

WORK AND WORK ACCIDENTS IN THE FLEXIBLE WORKING REGIME:  
THE ZONGULDAK HARD COAL BASIN CASE

İBRAHİM SARIKAYA

BOĞAZİÇİ UNIVERSITY

2012

WORK AND WORK ACCIDENTS IN THE FLEXIBLE WORKING REGIME:  
THE ZONGULDAK HARD COAL BASIN CASE

Thesis submitted to the  
Atatürk Institute for Modern Turkish History  
in partial fulfillment of the requirements for the degree of

Master of Arts

by

İbrahim Sarıkaya

Boğaziçi University

2012

"Work and Work Accidents in the Flexible Working Regime: The Zonguldak Hard Coal Basin Case," a thesis prepared by İbrahim Sarıkaya in partial fulfillment of the requirements for the Master of Arts Degree at the Atatürk Institute for Modern Turkish History of Boğaziçi University.

This thesis has been approved by

Prof Şevket Pamuk \_\_\_\_\_

(Thesis Advisor)

Prof. Çağlar Keyder \_\_\_\_\_

Yard. Doç. Dr. Ziya Umut Türem \_\_\_\_\_

December 2012

An abstract of the Thesis of İbrahim Sarıkaya, for the degree of Master of Arts at the Ataturk Institute for Modern Turkish History of Boğaziçi University to be taken in December 2012

Title: Work and Work Accidents in the Flexible Working Regime: The Zonguldak Hard Coal Basin Case

This thesis examines the work accidents in subcontracted companies in the Zonguldak Hard Coal Basin in the period of the flexible working regime post 1980. For this purpose, first, the political economy of work accidents is examined and the impacts of the new working forms on work accidents under the flexible working regime are discussed. Second, an overview of the history of the Zonguldak Hardcoal Basin is given. In addition to this, the changing global political economy of the coal production is analyzed by developing a comparative perspective between the cases of England, the People's Republic of China, and Turkey. Third, the redevançe system as a subcontracting practice is studied. Fourth, the main causes of the work accidents in subcontracted companies and informal pits are discussed. As a result, we conclude that the flexible working regime as one of the main pillars of neoliberalism has increased rate of the work accidents in the Zonguldak Hard Coal Basin.

Boğaziçi Üniversitesi Atatürk İlkeleri ve İnkılap Tarihi Enstitüsü'nde Yüksek Lisans Derecesi için İbrahim Sarıkaya tarafından Aralık 2012'de teslim edilen tezin özeti

Başlık: Esnek Çalışma Rejiminde İş ve İş Kazaları: Zonguldak Taşkömürü Havzası  
Örneği

Bu tezde Zonguldak Taşkömürü Havzası'nda esnek çalışma rejimi süresince taşeron işletmelerde ve kaçak ocaklarda gerçekleşen iş kazaları konu edilmiştir. Bu amaçla, ilk olarak iş kazalarının ekonomi politiği incelenmeye çalışılmış, esnek çalışma rejiminde çalışmanın aldığı yeni biçimlerin iş kazalarına etkisi araştırılmıştır. İkinci olarak, Zonguldak Taşkömürü Havzası'nın tarihine ana hatlarıyla değinilmiş ve kömür üretiminin küresel düzlemde değişen ekonomi politiğine İngiltere, Çin ve Türkiye üzerinden karşılaştırmalı bir bakış açısı geliştirilmeye çalışılmıştır. Üçüncü olarak Havza'da uygulamaya konulan alt sözleşmeli üretim pratiği olarak rödovans sistemi anlatılmıştır. Dördüncü olarak, taşeron işletmelerde ve kaçak ocaklarda gerçekleşen iş kazalarının nedenleri incelenmiştir. Sonuç olarak, neoliberal dönemin temel ayaklarından biri olan esnek çalışma rejiminin Zonguldak Taşkömürü Havzası'nda iş kazalarını arttırdığı argümanına ulaşılmıştır.

## ACKNOWLEDGEMENTS

First, I would like to thank my advisor, Şevket Pamuk, for his deep patience and his inestimable supports. His knowledge was one of the most important sources from which I benefitted during my thesis.

Another person that I would like to thank is Nurşen Gürboğa. I benefitted enormously from her work on the Basin and on coal miners. Despite her busy schedule, she always spared time for me whenever I needed to see her. I also would like to thank Kathryn Kranzler for editing my thesis with great attention.

I would also like to express my gratitude to mining engineers Erdiñ Günay and Levent Usman, miner Ayhan Gökğöz, and retired miner Recep Adıgüzel, who helped me to find different sources in Zonguldak.

I cannot forget to thank my friends Göksu, Irmak, Caner, Azat, Ruken, Sıla, Çağrı, Onur, and Evrim, who were always with me to discuss what had been found on work accidents during the research for this thesis and who brought these discussions up onto the agenda of their school, Istanbul University, through militant political activities.

Last, I would like to thank Nazlı Bülay Doğan for her invaluable theoretical and practical contributions. She made my writing period endurable.

## CONTENTS

CHAPTER I: INTRODUCTION.....	1
Outline of the Chapters .....	3
Research Methodology .....	5
CHAPTER II: WORK ACCIDENTS IN FLEXIBLE WORKING CONDITIONS.....	7
The Political Economy of Work Accidents .....	9
The Importance of Work Accidents in the Process of Class Formation.....	13
Working Life in Neoliberal Capitalism: An Introduction to the Flexible Working Regime.....	15
Work Accidents in the Flexible Working Regime.....	23
Turkey's Experience with the Flexible Working Regime.....	26
CHAPTER III: THE CHANGING POLITICAL ECONOMY OF THE COAL PRODUCTION FROM A COMPARATIVE PERSPECTIVE .....	32
An Overview of the History of Zonguldak Coal Hard Coal Basin.....	34
The New Coal Production Map .....	44
The UK's Experience with Coal Production .....	48
The PRC's Experience with Coal Production.....	51
Turkey's Experience with Coal Production.....	54
CHAPTER IV: PRIVATIZATION THROUGH THE BACK DOOR: THE REDEVANCE SYSTEM IN THE ZONGULDAK HARD COAL BASIN .....	58
Redevance System in General .....	59
A Zonguldak Coal Basin Reality: Informal Pits.....	65
CHAPTER V: AN EXAMINATION OF WORK ACCIDENTS IN THE ZONGULDAK HARD COAL BASIN.....	69
A Comparison between the Fordist Working Regime and the Flexible Working Regime in Terms of Work Accidents in the Zonguldak Hard Coal Basin.....	70
The Fragmented Labor Market and Work Accidents .....	72
The Practical Consequences of the Transformation of the Production Process in Terms of the Work Accidents.....	74
Work Accidents in Illegal Pits.....	82
CHAPTER VI: CONCLUSION .....	84
BIBLIOGRAPHY.....	87

