter houses made by the villagers of the environs or other citizens of Karabük appears in the housing development of the city. (İller Bankası, 1967; TÜMAŞ, 1997b)

In the housing development of Karabük, the effect of Iron and Steel works is important. Planning and design of the housing areas of the Establishment (Yenişehir, Ergenekon and partly Şirinevler) reflects the “garden city” approach of British planning history, as the site is planned and built by the British professionals, in late 1940s. One storey separately located houses takes the majority in the settlement, instead of high storey apartments. In 1948, the Establishments had given free electricity, water and fuel to these houses and built comfortable houses for single officers. After all these activities, Karabük and the Establishment had become an attractive and livable settlement. (İller Bankası, 1967)

Table 7: Houses built between 1939-1955

Year	House	Year	House
1939	101	1946	20
1940	172	1948	50
1941	75	1951	7
1942-43	190 (Yüz Evler)	1952	7
1944	145	1953-54	(Çamlık)72
1945	167	1955	5 (and Sosyal Bina)
		TOTAL	1011 .

Source: Fındıkoğlu, 1963; İller Bankası, 1967

Yenişehir is a modern housing site of Iron and Steel Factory. The 5 storey apartment group built in 1960s, named Kübanalar, is a model site. Till 1968, 365 house for officers, 72 house for single personnel and 1299 worker house had been built. But , these activities of the Establishment did not have sufficient

capacity to cover the housing need. Majority of the workers live in their own squatter houses and minority live in rental houses (İller Bankası, 1967). In the late 1960s till 1980s, building of squatter and poor quality buildings, with the high increase rate of the population is a result of the activities that could not keep up with the housing needs.

A vast area of the city has a highly confused spatial structure. As renovation process was going on in the residential areas, the old irregular housing areas were within and tend to transform to the sites having high storey modern buildings and other urban areas.

In Yenışehir and surrounding areas there are regular and planned housing areas, having 2 to 8 storeys.

Also Beşbinevler, the housing area designed for the settlement of the workers of the establishment, constructed by the cooperatives, with the support and participation of the Municipality, Syndicate and Managers of the Iron and Steel Works, depending on the Law No.775, in 1969, is a planned and regular residential area in the city. Besides, with some other housing project implications that were activated after this planned and organized housing projects, like Çamkent in Şirinevler town quarter, a relative healthy production of housing areas began in the early 1970s.

Although, this high storey building process goes on, in general, low storey buildings with one or two storeys were built in the city, till the first settlement years, mostly in the central town quarters. Besides the different storey levels, building density is high but not in the same level and changes in different parts of the city.

Traditional housing types changes into the ones constructed with new technologies. However, quality is not so well even in these new high storey buildings, because of the financial conditions of the citizens. Despite all of these, Karabük owns a healthy well-built environment which was designed by foreign professionals, and constructed nearly 50 years ago with a good suitability to the land, named Yenışehir (New City). This town quarter is still the most beautiful settlement area of the city.

Replacement of the squatter type houses, built in a short time after the first migration from the rural areas (1945), with the apartment houses was observed mainly in 1960s. Especially, increase in the rental house ratio, in Şirinevler town quarter, where officer families live, and central town quarters. A part of the officers in Karabük lives in houses provided by the Iron and Steel Works or other public establishments

In 1955-1965 period, general settlement pattern was formed by one and two storey detached houses. Considering the total number of residential buildings, in the borders of Karabük province of today, in 1940-1949 period, was 70% (740) of the total buildings (1029), calculation of 819 houses represents a high and important value for the same period. In other words, construction of the residential buildings in Karabük district center have the highest ratio, in the settlements of the province, according to the 2000 Building Statistics, by SIS.

3.2.3.2. Industry, Commerce and Other Landuses

Settlement is a one centered city, in general sense. But, as the city form enlarges towards the environs, new sub centers emerge. Some commercial functions are spread to the housing areas, some constituting sub centers in the residential districts. Moreover, some functions, except main commercial and governmental ones, like social service and education institutions, are spread in the city. The city has a linear form, which settlement grew in the surrounding of the main streets, with a perpendicular direction.

Industrial sites in Karabük have three different types. The first is the Iron and Steel Factory, which is established so far ago. This site has no possibility to spread because of the topographical and other natural thresholds and considered to have sufficient space for the enlargement of the foundation.

The second type is the one, which creates more problems for the urban life: rolling mills. They have a great contribution to the economic life of the city, but besides they create great urban and environmental problems for the city, as they are settled in-town.

Craftwork sites are the third type of the industry in the city. There are two sites, which are spread to the city space. Both two sites cannot meet the needs of the

enterprises using them. (TÜMAŞ, 1997). In the craftworks enterprises, %2.4 of the whole labour of the city is employed while %7.9 works in the small sized industrial enterprises. According to a study (TÜMAŞ, 1997), 708 person in the labour of 29500 person, works in the craftworks.

The important character of the industrial establishments in Karabük is their location near the railway, because of the need to the railway usage for transportation.

Present industrial establishments creates problem for the urban life, like the traffic problems because of the transportation of the goods by using the main streets that are also used for other activities of urban life. (İller Bankası, 1967)

This table, which depends on the related calculations for the city plans, also reflects the spatial planning side of the tendency and support to the private manufacturing enterprises and the policies chosen for the economic development of the city.

Table 8: Present and needed industrial site in 1965

Type of Industry	Present Area (m2)	Needed Area (m2)	Increase (m2)	Increase (%)
Rolling Mills	44750	115500	70750	158,10
Craftworks	293	1770	1477	504,10
Timber Works	11312	26600	15288	135,15
Embossed Iron Works	450	3700	3250	722,22
TOTAL	56805	147570	90765	159,78

Source: İller Bankası, 1967

These needs are evaluated in the plans, designed in 1967 and new sites for industry and craftworks are located in places that give opportunity for enlargement and easy arrival. This table also reflects the support (policy) to the manufacturing and rolling mills.

Other land use types such as recreational areas, schools, and health institutions have been built in the suitable areas, shown in the city plans. However, except Yenişehir, Ergenekon and Şirinevler town quarters, recreational areas were not sufficient, because of the unplanned and fast increase in the building ratio.

3.2.3.3. Land Values, Real Estate and Public Property

Largest land properties belong to public institutions, in Karabük, which are KARDEMİR, TCDD and Forestry.

In 1967, land values in the central town quarters of Karabük is given as follows: on Hürriyet Street: 250-300 TL, Kayabaşı town quarter: 100-150 TL, Bayır town quarter: 30-150 TL, Yeşil town quarter: 100 TL, Atatürk town quarter: 50 TL, Soğuksu town quarter: 25 TL, out of the city: 10-25 TL. (İller Bankası, 1967)

This data shows that, in the main street of the central business district (Hurriyet Street), land value is the highest in the city, despite its surroundings, Bayır town quarter, is not valuable in general. Following the main street of the city, the housing areas living transformation from squatter to new buildings, that are Kayabaşı and Yeşil, has a striking land value figures compared with other older settlement areas, Soğuksu and Atatürk town quarters. As the Establishment as public property owned Factory area, Yenişehir and partly Şirinevler, land values was not given in the studies. Outer parts of the city, like Beşbinevler, Kurtuluş and Yüzüncü Yıl town quarters, seem to be valueless and not settled in late 1960s and 1970s, till 1980s.

3.2.3.4. Planning Studies

First planning studies for Karabük, separate from the ones for the Iron and Steel Factories, was made in 1948, by Pertev and Nezihe Taner. As the plan could not cope up with the development of the city, a new planning study was needed, with a more comprehensive view, after another renewal of the plan in 1950s. Karabük-Safranbolu Analytical Studies and Planning Report, with the results of the planning competition for the two cities is based on the Zonguldak Regional Plan, organized by the Ministry of Settlement and Reconstruction, in the late 1960s. Within this study, Karabük and Safranbolu were considered together, with a similar approach of "Sümerkent" of 1950s, in a contemporary planning view in 1967. A master plan and city plans for Karabük and Safranbolu was designed in improvement plan details. Main objective of the plan was to connect Karabük with Safranbolu by developing the urban land use in Safranbolu direction. This was also a suggestion of the regional plan.

But, although the plans are designed with a technical and improvement perspective, in mid 1970s, need for the refreshment of the plan raised. Third planning study, made by Architect Baran İdil, could be finished in 7 years, and registered in 1980, when the city was developed and grown more than the plan.

As seen above, even planning studies made in a comprehensive and contemporary view using scientific tools could not cope with the development and growth of Karabük. This is also a discussion in city and regional planning area.



CHAPTER 4

RESTRUCTURING AND DEINDUSTRIALIZATION IN KARABÜK

4.1. Privatization of KARDEMİR

Privatization is used as a tool of neo-liberal economic policies, based on the political concerns, in the early 1980s in Türkiye. Many of the state institutions are included in the coverage of the privatization list and a directorate is established for this aim. As this study do not focus on privatization concept, and only deal with the outcomes and effects from the side of the socio-spatial structure of Karabük, reasons behind the decision and the process is tried to be exposed.

4.1.1. Decision, Process and the Reasons

While privatization of KARDEMİR became valid in January 1995, a total decrease in production is observed, economic growth in the region and Karabük declined but great economic effects in the dependent industry could not be observed, although ratio of manufacturing in GRP decreased. Restructuring in KARDEMİR is told to create a new base for integrated management; debt problems recovered, public management was ended. (TÜMAŞ, 1997)

4.1.1.1. Decision and Process

Privatization decision and process of the Establishment is explained in general, with important details in KARDEMİR's website and documents:

The Iron and Steel Works at Karabük has been the backbone of the Turkish heavy industry for years. The technology of the Iron and Steel Works at Karabük has not been made the renewal for a long period and Karabük Iron and Steel Works have been "lost". Hence, Karabük Iron and Steel Works are determined to privatize in contents of Economic Measures Programme dated April 5, 1994 by the end of year and to close if the privatization is not possible. Karabük Iron and Steel works has been taken into extent and program of privatization as per decision no. 94/16 dated December, 1994 of High Privatization Council and Karabük Iron and Steel Works Co. was incorporated on January 13, 1995 for the purpose of privatization. As per decisions Nos. 94/16 and its supplement 95/30 dated March 29, 1995 of High Privatization Council it was considered that Karabük Iron and Steel Works Co. would be taken over by Kardemir Inc. which was set up by Enterprising Committee on February 17, 1995. Conditions of taking over have been fixed by an agreement dated March 30, 1995 signed by Privatization Administration of the Prime Ministry of the Republic of Türkiye and Enterprising Committee of Kardemir Inc.

In accordance with this, all shares of Karabük Iron and Steel Works Co. have been transferred to Kardemir A.Ş. All severance pays and termination benefits of employees being subject to Labour Law have been paid by Privatization Administration . It has been stipulated that USD.20.219.599.- would be granted for urgent maintenance , repair and investments. Furthermore ; TL. 900,000 million in cash on account of capital increase and transfer of inventories at minimum safe level amounting to TL. 1,278.000.000.000,- (one trillion two hundred seventy-eight milliard) have been envisaged. Besides , all debts and obligations remained under responsibility of Türkiye Demir Çelik İşletmeleri Genel Müdürlüğü(TDÇİ) . It was stipulated that the broadest structure of partnership would be formed until May 30, 1995 beginning from date of transfer in accordance with share distribution groups and ratios indicated under item 3 Article a) of transfer agreement signed between High Privatization Council and founder shareholders and Enterprising Committee.

Lien and pledge have been established on all vehicles, machinery and equipment and real estates of company in favour of Privatization Administration until the commitments are fulfilled. The capital amounted to TL. 408 milliard as a result of share sales between July 7-14, 1995 stating that distribution of shares in groups has been effected as required in a Letter No: 6391 dated 27 September 1995 received from Privatization Administration, the lien and pledge have been released. Consequently, the capital of Karabük Iron and Steel Works Co. has been transferred to Kardemir Inc. and issued capital has been increased to TL. 8,733,927,521,411 and shares of the company taken over on TL (1) have been distributed to shareholders, who purchased shares value TL. 408 milliard, as per the rates of their shares on free basis. Thus, stipulations of transfer have come into force being valid from March 30, 1995. (KARDEMİR, 2003)

The proposed distribution of the shareholders and their shares, in the restructuring was designated to be as;

- Group A: KARDEMİR Workers, 35%
- Group B: Merchants and Industrialists, 30%
- Group C: Tradesman and Craftsmen, 10%
- Group D: Local community, 25%

After the transfer to KARDEMİR Inc., supply to public activities to get the highest contribution began, but the result was not as the expected. As the shareholders from the groups B, C and D, have bought lots lesser than the amounts provided for them, needed management capital of 2 trillion TL could not be obtained. In the second supply, the workers bought these lots with a self-sacrificing manner, and the share of the workers reached 51.8% (16.8% more than expected) in order not to leave the Factory to the “foreign hands”. Nevertheless, the capital amount stayed in 408 billion TLs, instead of 2 trillion TLs.

The actual distribution of lots by shareholders has occurred as;

- Group A: KARDEMİR Workers, 51.8%
- Group B: Merchants and Industrialists, 24.2%
- Group C: Tradesman and Craftsmen, 1.3%

Group D: Local community, 22.7% (ÖZÇELİK-İŞ, 2002)

Table 9.: Net change between the proposed and actual shares by shareholders

Groups:	A) Workers	B) Merchants & Industrialists	C) Tradesman and artisans	D) Local Community
Proposed %	35	30	10	25
Actual %	51.8	24.2	1.3	22.7
Difference %	+16.8	-5.8	-8.7	-2.3

Government has transferred the Establishment to the new structure, formed by the local groups, with a stock wealth of nearly 15 trillion TLs.

Main problem for the new owners was the oldness of the Establishment and the end year loss of 233 million US\$ in 1994. (TÜMAŞ, 1997)

Unavailability to compensate the losses of the SoEs, by the Treasury, as the outer resource usage increased, privatization comes to agenda, in 1994, also with the EU membership attempts. On the other hand, government's decision of devaluation because of the budget deficits, effected KARDEMİR as the loss and financial deficits of the Establishment could not be overcome by the Treasury or other public resources. Because of this, privatization of the Establishment (otherwise selling with 100 billions US\$ scrap value) decision was declared.

Main reasons are noted to be the location of the Factories, labour intensive production process of the Establishment and unavailability of capacity increase, no more than 1 million tons.

One of the (and the most important) critics to this privatization was the new position of the workers by the shareholding of the syndicate, as "the boss", in the executive committee of KARDEMİR Co. Inc. And this critics, focusing on the negative effect of the "managing" the Factory by the syndicate will create technical, economical and political problems, came into being in a short time as the returning of the financial problems similar to the ones in 1989-1994 term (for further discussion: Ersöz, 2001). This problems effected both syndicate and the management of KARDEMİR; syndicate executives changed and syndicate

became an “observer” and “inspector”, not a director or executive board member in 2002, to overcome this problem to a degree.

4.1.1.2. Financial Analysis³

In the privatization of KARDEMİR, main reasons were noted to be mainly economical and managerial. In our financial analysis, we begin with the period when the establishment seems to face with high levels of total economic loss, in the end of 1980s.

1) Karabük Iron and Steel Factories, which was making profit in 1985-1988 period, made a loss of 92 billion TLs, because of the work slow down and strike after the disagreement in the contract meetings, after a profit of 10 billion TLs in 1988. These conditions continued till 1993, and resulted with the loss of self resources and increase of the outer resources (from TTK, Divriği Establishment debts and bank credits taken by TDÇİ). Ratios and amount of losses per year is shown below:

Year	Amount of loss (billion TL)	Increase Ratio(%)
1990	404	339
1991	1,002	148
1992	1,745	74
1993	2,614	49
1990-1993	409,361	547

2) From the main (nominal) capital side; increasing the main capital of the Establishment from 40 billion TLs in 1988 to 120 billion TLs in 1990-1991 and 770 billion TLs in 1992-1993 could only cover 14% of the total losses in 1990-1993.

3) Because of the unavailability of the increase in nominal capital, getting into debt became inevitable, in order to cover the production inputs and stocks. Production has continued by using the coal from TTK, iron ore coming from Divriği mines and imported by TDÇİ and other materials, as a debt.

4) Unavailability of price determination in the sector, facing with the rivalry of arc oven private mills and imports, in the flat product area, made the payment for the outer resources impossible.

³ Data of the analysis is taken from ÖZÇELİK-İŞ, “Karabük Kapatılamaz”, 1994

Change in the outer resources in 1988-1993 period is shown below:

Year	Amount (billion TL)	Rate (%)*
1988	163	
1989	508	211
1990	935	84
1991	2,266	142
1992	3,883	71
1993	6,939	78
1989-1993	1619,088	4157

** Increase rate is for previous year*

More than half (57%) of the increase in the outer resources represents the increase in the labour salaries.

After this transfer, positive results observed in both finance and profitability, because of the transferred stock and wealth in KARDEMİR. But debts to TTK, Divhan and Banks increase between 1994-2001, as outer resources still used instead of main capital and share certificates records, registered to SPK (Directorate of Capital Market) are valued low levels, in general.

4.1.1.3. Reports on Privatization

In 1990s, KARDEMİR became a matter of the Turkish Government, as being the public establishment making high levels of loss and employing the highest number of workers. In order to correct this conditions, Government wanted a report on the Establishment, named "Evaluation of the Future of Iron and Steel Works", from Coopers and Lybrand (consultant of Undertrasury of Treasury and Foreign Trade) financial consultancy and McKinsey strategy consultancy (consultant of Administration of Expropriation) firms. Consultants admitted the report to Government Guiding Committee, in October 1994. (TÜMAŞ, 1997)

Many specialists question this consultancy and report process in different studies. Although there were reports and improvement projects written by the Turkish researcher and specialists of the state and the Establishment, Government gave the job to a foreign specialist group, told to be given with the directives to legitimize the privatization policy.

Results gained from the studies for the report were evaluated as follows: (TÜMAŞ, 1997)

- KARDEMİR do not have competitive power with the loss of 1.1 milliard US\$ between 1989-1994
- KARDEMİR may face with losses because of the competitiveness environment in Turkish steel market, which both national and global firms operate.
- Long products have a low ratio of 6% in Turkish iron and steel production, but there is a great competition between the private arc oven mills (64% production of long products) and ISDEMİR (15% production of long products).
- Source of the losses in 1993 was the low prices. Prices were higher than the world markets, Turkish export products and even the world coke prices level.
- Salaries have increased rapidly compared to input and output prices, even 50% higher than the ones in the private sector.
- Production costs of the Factory are four times more than the similar ones having international standards.
- When compared to the similar factories, it is understood that KARDEMİR has too much personnel, as an integrated plant. This condition is clearer in subsidiary units, managerial and project departments.

According to the results of technical evaluation, KARDEMİR has competitiveness in only in coking and sinter, but in other subjects under the world standards. KARDEMİR needs modernization. (TÜMAŞ, 1997)

Other technical findings are noted as follows:

Capacities are so lower than world standards, and sufficient economic productivity could not be obtained. ,

CIS countries threaten regional market advantage,

Steel market is shrinking, cheap import products affect Turkish market and there is excessive production worldwide. Demand increase and subsidies are less worldwide. (TÜMAŞ, 1997)

In the report, it is noted that, a high ratio (84%) of raw iron rod need of Türkiye can be provided from CIS and Eastern Europe, with lower prices. Besides, Türkiye will be obliged to cancel the supports for adaptation to EU conditions, as a net exporter of long products.