## FIGURES

1. Gross Fixed Investments between 1980 and 2005
2. Agriculture Value Added
3. Unemployment in Turkey between 1980 and 2010
4. The worker numbers of TTK
5. The total raw coal production
6. World's coal total production
7. Shares of world coal consumption
8. European total coal production
9. Asia and Oceania total coal production
10. UK total coal production 1863-73, 2007
11. England total coal production
12. The PRC's total coal production
13. Total coal production and total hard coal production in Turkey
14. Death Ratios for per 100,000-ton production
15. The coal production of subcontractors
16. Comparison of death ratios
17. Death numbers according to deathr in redevance firms since 1989



## CHAPTER I: INTRODUCTION

Work accidents are a vital cost of neoliberal globalization that is paid by workers all around the world. According to a report by the International Labor Organization (ILO) each year approximately 2.5 million workers die as a direct result of work accidents and work-related diseases. Therefore, focusing on work accidents and discussing the causes of work accidents by discussing the political economy behind these causes is very important to understanding the experiences of workers in the neoliberal globalization period.

For this purpose, this thesis examines work accidents in the subcontracting companies in the Zonguldak Hard Coal Basin in the post-1980 period. The main aim of this thesis is to ascertain whether the work accidents in the subcontracting companies in the Basin are not a destiny or a result of simple neglect in the work process, or are they the result of the political economy, which is shaped by the tense relation between the capital, the labor, and the state.

Studying Zonguldak Hard Coal Basin is important, above all, as Nurşen Gürboğa states, because it constitutes a microcosm of the relations between capital, labor, and the state.<sup>1</sup> Second, it was one of the most important and biggest worker basins in the country from the 1840s until the 1980s. Therefore, it is attractive to social scientists who study workers' experiences and history in Turkey.

In addition to this, after the Second World War, only the Turkish Hard Coal Enterprise (TTK), which was an important State Economic Enterprise of the import substitution industrialization period, produced coal in the Basin. In the neoliberal period because of the subcontracting practices of different actors different from TTK

---

<sup>1</sup> Nurşen Gürboğa, *The Zonguldak Coal Basin As the Site of The Contest 1920-47* (Istanbul: Ottoman Bank Archives and Research Center, 2009), p. 79.

started to produce coal in the Basin. Therefore, third, the differences, tense relations and contradictions between, these actors and their reflection on the working conditions create an opportunity for social scientists to understand working conditions and workers' experiences.

Studying mining and mine workers as a social scientist resembles going to a country whose language you do not know. On the one hand, the strange terms of the mining literature and, on the other, the Cartesian logic of the mining engineers make it very difficult.

Still, there are important studies that focus on the social history of the miners and their organized or unorganized struggles. Three studies that are the product of historiographic sensibility of recent years towards the social form the underpinning of this thesis. Donald Quataert's *Miners and the State in the Ottoman Empire: The Zonguldak Coalfield, 1822-1920*<sup>2</sup>, Hamdi Genç's dissertation "Ereğli Kömür Madenleri (1840-1920)"<sup>3</sup> and Nurşen Gürboğa's dissertation, "The Zonguldak Coal Basin As the Site of the Contest 1920-47"<sup>4</sup>.

These studies evaluate the actual living and working conditions of the Zonguldak Coal Basin by using the perspective of social history from below. They do not use the worker as a timeless and universal phenomena. Their worker category includes part-time, unskilled, and mostly migratory laborers. They also examine the ties of the workers with the village, their everyday resistances, the aspects of labor market and the work disputes between workers and so on.

---

<sup>2</sup> Donald Quataert, *Osmanlı İmparatorluğu'nda Madenciler ve Devlet* (İstanbul: Boğaziçi Üniversitesi Yayınevi, 2009).

<sup>3</sup> Hamdi Genç, *Ereğli Kömür Madenleri 1840-1920* (Ph. D. diss., Marmara Üniversitesi, 2007).

<sup>4</sup> Nurşen Gürboğa, *The Zonguldak Coal Basin As the Site of The Contest 1920-47*.

## Outline of the Chapters

The second chapter presents the theoretical discussion, which tries to clarify the terms work accidents and flexible working regime. First, I will try to put work accidents into the process of the political economy of the labor process. At this point, I will emphasize that the class struggle, which is the main determinant of the labor process, has vital importance about the work accidents. Second, I will evaluate the importance of work accidents in the process of class formation. Then, I will describe the historical background of the flexible working regime as one of the main pillars of the process of neoliberal capital accumulation. After that, I will answer why the flexible working regime leads to work accidents. Last, I will focus on the neoliberal labor policies of Turkey in general.

The third chapter focuses on the changing global political economy of coal production. First an outline of the history of the Zonguldak Hard Coal Basin will be presented. Then, a comparative perspective will be developed to understand the changing global political economy of the world coal map.

This map, as a result of international competition, coal production was transferred to regions where labor power was cheaper and unorganized. The deindustrialization process of the coal production in England, which was the biggest coal producer of the world from the Industrial Revolution until the Second World War will be examined. In addition to this, after the incorporation of the People's Republic of China into global neoliberalism, the transformation of the PRC into the world's biggest coal producer and importer will be evaluated.

After that, I emphasize that in Turkey, while the total production of coal including boron, lignite, and hard coal was increasing, the rates of hard coal

production was decreasing in the post-1980 period. The total production of coal in Turkey increased because the labor power was cheaper and less organized than those in the core capitalist regions, while hard coal production decreased because of the organized workers of the basin. This was seen as a threat by the state.

In the fourth chapter, the redeance system is analyzed directly by using the data of a field survey I carried out in the Zonguldak Hard Coal Basin and some important reports. I will assert that the redeance system as a subcontracting practice in the mining sector is a way of privatization of Turkey's Hard Coal Enterprise through the backdoor.

While almost all of the SEEs were privatized TTK was not privatized because of the organized power of the mine workers and the security concerns of the state. The redeance system paved the way to the future privatization. In addition to this, it is important to emphasize that in the redeance system informal pits serve as subcontractors of the subcontractors of the TTK. Therefore, there is a huge increase in the number of informal pits post-1980 period.

The fifth chapter also is based on the data of the field survey I carried out in Zonguldak Hard Coal Basin. In this chapter, I will clarify why the flexible working regime leads to work accidents in the subcontracted companies and the informal pits by focusing on the labor process. The production pressure, the acceleration of the rhythm of the work, the destruction of the collectivity between miners, the abandonment of the work place education, the deletion of accident records for the destruction of the collective memory against work accidents are the main causes of the work accidents which will I focus one by one.

I will claim that although it is not a secret that the working conditions in the mines are not secure and healthy, the high rates of unemployment in Zonguldak and

Turkey force miners to work in these conditions. Last, I will focus on the work accidents in the informal pits and how they symbolize a return to 19th century working conditions.

## Research Methodology

In the first stage of the thesis, the subcontracting practices in the Zonguldak Hard Coal Basin will be discussed. However, when I went to Basin I realized that work accidents have a vital importance. Studying the work accidents in the flexible working regime allowed me both to focus on a common problem of the workers and develop a discussion about the flexible working regime.

I went to the Basin two times. I conducted interviews with generally the subcontracted companies' workers, trade unionists and mining engineers. In the text, I never used the real names of the miners with whom I have conducted interviews. I also changed the names of the doctors and the engineers with whom I have conducted interviews in Zonguldak, except Levent Usman who became a researcher in work accidents because of his interest.

Beside the interviews, when I realized that mining is a culture, which envelops the whole city, I decided to learn the technical aspects of the mining literature that I had tried to avoid until that moment. I visited the mining galleries that had been built by one of the subcontracted company.

I have descended to the altitude of -630 with the miners. They shared their food – eggs with potatoes – with me. I have listened to their struggle for the syndicate and also to their memories about the friends that they had lost in work accidents. I have conducted detailed interviews with 30 miners. Two of them were

generous to let me stay in their houses. After the end of my field study, when I have heard that the recent accident (January 2013) in Zonguldak happened in the gallery that I had visited, I have got Zonguldak in no time flat. I was there when the bodies of the miners were retrieved.

The second time, I met with miners at the Local of Mining Engineers Chamber where almost all of them meet and drink beer at least once a week, I started to understand what they were talking about.

There are many reports that focus on different aspects of mining and the Basin. These are prepared by the Turkey Hard Coal Enterprise, the General Mine Workers Union, the Ministry of the Energy and Natural Resources, the International Labor Organization, and the World Energy Council. I used these reports as much as possible, especially the 2011 Report of the State Supervisory Council about work accidents in the mines, which was prepared after 30 miners died in a terrible accident in the Karadon Region.

When I learned that the mining engineer Levent Usman had a file that had data about the work accidents in the Basin since 1875 until today, I was astonished and excited. I was astonished because this data had not published anywhere before, and excited because with this data it is possible to create a historical framework about work accidents in the Basin. The data consists of both the TTK and subcontracted companies and informal pits. There is also the cause of each accident and the place and the year of birth of the dead miners. I prepared a graph that shows the death rate per 100,000 tons production since 1960 until today. This graph is a statistical expression of my theoretical discussion because it is clear that the flexible working regime has increased the numbers of work accidents.

Last, I need to explain why I study only fatal work accidents instead of all work accidents. Unfortunately, except for fatal work accidents, none of the work accidents has a register in the subcontracted companies. The work place doctors<sup>5</sup> who are organic intellectuals of the capital, prepare the ground for this by treating the workers in the work place. In the informal pits, even fatal work accidents are covered up. In this point, I want to tell a story that I heard different versions of it in the Basin.

In an informal pit, a worker dies. The owners of the pits rushes the dead worker to the worker's house. They offer blood money to his family and the family accepts it out of desperation. After that, the clothes of the dead miner are changed. The miner is carried up to the roof of his house and the owners of the pits put cement on his clothes. Then he is thrown off the roof to make it look like an accident.

---

<sup>5</sup> The work place doctors are also members of the board of management of the company. Almost all of the work place doctors whom I interviewed talked about the ignorance of the workers and saw the workers as the main cause of the accidents.

## CHAPTER II: WORK ACCIDENTS IN FLEXIBLE WORKING CONDITIONS

In the neoliberal globalization period, the work and daily life conditions of the workers have worsened increasingly because the collective struggle for the workers' rights has declined. The high unemployment rates, the sharpening of the global capitalist struggle, and the collapse of the real socialist models that had once increased the hope of people for better working and life conditions have worsened the work and daily life conditions of the workers in parallel with the decline in organized struggle. Because of the worsening of work and daily life conditions of the workers in the neoliberal globalization period, work accidents have become one of the most important common experiences of workers throughout the world.

According to the International Labor Organization (ILO) Facts on Safety and Health at Work Report,

Each year about 2.3 million men and women die from work-related accidents and diseases including fatal accidents which is close to 360,000 and an estimated 1.95 million fatal work related disease. This means that by the end of this day nearly 1 million workers will suffer a workplace accident, and around 5,500 workers will die due to an accident or disease from their work.<sup>6</sup>

These numbers are a considerable indicator of the importance of the issue of work accidents within the world of neoliberal capitalism.