Table 10: KARDEMİR Technical Evaluation

Plants	Evaluation	Needed Improvement	Thoughts
Ore Field Coal Field	competitive	less	New crane must be settled
Coking Sinter Preparing Sinter	competitive competitive	less	In service till 2005 Cost disadvantage because of being small
High ovens	old		Peak-pressure problems
Steel production Log Moulding	old old		Usage life expired Usage life expired
34" Block Roll 28" Duo Roll		much much	Depends on log moulding, with the full installation of continuous log moulding.
28" Trio Roll Cont.round product mill Cont. wire rod mill	old old	less less less	Only big rolling mill in Türkiye Seperation is possible Modernization needed

Source: TÜMAŞ, 1997

Considering all these findings, economical reasons, and some other inputs, 6 alternatives for the future of the Establishment is formed, in the report:

Alternative 1: Spare employment must be lowered immediately

Alternative 2: Spare employment must be lowered immediately; salary policy of private sector must be put into practice,

Alternative 3: investment to long products results with; a loss of 150 million US\$ with limited restructuring; optimistically a profit of 85 million US\$ with a hard-working and successful restructuring, till year 2000

Alternative 4: investment on the long products seems more attractive than investment on the flat products.

Alternative 5: separation of the single units and management of mills separately or the coking process must be continued.

Alternative 6: completely close the plant and sell all the belongings.

Cost of this procedure will be totally 200 million US\$ with 80 million US\$ for environmental design and cleaning. (TÜMAŞ, 1997)

4.1.1.4. Report for Regional (Re-) Development

After the privatization of KARDEMİR, a Re-Development study, named “Zonguldak-Bartın-Karabük Regional Development Project”, on former Zonguldak Province was developed by TÜMAŞ-GERSAR-BRL consortium, for the State Planning Organization, in 1997. In the research process of the study, meetings with Turkish Coal Institution (TTK) and Karabük Iron and Steel Works (KARDEMİR), syndicates and related public institutions organized and presentations made, by the consortium.

In the project, focusing on the regional development alternatives, after the reorganization of TKİ and privatization of KARDEMİR, for Zonguldak-Bartın-Karabük region is examined in detail, with economic, social and spatial specialties, in analysis part. In the executive report, where regional development alternatives and programme is summarized, detailed evaluation of the potentials and problems of the region is made and scenarios with strategies for the regional development, by developing alternatives are given. In addition, suitable investment areas are noted.

According to the report, potentials of the region can be defined in three levels.

Good level potentials: *geographical location, being “region of first level development priority”, big, small and middle sized industry, forests, vegetation and stockbreeding, education, transportation*

Middle level potentials: *local authorities, tourism, climate, and environment*

Low level potentials: *physical properties, land, mining, and fishing*

In the report, equipment modernization, increasing economical performance and positive effects of these investments on the regional employment are noted to be the future plans of KARDEMİR.

Regional development scenario and strategies use two main analysis: institutional and socio-economical. Institutional analysis evaluate four possible conditions: *continuity of the present condition, growth of private sector, participation of public sector and partnership of public and private sectors.*

The socio-economic analysis is formed by the combination of regional growth rate, employment opportunities, interrelated investments and population estimations, using an estimation model depending on the regional IO matrix.

After the analysis, three alternatives for the regional development is formed and regional development targets, depending on these alternatives are offered.

As a result of this studies;

- Region is proposed to be a focal area of industry and commerce in order to stabilize the problems of rapid growth in metropolitan areas
- Supporting manufacturing, trade and related services must be considered, evaluating the examples of Ruhr and Whales, with restructuring of ERDEMİR and KARDEMİR. In addition, new precautions and supports for new forms of employment and education of the workers are important.
- Filyos Valley Free Trade Zone project must be put into action, as the international importance of Karadeniz Region increases.
- Rural development must be considered and projects must be developed considering agricultural and forestry production improvements

These offers are supported by the formation of a "Special Regional Re-Development Agency" in the Development Organization part of the report. Also, development targets including the suggestions for the decrease in the public investments in general and increase in the opportunities for private sector is given before a action program for the regional development. Suggestions of

this part, mainly focuses on the improvement of the industrial activities with the improvement by economical reorganizations of the big scaled ones and the supports for the Organized SME Districts, while continuing to be a first priority region for development (KÖY1). Three types of funds (participation, warranty, technical support) are defined to be used for this supports, which will be directed by the proposed regional development agency and detail the investments by terms and years by sectors.

In the report, KARDEMİR and Karabük are not in front, as regional evaluation and policies are formed. However, the policy of supporting the SMEs and Filyos Project by the helps of KARDEMİR is the main function of the Establishment, besides the suggestions of restructuring after the privatization.

Actually, the project proposals should not be implemented and proposed Regional Development Agency could not be established, in nearly 7 years' time, till 1997.

4.2. Effects of Privatization

Privatization period, beginning with the Act in 1995, opened a new way full of problems to the economic and social structure of the city, affecting the spatial structure as well. In this part, these changes are examined considering the observed and possible effects to economic, social and spatial structure of the settlement. Main focus is on the Province center, but information including some districts will be given for comparison and evaluations.

4.2.1. Economic Effects

Economic effects of the privatization, on Karabük, are examined by using three data groups obtained. The first is the net change in the number of the establishments by economic activity types after the privatization, the second is the change in the net monthly savings of different social groups and the third is the tax incomes.

In 1996-2000 period, we observe the highest ratio in the closures of the enterprises in Karabük Province, is in the Province center. In and after 1997,

opening registration ratio in the Center, increase from 46.11% to 86.02% of the whole openings in the province.

Table 11: Number of Closed and Registered Commercial Units (to the Karabük Chamber of Industry and Commerce Between) 1996-2000 *

Years	Opening			Closing		
	Province	Centre	Center %	Province	Centre	Center %
1996	193	89	46.11	121	98	80.99
1997	93	80	86.02	71	63	88.73
1998	105	96	91.43	101	91	90.10
1999	81	71	87.65	98	83	84.69
2000	101	85	84.16	61	54	88.52

* Adapted from the data given by Karabük Chamber of Industry and Commerce

In the new (opening) registration figures of the Karabük Chamber of Commerce and Industry, the main increase is found to be in construction and public works classification, where housing cooperatives is more than 90% of total. These housing cooperatives generally choose locations out of Karabük city and neighbor settlements for their constructions. An interesting point in this data is the high value of openings in the enterprises having more than one activities, related with each other or not, in their establishment contracts or firm names. This represents the tendency to get income from different activities when needed. For example, in these enterprises, we can see mining, health, iron and steel transportation and construction in one establishment or education, construction and automotive in another. Also, similar to this multi-profession establishments, personal enterprises do not have clear job definitions. Small increase in metal base industry is because of the private SMEs operating with the products of by-products of the other mills of KARDEMİR as semi-products, and most of them deal with the transportation and wholesale these products. Insurance (including offices, consultants, and some other services) , wholesale and retail trade (especially in food and textile sectors) and transportation sectors have a relative increase in this period, which can be noted to be a indicator for the services sector.

In the closing of the registration, in 1996-2000 period, personal companies and retail firms found to have the highest ratio. This can be evaluated as, the emerging economical conditions do not let persons to continue their own work, with limited capital accumulation and income with the effect of high tax ratios,

insurance and other regulations. An important ratio is in transportation sector, which contains transportation of iron and steel, construction and other industry materials and passenger transportation. Other closings are in different sectors, like mining, food and beverages, textile and clothing, offices, financials and insurance institutions, etc.

An interesting figure is the high registration and closing rates in the housing and office building cooperatives. Most of them established for building houses or offices in the environs of the city or in the other settlements, for resort usage or home after retirement, reflecting another tendency related with the period: to move out of the city.

Table 12: Ratio of Firm Openings and Closings to the Total Openings in Province Center by Economic Activity Type

a. Openings

Economic Activity Type	1996	1997	1998	1999	2000
Non-Metallic- Mining	2.20	0.00	0.00	0.00	0.00
Food, Drinks and Tobacco Industry	4.40	6.33	4.21	3.03	1.27
Textile, Clothing and Leather Industry	4.40	3.80	1.05	0.00	0.00
Forestry Products and Furniture Manufacturing	0.00	1.27	1.05	0.00	0.00
Paper, Paper Products and Press Industry	0.00	0.00	0.00	0.00	2.53
Chemical-Petroleum, Coal, Rubber and Plastic Products	0.00	0.00	1.05	0.00	0.00
Stone and Soil Based Industry	1.10	1.27	0.00	1.52	0.00
Metal Base Industry	5.49	2.53	2.11	1.52	2.53
Metal Goods-Mach. and Hardware, etc.	2.20	0.00	1.05	0.00	0.00
Other Manufacturing	0.00	1.27	2.11	3.03	0.00
Construction and Public Works	16.48	24.05	18.95	33.33	18.99
Wholesale Trade	1.10	8.86	8.42	10.61	7.59
Retail Trade	7.69	10.13	10.53	4.55	8.86
Restaurant and Hotels	0.00	0.00	0.00	0.00	1.27
Transportation	7.69	6.33	3.16	6.06	6.33
Financial Institutions	0.00	0.00	1.05	0.00	1.27
Insurance Institutions	2.20	3.80	2.11	1.52	7.59
Education, Health and Other Services	1.10	0.00	1.05	1.52	0.00
Cultural and Recreational Services	1.10	0.00	1.05	1.52	0.00
Services for Persons and Families	4.40	0.00	0.00	1.52	0.00
Personal Activities Not Defined Well	16.48	6.33	9.47	4.55	15.19
Firms Having More Than One Activity	21.98	24.05	31.58	25.76	26.58

* Adapted from the data from Chamber of Commerce and Industry of Karabük

b. Closings

Economic Activity Type	1996	1997	1998	1999	2000
Food, Drinks and Tobacco Industry	0.00	4.92	0.00	2.44	3.57
Textile, Clothing and Leather Industry	0.85	0.00	1.14	0.00	1.79
Paper, Paper Products and Press Industry	0.85	0.00	0.00	0.00	0.00
Metal Base Industry	0.00	8.20	1.14	3.66	1.79
Metal Goods -Machine and Hardware, etc...	0.00	1.64	1.14	0.00	0.00
Construction and Public Works	15.25	29.51	18.18	23.17	25.00
Wholesale Trade	3.39	3.28	6.82	2.44	5.36
Retail Trade	13.56	14.75	11.36	9.76	21.43
Transportation	6.78	4.92	5.68	7.32	3.57
Financial Institutions	0.00	0.00	1.14	0.00	0.00
Insurance Institutions	1.69	1.64	2.27	3.66	0.00
Education, Health and Other Services	0.00	1.64	1.14	0.00	1.79
Cultural and Recreational Services	0.85	1.64	0.00	1.22	0.00
Services for Persons and Families	0.85	0.00	0.00	0.00	1.79
<i>Activity Not Defined Well</i>					
Personal Activities Not Defined Well	55.93	26.23	40.91	43.90	32.14
Firms Active in More Than One Activity	0.00	1.64	9.09	2.44	1.79

* Adapted from the data from Chamber of Commerce and Industry of Karabük

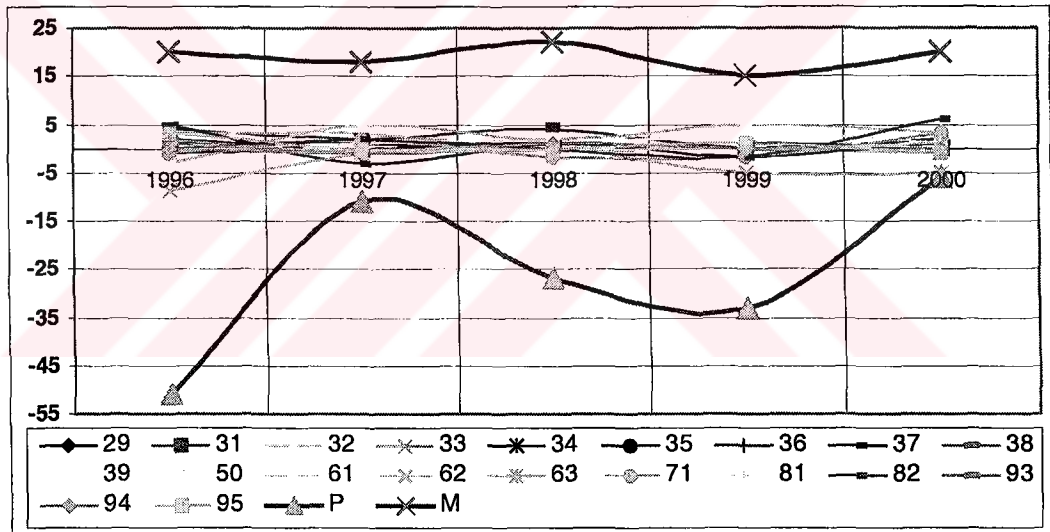


Figure 8: Net Change in the Number of Firms by Economic Activity Type and Year
(Calculated from the data of opening and closings between 1996-2000 (Table 12 a, b))

Another data is the net savings of the employees or employers of the local community. In a study made on 150 households in the oldest worker and tradesman settlements, Kayabaşı and Yeşil town quarters, in 1996 (Çevik et al., 1996), it is found that incomes and expenses of the households are mostly equal that result with no savings. Especially in the households where at least

one person works as a worker in municipality, KARDEMİR or private mills this condition is in the highest level. In the overall figures of the study, head of the family is retired or working as a tradesman and other jobs (like taxi driver or free services) present similar tendencies. This is told to be the worst conditions of the last 20 years in the city, by all social groups interviewed.⁴

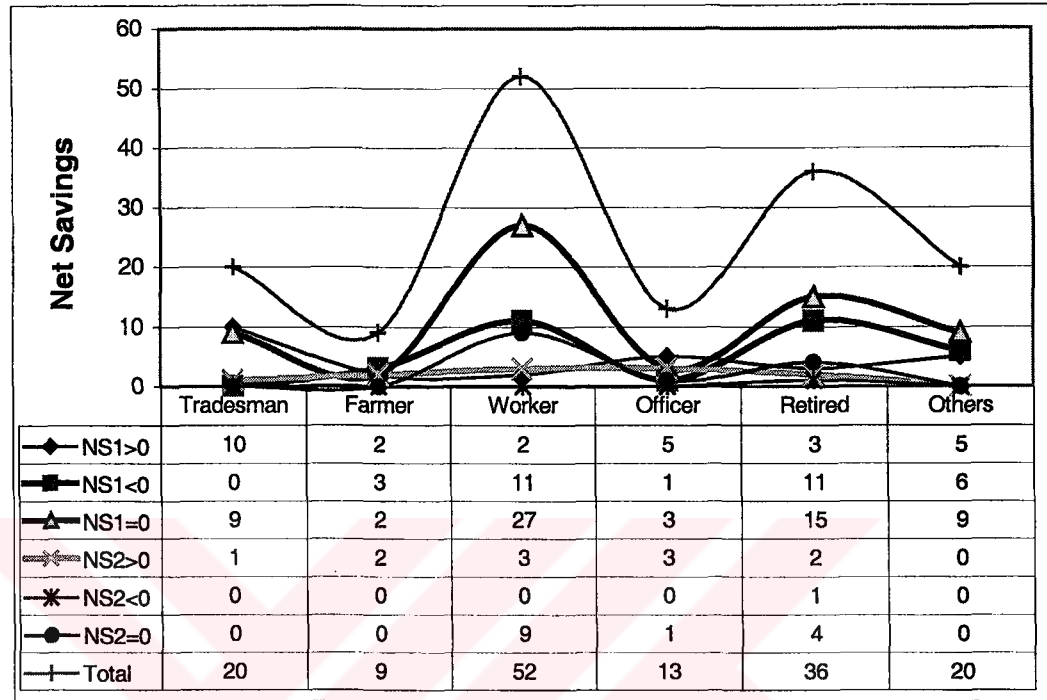


Figure 9: Net Savings by Occupation of the Head of Family (1996)

Source: ÇEVİK et al., 1996

As the third indicator for the evaluation of the economic effects, tax revenues are examined. In 1996, ratio of the tax revenues from 8592 taxpayers is 64.05% of the realized tax value. This ratio is 65.44% in 2001, from a number of 15243 (77.45% more) taxpayers, reflecting the relative decline in the payments, despite the number of taxpayers increase, in the Province, as an indicator for the loss of welfare and income. Province center has the 80% ratio of the values of the Province total.

⁴ This opinion is mentioned by all tradesman, officer and workers, interviewed in 1996, 2001 and 2002.

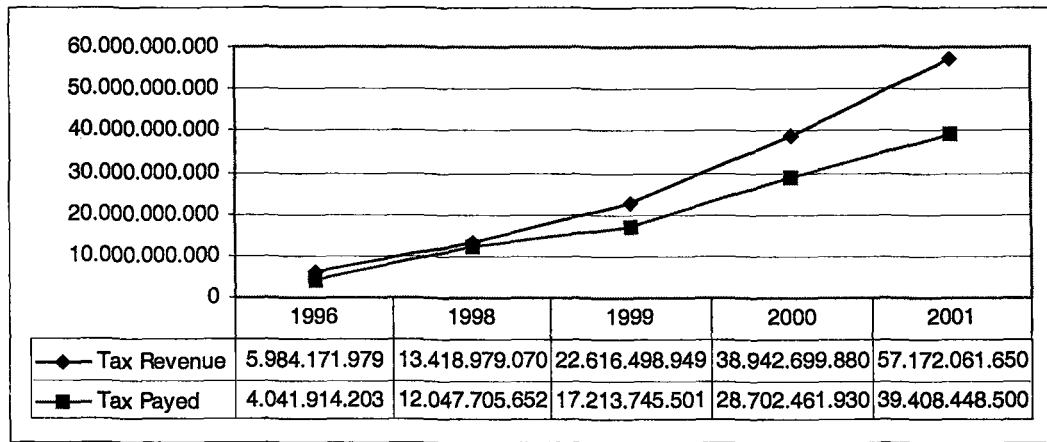


Figure 10: Change in the Tax Revenues and Payments in Karabük Province (1996-2001)

Source: Karabük Governorship, Department of Commerce and Industry Yearbook 1996, 2001

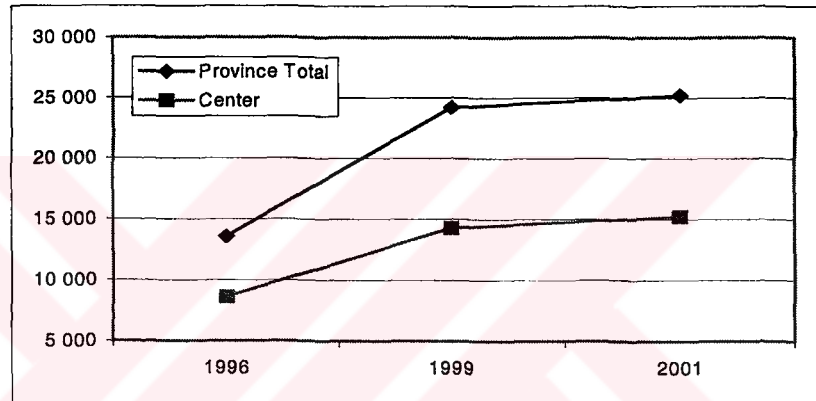


Figure 11: Change in the number of taxpayers in Province Center and Province Total

Source: Karabük Governorship, Department of Commerce and Industry Yearbook 1996, 2001

4.2.1.1. Manufacturing

Manufacturing establishments and related facilities in the settlement are the most effected units from the privatization, as they have close relations with the Iron and Steel production of KARDEMİR, in different scales. Although the private steel mills use different processes and have advantages in economical means, they used the opportunities of scale economy and externalities created by KARDEMİR.

Not only the rolling mills, but also the units dealing with the facilities like transportation, marketing and by-production of iron and steel industry products faced with structural and economic problems.

In this period, many of the rolling mills could not work in full capacity, although many of them improved their technical and managerial structure, or shut down. This also resulted with the relocation of -especially the managerial and operational branch of -some of the rolling mills in other parts of the country, mainly in Istanbul (like Ekinciler). According to the data given by the Prime Ministry of Türkiye, in October 2002 (Prime Ministry Website, 2002), 37 establishment (12 in textile and clothing) works in low capacity and 10 establishment (3 of them in textile sector) is closed.