The Universal Declaration of Human Rights claims that the right to life is one of the fundamental rights of all people regardless of their age, ethnicity, gender or religion.<sup>7</sup> However, in our contemporary world, the right to life of the people who must sell their labor power to capitalists for their livelihood has been taken away. In

---

<sup>6</sup> ILO, April 2009, "Facts on Safety and Health at Work Report," Accessed on 15 November 2012, Available online at <[http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms\\_105146.pdf](http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms_105146.pdf)>

<sup>7</sup>UN, December 1948, "Universal Declaration of Human Rights", Accessed on 15 November 2012, Available Online at <<http://www.un.org/en/documents/udhr/>>



this chapter, it is claimed that workers' health and security are not issues of rights but an issue of class struggle.

Work accidents are the result of the commodification of workers' health in parallel with the commodification of labor power. The commodification of labor power in the labor process produces unequal and dominance relations, which create a base for workers' struggles and organizations. However, neoliberal policies destroy the collective action potential and make an organized assault on organized labor.

The flexible working regime, which is an important pillar of neoliberal policies, leads to a considerable transformation in the working life. It deepens the commodification of workers' health by reducing it to an ordinary input expense. The flexible working regime prepares suitable grounds for work accidents by restructuring the working conditions. As a result, the relation of work accidents to the flexible working regime is not ordinary, accidental, or temporary.

For that reason, in this chapter, first the political economy of work accidents will be examined. It will be shown that unless work accidents are put into the labor process, which includes the dominance relations under capitalism, it is not possible to develop a framework within which work accidents can be understood comprehensively.

Then, the importance of the struggle against work accidents' in the process of class formation will be evaluated briefly. After that, a general picture of a flexible working regime as a part of a flexible capital accumulation regime, meaning neoliberalism, will be drawn.

It will be shown that a flexible working regime deepens the unequal and dominance relations of the labor process and destroys the base for collective action and so prepares a suitable environment for work accidents. The concepts of work

accidents and flexible working regime construct the framework of the theoretical approach presented here to understand why the flexible working regime prepares suitable grounds for work accidents.

Last, Turkey's experience with neoliberalism and so the flexible working regime will be analyzed briefly.

### The Political Economy of Work Accidents

Work accidents can be defined as "accidents that happen in a working life context."<sup>8</sup> However, it does not mean that the main consequences are "limited to injuries on the involved workers,"<sup>9</sup> or are limited to the workplace where the accident happened. Many people are affected to different degrees by work accidents including workers, workers' family, capitalists, state's supervisor of the occupational health and safety and those who are involved in the work context before and after the accident in many different ways.

In addition to these, there are the social, economic and political effects of work accidents. For that reason, work accidents should not be considered as limited to the people who are directly involved or to the exact time when the accident happened.

French Sociologist Annie Thebaud Mony, who conducts field studies on the relations of subcontracting and workers' health in the French nuclear industry, writes that, "work accidents occur in the junction of public policies, the strategies of

---

<sup>8</sup> Jan Hovden et al., *A Need for New Theories, Models and Approaches to Occupational Accident Prevention?* *Safety Science* 48, no 8 (2010), p. 3.

<sup>9</sup> *Ibid.*, p. 4.

individual companies and laborers' choices which are limited by social relations."<sup>10</sup> However, it is not enough to focus only on triangle of the state, capitalist and workers. It is also necessary to examine the unequal and repressive nature of these relations to describe the notion of work accidents. The intersection of these three is the labor process, where the work accident occurs.

The most distinguishing feature of the labor process for work accidents is the commodification of labor. It is no coincidence that the labor process is based on dominance relations, as it is what capitalism entails in the condition of commodified labor.

To distinguish the workers from their ability or capacity to work, Marx called them "labor power", and their performance or application, "labor." He described labor power as "the aggregate of those mental and physical capabilities existing in a human being that he exercises whenever he produces a use value of any description."<sup>11</sup>

To understand dominance relations of the labor process, first, what the labor process is must be understood, so why it produces dominance relations can be answered. The labor process is started by the capitalist to produce commodities by using his/her money as capital. In this process, he/she brings together modes of production (constant capital), which are also the product of labor and labor power (variable capital) to produce a commodity. Labor power is a commodity, the use-value of which possesses the peculiar property of being a source of value, the actual

---

<sup>10</sup> Annie Thebaud - Mony, *Çalışmak Sağlığa Zararlıdır* (Istanbul: Ayrıntı Yayınları, 2012), p. 24.

<sup>11</sup> Karl Marx, *Capital: Volume 1: A Critique of Political Economy* (Middlesex: Penguin Books, 1992), p. 113.

consumption of which, therefore, is itself an embodiment of labor, and consequently,<sup>12</sup> a creation of value.

Therefore, labor power creates a surplus value, which is directly pumped out by the capitalists, who take power from property rights, which are backed by laws. At this point, Ellen Meiksins Wood's emphasize on the role of the state in this process must be remembered:

The forfeit of surplus labor is an immediate condition of production itself... To speak of the differentiation of the economic sphere in these senses is not, of course, to suggest that the political dimension is somehow extraneous to capitalist relations of production.... Absolute private property, the contractual relation that binds producer to appropriator, the process of commodity exchange - all these require the legal forms, the coercive apparatus, the policing functions of the state. Historically, too the state has been essential to the process of expropriation that is the basis of capitalism. In all these senses, despite their differentiation, the economic sphere rests firmly on the political.<sup>13</sup>

As a result, the unequal and repressive nature of the labor process is the logical consequence of the appropriation of surplus value, which is a free gift from the workers to the capitalists by relying on property rights.

The *raison d'être* of capitalism is to increase surplus and so the capitalist tries to either extend the working hours (absolute surplus value) or intensify the work by technological developments (relative surplus value). However, this stimulation has vital effects on the workers. As Karl Polanyi says, "labor is only another name for a human activity which goes with life itself... can (not) be detached from the rest of life."<sup>14</sup>

Therefore, during working hours, workers lose their control over their body, health, and so their lives. Following Marx, once labor power becomes a commodity,

---

<sup>12</sup>Ibid., p. 114.