Different from the manufacturing activities related with iron and steel industry, textile and clothing seems to increase in this period, with the establishment of some private enterprises, in the city, especially produce for export (like Gürmen, producer of Ramsey men's' wear). However, this increase in another manufacturing sector, could not compensate the economic and social benefits, gained from iron and steel industry. Investments to develop manufacturing activities continue in the region, like the Organized Industrial District, to be completed in late 1999 and fully activated in late 2002, after the building of infrastructure and road network, where land for 20 establishments from textiles, iron and steel works, forestry and timber works, food and building materials sectors assigned. (Karabük Department of Industry and Commerce, 2002)

4.2.1.2. Construction and Building

Production of construction steel in the province and the existence of the dense activity in production of construction materials in the region is an advantage for this sector. Construction activities and the firms related with this sector seem not to change with high ratios in this period, after the privatization. As mentioned above, in Table 11 and Table 12, activity in this sector is high, especially because of the housing and other building cooperatives operate in the province. This activity is also observed in the employment figures of Karabük, with an increase ratio of 733% between 1990-2000 in male and 311% in female figures.

4.2.1.3. Commerce and Trade

Commercial firms and trading companies in the city faced with a relative decline, especially in the retail trade and personal commercial facilities (Table 12). Some firms, especially trading companies dealing with iron and steel products, move their head offices and managerial units to Istanbul, and some other enlarge their activity profiles with entering new sectors with cooperation with big capital firms of the country. However, small firms hardly stand and continue their struggle with the lesser amounts of income. Most of the tradesman and officers from different sectors, especially small firm owners or persons, claim about the conditions emerged after late 1980s. Some of them changed their activity field, from production units to vendor any product in different areas (home electronics of information technology like GSM phones).

In general, commercial activities in the city lived a relative but high decline in small enterprises, decentralization or structural change in some others and some continuing production and invest for increase in this production type increased activity (especially the commercial branches or vendors of local or regional manufacturing enterprises, in textiles and food) in order to survive.

4.2.1.4. Banking and Finance

Banking activities in this period, have a relative increase, especially with the opening of the branches of private banks. Except the branch transfer of some banks, out of the region, and closure of some others with the governmental decisions (like Emlakbank) financial institutions and banking operations seem to be active, despite the economic problems. In addition, in this period private finance institutions operate in the city, some within the branches of the banks. Most of the banks, were established in 1950-1980 period and are mainly public companies or owned big capital (ists) of the country.

Table 13: Banks Operating Between 1981-2003

Name	Opening	Closing
Yapı ve Kredi Bankası A.Ş.	30.04.1951	
Türkiye Cumhuriyeti Ziraat Bankası A.Ş.	01.10.1952	
Sümerbank A.Ş.	12.12.1954	11.01.2002
Türkiye İş Bankası A.Ş.	03.11.1960	
Akbank T.A.Ş.	08.06.1964	
Türk Ticaret Bankası A.Ş.	15.11.1965	14.08.2002
Türkiye Vakıflar Bankası T.A.O.	16.12.1965	
Türkiye Halk Bankası A.Ş.	21.06.1968	
Türkiye Emlak Bankası A.Ş.	02.10.1970	09.07.2001
Pamukbank T.A.Ş.	04.09.1972	
Etibank A.Ş.	04.12.1972	28.12.2001
Şekerbank T.A.Ş.	04.10.1976	
Toprakbank A.Ş.	02.03.1998	30.09.2002
Adabank A.Ş.	15.03.1998	
Türkiye Cumhuriyeti Ziraat Bankası A.Ş.	09.07.2001	
Oyak Bank A.Ş.	11.01.2002	
Denizbank A.Ş.	04.02.2002	

Source: Türkiye Bankalar Birliği, 2003

4.2.1.5. Services

Services sector in the settlement increase with the entrance of “free enterprise” regulations, to the economic life of the country, like private cargo/transportation firms. Besides, with the privatization or decentralization of some services managed by state owned enterprises, like the change in TEK restructured as TEDAŞ, effect the increase in public and private services in the city. But, except this kind of restructuration, “white collar” workforce or firms do not operate with high values in the city, with respect to the metropolitan cities, as the services supplied by this kind of firms are “bought” from the advanced ones in the greater cities, like İstanbul and Ankara. This condition is also an outcome of the “industrial” social structure and urban culture created by this structure.

4.2.2. Social Effects

4.2.2.1. Demographic Change

The period after 1980 shows the reflections of the developments shaped by the affects of the economic, social and political structure in the national scale. Effects of the resolutions for structural change in economy, known as 24 January 1980 Decisions, also felt in Karabük. Reactions to this economic and political structural change attempts, especially from the syndicates and other worker organizations, like strikes, became the main political activity in the labour side.

In 1980-1985 period, total population of Karabük raised to 142569 from 131249, in 198, with an increase rate of 23.9%. A recession in the urban population (23.9%) is observed in this period, while an increase of 1% exists in the rural population, in terms of previous period. Urban-rural ratio of 1985 is 67/33 and continues this tendency in favor of urban population. An important fall of 195,3%, from 47751 in 1985 to 17988 in 1990, is observed in rural population, in the second half of the. In other words, "rural is emptied". Because of this fall, urban-rural ratio changed to 85/15, with an increase of 18% in urban population. Annual increase rate of total population also experienced a rapid fall of 28.94, similar to and because of the rural figures. Depending on the economic, political and social change related with the problems of Iron and Steel Works, in 1985-1990 term, the increase rate show this negative character which is not observed at no time between 1950 and 1985. When arrived at 1990, Karabük is a district having a population of 123361 (105373 urban, 17988 rural), which is even more than some provinces of Türkiye

But this condition would not take a long time. As 1985-1990 conditions continued and especially, because of the privatization of the Factory in 1994, which lead to the redundancy of a huge number of workers with resignation and dismissal, an important quantity of population left the city and moved to other province or districts where their relatives live or finding a new job is quite easy. According to 1990-2000 census data, this change is reflected as an annual decrease of 4.5% in urban population and 11.4% in rural. Conditions that result with a clear effect to the rural population in 1985-1990, observed in 1990-2000

census data, like mentioned above. City, having a total population of 123361 in 1990, meets us as a province accommodating a population of 100749 urban and 16055 rural and 116804 in total population, in 2000. Being the 78th province of Türkiye, with the privatization of the Factory in 1995, could not stop or lower this decline in a short period.

Table 14: Population change between 1980-2000

Census	KARABÜK (Centre)								Türkiye	Karabük
	Urban Pop.	Urban Incr. %	Urban %	Rural Pop.	Rural Incr. %	Rural %	Total	Pop. density	Annual Rate %	Annual Rate %
1980	84 137		64	47 212		36	131 249	177		
1985	94 818	23.90	67	47 751	2.27	33	142 569	192	24.88	16.55
1990	105 373	21.11	85	17 988	-195.26	15	123 361	166	21.71	-28.94
2000	100 749	-4.49	86	16 055	-11.37	14	116 804	154	18.28	-5.46

Source: SIS Census Data 1980, 1985, 1990 (Karabük/ Zonguldak) , 2000 (Karabük)

A general examination of the population movements of Karabük in 1960-1985 period, represents a linear relation in urban-rural differentiation. Although rural population has constancy in 1965-1970 period, a regular increase of equivalent ratio is observed in other years. In detail, increase ratio of rural population represents a decline, relative to the urban population, after 1975. After 1985, this decrease continues with an increasing trend.

When population increase ratio figures of Türkiye and Karabük are compared, it is observed that, although Karabük has the same progress with Türkiye averages after 1955, high population decrease in the rural settlements effect the increase rate so, increase rate appeared to be so lower than the numbers for Türkiye, in 1985-1990.

Reasons of this decline can be designated by the evaluation of age pyramid of 1990-2000. Age pyramid of Karabük represents the typical structure of developing regions; young population is high, older population is low and besides, and prolificacy is relatively low.

In the age pyramid of 2000, loss of young population can be clearly observed. This barely shows there existed an important migration between 1990-2000. Youth were married and then left the region.

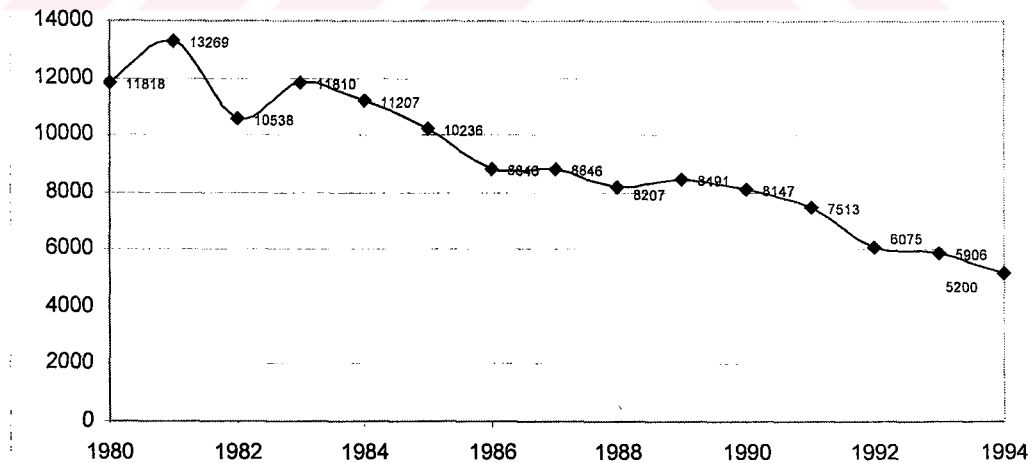
Although detailed interpretation is not possible from the present data, about the direction of the migration is from rural to urban or from rural to out of the region, considering the population increase and increase rate figures, it is clear that population increase of Karabük declined in general, this period. Young people in productive ages are not living in Karabük, youth of the rural settlements migrate out of the region, and following, urban youth consecutively leave the region, in 2000.

4.2.2.2. Change in the Employment Figures

a. Employment Change in KARDEMİR

Number of total personnel employed in the Factory units decreased to 4791 in 1995, from 9721 in 1989. Lowering the personnel quantity was fast and effective in 1991, 1993 and 1994 (-1099 in 1995). If we take average size of household as 5, this dismissal of the, mainly male, 4930 workforce effects nearly 25000 dependent individual in economic and social means, by decreasing their income, in Karabük and its surrounding settlements.

Figure 12: Annual average of the workers of KARDEMİR (1980-1994)



Sources: "137 Gün Süren Grevimiz", Çelik-İş Sendikası, Ank. 1989; "Karabük Kapatılamaz", Özçelik-İş Sendikası, 1994; Karabük DÇ Personnel Statistics (Values in 25.04.1994)

Dismissal contains different age and seniority groups and young worker; officer and technical personnel (engineer, architect, etc.) could not find new jobs. This job loss creates the main social impact.

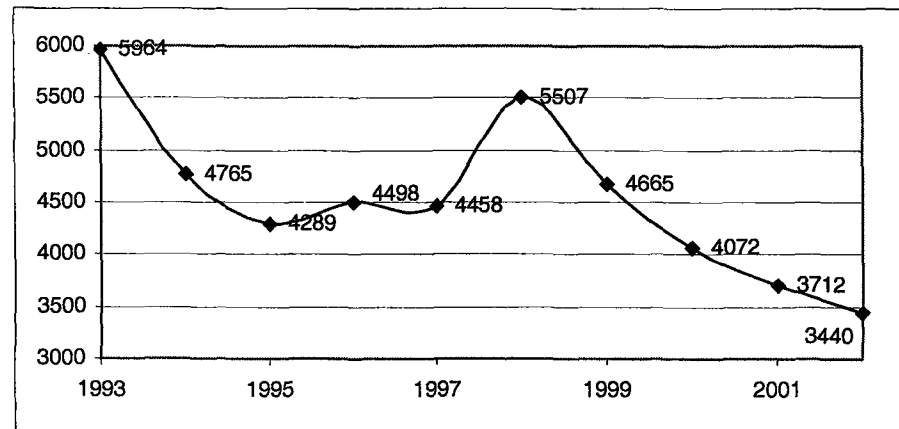


Figure 13: KARDEMİR Workers in the end of the years (1993-2002)

Source: KARDEMİR Department of Human Resources, 2003

Table 15: Reason and Number of the Employees Left KARDEMİR 1991-1995

a.Officers	1991	1992	1993	1994	1995	Total	%
Resignation	7	1	2	5	12	27	2,4
Transfer to other establishment	5	2	5	4	532	548	48,8
Military Service	4	4	3	4		15	1,3
Retirement	18	59	45	95	219	436	38,9
Death	3	2	2	2	3	12	1,1
Transfer between offices	6	16	47	11		80	7,1
Dismissal	1				3	4	0,4
Total	44	84	104	121	769	1.122	100
%	3,9	7,5	9,3	10,8	68,5	100,0	

b.Workers	1991	1992	1993	1994	1995	Total	%
Health	11	7	8	6	6	38	0,9
Military Service	6		1	4	1	12	0,3
Retirement	675	520	147	1 151	396	2.889	70,8
Death	20	7	19	14	8	68	1,7
Resignation	1				5	6	0,1
Dismissal	5	910	5	22	82	1.024	25,1
Temporary Workers	1	3	10			14	0,3
End of Contract	5	2	2	3	1	13	0,3
Other	2	1	12	1		16	0,4
Total	726	1.450	204	1 201	499	4.080	100
%	17,8	35,5	5,0	29,4	12,2	100	

Source: TÜMAŞ, 1997 from KARDEMİR

There is no detailed data collected about the education level of the dismissed workers, in KARDEMİR. However, with a general evaluation, most of them at least graduated from private school, and generally technical school graduates (TÜMAŞ, 1997). Most of the officers were graduates of high school or university

Table 16: Employment and Personnel Change in KARDEMİR (1989-1995)

a. Employment	1989	1990	1991	1992	1993	1994	1995
Officer	56	52	48	44	85	89	1
Contractual	1.174	1.178	1.204	1.127	1.142	1.036	505
Staff	7.871	8.048	7.416	5.982	5.882	4.691	4.213
Temporary	620	99	97	93	82	74	72
Total	9.721	9.377	8.765	7.246	7.191	5.890	4.791

b. Personnel Change	1990	1991	1992	1993	1994	1995	1995-1990
Officer	-4	-4	-4	41	4	-88	-55
Contractual	4	26	-77	15	-106	-531	-669
Staff	177	-632	-1.434	-100	-1.191	-478	-3.658
Temporary	-521	-2	-4	-11	-8	-2	-548
Total	-344	-612	-1.519	-55	-1.301	-1.099	-4.930

Source: TÜMAŞ, 1997a from KARDEMİR

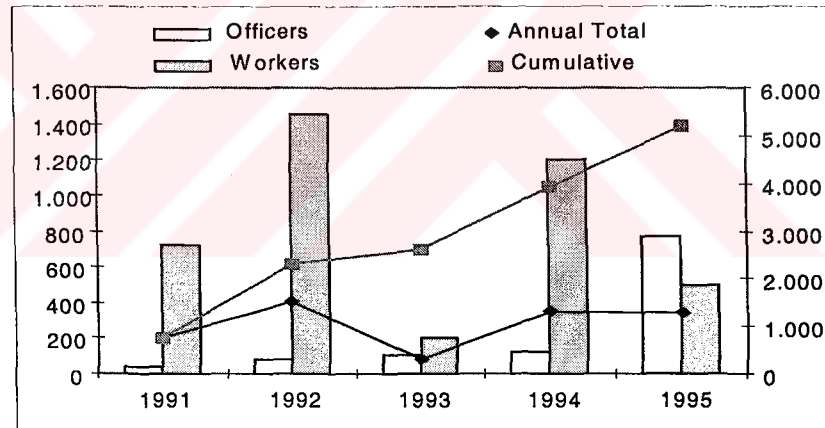


Figure 14: Number of Employees Left KARDEMİR

Source: TÜMAŞ, 1997

According to a research (TUMAS, 1997), less of the retired people have moved to other provinces. Some older ones returned to their villages and some others continued their life in Karabük, although it is not easy to find a job in other manufacturing and industry branches.

b. Employment Change in Karabük City in 1990-2000 Period

According to the 1990-2000 census data, employment figures and distribution of the employed population to the sectors represents an important difference to the previous periods. When the values of last week's occupation are compared, number of occupancy in "agriculture, stockbreeding, forestry, fishing and hunting", Karabük and Safranbolu are found to live a decline, small in numbers but high in the ratios. In the group of "scientific, technical, professional and related workers" and, "administrative and managerial workers" has an increase in both male and female numbers. An increase is also observed in the "unknown" occupancy group of Karabük, especially in male figures. In general, despite the increase in occupancy figures of Safranbolu, Karabük shows a recession, especially in male working population. In 10 years period (1990-2000), a total of 2158 workers (2209 with the loss in agriculture and stockbreeding) is found to leave the labour force in Karabük. Distribution of this loss in three main activity groups is: 1808 in nonagricultural production and related works, 260 in services and 90 in commercial and sales.

Women are observed to increase their economic activity by the employment in different sectors. Female workforce increases their number, a total of 775, in the three main sectors where male workforce faced with a decline. First group of this increase is nonagricultural production with 523 added workers, second commercial and sales with 139 and thirdly services with 139 added female workers

Distribution of the workers to the sectors gives a similar result. Male workforce in "manufacturing industry" sector faces with a loss of 34%, and this loss continues in "transportation, storage and communication" and "agriculture, forestry, fishing and hunting", following in order. Female workforce is in increase except "agriculture, forestry, fishing and hunting" and "electricity, gas, water", but could not compensate the quantity left by male labour. While the condition appears like this in Karabük, in Safranbolu there exist a rise in both male and female workforce, except the very low level decline in the manufacturing and agriculture workforce.

In total employment figures of Karabük, 1066 female workers could not replace loss of 1688 male workforce. This loss of 622 workforce (2.25%) means a net

decline in total figures, as employment of female workforce is not mean the same as the male workforce, in qualitative and quantitative measures. But, the participation of women in the economic life with this trend, showing the shift from the works that need “muscular” workforce of male to services and commerce type works that need different qualifications without selecting the sex, is an indicator of an important change in the region.

Figures of “unemployed seeking for a job” between 1990 and 2000, shows a decline of 1517 person in male job seekers, meaning that male unemployment rate increased but job seekers in the city decrease, female job seekers increase a number of 538, supporting the comment on economic activity increase of women. This increase is observed especially in the data of women between the ages of 20-39 (20-24, 30-34, 35-39 age groups

In the light of all these data, we find out that, ratio of the male decrease 1% (51% in 1990 and 50% in 2000) and female in total population increase 1% (49% in 1990 and 50% in 2000), creating a relative numerical equality. Increase in the male worker ratio in the economic active male figures and decline in the job seeker male ratio in the unemployment figures are observed with the relative decline in the female worker ratio in the female economic activity, but a net increase in the job seeker female number and ratio. Inactivity ratio increases in the values of male, while decrease in female figures.

4.2.2.3. Change in the Other Social Indicators (Divorce, Marriage, Death, Public Security and Suicide Figures)

As the data collected for Karabük before 1995 was presented in the Zonguldak figures, and no separation was made in the published statistics till today, we have to consider the data after 1995. The data given below is the data of Karabük Province (if not mentioned anything else), not the central district, but the majority in the numbers found to be in the Karabük City.

When we examine the data of marriage, divorce, death and suicide figures, needed to expose the social effects of the deindustrialization, for Karabük we find out the following results.

Divorce figures represent an unsteady increase between 1996-2000, from 95 to 167. This gives an approximate increase ratio of 19 % per annum, except 1998. In 1998, having the lowest number of divorces in this period, reason for divorce is “discord” with a ratio of 92.4%, close to the crude divorce ratio of Türkiye (92%), and following “leaving” with a number of 5 and ratio of 7.8%. As we do not have detailed research information about the reasons for divorce, it is not possible to say this result of high discord ratio is an outcome of the job loss in the settlement. But, considering the social and economical structure of the region and the decline in the population figures, we can emphasize this change to be mainly affected from the deindustrialization process. Another interesting point appears in the comparison of Karabük with Bartın and Zonguldak, other provinces of the region. Figures show an increase in Bartın, like Karabük, while Zonguldak is in a steady decline.

Table 17: Divorces by provinces of the region

Province	1993	1994	1995	1996	1997	1998	1999	2000
Türkiye Total	27 725	28 041	28 875	29 552	32 717	32 167	31 540	34 862
Regional Total	495	575	583	630	569	536	617	652
Zonguldak.....	394	441	430	370	289	286	171	295
Bartın.....	101	134	153	165	178	184	279	190
Karabük	-	-	-	95	102	66	167	167

Source: www.die.gov.tr

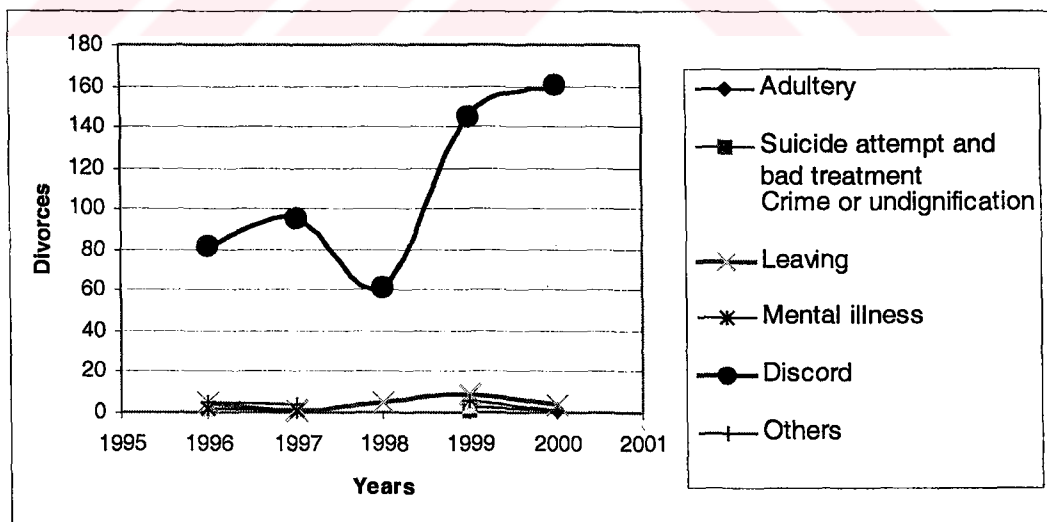


Figure 15: Divorces by reasons (1996-2000)

Source: Divorce Statistics 1996-2000, SIS

In marriage figures, we observe close numbers, fluctuating close to the average value of 2202, between 1996-1999. As we find close numbers to the figures of Zonguldak between 1992-1995, when we add the quantities with the numbers given in Zonguldak, we can interpret this result, as there is not a huge difference in the marriage figures of the city, relative to the past. This means, tendencies in marriage do not differ in high values, with the changes in the social and economical structure of the settlement. In 1997, nearly half of the marriages appear to be in the province center, Karabük City, secondly in the non-municipal villages of the province and thirdly district centers (Safranbolu, Eflani, Eskipazar, Yenice and Ovacık). Less marriage are made in the villages in the municipality borders.

Table 18: Marriages by provinces of the region

Province	1992	1993	1994	1995	1996	1997	1998	1999
Total	436 121	460 002	462 415	463 105	486 734	518 856	485 035	475 613
Regional Total	9 504	9 923	9 536	9 942	10 220	10 629	10 149	9 994
Zonguldak	7 453	8 127	7 594	7 813	5 883	6 186	5 972	6 115
Bartın	2 051	1 796	1 942	2 129	2 203	2 123	1 937	1 765
Karabük	-	-	-	-	2 134	2 320	2 240	2 114

Source: www.die.gov.tr

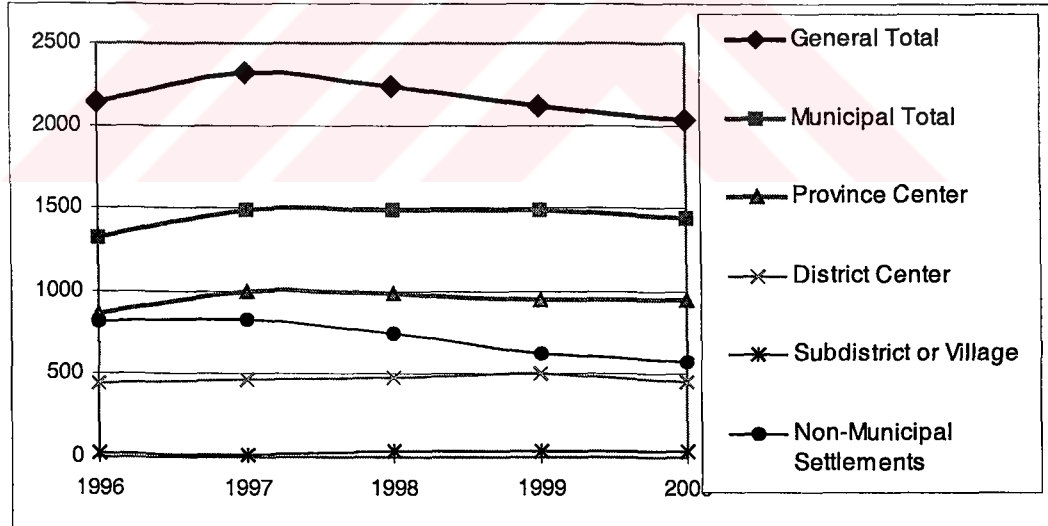


Figure 16: Marriages by settlements, 1996-2000

Source: Marriage Statistics 1996-2000, SIS

Different from the supposed, suicide figures are not found to be in high numbers. In fact, some decrease is observed in the recorded suicide events

between 1996-2001. Suicides in Karabük do not change in high amounts and thought not to be caused by the negative economical conditions. In 1998, for example, 2 of 5 suicides are from illness and 2 of them from family discord and hard struggle for living. Considering the population of the settlement to be more than 100.000, the number of 7 in 1996, 5 in 1998 and 6 in 2001 with a ratio of nearly 0.00005 in the total population, is not a considerable quantity. The family and environment can relate this very low quantity of suicides with the social and religious structure in the settlement resulting with the economic and socio-psychological support to the unemployed.

Table 19: Suicides by provinces of the region

Province	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Total										
Regional Total	25	16	11	19	24	25	36	23	23	24
Zonguldak	25	10	8	17	23	12	23	12	13	8
Bartın	-	6	3	2	1	1	7	6	6	12
Karabük	-	-	-	-	-	12	6	5	4	4

Source: Suicide Statistics 1996-2000, SIS

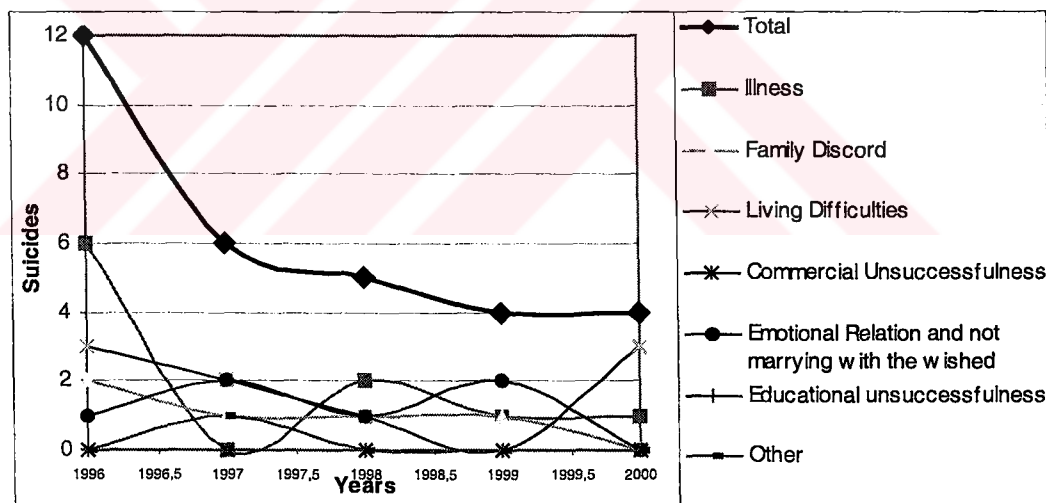


Figure 17: Suicides by reasons (1996-2000)

Source: Suicide Statistics 1996-2000, SIS

When looked to death figures of the province, an increase is observed in total figures, with an unsteady increase in male death figures. This does not give or mean there exist an important change because of the deindustrialization, without knowing the reasons of the deaths.

Figure shows the total figures of the change in the selected reasons for death in 1996-2000 period. We see that, the ratios increase in 1999, in total and in the “other” diseases (where 45 types of disease are included) appear to be in the first while “other forms of heart disease” decrease in this year, after an increase in 1997. Suicides and cirrhosis of the liver, defined to be other indicators for the impacts of deindustrialization, by Brenner (ERSOY et al, 2000), have very low values in the period, only having a small relative increase in 1998. A notable change is in the “symptoms and ill defined conditions”, that return to the level of 1996 in 2000, after a decline in 1997.

Table 20: Deaths by Provinces of the Region 1991-2000

Province		1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Zonguldak	Total	1459	1144	1121	1036	1173	539	535	545	580	521
	Male	819	637	623	542	642	295	306	306	313	287
	Female	640	507	498	494	531	244	229	239	267	234
Bartın	Total	-	102	72	81	87	123	215	245	222	218
	Male	-	51	42	48	55	72	120	128	129	118
	Female	-	51	30	33	32	51	95	117	93	100
Karabük	Total	-	-	-	-	-	554	576	603	651	577
	Male	-	-	-	-	-	305	290	328	346	328
	Female	-	-	-	-	-	249	286	275	305	249

Source: Death statistics 1996-2000, SIS

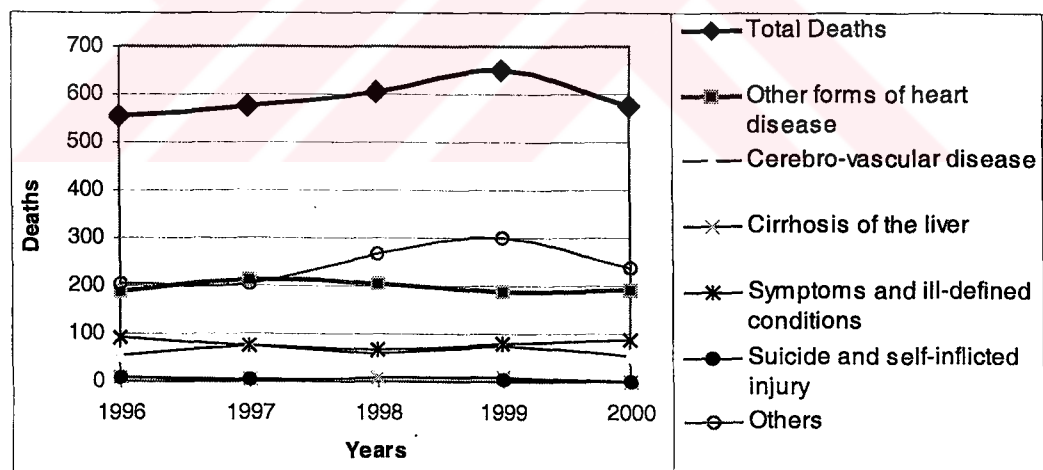


Figure15: Deaths by Some Special Reasons (1996-2000)

Source: Death Statistics 1996-2000, SIS

Although it is not easy to evaluate this death figures without examining the personal data of the ill people, this figures give general information about the

change in the reasons of death in Karabük. As explained above, these figures do not strongly reflect a condition negatively effected from a destructive effect, but show the changes after an important fact, from a health-centered view.

Coming to the psychological side of the fact, reflected to the public security and crime actions, we observe not a high but important increase in the figures. From the Public Security data of 1996 and 2001, we find out that important increase in crimes effectual to public security, increased in different types of crimes and in total (91.49%). Especially “attack to property”, “killing” and “man kidnapping”, “intentionally starting fire” seems to increase more than others, both in number and ratio, while crimes having sexual context (adultery, raping by violence, etc.) decreased.

Table 21: Crimes Effectual to Public Security and Police Follow Up (1996-2001)

Crimes Effectual to Public Security	1996	2001	Change	Change %
Seizure and robbery	2	4	+2	100.00
Killing	4	10	+6	150.00
Intentionally started fire		23	+23	100+
Attack to property/dwelling	6	21	+15	250.00
Girl-woman kidnapping	16	18	+2	12.50
Man kidnapping		2	+2	100+
Child kidnapping	1	1	0	0.00
Raping by violence	6	1	-5	-83.33
Adultery	2		-2	-100.00
Prostitution	5	6	+1	20.00
Bothering to chastity (ırza tasaddi)	5	4	-1	-20.00
TOTAL	47	90	+43	91.49

Crimes for Police Follow Up	1996	2001	Change	Change %
Attack, insult and hit to police	17	13	-4	-23.53
Attack, insult, hit to other public officers	1		-1	-100.00
Opposition to law No. 6136	27	13	-14	-51.85
Hit	106	216	+110	103.77
Wounding	39	46	+7	17.95
Cheat		18	+18	
Gambling	9	16	+7	77.78
Threat	1	25	+24	2400.00
Suicide	7	6	-1	-14.29
Bribe, debt, corruption		1	+1	
Thievery	52	34	-18	-34.62
Thievery from person	3	12	+9	300.00
Car thievery	8	18	+10	125.00
Thievery from car	35	14	-21	-60.00
Other thievery types	46	61	+15	32.61
Events out of classification	408	174	-234	-57.35
TOPLAM	753	667	-86	-11.42

Source: www.karabuk.gov.tr, Karabük Governorship Department of Security

In the figures of crimes for police follow-up, an important increase in threat, thievery and hit incidents are observed, despite the decrease in total numbers (11.42%). These incidents can be thought to reflect the change in the personal and socio-psychological actions and expressions; as the ones having destructive effects and more violence, increase while total population decrease.

4.2.2.4. Social Groups

With the change in the demographic and occupational structure of the settlement, social groups also changed. In late 1980s, social groups of the city are found to be: prestige, high, middle high, middle bottom, bottom. (BARLAS H.Ü.; 1988). Where “prestige” contains the high rank officers, administrators and managers of the local government and KARDEMİR; “high” class is the some private enterprise owners, technician, engineer and officers of the public establishments. “Middle high” is the tradesman and low rank officers of the establishments and some workers and officers in private enterprises of different sectors in the city. “Middle bottom” and “bottom” is the workers and persons work in temporary positions.

After the privatization, with the migration and retirement of many high rank officials in the city, ratio of the prestige group and high level decreased, and in the second half of 1990, prestige group disappeared in the city.

4.2.2.5. Education, Health and Other Social Affairs

Main difference in education figures of Karabük, from the former period, is the establishment of the faculties and vocational high schools of Zonguldak Karaelmas University in the city and Safranbolu. This creates a temporary low increase in the educated population of students and contributes to the local economic and social life. The decrease in the population of the age groups in 5-20 interval, is reflected to the education figures as the decrease in the number of students. Except this decline, other figures of education show a steady character in numbers of schools, teachers and students. As the specialty of the term, beginning with 1980, is the private courses for entrance exams of university and high schools and Anadolu High Schools giving education in

foreign languages, also established in Karabük. In 11 public schools, 5961 students are educated by 487 teachers and 117 students in 1 private school (TED Karabük College) are educated by 27 teachers, in 1999-2000 term.(Karabük Governorship, 2003)

Health services are developed, compared with the previous term, and different private health institutions are established after 1980s. In the province center, 1 Public Hospital, 1 Birth and Infant Clinic, 2 Mother-Childcare and Family Planning Center, tuberculosis Fight Center, 1 Community Healthcare Laboratory, 38 Health House and 10 Village Clinic, 1 SSK Dispensary and 3 private hospital and polyclinic centers operate, in 2002. A difference is the opening of a private hospital, with the selling of the Demir-Çelik Hospital to a private enterprise in 1995, with the privatization. In overall figures, health and related services in the city appear to increase in both quality and quantity, beginning with the late 1960s and especially in 1980s.

Other social services and affairs, we observe a positive change in activities, as new forms of entertainment and opportunities are introduced, especially in sports and other recreational services. Nevertheless, parallel to this increase, there is also a relative negative condition appear, with the change in the property of some socio-cultural foundations of Iron and Steel Works. Club houses, museum, cinema and hotel owned and managed by KARDEMİR, which were the first examples of the Turkish Republic, sold or hired to private enterprises. Museum and cinema is now operate different from their functions; museum as a unit of a media enterprise and cinema as a center of entertainment games (billiards, electronic games, etc.).

4.2.3. Spatial Effects

Spatial effects of deindustrialization in Karabük are examined in three topics. First is related with the housing and shelter change of the KARDEMİR workers, effecting the spatial structure of the with the intra-city movement and immigration side; second one is the change or transformation in the other land uses in the settlement, designed by planning processes or emergence with the developments and thirdly the public property change and real estate side.

4.2.3.1. Housing and Residential Areas

Change in the housing areas of the city can be examined in two sides. The first is the transformation in the private owned or cooperative housing areas different from the residential areas of KARDEMİR, and the residence areas owned by KARDEMİR.

After 1980s, the city faced with an increase in the cooperative housing, with the support and incentives given by the central government, housing activities of the citizens of Karabük in the residential development areas of the city and improvement planning and renewal projects mainly supported and planned by the Municipality, in the central town quarters of the city. City lived a period of transformation of one or two storey buildings to 5 to 8 storey and 20-30 flat buildings in different town quarters. This transformation is observed especially in the prestige area Şirinevler and neighbor areas, with the effect of the choice of the retired officers to live in these areas and the tendency of the landowners to rental income. Because of this approaches of the landowners, with the influence of construction and the real estate firms newly entered in the economic life, high storey built environment became the main character of the city.

Karabük is a worker city. After the privatization, with the migration of dismissed and retired workers and officers, residential structure of the city lived a relative change. Most of the employees live in settlements near the Factory, like Safranbolu and Karabük and less of them are the residents of other far settlements. Most of the workers live in Beşbinevler, Yeşil, Kayabaşı, Fevzi Çakmak and Yenişehir. Different from the period before privatization, most of the officers, especially the high rank managers and officers, continue to live in Yenişehir and Şirinevler, but now, with some of the workers and contractual officers, as neighbors.

As there is no sufficient knowledge about the settlement places of the workers left KARDEMİR, but the info about the present workers are given below:

Table 22: Residential Areas of Workers by Town Quarters in Karabük (2002)*

QUARTER	Worker	Urban %	District %
ATATÜRK	79	3.491	3.076
ADATEPE	21	0.928	0.818
HÜRRİYET	9	0.398	0.35
NAMIK KEMAL	18	0.795	0.701
BAYIR	36	1.591	1.402
BEŞBİNEVLER	502	22.183	19.548
ERGENEKON	126	5.568	4.907
FEVZİ ÇAKMAK	186	8.219	7.243
KARABÜK	91	4.021	3.544
KAYABAŞI	218	9.633	8.489
KARTALTEPE	56	2.475	2.181
KURTULUŞ	99	4.375	3.855
SOĞUKSU	118	5.214	4.595
ŞİRİNEVLER	117	5.17	4.556
YENİ	59	2.607	2.298
YENİŞEHİR	144	6.363	5.607
YEŞİL	262	11.578	10.202
YÜZÜNCÜ YIL	94	4.154	3.66
ÖĞLEBELİ	28	1.237	1.09
TOTAL (City)	2263	100	88.123

* Refined from the data given by KARDEMİR Department of Human Resources

Table 23: KARDEMİR Employees by residential areas (1997)

	Karabük	Safranbolu	Eskipazar	Others	Total
Officers	456	54	3	3	516
Ratio (%)	88,4	10,5	0,6	0,6	100
Workers	3.139	895	59	32	4.125
Ratio (%)	76,1	21,7	1,4	0,8	100

Source: TUMAŞ, 1997 from KARDEMİR

Table 24: KARDEMİR workers by residential areas (2002)*

	Karabük	Safranbolu	Eskipazar	Yenice	Not defined	Total
Urban	2263	528				2791
Ratio (%)	88.12	80.98				
Rural	305	124				429
Ratio (%)	11.88	19.02				
Total	2568	652	80	16	122	3438

* Refined from the data given by KARDEMİR Department of Human Resources

The second part of the residential area analysis is for the KARDEMİR residential areas in Yenışehir, partly Şirinevler and Ergenekon town quarters.