<sup>13</sup> Ellen Meiksins Wood, *Democracy Against Capitalism* (Cambridge: Cambridge University Press, 2000) pp. 29-30.

<sup>14</sup> Karl Polanyi, *The Great Transformation* (Boston: Beacon Press, 2001) p. 75.

"the workers work under the control of the capitalist to whom his labor belongs."<sup>15</sup>

Because it is impossible to leave his/her health at the door, the health of the workers is also commodified during working hours. Polanyi writes,

For the alleged commodity "labor power" cannot be shoved about, used indiscriminately, or even left unused, without affecting also the human individual who happens to be the bearer of this peculiar commodity. In disposing man's labor power the system would incidentally, dispose of the physical, psychological, and moral entity "man" attached to that tag.<sup>16</sup>

For that reason, the commodification of labor power is related to all aspects of human life, including health.

Issues such as health-related investments, education and environmental factors are taken with the logic of the maximization of profit by the capitalists. While health and a safe place are vital for workers, it can be seen as an unnecessary expenditure for the capitalists. From the perspective of the capital accumulation process or capitalists, there is no difference between the death of a worker and the breakdown of a machine. The death of the worker is an economic loss; both as a loss of labor power and a compensation for the death.

This antagonism is one of the fundamental dynamics of the class struggle. The labor power, so people, is a kind of input into production process. Mony writes that "workers health became a victim of economic rational or accounts of insurance agents."<sup>17</sup>

---

<sup>15</sup> Marx, *Capital*, p.118.

<sup>16</sup> Polanyi, *Great Transformation*, p. 76.

<sup>17</sup> Mony, *Çalışmak Sağlığa Zararlıdır*, p. 23.

## The Importance of Work Accidents in the Process of Class Formation

According to E.P. Thompson, social classes are historical processes that are shaped by the conflictual relations in the labor process. Contrary to determinist theories,<sup>18</sup> which view classes as an automatic product of the current mode of production, this kind of historicist approach to class formation focuses on the work and daily life relations of workers and capitalists. Therefore, he emphasizes not only the economic aspects of class relations, but also the political and cultural aspect of it. "The making of the working class is a fact of political and cultural, as much as of economic, history."<sup>19</sup>

Like capitalists, workers are also active actors who create their own history by struggling against or incorporating various conditions.<sup>20</sup> Thompson writes that "the working class made itself as much as it was made."<sup>21</sup> The commodification of workers' health, which is one of the important results of the commodification of labor, is also an issue of struggling against or incorporating in the process of class formation.

The working life context can be seen as a microcosm of class struggle, which is shaped by the economic, social and the ideological relations between the workers and the capitalists. Michael Buroway says that "any work context involves an economic dimension (production of things), a political dimension (production of

---

<sup>18</sup> One of the most important example: Gerard Cohen, *Karl Marx's Theory of History* (New York: Oxford Press, 2000)

<sup>19</sup> Edward Palmer Thompson, *The Making of English Working Class* (New York : Vintage Books, 1966) p. 194.

<sup>20</sup> Ellen Meiksins Wood, *Democracy Against Capitalism* (Cambridge: Cambridge University Press, 2000), pp. 76-107.

<sup>21</sup> Thompson, *The Making of English Working Class*, p. 194.

social relations), and an ideological dimension (production of an experience of those relations)."<sup>22</sup>

Therefore, discipline of labor power economically, socially, and ideologically by capitalists is a crucial point for class struggle. Following Thompson, it can be said that the agency of workers must be taken into account in the process of the discipline of labor power economically, socially, and ideologically by capitalists. This kind of approach offers important insights into the process of class formation.

David Harvey writes that "since labor control is essential to capitalist profit, so, too, is the dynamic of class struggle over labor control and market wage fundamental to the trajectory of capitalist development."<sup>23</sup> Capitalists try to develop some mechanisms for labor control. He continues, saying, "labor control (...) entails, in the first instance, some mix of repression, habituation, co-optation and co-operation, all of which have to be organized not only within the workplace but throughout society at large."<sup>24</sup>

Technological change, the intensification of working, de-unionization, less safer and less healthy conditions can be turned into critical weapons in the hands of the capitalist class. In times of high unemployment, workers must choose either to work in unsafe and unhealthy conditions or go hungry. The workers' struggle against harsh physical and psychological pressures in the working place aims at the weakening of such discipline mechanisms.

In contemporary capitalism, the struggle against work accidents as a part of the working class tactics of weakening discipline mechanisms on labor power is one of the constitutive moments of working class formation. As said above, work

---

<sup>22</sup>Michael Buroway, *The Politics of Production* (London: Verso, 1985), p. 39.

<sup>23</sup>David Harvey, *The Condition of Postmodernity* (Cambridge: Blackwell Publishers, 1989), p. 180.

<sup>24</sup>Ibid., p. 123.

accidents are common among workers throughout the world. Therefore, the struggle against work accidents can be a junction point between the experiences of the workers and the working class formation.

Working Life in Neoliberal Capitalism:  
An Introduction to the Flexible Working Regime

The flexible working regime, which is an important constituent of the neoliberal capital accumulation regime, creates the conditions for work accidents. The division of the production process and so the prevalence of subcontracting relations, high unemployment rates, and the smooth flow of capital are important pillars of the flexible working regime.

The dissolution of the organized power of the workers in the Keynesian period all over the world disturbs the tense balance between the working class and the capitalists. The working life context became more unequal and more repressive, which led to more work accidents. Before focusing on the relations of the flexible working regime and work accidents, first an understanding of the flexible working regime from historical perspective is necessary.