Change in the residents is noted above. In addition to the change in the residents, the physical environment and usage also change, as well. With the transfer of the property of the residential areas to the new KARDEMİR administration and the decision of KTVKK of Ministry of Culture noting Yenişehir Residential area is an urban and natural conservation area, importance of the areas increased. Nevertheless, despite this importance, this area, aged more than 60, is not cared well and physical space begin to lose its character. As the social structure, constructed by the first and second generation managers and officers, tied to the Establishment with strong emotional and professional bounds, replaced with a less space-devoted social structure, this importance gives its place to a “socio-culturally” slum areas.

4.2.3.2. Changes in Industry, Commerce and Other Landuse

In this period, industrial landuse forms tend to increase with the investments to OSB and KSS usages, out of the settled area of the city. With the establishment activities of Organised Industrial District (OSB) in Zopran road and site for SMEs in Ankara Road environ is the main industrial landuse decisions of the city. Besides these organized activities, near to the Kastamonu and Safranbolu roads, some textile and food industry companies establish their production units (like Ramsey in Kastamonu road), and some mills move to the new industry area in Kurtuluş town quarter.

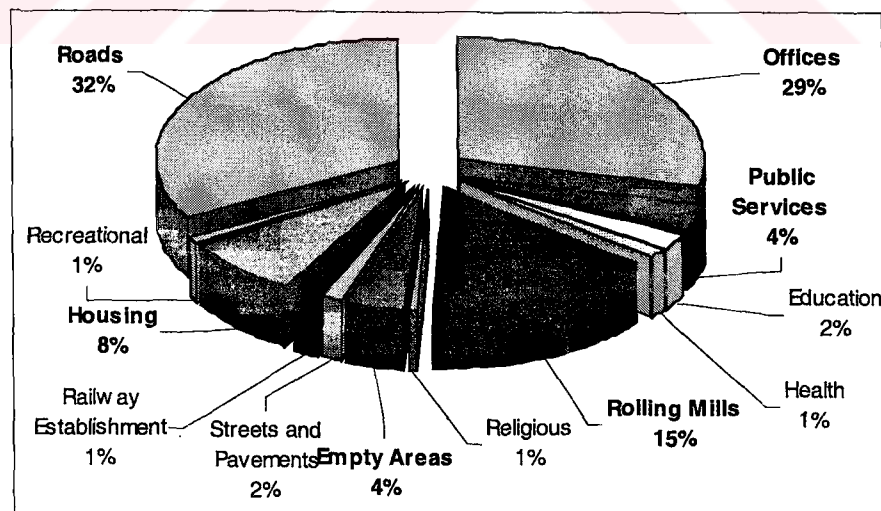


Figure19: Landuse in the CBD

Source: BARLAS H.Ü., 1988

4.2.3.3. Changes in the Land Values, Real Estate and Public Property

When we look to the distribution of the land values, the highest values are in the center and the residential areas where high-level income groups are settled. In the other parts, there seems no large difference between the land values of the residential districts. However, different parts of the residential districts can show different land values, inside. House prices increase in the areas near to the center and in the environs decrease a high level.

Largest land properties belong to public institutions, in Karabük, which are KARDEMİR, TCDD and Forestry .

The public land belonging to Treasury is forest, and nearly whole public land in the city is used. In addition, a cadastral work for the city is finished (TUMAS 1997)

An important change in the property structure of the city is the donation of 170000m² areas of KARDEMİR property, to the General Directorate of National Parks, and the assignment of some part of the property of State Railway Enterprises, in the city center, to the Karabük Municipality, for the planned urban land uses.

Also, Zonguldak Karaelmas University is given 8 big parcels payless, in privatization period.(www.oib.gov.tr)

Prestige areas of the city (Yenişehir and Şirinevler) and the center continue to have the highest land values, with the newly developing housing areas (like Yüzüncüyıl). Other areas in the city do not tend to increase in high amounts, in the order.

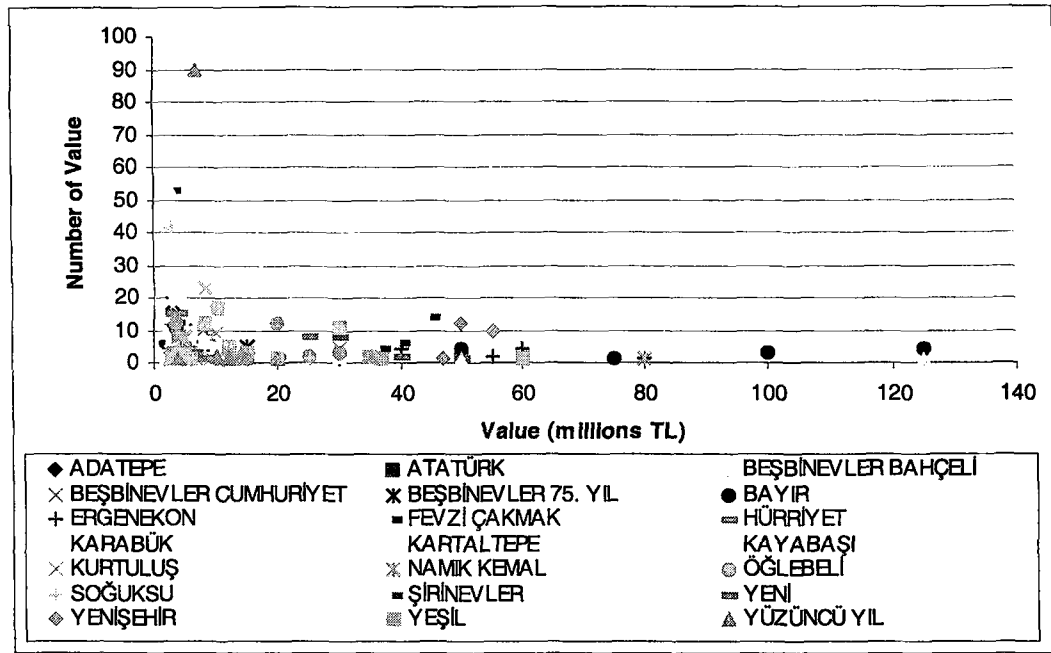


Figure 20: Land Values by Town Quarters (2002)

Source: Karabük Defterdarlığı, 2002

4.2.3.4. Planning Studies

In 1980-2000 period, city plans are revised and new plan for new condition is designed. After a long design and registration period of the planning project in 1980, Ülker Barlas designed the last and valid plan, in 1988.

Plan covers more area than the previous ones and offer residence development areas, different from Safranbolu axis, Kapullu in the north and Zobran direction in the south, with different justifications.

Nevertheless, this plan shared the fate of the previous ones, this time because of not only the unexpected growth pattern or effects on the plan, but the behavior and activity of the Municipality officers, as evaluated by the designers of the plan. In addition, the lack of future sight and “vision” in the settlement is told to be another fact in the planning problem, noted above.

Currently valid plan is based on Barlas plan, but with many modifications of Bükülmez, in 1994. Municipality planning department continues to design some local modifications, on the last “plan”.

4.3. A Comparison

In order to understand the crucial change in Karabük, it is helpful to make a general comparison with another city, having a similar development story.

As having the first, but lower capacity, steel factory of Turkish Republic, Kırıkkale has lived a development period, similar to Karabük, under different social and spatial conditions.

Here, we make general evaluations in two parts, for the comparison of two settlements' general development structure, focusing on the period when KARDEMİR is privatized and restructuring process started in the region, as well. First part is the similarities, second is the differences.

Similarities, between the two cities are found to be mainly in the development processes of the city, only differing in some details:

- Factories are established depending on the national development policies, considering defense factor,
- Both cities began to grow with the worker migration from the other parts of the country, as there are no sufficient and qualified workers in the settlement of environs.
- Both were close and district of an important province. Karabük was a district of Zonguldak, a mining and industry metropolis; while Kırıkkale was a district of Ankara, the capital city of Türkiye.
- Urbanization of the both began in 1940s and with the worker migration and the emergence of the commercial units in the settlement. Besides, environmental settlements and villages faced with a population increase with the new residents.
- Social layers and classes of both settlements reflect the similar results: workers, officers and bureaucrats, tradesman and artisans.

Differences can be listed as follows:

- Karabük Factories is an integrated plant with a large range of products, while Kırıkkale is relatively smaller one with limited product range.
- Kırıkkale Factory is owned by Military (later MKEK, producing for mainly defense concerns) in the establishment, while Karabük Factories was owned by a SoE organization.
- Kırıkkale Factory is still a SoE, while shareholders from different groups own privatized Karabük Factories
- Kırıkkale was able to grow and develop stable, in terms of physical space, while Karabük do not have sufficient physical space opportunities for development.
- Planning processes and physical space design is different.
- Management and operational approaches are different, both before and after 1980s regulations. Kırıkkale Factories did not faced with fluctuations in production, except small changes, and managerial conditions while KARDEMİR could not gain its stability after 1990.
- Population increase and socio-spatial development of Kırıkkale continued after 1990s, both in rural and urban figures, while Karabük lived a high ratio of decline.

Because of this short comparison of two settlements, having similar development processes but so much different political and social effects on them, reflects the importance of political and social policy differentiations. Liberal policies targeting the SoEs, especially in strategical production types, could be successful in Karabük case, much more than Kırıkkale.

Of course, this opens different arguments. However, as this is not the main subject of this study, we will only be contented with this basic comparison.

Both two settlements have different social dynamics, socio-economic inter-relations and political position, although they have very similar development processes.

KARDEMİR could not cope up with the emerging new market conditions, as an integrated plant , and develop its production by means of economic input and exports, affected by the reflections of neoliberal policies, while Kırıkkale continued its life with having a multi sectoral growth pattern after 1980s, as it has a limited and designated market and guaranteed buyer, which are military and related state institutions.

As a result, different from locational problems, threats on the political and social concerns, which Karabük case depend did not give the same reflection in Kırıkkale case, because of the strength of the threat on Karabük is so much. In addition, managerial structure of the establishment and the continuity of the developed social manner and life is another factor of the question.



CHAPTER 5

EVALUATION AND CONCLUSIONS

5.1. Findings

Findings of the study are listed by related main topics, some with their short explanations, below. Main focus is on the case study.

5.1.1. Restructuring and Deindustrialization

- World economic, social and spatial structure lived two main restructuration period in 20th century: first is the shift from agriculture to industry in the first half of the century, defined by industrialization and related concepts, the second is the shift to services in the second half of the century, defined by deindustrialization-tertiarisation-reindustrialization concepts with globalization, in manufacturing based analysis.
- Economic and political restructuring in the world introduced a new international division of labour and changed the forms of work (and management) with disintegration and deregulation.
- This change forced nation states and firms to reorganize their way of production and policies of manufacturing, in order to cope up with the “competitive” economic environment.
- Industrial production, having strategic importance in welfare state and import substitution policies could not adapt to this new conditions

resulting with the decline in the indicators easily, and had to decrease labour with making technological improvements.

- Deindustrialization is lived strikingly in the developed countries, and not only affected local and regional, but also national economic and social structures as well.
- Not only having negative repercussions, deindustrialization showed a form of creative destruction, open to discussion, by destroying the basic statements and activities of national heavy industry approach, but giving opportunities to other forms of “competitive” manufacturing types and services, as well.
- Social structures of the regions and settlements, faced with deindustrialization, also live a decline in the qualitative and quantitative social indicators and population figures, as well.

5.1.2. Iron and Steel Industry

- **Iron and Steel Industry is a very important indicator of economic and social development.**

Iron and steel industry is a type of industry, anticipated to be established depending on the reasons related with the social, political and spatial structuration besides the economic accumulation, like its support to defense industry. Also it has a structure that create economy by the gathering of different types of production like chemicals and by-production, as well as producing the main input of construction sector: steel.

Because of these reasons, having iron and steel industry for a country also means to make an important strategic choice in economic, social, political and spatial fields. Besides being a tool of “progress” (in economical sense) and “development” (in socio-economical sense) for the nation states, iron and steel industry kept its importance of being the most important type of heavy industry.

- **Iron and Steel Industry is not only a tool for economic progress and development, but also social development by creating employment and externalities.**

Iron and Steel Industry, having a large scale of products, by-products and inputs from various sectors, creates employment for professionals in

different technical and managerial fields of production. Besides the labour of the integrated plants, addition of the employment in different sectors (trade, commerce, SMEs, services, etc.) emerged in the environs, shows us the affect of the activity of these establishments, to the social structure.

These establishments do not only act as a supplier of the wages of the workers, but also create opportunities for the employees in all areas of social life and personal development (education, cultural activities, health etc.) by direct or indirect arrangements. Meeting the divergent needs of the new social stratum, to sustain a healthy and educated local community life, is evaluated in this context.

- **Iron and steel industry is also an important tool for spatial development by activating the sub- and by-production activities, with urbanization.**

Factories also function to create living conditions, not only for the labour working in the production processes, but also to the families of the workers and others, who deal with the activities related with (or serve to) the Factories, in social and spatial means. This can be read from the rapid increase in the number of the units in different sectors and their spatial distribution, parallel to the demographic changes in the city, with the establishment process, and the emergence of rapid urbanization.

Industry is known to be an attractive element for urbanization. Increase in the activities of private and public enterprises, with the establishment and starting production of the industrial establishments, activates the social and physical infrastructure investments with the increase in the needs of the local community. This is the main reason of the changes in the qualitative and quantitative values of the urban space, which spreads to its environs and the settlements having economic and social inter-relations, in a relatively short period.

- **Raw material, sub- and by-products of the Iron and Steel Industry is important by creating market for other sectors and settlements.**

I&S Industry has an important position, as market for the sectors dealing with mining, production and distribution of the inputs of the industry (which are coal and iron ore in the lead), and input provider for the sectors using the outputs of the I&S industry (steel, chemicals, etc.). Public and private providers of raw and additive materials for the establishments enlarge the territory of the Factories, as they have influence in the social, political and economical structure of their locality. This effect can reach to the other parts of the country, as well. For example, two main inputs of KARDEMİR come from Zonguldak Coal Basin and Divriği Iron Ore Mines, two different localities in two different regions.

5.1.3. Karabük Iron and Steel Works

- **Establishment of Karabük Iron and Steel Factories is in the framework of the State Policy, as it is seen to be an important tool for national development**

Karabük Iron and Steel Factories is established after a series of activities made according to the decisions of Izmir Economy Congress, which is the first and the most important attempt to establish an independent national economy of the new Turkish Republic. 18 million TLs have been assigned for the establishment process, in 1926, according to the Law for Establishment of Iron Industry, (No.786), but because of some disorganizations, this strategical establishment could have started production 13 years later, in 1939. Birth of the iron and steel industry is supported by the completely state administrative persons, from minister to the president of the republic, as it was seen as a weapon for the “struggle of being”, for the Republic.

- **In the establishment process, president of the republic, prime minister, other government members, general staff and foreign countries (with financial support and the activities of their specialists) have different levels of importance from the location to management activities.**

Different organizations had different interest areas in the establishment process; Ministry of Economy with the economic side, General Staff and Ministry of Defence with the defence side, Sümerbank with the technical and managerial establishment procedures of the Iron and Steel Factories. The lack of sufficient capital and qualified personnel to work in the Iron and Steel Works, was the reason of the cooperation with the foreign countries. Here we have to note that, viewpoint of some specialists seem to evaluate the subject more politically, according to the political and economic strategy of their country, especially in the reports on Turkish economy (like Thornburg). Although some specialists offer locations other than Karabük, in their reports, effects of the coming world war made the General Staff to effect the decision by military doubts.

- **Location of the Factories was argued so much.**

Location for the first Turkish iron and steel factory was offered and reported to be near Ereğli or environs. The lack of knowledge about the presence of the iron ore in Divriği and others, with the effects of the proposals of the foreign experts noting that iron ore should be imported (like Grannig) made the governments to act different than the “best” solution, besides the effect of General Staff. This distant location to the

iron ore mines, later, resulted with relatively high transportation costs, that affect the total price of the products.

- **Despite working low capacity in some periods, the Establishment made profit, from the start of production in 1939 to 1975**

The main support to the Establishment was giving the opportunities to designate the market and competition conditions, by laws and related legislations. Besides, its changing position with the establishment of ERDEMİR and İSDEMİR, effects of the public oriented, long import substitution period, which provides a decision-maker position to the Establishment, is observed to be much more. Decrease in the contribution of the Establishment to the economic life was observed, as it could not reach its production targets because of the problems related with production factors, managerial and administrative activities and some others coming from the establishment processes; with the effects of political interventions and economic factors in 1970s, resulting with over employment and losses in productivity. But the importance of its contribution in terms of social, economic and spatial development is so much and clear.

- **Designating the prices by benefiting from the import substitution oriented system has helped KISW to reach its economic targets.**

Turkish Iron and Steel Works, a public enterprise, has been the only authorized authority for the designating the conditions for the Turkish iron and steel market. Establishment (TISW), continued its activities as the biggest and the most important establishment in the sector, by adding Divriği, Hekimhan, İsdemir and some other related institutions after Karabük Iron and Steel Factories, in a relatively short period of time, although private enterprises operate and grow in the sector. The Establishment have used the tools given by the state, coming from the import substitution and SoE oriented economic approach. Three main reasons for the establishment to reach its targets are: support of state power, qualified, professional managers, and the structure of the national I&S sector.

- **KARDEMİR has important role and contribution in the establishment of other two Iron and Steel Factories, ERDEMİR and İSDEMİR.**

Eregli and Iskenderun Iron and Steel Factories are completely the products and contribution of KISF, both in construction and supply of qualified staff. KISF, which is the founder of İsdemir and associate founder of Erdemir gave its whole "soul" and "freshness", by not only from the technical point of view, but also social side by exporting the qualified staff to all sort of positions in the others. Besides these, one of the major elements of the development of related social, economical and spatial structures of its important units, like Divriği, is KISF.

- **KISF is the most important school for the qualified heavy industry (steel) workers, technicians and officers, of the Turkish Republic.**

KISF's workers, especially staff and people who has worked in the establishment period, and their families, have developed an emotional relation in addition to economical or labour focused relation to Factories. This relation constituted firstly the beginning generation staff who were tied heart and soul, gave all kinds of effort with an instinct, that is created by social structure and conditions to make the enterprises important in national scale, supplying national and local development, the core staff of other iron-steel factories and private small factories, basic labour force.

- **Taking political and financial support from the governments even in the crisis periods was easy, because of its position for the national politics and economy.**

Importance of the development and the management of iron and steel factories, with the transfer of additional economical values to the national economy, are determined as the unchangeable certainty in the studies of the Governments, except the ones after 1980. Because of the state policies, they protect their power and position, having a special territory, as they are important designators of Turkish Industry, although the differences (or absences) between approaches of governments, in contrast to the level of development, support private enterprises in the sector. With S. Erkün's words " Iron and Steel Foundation is itself less-more owns a chief management, looks like a state in another state. Any guest who visits Karabük immediately feels that an industrial power is dominant in the city"

- **Accumulation of the shares in the active shareholders, as a method of privatization, could not be successful in management for the same targets, with different groups having different and sometimes conflicting interests.**

The method of privatization of KISF, occurred after long discussions and tension. After the selling decision which leaded big reactions and criticisms at first, a special privatization method was adopted and the Establishment was sold off by being turned over to the people working in the factory and living in the city. But, because of the reasons like the difference in the ratio of aimed share and the conditions like the existence of labour union in the board of directors, which is an important point in focusing of criticisms and unproductive, ineffective work of the management, KARDEMİR was not managed as expected by the groups who resisted to the selling. Though submission to public and presentation of shares to the stock exchange and some arrangements supplied pure values in economical manner, it introduced important problem especially administrative subjects and some time later, enterprises came to a position that they need state support again.