The Transition from Keynesianism to Neoliberalism

One of the most important aspects of capitalism is not only its power of changing the world, but also its capacity to transform itself. The deep-rooted change in the process of capitalism in approximately the last forty years has been witnessed. This deep-rooted change, called “neo-liberalism,” was first applied by Ronald Reagan in the U.S. and Margaret Thatcher in the UK.



In the following years, with the effect of the dissolution of the USSR and China's step to integrate into the world capitalist economy after 1979, the neoliberal policies that spread all over the world were constituted as a remedy for the capital accumulation crisis of capitalism, which arose after the "golden age" of capitalism.

Between 1945 and the initial years of the 1970s was the "golden age" of capitalism, characterized by Fordist production, domestic mass consumption and import substitution policies. It is known as the Fordist-Keynesian Period.<sup>25</sup>

Harvey writes that in the Fordist production system, "labor productivity radically increased by breaking down each labor process into component motions and organizing fragmented work tasks according to rigorous standards of time and motion."<sup>26</sup> In this system, uneducated and unskilled workers who had no control over the production process because the production, pre-production, and post production units organized for centralized control were separated from each other. The aim in the Fordist production system is standardized mass production.

The Fordist production system was first applied in the mid-1910s. However, its expansion coincided with the application of Keynesian policies, which were based on rational state planning, that was mostly developed (and seen as necessary) in the interwar years. The policies, aimed to increase domestic mass consumption by increasing the purchasing power of workers and lead to a kind of welfare state. The social security institutions tried to include everybody, minimum wages were increased, and unemployment insurance applied. The state prompted domestic mass consumption with this kinds of practices.

In the Fordist-Keynesian period, there were high employment rates. The system was based on domestic consumption so job security was an important part of

---

<sup>25</sup> Eric Hobsbawn, *The Age of Extremes* (London: Abacus Publishing, 1995) pp. 257-286.

<sup>26</sup> Harvey, *The Condition of Postmodernity*, p. 125.

the period. Working hours and minimum wages were protected by laws. People worked under the strict division of labor and in one determined place (mostly in a factory) where the production was intensified.

In these years, as Harvey writes, "the tense but nevertheless firm balance of power that prevailed between organized labor, large corporate capital, and the nation state, and which formed the power basis for the postwar boom was not arrived at by accident. It was the outcome of years of struggle."<sup>27</sup>

In the Keynesian period, the Cold War was a crucial determinant for the political atmosphere of the world. For the capitalist block, the threat of communism was an important reason to undermine the organized workers' movements. However, the syndicates, which acted as intermediaries between workers and capitalists instead of organizations that struggled for the workers' demands, were used for channeling workers' opposition and demands to existing capitalist system.

In spite of these policies, workers had create powerful trade-unions. The need for the domestic consumption of the Fordist Keynesian model and the existence of real socialist models, which increased the expectations of people for better working and life conditions, helped in the establishment of an organized workers' movements. The social expenditures, the high employment rates, the job security were among the gains of these movements. Therefore, capitalists and states recognized labor as one of the pillars of society.<sup>28</sup>

Growth rates were very high in the Keynesian period. The positive conditions after the Second World War increased the surplus and the capitalists invested heavily

---

<sup>27</sup> Ibid., p. 133.

<sup>28</sup> Michael Hardt and Antonio Negri, *Labor of Dionysus* (London: University of Minnesota Press, 2003) p. 55.

in technological innovations for industrial production. These technological developments led to important increases in production.

In the last years of the 1960s and the first years of the 1970s, the Keynesian economy fell into a capital accumulation crisis, which showed itself as high unemployment rates and decreasing profit rates. In these conditions, the capital accumulation regime was restructured at the highly competitive international level. As a result, the period between 1970 and 1980 saw a transition to neoliberalism. Dumenil and Lévy write, neoliberalism "conveys an ideology and a propaganda of its own, it is fundamentally a new social order in which the power and income of the upper fractions of ruling classes."<sup>29</sup>

The neoliberal policies promoted an export-oriented industrialization model instead of import substitution policies, the liberalization of trade, and an exchange regime, fiscal and monetary discipline to eliminate deficit and control inflation, reduction in public spending and the privatization of state economic enterprises (SEE). In short, neoliberal policies aimed at the internationalization of the circulation of capital. Ağartan states that "this model ... was backed and fervently propagated by international financial institutions such as the IMF and World Bank."<sup>30</sup>

### The Division of the Production Process

All over the world, as a remedy to the crisis of the Fordist- Keynesian system, capitalists tried to reduce the costs of labor power by flexing the labor regime of the Fordist period, which was characterized by job security for workers, equality in the

---

<sup>29</sup> Gérard Duménil and Dominique Lévy, *The Neoliberal (Counter)Revolution*, Accessed on 15 November 2012, Available online at < <http://sanhati.com/wp-content/uploads/2007/03/neoliberalcounter.pdf> >

<sup>30</sup> Kaan Ağartan, "*Privatization and Limits to Economic Liberalization in Turkey: Erdemir Case Study*" (Ph.D. diss., State University of York, 2009), p. 109.

level of workers' wages and defined working hours, and the production process, was realized in a defined space by the strict division of labor.

Technological developments in communication and transportation destroyed the natural barriers of the integrated global economy. Hobsbawn claims that the golden age created a global economy that integrated almost all parts of the world.<sup>31</sup> The rise of the global economy meant the restructuring of all economic activities under the conditions of international competition. Harvey writes that these developments "utilize and empower the most fluid and highly mobile form of capital – money capital – to reallocate capital resources globally (eventually through electronic markets) thus sparking deindustrialization in traditional core regions and new forms of (ultra-oppressive) industrialization..."<sup>32</sup>

With the smooth flow of capital conditions, it can be observed that the global balances of the cost of the labor power become more important. In the neoliberal conditions of competition, the capitalists of the developed countries found the labor power of developed countries very expensive and strong as it had been organized around the common interest of the unions and syndicates.

They started to transfer their labor-intensive production to less developed countries where they were able to find lower-waged, unskilled and unorganized labor. The new transportation technologies, which reduced production costs, prepared the basis for separating planning and finance (which is still in the parent country) from production. While the developed countries became specialized in planning and finance, the less developed ones turned to labor power storage for global capital.