- **Functional fragmentation of the Establishment and compulsory dismissal of workers result with important social problems, as sufficient prevention was not taken.**

KISW faced with reorganization, by combining related parts or forming autonomous firms from different departments, to lower the number of units, of its integrated structure. For example, marketing and sales department formed to act as a different Co.Inc, steel construction as another, forming a new operational structure and interior organization, different from the previous. Although there are some preventions taken by the local and government administrators, to overcome the unemployment problem after the dismissal, they were not in time and not sufficient, to overcome the main reasons for the migration and the unemployment, in the settlement. This condition also spread to the environs, having inter-relations with the center, but not in high values as expected, because of the social compensation structure of the Turkish society.

- **Establishment, observed to obtain an increase in the economic indicators, began to look for state support in a relatively short period, after the restructuring.**

Establishment, which lived a long problem period because of the political and economical effects of the local and national restructuring, seemed to increase its gains without increase in production, by the entrance of the shares to the stock exchange. Besides, the workers, and local capital owners of the region, as a condition, which must be mostly questioned and examined, bought most of the exchange lots.

- **Administration and production approach for providing a stable management for the Factories could not be developed.**

Executive structure of the Establishment changed in relatively short intervals, for a steady and strong management, with different reasons. Applications of the Executive Board, which syndicate was a member, could not be able to overcome the losses by gains in production and marketing, although some investments and improvements were made. Investments for the renovation and capacity improvement were not sufficient and production targets could not be reached even though progress in quality and labour management issues were observed.

- **Establishment has lost general competitive power that even the reorganization and renewal works was not sufficient to return to the market with an increased competitive production.**

Added to the national policy and economic implementation faults, the pressures of the private arc-oven rolling mills operating in the country, ERDEMİR and ISDEMİR in the national market, and the insufficient administration and production approaches in the lead, resulted with the losses of KARDEMİR, especially in production costs. Leaving KARDEMİR, an integrated steel plant unstable, without investment support, opposite to the general trends in the iron and steel industry, means the disability of the Establishment.

5.1.4. Karabük City

- **Karabük Village having 13 houses, have transformed into the Karabük Province Center with a population of nearly 150.000 in a period of 60 years, from establishment to the privatization.**

Workers and officers in high amount and with different qualifications, which are needed by heavy industry establishments, firstly supplied from outside of the region but afterwards from the region and the migrants settled there. With this trend, the region and its near neighborhood came off its rural status and faced with urbanization fact. In a very short time, it became an essential urban region.

- **Karabük has grown as a city of worker-officer-tradesman, with the rapid urbanization, dependent to KISW.**

Before the beginning of construction of the factories, Karabük village and its neighborhood was composed of families living on farming, low amount of artisans and tradesmen. Safranbolu was carrying on its effect on the region as the nearest urban and administrative center. With the construction of factories, demand created by especially in the construction and then the workers in the production units with public services and officers of factories increased the number of artisans and tradesmen. Especially becoming a district in 1950s and with the establishment of private enterprises accelerated the trend in variety. In the region, the existence of the owner of large areas of land in Safranbolu and inexistence of clear important local capital, limited the development of the classes in the settlement, except these three.

- **A “planned” growth is prepared and expected, but spatial development could not be controlled after a while (especially after 1960s), with the unplanned and unexpected developments**

In addition to the establishment process of the Factories, some plans and arrangements were made to meet the needs of employees, like housing and residential plans, and these plans were realized in a short time. Settlement plans and housing works, which were formed by both foreign and native experts, with the applications that solve housing problems of the people who work (and will work) in the Factories were

realized. But these works could not show a proportional development with the increase of employees. Tradesmen, workers and a small number of officers who were not given houses, participated in an activity of construction, which became dense from the environs to the center. Urban population, which increases gradually, also in this manner, continued its development in physical space. But this development, became an uncontrolled action after 1960s, and especially its implementation of planning side became absent. Because of this, although definite city planning activities were done in the second half of 1960 and afterwards, these could not be completely put into practice.

- **Private enterprises in the region, established or made improvements after the privatization (like textile, food, tourism, etc.) could cover the losses in the total employment, to a degree.**

Local community and economy, earning their living from the production activities of iron and steel and sub sectors for decades, is highly affected from the conditions emerged after the privatization. Privatization, as not being a long-run planned activity, became the main reason for the striking social and demographic change as the activities to prevent and lower the impacts was not implemented. Manufacturing sector established in the region, especially textile and clothing, became an opportunity for recovering this problem, by absorbing –especially woman- workforce from the unemployed quantity. However, the statistics of the unemployment of the qualified men workers do not reflect acceptable values.

- **Despite the some public and private investments, economic and social indicators reflect a recession.**

Projects and investments, in order to lower the social and economic losses and to reach a level of development after the privatization, (like the ones planned by the Governorship), was effective but insufficient for the development targets and stop the decline in the main socio-economic indicators

- **Active population and educated employment values faced with the highest decline in the history of the settlement.**

Karabük City sustained the quantitative and qualitative value increase in the social and economic indicators, gained with the Establishment of the Factories, even in the crisis periods, till 1980s. Settlement faced with losses in the social and economic values (especially in quality), beginning with the restructuring period after 1980, intensified in 1990s with the privatization process. When the demographic change in 1990-2000 period is evaluated, especially loss of educated young population

is observed to be high. In addition, the qualitative values of the social life of the city are told to be in a decline, by the older residents of the city.

- **Qualitative value loss in the social structure is observed besides the quantitative losses.**

Social structure of Karabük and environs is a composition of the social qualifications, produced in long periods. Social values, living in this composition, cannot be easily defined by being a worker-officer-tradesman settlement, but also with the others. Change and transformation in the family structure, religion and faith issues, inter-relations of social groups and classes are the main issues.

- **General political structure and choices of the region, and the city, do not seem to change its peculiarities, which are similar to the country.**

Karabük, from the establishment till today, did not show different political choice and trends from the whole country, depending on the social structure and the values of the local community. When the local and general (political) elections are evaluated, settlement seems to be close to the political thoughts, called as central right (after 1990, an increasing ratio in conservative right is observed). Because of the important political and economic position, no serious tension with the governments and local political power groups is observed, till the restructuring period began in the second half of 1980s, and reached its highest level in privatization period (1990).

- **Similar saying and activities of locally active political and social organizations was observed, but not in a strong partnership except some accompanying lobbying activities.**

Chamber of Industry and Commerce, some other profession organizations, syndicate, some political parties, and NGOs are active and have socio-political power in the local. Cooperation of these structures, having different aim and targets, was observed in their activities in collaborating with others for the resistance to the selling of the Factories in the name of privatization, but this structure could not be sustained except some points of less importance. There were not any cooperation and unity activities, to sustain a partnership for the settlement, except some attempts of some local administrators, governor in the lead, like collecting some separate NGOs in one Karabük oriented foundation or society. Although majority of these social groups declared that they are against the privatization or selling of KARDEMİR, with different reasons, some of them –especially some private iron and steel producers- were out of these cooperative actions.

- **Political and social “power” struggle continues in the Factories and its functional territory (related units and establishments), between some social and political groups (clearly observed in the tension between two syndicates).**

Seeing KARDEMİR as a tool for getting a political and social position and power continues despite this cooperation activities. KARDEMİR appears to be the struggle and tension area of the designated social and political groups. In order to own and use the qualitative and quantitative potentials of the Establishment, different groups “played” on the Factories, for a long time. Most important ones are some political parties, governments of different periods, local capital and private steel producers and syndicates. The political pressures and interferences of governments of some periods negatively affected management and employment structure of the Establishment; power and authority struggle between the syndicates is reflected to the Establishment and market struggle of the private producers has effected the Establishment. National, regional, and local inter-relations of the settlement supported this condition, as well. This is a result of its strong capacity to install political and economical inter-relations countrywide.

5.2.Evaluation

It is clear that restructuring in the whole economic, social and spatial scales, have impacts on the national structures, organized as nation states, in different turn points of the world history. Similarities between these periods are also observed by their results and outcomes in “social” and “spatial” issues. Restructuring in early 20th century resulted with a decline in agricultural indicators, and transformation in the socio-spatial structure dependent to this kind of production, while the increase in the industrial indicators observed. However, the same fact happens in late 20th century to industry with the industrial decline, namely deindustrialization, with the shift to the services sector, in the “age of globalization”.

Restructuring of the “welfare state”, in 1980s and development of global integration models, supported by international organizations (like IMF, WB) imports not only financial opportunities (as they mention), but also social and spatial instabilities with interventions to national economies as well. Thus, the age of nation states is attempted to be ended, with the globalization and its tools. Solutions, processes and tools differ, despite the results are similar.

Negative effects are felt in long periods and seem to use “planning” in the scene but destroying the positive outcomes of it behind the scene.

Effects of this restructuring, depending on the neoliberal ideology, and its applications, using privatization and other deregulation tools, are lived in the areas having “old” production types and processes, by deindustrialization. Not only being established in a public enterprise oriented structure and import substitution policies to strengthen the state, SoEs of main industrial activities were also used as a tool for social and spatial development in planning, by all countries targeting high levels of national and regional development in a designated period.

Coming to the main subject of this study, restructuring in the Turkish economy, as a nation state oriented country, reflects the similar results and implications with the other nation states. Usage of privatization as an important instrument of the neoliberal reorganization of the state, could not reach its targets, as it was not used for a common/public sake and social profit. Turkish economy, mainly manufacturing and industrial production plants of the State (SoEs), made to lose their function of transferring the economic profits to the common social gains, by employment, social security, etc., in this period.

Creating opportunities for the private sector is not only the economic policy of the neoliberal economy, but also one of the important activities of the mixed or statist economy, as well, but by using different tools (legislations, etc.). The difference is in the ratio of the transfer to public and, the owner of the economic profit.

We observe that, the establishment and development of heavy industry (especially coal mining and steel production) as a strategic instrument for the nation states, is one of the most important political and social targets of their existence, as they are the main resources of national defense, mechanization and a tool for socio-spatial development.

Turkish experience of deindustrialization has some similarities with the examples in both developed and developing countries, in function and content. Process begins with the establishment of institutions for privatization and reorganization of the economy, possible methods and target SoEs are chosen

and operations begin. But the main operational difference of the developed country examples is the preparation and formation of the technical and legislative structures to lower the negative impacts of the process. Parallel to this, integration with the other forms of work in the new sectors is supported by special activities like education, worker improvement, etc. But, this activities could not compensate the negative impacts of deindustrialization, even in the developed countries, and the (spatial) division of labour continue to change also with the effects of the raising quantity of cheap labour used by international and multinational companies rooted in the developed countries, that affect the competition environment.

Focusing on the iron and steel industry and related activities (mainly coal mining) of Türkiye, both national and international interferences are seen in the back of the scene. Reorganization of two big SoEs of Turkish heavy industry; Turkish Coal Works in Zonguldak (TKİ) and Karabük Iron and Steel Works in Karabük (KARDEMİR) are the original experiences having implications and effects on sociospatial structure of the former Zonguldak Region. Our case study, KARDEMİR and Karabük city, lived the process and impacts more than any other settlements in the country, by means of sociospatial effects, like Zonguldak.

We evaluate Karabük case, with a sociospatial view, in three main topics: economic, social and spatial.

Different economic activities of the settlement have increased (from four small shops to thousands of offices, markets, shops, restaurants, etc.), beginning with the establishment of the Factories., and raised both in number and type in nearly a 70 years period of time. However, this increase have occurred in the activities mainly dependent to the population, dealing with the works of Iron and Steel Factories, which is the main actor of the base sector of the region. The economy of the settlement, with these new sector improvements, come to a level that imports services and goods to both neighbor settlements, regions and the whole country, like chemicals, food products and also iron and steel based manufacturing products. In other words, the “Boss” of the city was KARDEMİR.

After the privatization, main economic change different from the reorganization outputs of the Factories is the emergence of the new areas of production. Some

of them are related with the region's social, geographical and cultural structure (like food and beverages, clothing, tourism, etc.) and some "imported" to the region (like textile, etc.) using the spare or free workforce and experience of the region (like Gürmen-Ramsey example). Besides, this "reindustrialization" sparks, the movement of the big capital and industrialists of the region, who accumulated from the externalities of the heavy industry production and other fields, to İstanbul and İzmir is observed. This "escape" from the region, parallel to the "investment" on the region shows the change in the source of capital behaviour of the Turkish capitalists, similar to the others operating worldwide: leaving the areas of low competition for entering the area of high competition. Karabük is affected from this condition, as the positive side of the deindustrialization. Fragmentation of the Factories by forming new companies in related but different sectors and the increase in the services with trade activities (most operate out of the settlement) is another fact for employment opportunities and economic activity of the settlement. But not sufficient to gain the former economic life of the city.

Coming to the social side of the fact, we mainly observe a declining demographic change in Karabük, as being the home place of the Factories, in both qualitative and quantitative means, after 1980. Census data of 1980-2000 period reflects the fast decline in both rural and urban values of the settlement, and the employment with economic activity indicators, as well. Especially decline in the male workforce in heavy industry and other related manufacturing with the increase in the number of woman workforce in manufacturing (other than heavy industry) and both male and female in services. In addition, the increase in the ratio of women seeking for a job is an important indicator.

Karabük city is not a traditional Ottoman city, although it is close to Safranbolu. So, the formation of the social structure is so much different than any other "old" settlement of the region, even then Ereğli. People have migrated to the region from different parts of the country, beginning with the establishment process of the Factories, formed the original society of Karabük, the first industrial city of Turkish Republic. This heterogeneous social structure developed as a modern urban-rural transition type settlement, as social and spatial ties to the villages continued in the urbanization period and in the present time. This social ties, later being the main compensation tool for the after-privatization period

unemployment, is rooted from the traditional family type, which has transformed into a modern type in the development process, but still have the same main characteristics.

Karabük is located in a physically defected area, for spatial development. This means, there exist a low potential for spatial development and dispersion opportunities, either planned or not, because of the physical thresholds. This results with the emergence of Safranbolu direction as the spatial development axis of Karabük. Later, this tendency is reflected to the social side and a part of the population of Karabük moved to Safranbolu and its rural areas.

Location and spatial relations of the social groups and stratum, as the main point of the sociospatial analysis, is observed not to change by means of function, but in content as the social structure of the settlement changed. Restructuring period outcomes in social space is observed as the movement of the high rank officers and some middle rank ones out of the city, mainly the homeland of their parents or big cities, and the movement of the others to the housing areas left with this migration. In addition, the ownership change of the land of KARDEMİR, and the lack of spatial care in the former housing areas of KDÇİ (Yenişehir and Şirinevler in the lead), entered a spatial decline period, especially in physical space issues.

5.3. Concluding Remarks

Main concern of this study is to understand the deindustrialization in Karabük, with a sociospatial view. Deindustrialization in Karabük has similarities with the other experiences, mainly in technical and political processes. Also, have differences, which are peculiar to the locality and Turkish society. Differences and reasons are noted below:

- Karabük has developed a social structure that sustain relations with rural, which helps to sustain the solidarity between the members of the families, in crisis times, depending on the strong ties with the traditional background and religious characteristics.

- Social compensation mechanism work more properly than the economic and technical ones, so that social reactions can be given in a short time as a solidarity action.
- Local community in Karabük is so “organized” (but not “planned”) politically, socially, and spatially.
- Targets and lifestyles of the local community of Karabük, similar to the average lifestyle of Turkish society, are so much different from any Western society, which depends on individual more than social.



REFERENCES

1. ACAROĞLU İ., (1973), "Geniş Kapsamlı Planlama Yaklaşımı ve Zonguldak Metropolitan Alan Planlaması", Mimarlık 4/1973, p. 15-21, Mimarlar Odası, Ankara
2. AFETİNAN A., (1989), *İzmir İktisat Kongresi 17 Şubat-4 Mart 1923*, Atatürk Kültür, Dil ve Tarih Yüksek Kurumu Türk Tarih Kurumu Yayınları XVI. Dizi-Sa.46a, 2nd Edition, Türk Tarih Kurumu Basımevi, Ankara
3. ANDERSON J., DUNCAN S., HUDSON R., (1983), "Uneven Development, redundant spaces?: an introduction" , Redundant Spaces, Ch.1, p.1-15, Academic Press, London
4. ATALAY B., (1983), *Sanayileşme ve Sosyal Değişme (Kırıkkale Araştırması)*, DPT Sosyal Planlama Başkanlığı Planlama Dairesi, Ankara
5. ATALAY M., TURHAN M. (2002), "Küreselleşme, Gelişmekte Olan Ülkeler ve Türk İmalat Sanayi", Planlama Özel Sayısı, p. 77-110, Devlet Planlama Teşkilatı, (<http://ekutup.dpt.gov.tr/planlama/42nciyil/atalay.pdf>), Ankara
6. ATASOY V., (1993), *Türkiye'de Kamu İktisadi Teşebbüsleri ve Özelleştirme Sorunu*, Nuru Matbaacılık San.Tic.A.Ş., Ankara
7. ATATEKİN M.E., KOSİF Ç., YALÇINKAYA A.E., NEVRİM B., (2002), *Özçelik-İş Sendikası ve Kardemir Özelleştirmesi*, Özçelik-İş Sendikası Yayınları, Ankara
8. AY TAR D., *Özelleştirmenin Hikayesi*, <http://daytar.tripod.com/>
9. BAETEN G., SWYNGEDOUW E., (1999), "Politics, Institutions and Regional Restructuring Processes: From Managed Growth to Planned Fragmentation in the Reconversion of Belgium's Last Coal Mining Region", Regional Studies, May99, Vol.33, Issue 3, p247-259 (from EbscoHost Academic Search Premier)
10. BARLAS H.Ü., (1988), *Karabük-Zonguldak İmar Planı Analitik Etüdları*

11. BARLAS U., (1986), "Ağır Sanayi Etkisinde (Karabük) Bulak Köyü Halk Bilgisi", 3. Milletlerarası Türk Folklor Kongresi, Seperate Print from Vol.1, Ankara University, Ankara
12. BARLAS U., DOĞAN E., (Ed.), (1988), 51. Yılda Karabük Demir Çelik Fabrikaları, Ünal Ofset, İstanbul
13. BARLAS U., İNCE Y. (Ed.), (1987), 50. Yılda Karabük Demir Çelik Fabrikaları, Ünal Ofset, İstanbul
14. BARLAS U., TANYERİ N., et al. (1991), Karabük Köy Kalkındırma Projesi- Bulak Köyü, Special Report, Karabük
15. BORATAV K., (1998), Türkiye İktisat Tarihi 1908-1985, 6th Edition, Gerçek Yayınevi, İstanbul
16. BORATAV K., TÜRKCAN E., (Ed.) (1994), Türkiye'de Sanayileşmenin Yeni Boyutları ve KİT'ler, Türkiye Araştırmaları- İktisat Politikası Seçenekleri, Tarih Vakfı Yurt Yayınlar, İstanbul
17. COLIN W., TAYLOR J. (1999), "Industrial Restructuring and Regional Policy", Oxford Economy Papers 51, p. 487-516, Oxford University Press, UK
18. COOKE P., (1988), "Spatial Development Process: Organized or Disorganized", Uneven Re-Development (ed.:Massey D. and Allen, J.), Ch.11, p. 232-249, Open University, UK
19. Cumhuriyet, June-December 1994 issues
20. ÇELEBİ İ., (1979), Türkiye'de Demir-Çelik Sanayi'nin Yapısı ve Sorunları, T.C. Başbakanlık Devlet Planlama Teşkilatı Yayın No: DPT 1672-İPD 405, Devlet Planlama Teşkilatı, Ankara
21. ÇELİK-İŞ Syndicate Ankara Central Office and Karabük Branch Executive Board Members (Interview)
22. ÇEVİK M., (1998), Batı Karadeniz Bölgesi Strateji Planı Kapsamında Karabük Kent Merkezi Gelişme Seçenekleri, Unpublished (Undergraduate) Graduation Project Seminar Report,
23. ÇEVİK M., et al. (1996), Planlama Öğrencileri Birliği Karabük Yaz Atölyesi Çalışması , Unpublished Report and Data of POB Karabük Workshop