---

<sup>31</sup> Hobsbawn, *The Age of Extremes*, p. 265.

<sup>32</sup> David Harvey, 2010, *Organizing for The Anti-Capitalist Transition*, Accessed on 15 November 2012, Available online at <<http://davidharvey.org/2009/12/organizing-for-the-anti-capitalist-transition/>>

Parallel to dynamic capital movements on a global scale, in the labor process the capitalists needed less labor power because of the technological developments, which had increased the productivity of the labor power. The same work started to be done by fewer workers.

In addition to this, because of the dissolution of the organized power of the workers, the capitalists extended the working hours. Because of these two important changes meant the rise of both the absolute and relative surplus value, the workers lost their central position in the labor process apparently. However, it is known that highly technological industrial machines were also the products of workers. Therefore, dead labor (constant capital) started to become more important than living labor.

The rise of the proportion of constant capital in the labor process gave the capitalists the chance to consume potential profitability advantages at every step of production, which was the result of the dividing of the production process, a perfect example of the speculative logic of capitalism.<sup>33</sup> As a result, important developments were observed in the labor market.

The production process was divided not only regionally, but also between parent and subcontracted companies. The prevalence of subcontracted firms through which the production process was realized by different forms of labor became a global phenomena. Before the neoliberal period, there had been firms which did not take a part of the main work but did supplementary jobs, such as preparing meals of the company, cleaning of the company and transportation of the workers. However, in the flexible working regime, the main work started to be divided. For instance, a

---

<sup>33</sup>Fuat Ercan, 1997, "*Tarihsel ve Toplumsal Bir Süreç Olarak Kapitalizm ve Esneklik*", Accessed on 15 November 2012, Available online at <http://fuatercan.wordpress.com/2007/01/09/tarihsel-ve-toplumsal-bir-surec-olarak-kapitalizm-ve-esneklik/>

computer consists of many different parts which are produced by different firms in different regions.

The working conditions of subcontract firms were greatly different from those of the parent company. The new labor pattern was based on unsecured, cheap, unorganized labor power and the loss of the potential of collective bargaining. Mokoto Itoh defines this process as the developments of new discipline mechanisms on labor.<sup>34</sup>

The subcontracted companies, which employ fewer workers than the parent company, undertake a part of the main work. Either different forms of laborers in the same production space came together or the production was done by different firms in different regions. Both situations destroyed the collective organization base by differentiating the conditions and so the experiences of workers, which was the base of the class formation. Because of the different forms of labors, it is very hard to find common demands or experience for parent company workers and subcontracting company workers.

Technological developments also led to the deskilling of the labor power. Less skilled workers could be removed easily. Especially when subcontracted workers attempted to organize, they could easily be removed. The main reason for this was the high unemployment rates in the neoliberal period.

Not only subcontract workers, but also temporary and part time work relations prevailed. Behind the logic of using more temporary and part-time workers, was the act of minimizing the inactive capacity of the labor process. For instance, if you produce a car you do not need a car painter in the labor process. When you finish

---

<sup>34</sup> Mokoto Itoh, "*Japan In New World Order*," *Socialist Register* 28 (1992), p. 201.

the production you can employ temporary or part time workers for this job. After the painting, they can be laid off.

There were many important reasons for the rising unemployment in the neoliberal period. First, the transition from the import-substitution model to export-oriented model made unemployment at the national level less important for the global economy. Second, the rise of productivity and so use of fewer workers for the same job increased unemployment. The third factor was the rise of the finance sector. Finance became more important in the whole economy. However, the employment capacity of the finance sector was low because of its highly technological character.

Fourth, the jobless growth phenomenon was very important for understanding the rise of unemployment rates. Especially, in dependent capitalist countries like Turkey, the speculation led nature of growth based on massive inflows of foreign finance capital prevented the growth from creating employment.<sup>35</sup> Last, the privatization of the SEEs and the mechanization of agriculture increased the unemployment rates.

An important consequence of the high unemployment was the growth of informal economy. In the neoliberal period, the proportion of informal employment in the whole economy increased. Mütevellioğlu and Işık write that "the existence of the informal sector is the outcome of both the absence formal structures and the growth tendency of capital accumulation."<sup>36</sup> Informality prevailed in profitable sectors. Unemployed people easily accepted work in the informal sector in unsecure

---

<sup>35</sup> Erinç Yeldan and Hakan Ercan, 2011, " Growth, Employment Policies and Economic Linkages: Turkey," ILO Employment Working Paper No.84, Accessed on 15 November 2012, Available Online at < [http://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/---emp\\_policy/documents/publication/wcms\\_166290.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_policy/documents/publication/wcms_166290.pdf)>

<sup>36</sup> Nergis Mütevellioğlu and Saim Işık, (2009) "Türkiye Emek Piyasasında Neoliberal Dönüşüm, In *Küreselleşme, Kriz ve Türkiye'de Neoliberal Dönüşüm* (pp.159-198) İstanbul: Bilgi Üniversitesi., p.

and unhealthy conditions. The prevalence of the subcontracted pattern also led to the increase in informal working. Subcontracted firms easily hired informal workers.

Consequently, as Harvey says, the flexible working regime is a "successful assault upon organized labor and its political institutions while mobilizing global labor surpluses, instituting labor-saving technological changes and heightening competition."<sup>37</sup> It deepens the unequal and dominance relations of labor and destroys the base for collective action. Therefore, if work accidents are taken as an issue of class struggle, it is no coincidence that in the conditions of unorganized labor the flexible working regime increases the number of work accidents.

The next section analyzes how and why the working life in neoliberal capitalism conditions turned into a machine that took away the right to life of the workers.