24. ÇINKI M., "Ulusların Gücü ve Yurdumuzun Tükenişi ya da Tüketilişi",
25. DEITRICK S., BEAUREGARD R.A. (1995), "From Front-runner to Also-ran- the Transformation of a Once Dominant Industrial Region: Pennsylvania, USA", The Rise of the Rustbelt (ed. :Cooke, P.), p. 52-71, UCL Press, London
26. DEMİR ÇELİK ÜRETİCİLERİ DERNEĞİ Dergisi, Ekim-Aralık 2002,s. 30, Ankara
27. DEMİR ÇELİK ÜRETİCİLERİ DERNEĞİ Dergisi, Temmuz-Eylül 2002, s. 29, Ankara
28. Devlet İstatistik Enstitüsü, 1970 Bina Sayımı, DİE, Ankara
29. Devlet İstatistik Enstitüsü, 1970 Genel Nüfus Sayımı Sonuçları-Çankırı, DİE, Ankara
30. Devlet İstatistik Enstitüsü, 1970 Genel Nüfus Sayımı Sonuçları-Zonguldak, DİE, Ankara
31. Devlet İstatistik Enstitüsü, 1980 Genel Nüfus Sayımı Sonuçları-Çankırı, DİE, Ankara
32. Devlet İstatistik Enstitüsü, 1980 Genel Nüfus Sayımı Sonuçları-Zonguldak, DİE, Ankara
33. Devlet İstatistik Enstitüsü, 1980 Genel Sanayi ve İşyerleri Sayımı 1. Aşama Sonuçları-Zonguldak, DİE, Ankara
34. Devlet İstatistik Enstitüsü, 1980 Genel Sanayi ve İşyerleri Sayımı 1. Aşama Sonuçları-Çankırı, DİE, Ankara
35. Devlet İstatistik Enstitüsü, 1984 Bina Sayımı, DİE, Ankara
36. Devlet İstatistik Enstitüsü, 1990 Genel Nüfus Sayımı, Nüfusun Sosyal ve Ekonomik Yapısı-Çankırı, DİE, Ankara
37. Devlet İstatistik Enstitüsü, 1990 Genel Nüfus Sayımı. Nüfusun Sosyal ve Ekonomik Yapısı-Zonguldak, DİE, Ankara
38. Devlet İstatistik Enstitüsü, 2000 Bina Sayımı, DİE, Ankara

39. Devlet İstatistik Enstitüsü, *2000 Genel Nüfus Sayımı, Nüfusun Sosyal ve Ekonomik Yapısı-Karabük*, DİE, Ankara
40. Devlet İstatistik Enstitüsü, *Boşanma İstatistikleri 1996-2000*, DİE, Ankara
41. Devlet İstatistik Enstitüsü, *Evlenme İstatistikleri 1996-2000*, DİE, Ankara
42. Devlet İstatistik Enstitüsü, *İntihar İstatistikleri 1996-2000*, DİE, Ankara
43. Devlet İstatistik Enstitüsü, *Ölüm İstatistikleri 1996-2000*, DİE, Ankara
44. ENGİN A., (1994), "Özelleştirme-Kamu Mülkü Haraç Mezat", Series in Cumhuriyet Newspaper, in June 1994 issues
45. ERAYDIN A., (1997), "Değişen Dünyada Bölge Planlamanın Yeniden Tanımlanması: Bir Ekonomik Bütünleşme ve Demokratikleşme Projesi", Planlama- Journal of the Chamber of City Planners, Issue:15-97/1, TMMOB Şehir Plancıları Odası, Ankara
46. ERDER L., (1968), *Migration and Economic Activity in the Karabük Subregion: A Case Study Based on Selected Indicators*, METU, Ankara (Masters Thesis)
47. ERDOĞAN N., (1991), *Sosyolojik Açıdan Kent İşsizliği ve Anomi*, Ege Üniversitesi Edebiyat Fakültesi Yayınları No:62, Ege Üniversitesi Basımevi, İzmir
48. ERKUN S., (1985) "Türkiye'de İlk Ağır Sanayi Yerleşimi: Karabük'ün Kuruluş Dönemi", Kentleşme-Sanayileşme Etkileşimi-Dünya Şehircilik Günü 9. Kolokyumu Kitabı, p.35-44, Dünya Şehircilik Günü Türkiye Daimi Komitesi, İstanbul
49. ERSOY M., ŞENGÜL T. (Ed.), (2001), *Sanayisizleşme Sürecinin Kentsel Yaşama Etkileri: Zonguldak Örneği*, ODTÜ Kentsel politika Planlaması ve Yerel Yönetimler Ana Bilim Dalı Yayın No: 5, ODTÜ Mimarlık Fakültesi Basım İşliği, Ankara
50. ERSÖZ H.Y., (2001), "Özelleştirmede Çalışanların Mülkiyet Sahipliği: KARDEMİR Örneği", Çimento İşveren Dergisi, issue: 5, vol.:15, p.13-26, <http://www.cmis.org.tr>
51. ESER U., (1993), *Türkiye'de Sanayileşme*, İmge Kitabevi, Ankara

52. FINDIKOĞLU, Z.F., (1964), *Amme ve Belediye Hizmetleri Bakımından Karabük*, İktisat Fakültesi Neşriyatı No:133-İktisat ve İçtimaiyat Enstitüsü Neşriyatı No:31, İstanbul
53. FOTHERGILL S., GUDGIN G., KITSON M., MONK S., (1988), "*The Deindustrialization of the city*", *Uneven Re-Development* , Ch. 3, p. 68-86, Open University, UK
54. FRIEDMAN A., (1981), "*Social Relations at Work and the Generation of Inner City Decay*", *Redundant Spaces*, Ch.3, p.51-65, Academic Press, London
55. GENEL MADEN-İŞ, (1992), 2. Zonguldak Kurultayı: Sorunlarımız ve Çözüm Önerileri, Zonguldak
56. GOTTDIENER H., (1994), *The New Urban Sociology*, McGraw-Hill
57. GRAHAM D., SPENCE N., (1995), "*Contemporary Deindustrialization and Tertiarisation in the London Economy*", *Urban Studies*, Jun95, Vol.32, Issue 6, p 885 (electronical issue gathered from EbscoHost)
58. GÜVENÇ M., (2000), "*İstanbul'u Haritalamak:1990 Sayımından İstanbul Manzaraları*", *İstanbul Dergisi*, No:34
59. GÜVENÇ M., (2000), "*Kent Araştırmasına İlişkisel Yaklaşım: İşyeri-Statü Farklılaşması ve Mekansal İzdüşümleri*", Mübeccel Kıray İçin Yazılar, p.261-272, Bağlam Yayınları, İstanbul
60. HATMAN A., (2001), "*Sanayisizleşmenin Gölgesinde Mühendisler ve Mühendislik*", TMMOB Sanayi Kongresi 2001 – Küreselleşme ve Sanayileşme, p. 257-261, İstanbul
61. HUDSON R., (1988), "*Labour Market Changes and New Forms of Work in "Old" Industrial Regions*", *Uneven Re-Development* , Ch. 7, 147-166, Open University, UK
62. Hürriyet, June-December 1994 issues
63. Iron and Steel Organisations Website, <http://www.steel.org>
64. IVERSEN T., CUSACK R.T. (1998) "*The Causes of Welfare State Expansion: Deindustrialization or Globalization?*", Social Science Research Center Discussion Paper, ISSN Nr. 1011-9523, Berlin

65. İLLER BANKASI (1968), *Karabük-Safranbolu Analitik Etüdler ve Teklif Projeler*, İller Bankası, Ankara
66. İMAR VE İSKAN BAKANLIĞI (1964), *Zonguldak Bölgesi Ön Planı*, Planlama ve İmar Genel Müdürlüğü Bölge Planlama Dairesi, Ankara
67. İMAR VE İSKAN BAKANLIĞI, (1971), *Batı Karadeniz Bölgesi Bölgesel Gelişme, Şehirleşme ve Yerleşme Düzeni*, Planlama ve İmar Genel Müdürlüğü Bölge Planlama Dairesi, Ankara
68. KAHYAĞLU D., (1966), *Report on Karabük*, METU, Ankara (Masters Thesis)
69. Karabük Governorship Website, www.Karabük.gov.tr
70. Karabük Municipality Website, www.Karabük-bld.gov.tr
71. KARABÜK Municipality, Directorate of Public Works (Mapping and Planning Branches)
72. KARABÜK TSO, *Karabük Ticaret ve Sanayi Odası Dergisi*, Year:2, No:2, Jan.-Feb. 1987, KARABÜK
73. KARABÜK TSO, *Karabük Ticaret ve Sanayi Odası Dergisi*, Year:2, No:3, March-April 1987, KARABÜK
74. KARABÜK TSO, *Karabük Ticaret ve Sanayi Odası Dergisi*, Year:2, No:4, May-June 1987, KARABÜK
75. KARABÜK BELEDİYESİ,(1986), *Karabük 85*
76. KARABÜK TİCARET VE SANAYİ ODASI, (2001), *2001, Yearbook*, Karabük
77. KARABÜK VALİLİĞİ SANAYİ VE TİCARET İL MÜDÜRLÜĞÜ, (1997), *Karabük İli Ekonomik ve Ticari Durum Raporu*, Karabük
78. KARABÜK VALİLİĞİ SANAYİ VE TİCARET İL MÜDÜRLÜĞÜ, (2002) *2001 Yılı Karabük İlinin Yıllık Sanayi ve Ticari Durum Hakkındaki Rapor*, Karabük
79. KARDEMİR A.Ş. Website, www.kardemir.com
80. KARDEMİR A.Ş. (2002), *2002 Yılı Raporu*, Karabük

81. KARDEMİR A.Ş., Department of Human Resources
82. KARDEMİR, *Ürünler Kataloğu*, KARDEMİR Karabük Demir Çelik Sanayi Ticaret A.Ş., Karabük
83. KDÇİ, *Karabük Iron and Steel Works*, Ünal Ofset, İstanbul
84. KIRAY M., (1964), *Ereğli: Ağır Sanayiden Önce Bir Sahil Kasabası*, Mübeccel Kiray - Bütün Eserleri 1, İletişim Yayınları, İstanbul
85. KIRAY M., (1999), *Toplumsal Yapı Toplumsal Değişme*, Toplu Eserleri 4, Bağlam Yayınları, İstanbul
86. KONGAR E., *İmparatorluktan Günümüze Türkiye'nin Toplumsal Yapısı*, Cem Yayınevi, İstanbul
87. KÖSE S., (2002), "24 Ocak 1980 ve 5 Nisan 1994 İstikrar Programlarının Karşılaştırması", *Planlama Özel Sayısı*, p. 119-128, Devlet Planlama Teşkilatı (<http://ekutup.dpt.gov.tr/planlama/42nciyil/koses.pdf>), Ankara
88. LEFEBVRE, H., (1991) , "Social Space", *Production of Space*, Ch.2, p.68-168, Basil Blackwell, London
89. MALİYE BAKANLIĞI KARABÜK DEFTERDARLIĞI, (2002), *2002 Yılında Uygulanacak Asgari Arsa ve Arazi Metrekare Birim Değerleri*, Karabük
90. MASSEY D., (1984), *Spatial Divisions of Labour: Social Structures and the Geography of Production*, Macmillan Press, London
91. MASSEY D., (1988), "Uneven Development: social change and spatial divisions of labour", *Uneven Re-Development*, Ch. 12, p. 250-276, Open University, UK
92. MASSEY D., MEEGAN R., (1982), *The Anatomy of Job Loss*, Methuen & Co. Ltd., London
93. McMULLEN S., "From Steel Mills to Shopping Malls: Changing Social Relations in the Wake of Deindustrialization in Two Old Industrial Regions", UC San Diego, Dept. Of Sociology, USA
94. MİLLİ PRODÜKTİVİTE MERKEZİ, (1982), *Demir-Çelik Semineri*, Milli Prodüktivite Merkezi Yayınları:264, Ankara

95. MORGAN K., SAYER A., (1981), "*Regional inequality and the state in Britain*", Redundant Spaces, Ch.2, p. 17-49, Academic Press, London
96. MORRIS J., PLAKE R. (1995) "*The Restructuring of the Steel Industries in Germany and Great Britain*", The Rise of the Rustbelt (ed. COOKE, P.), p. 72-102, UCL Press, London
97. MOSS P., (1995), "*Inscribing Workplaces: The Spatiality of the Production Process*", Growth and Change, Winter95, Vol.26, Issue 1. (from EbscoHost Academic Search Premier)
98. MURGATROYD L., URRY J., (1981), "*The Restructuring of a local economy: the case of Lancaster*", Redundant Spaces, Ch.4, p.67-98, Academic Press, London
99. OCAKLI M.H., (2001), "*Özelleştirme Politikaları ve Demir Çelik*", (Paper presented in the symposium organised by ERDEMLİR, in Oct. 2001)
100. OECD, (1994), Regional Problems and Policies in the United Kingdom, OECD, Paris
101. ÖZÇELİK-İŞ SENDİKASI, (1994), Karabük Kapatılamaz: Karabük D.Ç. Fabrikalarının Kapatılmasına Karşı Alternatif Görüşler, Özçelik-İş Sendikası, Ankara
102. ÖZÇELİK-İŞ SENDİKASI, (2002), 10. Olağan Genel Kurul Faaliyet Raporu, Özçelik-İş Sendikası, Ankara
103. ÖZÇELİK-İŞ Website, <http://www.ozcelikis.org.tr>
104. ÖZGÜN K., (1976), Zonguldak Maden Havzasında İstihdam Modeli ve Yerleşme Dokusunu Etkileyişi, METU, Ankara (Masters Thesis)
105. PERRUCCI C.C., PERRUCCI R., TARG D.B., TARG H.R., (1988), Plant Closings: International Context and Social Costs, Aldine de Gruyter, NY
106. POUNDS N.J.G., (1966), The Geography of Iron and Steel, Hutchinson University Library, Hutchinson & Co. Publishers Ltd., London
107. POUNDS N.J.G., (1968), The Ruhr: A Study in Historical and Economic Geography, Ch.6 & Ch.8, Greenwood Press, NY

108. POYRAZ L., EGE E., Karabük'ün Kuruluşu ve Gelişmesi, METU Research Report
109. PRECHEL H., (1990), "Steel and the State: Industry Politics and Business Policy Formation, 1940-1989", American Sociological Review
110. RODWIN L., SAZANAMI H., (1989), "Deindustrialization and regional economic transformation", Deindustrialization and Regional Economic Transformation in US, Ch.1, p.3-28, UNCRD
111. ROGERS A., (2001), Article in April 30 issue of Newsweek, www.newsweek.com
112. ROWTHORN R., RAMASWAMY R., (1999), "Growth, Trade and Deindustrialization", IMF Staff Papers Vol.46, No:1, <http://www.imf.org>
113. ROWTHORN R., RAMASWANY R., (1997), "Deindustrialization: Causes and Implications", IMF Working Paper, www.imf.org
114. SMITH N., (1990), "Uneven Development: Nature, Capital and the Production of Space", Basil Blackwell, USA
115. State Institute of Statistics Website, www.die.gov.tr
116. State Planning Organisation Website, www.dpt.gov.tr
117. SÜMERBANK, (1937), Karabük Demir Çelik Fabrikaları, Sümerbank, Ankara
118. SYKORA, L. , "Processes of Socio-Spatial Differentiation in Post-Communist Prague", Housing Studies, Sep 99, Vol.14, Issue 5
119. ŞAFAK GAZETESİ, (1996), Karabük '96, Karabük
120. T.C. Başbakanlık Özelleştirme İdaresi Başkanlığı, <http://www.oib.gov.tr>
121. TAMAS P., (1999), "Deindustrialization in Post-Socialism. Strategies for Co-Habitation with Long Term Unemployment in Hungary", Unemployment: Risks and Reactions (ed.:GENOV, N.), Friederich Ebert Stiftung, Paris (electronic edition)

122. TANSEL A., (2002), "The Effects of Privatization on Labor in Turkey", ERC Working Papers in Economics 01/03, May 2003, METU, Ankara
123. TEZEL Y.S., (2003), "1934 Sanayi Programı ve Türkiye'de İktisadi Devletçilik'in Tarihindeki Yeri", <http://www.geocities.com/ystezel/>
124. TMMOB Şehir Plancıları Odası (1997), Özelleştirme ve Kamu Arazileri, TMMOB Şehir Plancıları Odası, Ankara
125. TODES A., "Socio-Spatial Effects of Economic Restructuring: The Case of Newcastle", University of Natal, Department of Planning, Durban
126. TORRES, R.E. (1991) "Health Consequences of an Unhealthy Economy: Latinos in the Midwest", Eastern Michigan University Working Paper No:10, USA
127. TURKISH IRON AND STEEL WORKS, Engineering Projects and Products -Karabük, Özer Matbaası, Karabük
128. Turkish Great National Assembly Website, www.tbmm.gov.tr
129. Turkish Iron and Steel Producers Association Website, www.dcu.org.tr
130. Turkish Prime Ministry Website, www.basbakanlik.gov.tr
131. TÜMAŞ-GERSAR-BRL (1997), "Karabük İlinin Kentsel Master Plan Etüdü", Zonguldak-Bartın-Karabük Bölgesel Gelişme Projesi, Cilt VI-3, Devlet Planlama Teşkilatı Müsteşarlığı Bölgesel Gelişme ve Yapısal Uyum Genel Müdürlüğü, Ankara
132. TÜMAŞ-GERSAR-BRL (1997), "Zonguldak-Bartın-Karabük Bölgesel Gelişme Projesi Mevcut Durum Değerlendirme Raporu", Zonguldak-Bartın-Karabük Bölgesel Gelişme Projesi, Cilt II, Devlet Planlama Teşkilatı Müsteşarlığı Bölgesel Gelişme ve Yapısal Uyum Genel Müdürlüğü, Ankara
133. TÜMERTEKİN E., (1969), Sanayi Coğrafyası, İstanbul Üniversitesi Yay. No:751- Coğrafya Enstitüsü Yay. No:22, İstanbul
134. TÜRK KAMU İŞLETMELERİ BİRLİĞİ, (1995), Özelleştirmenin Sosyal, Ekonomik ve Siyasi Boyutları, Published Symposium and Pannel Notes, Ankara

135. TÜRK-İŞ, (1998), KİT'ler ve Özelleştirme: İddialar ve Gerçekler, Türk-İş Araştırma Merkezi, Ankara
136. TÜRKKAN E., (1992), "1980 Sonrasında Sanayileşme", Türkiye Ekonomisi: Sektörel Gelişmeler, p.49-76, Türkiye Ekonomi Kurumu, Ankara
137. ÜNAL, Y. (1982), "Karadeniz Ereğli'de Toplumsal Yapı-Fiziksel Yapı İlişkileri", Türkiye Birinci Şehircilik Kongresi 1. Kitap, p. 101-132, ODTÜ Şehir ve Bölge Planlama Bölümü, Ankara
138. WARN S., (1998), "Deindustrialization", Geofactsheet, April 1998, No:41, Geopress, Birmingham
139. WATTS M., VALADKHANI A. (2001), "The Impact of Deindustrialization on Employment Outcomes in Australia, Japan and the USA", Understanding Unemployment in Australia, Japan and the USA Workshop, Centre of Full Employment and Equity, Univ. Of Newcastle, Australia
140. YAZICI E., (1993), Sosyo-Kültürel Değişim Sürecinde Karabük'te İşçi Ailesi, İmaj Yayınevi, Ankara
141. ZONGULDAK VALİLİĞİ, (1968), Zonguldak 1967 İl Yıllığı, Ajans-Türk Gazetecilik ve Matbaacılık Sanayii, Ankara

APPENDICES

1. Master Plan of Karabük (1967)
Source: İller Bankası, 1967
2. Regional Existing Landuse (Karabük and Safranbolu) (1997)
Source: TÜMAŞ, 1997
3. City Plan of Karabük by Nezihe and Pertev Taner (1948)
Source: İller Bankası, 1967
4. City Plan of Karabük by Gündüz Özdeş (1967)
Source: İller Bankası, 1967
5. City Plan of Karabük by H. Ülker Barlas (1988)
Source: BARLAS H.Ü., 1988
6. Karabük Existing Landuse (1967)
Source: İller Bankası, 1967
7. Karabük Existing Landuse (1997)
Source: TÜMAŞ, 1997
8. Industrial Placement (1997)
Source: TÜMAŞ, 1997
9. Locations of Public Properties (1997)
Source: TÜMAŞ, 1997
10. Karabük District Population Change Map (1950-1980 and 1980-200)
11. Karabük (Center) Age Pyramide 1990-2000
Source: SIS,

KARAHUKYI SAFRANBOLU MEVCUT DURUM
REGIONAL EXISTING LAND USE



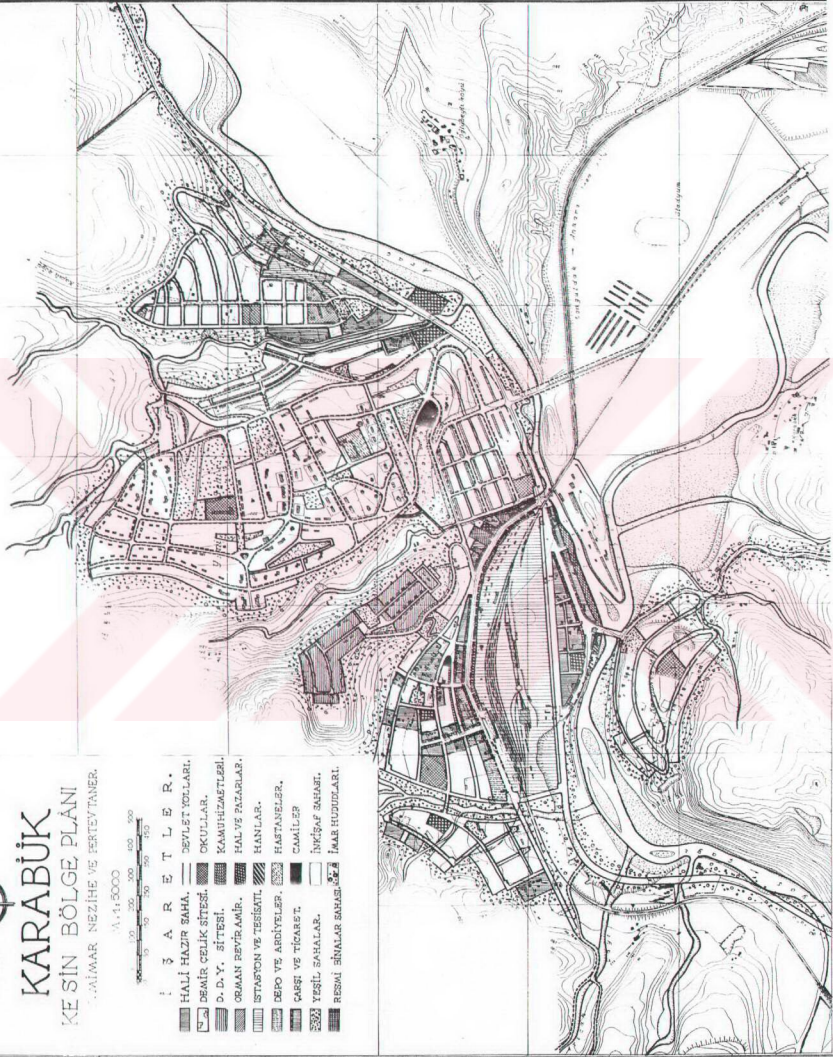
KARABÜK KEŞİN BÖLGE PLANI

ALIMAR NEZİHE VE FETEVANER.

1:5000



- İ Ş A R E T L E R .**
- HALI HAZIR SAHA. — DEVLET YOLLARI.
 - DEMİR ÇELİK ŞİŞE. — OKULLAR.
 - D. D. Y. ŞİŞE. — KAMU HİZMETLERİ.
 - ORMAN BEYRAMLAR. — HAL VE PAZARLAR.
 - STASYON VE TESİSAT. — HANLAR.
 - DEPO VE ARKİVELER. — HASTANELER.
 - GARİ VE TİCARİET. — CAMİLER.
 - YEŞİL SAHALAR. — İNÇİFAK SAHALAR.
 - RESMİ BİNALAR SAHALAR. — PAZAR HUZURLARI.



RABÜK (Zonguldak) - İZMİR PLANI 1/5000

- AK VE YEŞİL ALANLAR**
- 1. Ak alan
 - 2. Yeşil alan
 - 3. Ak alan
 - 4. Yeşil alan
 - 5. Ak alan
 - 6. Yeşil alan
 - 7. Ak alan
 - 8. Yeşil alan
 - 9. Ak alan
 - 10. Yeşil alan
 - 11. Ak alan
 - 12. Yeşil alan
 - 13. Ak alan
 - 14. Yeşil alan
 - 15. Ak alan
 - 16. Yeşil alan
 - 17. Ak alan
 - 18. Yeşil alan
 - 19. Ak alan
 - 20. Yeşil alan
 - 21. Ak alan
 - 22. Yeşil alan
 - 23. Ak alan
 - 24. Yeşil alan
 - 25. Ak alan
 - 26. Yeşil alan
 - 27. Ak alan
 - 28. Yeşil alan
 - 29. Ak alan
 - 30. Yeşil alan
 - 31. Ak alan
 - 32. Yeşil alan
 - 33. Ak alan
 - 34. Yeşil alan
 - 35. Ak alan
 - 36. Yeşil alan
 - 37. Ak alan
 - 38. Yeşil alan
 - 39. Ak alan
 - 40. Yeşil alan
 - 41. Ak alan
 - 42. Yeşil alan
 - 43. Ak alan
 - 44. Yeşil alan
 - 45. Ak alan
 - 46. Yeşil alan
 - 47. Ak alan
 - 48. Yeşil alan
 - 49. Ak alan
 - 50. Yeşil alan
 - 51. Ak alan
 - 52. Yeşil alan
 - 53. Ak alan
 - 54. Yeşil alan
 - 55. Ak alan
 - 56. Yeşil alan
 - 57. Ak alan
 - 58. Yeşil alan
 - 59. Ak alan
 - 60. Yeşil alan
 - 61. Ak alan
 - 62. Yeşil alan
 - 63. Ak alan
 - 64. Yeşil alan
 - 65. Ak alan
 - 66. Yeşil alan
 - 67. Ak alan
 - 68. Yeşil alan
 - 69. Ak alan
 - 70. Yeşil alan
 - 71. Ak alan
 - 72. Yeşil alan
 - 73. Ak alan
 - 74. Yeşil alan
 - 75. Ak alan
 - 76. Yeşil alan
 - 77. Ak alan
 - 78. Yeşil alan
 - 79. Ak alan
 - 80. Yeşil alan
 - 81. Ak alan
 - 82. Yeşil alan
 - 83. Ak alan
 - 84. Yeşil alan
 - 85. Ak alan
 - 86. Yeşil alan
 - 87. Ak alan
 - 88. Yeşil alan
 - 89. Ak alan
 - 90. Yeşil alan
 - 91. Ak alan
 - 92. Yeşil alan
 - 93. Ak alan
 - 94. Yeşil alan
 - 95. Ak alan
 - 96. Yeşil alan
 - 97. Ak alan
 - 98. Yeşil alan
 - 99. Ak alan
 - 100. Yeşil alan

- YOL VE ALTYAPU**
- 1. Yol
 - 2. Altyapı
 - 3. Yol
 - 4. Altyapı
 - 5. Yol
 - 6. Altyapı
 - 7. Yol
 - 8. Altyapı
 - 9. Yol
 - 10. Altyapı
 - 11. Yol
 - 12. Altyapı
 - 13. Yol
 - 14. Altyapı
 - 15. Yol
 - 16. Altyapı
 - 17. Yol
 - 18. Altyapı
 - 19. Yol
 - 20. Altyapı
 - 21. Yol
 - 22. Altyapı
 - 23. Yol
 - 24. Altyapı
 - 25. Yol
 - 26. Altyapı
 - 27. Yol
 - 28. Altyapı
 - 29. Yol
 - 30. Altyapı
 - 31. Yol
 - 32. Altyapı
 - 33. Yol
 - 34. Altyapı
 - 35. Yol
 - 36. Altyapı
 - 37. Yol
 - 38. Altyapı
 - 39. Yol
 - 40. Altyapı
 - 41. Yol
 - 42. Altyapı
 - 43. Yol
 - 44. Altyapı
 - 45. Yol
 - 46. Altyapı
 - 47. Yol
 - 48. Altyapı
 - 49. Yol
 - 50. Altyapı
 - 51. Yol
 - 52. Altyapı
 - 53. Yol
 - 54. Altyapı
 - 55. Yol
 - 56. Altyapı
 - 57. Yol
 - 58. Altyapı
 - 59. Yol
 - 60. Altyapı
 - 61. Yol
 - 62. Altyapı
 - 63. Yol
 - 64. Altyapı
 - 65. Yol
 - 66. Altyapı
 - 67. Yol
 - 68. Altyapı
 - 69. Yol
 - 70. Altyapı
 - 71. Yol
 - 72. Altyapı
 - 73. Yol
 - 74. Altyapı
 - 75. Yol
 - 76. Altyapı
 - 77. Yol
 - 78. Altyapı
 - 79. Yol
 - 80. Altyapı
 - 81. Yol
 - 82. Altyapı
 - 83. Yol
 - 84. Altyapı
 - 85. Yol
 - 86. Altyapı
 - 87. Yol
 - 88. Altyapı
 - 89. Yol
 - 90. Altyapı
 - 91. Yol
 - 92. Altyapı
 - 93. Yol
 - 94. Altyapı
 - 95. Yol
 - 96. Altyapı
 - 97. Yol
 - 98. Altyapı
 - 99. Yol
 - 100. Altyapı

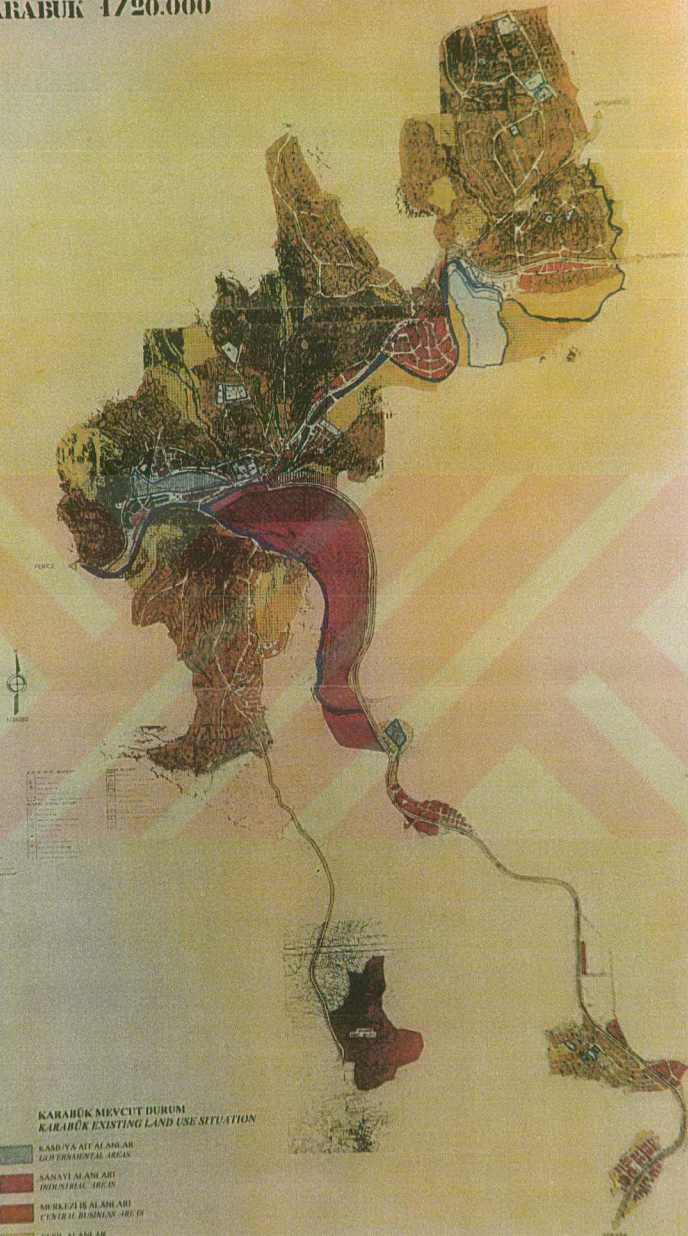
YOL VE ALTYAPU
1/5000

KARABÜK BUGÜNKÜ ARAZI KULLANILIŞI

- | | |
|----------|----------|
| İSKAN | ENDÜSTRİ |
| DEPOLAMA | MEZARLIK |
| TİCARET | YEŞİL |

0 100 200 400 600 800 1000





KARABÜK MEVCUT DURUM
KARABÜK EXISTING LAND USE SITUATION

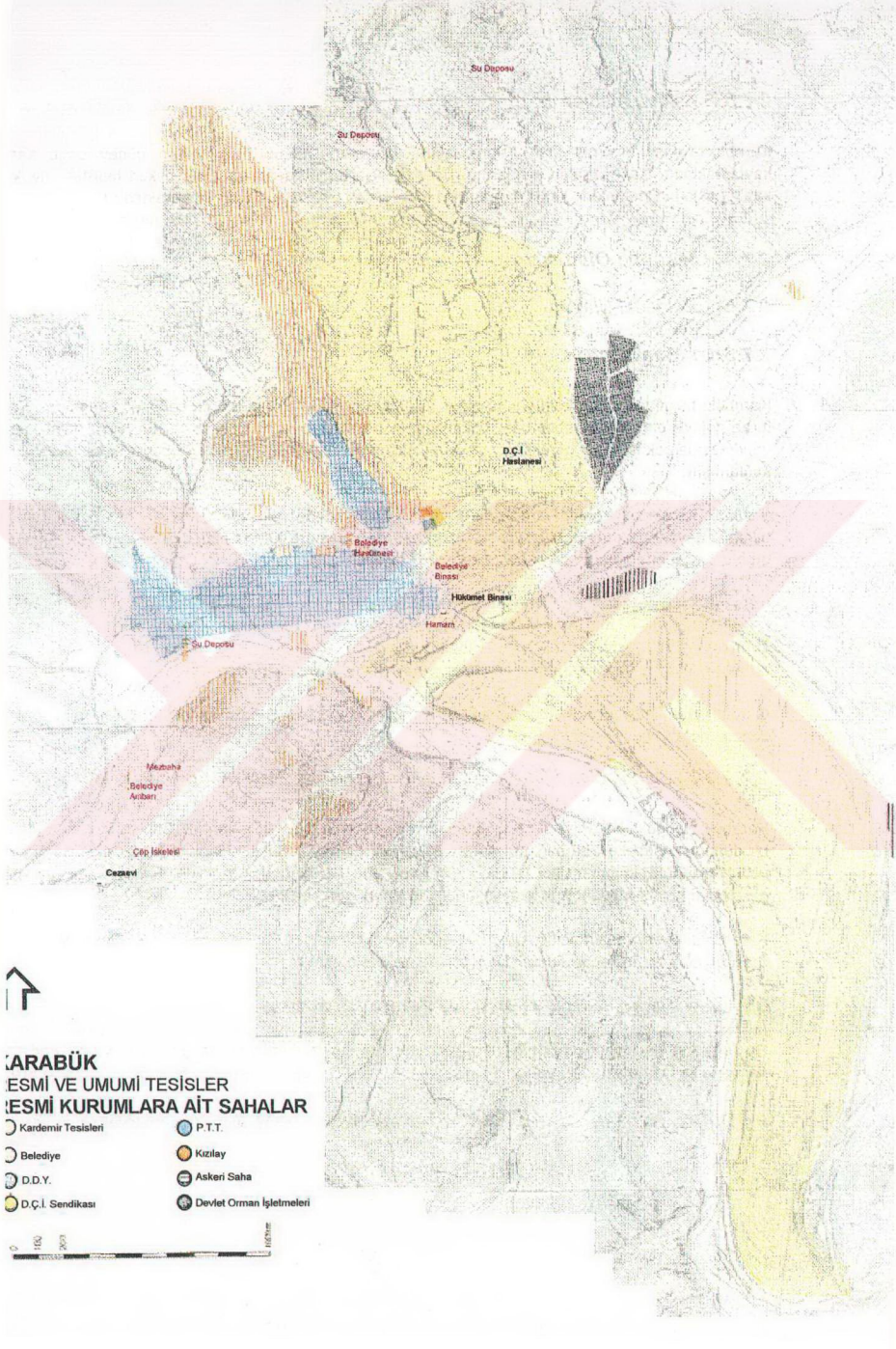
- KARABÜK ŞEHİR ALANLARI
GOVERNMENTAL AREA
- SANAYİ ALANLARI
INDUSTRIAL AREA
- MERKEZİ İŞ ALANLARI
CENTRAL BUSINESS AREA
- YEŞİL ALANLAR
GREEN AREAS
- KAMUİ ALANLARI
RESIDENTIAL AREA
- YOLLAR
ROADS

KARABÜK 1/20.000



SANAYİ YER SEÇİMİ
INDUSTRIAL PLACEMENT

SANAYİ ALANLARI
INDUSTRIAL AREAS



ARABÜK

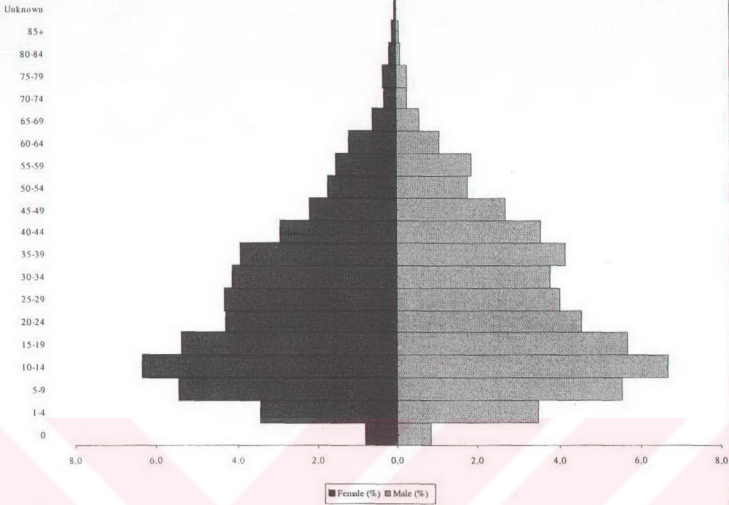
ESMİ VE UMUMİ TESİSLER

ESMİ KURUMLARA AİT SAHALAR

- Kademir Tesisleri
- Belediye
- D.D.Y.
- D.C.I. Sendikası
- P.T.T.
- Kızılay
- Askeri Saha
- Devlet Orman İşletmeleri



Karabük (Center) Age Pyramide 1990



Karabük (Center) Age Pyramide 2000