### Work Accidents in the Flexible Working Regime

The previous parts discussed how work accidents are a consequence of commodified labor in which the workers' health and security are reduced to an ordinary expense for an input. It was argued that the commodification of labor power in the labor process produces unequal and dominance relations and so it is an issue of class struggle. After that, the flexible working regime deepens the process of the commodification of labor by the rising relative and absolute surplus value in the conditions of global economic competition. In addition to this, the flexible working

---

<sup>37</sup> Harvey, *Organizing for the Anti-Capitalist Transition*, Accessed on 15 November 2012, Available online at <<http://davidharvey.org/2009/12/organizing-for-the-anti-capitalist-transition/>>



regime destroys the collective organization base. This part analyzes how flexible working conditions open the way to work accidents.

As was explained above, the division of the production process between parent and subcontracted company is an important aspect of the flexible working regime. In the examples of the subcontracted model, the obligations of the parent company for health and secure working conditions are transferred to small subcontracted companies that do not have enough economic power to fulfill these obligations.

In addition to this, the contractual relations between the parent and subcontracted company are based on limited time in most cases. The subcontracted companies must complete their work in contractually defined times. The acceleration of the rhythm of the production process leads to an increase in the intensity of the production process. The intense and long working hours lead to a loss of concentration and tiring of the body, which increase the possibility of making mistakes in the production process. Especially in heavy industries, this situation can be the cause of fatal work accidents.

The prevalence of temporary and part-time working patterns, which are parallel to the prevalence of subcontracted relations in most cases, is another important reason for increasing work accidents. First, firms see work place education as very expensive for temporary workers. Second, workers do not want to specialize in one job because they know that they have no work guarantees. Third, subcontracting practices destroy the collectivity between workers. The temporary status prevents the creation of common experiences about the production process. In any work accident case, workers who know each other can develop urgent reflexes to accidents. Last, in cases when different forms of labor come together in one work

place, the division of the production process become more complex, which also can be a cause of accidents.

Another important factor that leads to work place accidents is the extension of the informal sector in the flexible working regime as was explained above. The informal sector transferred the duty of creating health and secure work conditions to the conscience of the owners of the firms. The informal sector cannot be controlled by state supervisors because the business are not legally registered. In addition to this, subcontracted firms can employ unregistered workers easily at low wages and in unsecure conditions.

The importance of class struggle to force the capitalists to improve working standards was discussed. In the neoliberal period, high unemployment rates can be observed. The question of why people accept to work in unsecure and unhealthy conditions is mostly related to high unemployment rates. Unemployment is used by capitalists as a discipline mechanism on labor power and so deepens the unequal and dominant nature of the labor process in the conditions of commodified labor. The only choice of workers is either to work in unsecure and unhealthy conditions or go hungry. Unemployment is also used as an important weapon against any organization attempt. If unemployment is thought together with the division of the production process by region, in the conditions of high unemployment rates, workers accept unsecure and unhealthy conditions because they do not want to transfer to any industry in another region.

In summary, it can be said that the obligation transfer from parent company to small firms, the loss of collective memory and collective experiments, the increase of the intensity and complexity of production, the abandonment of work place

education and specialization in one job and the rise of the informal sector are the main causes of work accidents in the flexible working regime.

### Turkey's Experience with the Flexible Working Regime

To understand the flexible working regime in Turkey, the general picture of neoliberalism in Turkey in which organized political power of the working class was gradually destroyed should be discussed. As was emphasized, under the circumstances of an unorganized working class, work accidents find convenient conditions.

The transition process to neoliberalism began with the 12 September coup. The macro and micro politics which were implemented after the coup introduced neoliberalism and so a flexible labor regime. This process demolished the tense balance between the working class and capitalists to the detriment of the working class.

The transition process to neoliberalism resembled that of Chile and Argentina, where the neoliberal revolutions were not accomplished by democratic means. In these countries, as Harvey says, the transition process

was as simple as it was swift, brutal, and sure: a military coup backed by the traditional upper classes (as well as by the US government), followed by the fierce repression of all solidarities created within the labor and urban social movements which had so threatened their power.<sup>38</sup>

It can be also claimed that 12 September coup prepared a "shock doctrine" process, as Naomi Klein asserts. Quoted by Milton Friedman's crisis definition, Klein defines shock doctrine as "only a crisis—actual or perceived—produces real change.

---

<sup>38</sup> David Harvey, *A Brief History of Neoliberalism* (Oxford: Oxford University Press, 2007), p. 39

When that crisis occurs, the actions that are taken depend on the ideas that are lying around (...) the politically impossible becomes politically inevitable."<sup>39</sup>

The 12 September coup can be evaluated in terms of two targets that were related to each other. The first target was to the emergence of the working class which had been growing, as an organized power both quantitatively and qualitatively since the 1960s, and the wave of social movements that had spread together with the socialist thoughts. The second target was to restructure the country in accordance with neoliberal policies.

However, it was feared that the social and political opposition, which were powerful in these periods, might prevent this reconstruction process. The coup leaders realized the two targets. The rights of the working class, which had been gained by organized struggles especially after the 1960s, were withdrawn one by one and the existing socialist opposition was suppressed. In addition to this, the disintegration of socialism in the USSR in 1991 and so the loss of confidence in socialism worldwide enabled neoliberal policies to be implemented more easily.

Thus, the obstacles against the implementation of neoliberal policies were removed. It was based on the elimination of public spaces and services such as education and health, creating new spaces of profit via privatization and decreasing the cost of labor and preventing workers from organizing via subcontracting practices and privatization of the SEEs. Ağartan writes that "key international institutions such as the IMF, World Bank and to some extent the OECD have also been heavily involved in this neoliberal restructuring process to instigate radical policy changes towards installing a new outward-oriented economic model."<sup>40</sup>

---

<sup>39</sup> Naomi Klein, *Shock Doctrine* (New York: Metropolitan Books, 2001), p.6

<sup>40</sup> Kaan Ağartan, "*Privatization and Limits to Economic Liberalization in Turkey: Erdemir Case Study*" pp. 113-114.

Epecially, the Transition to a Stronger Economy Program of the Justice and Development Party (AKP) under the sponsorship of the IMF right after the 2001 crisis introduced an important step to fulfill the requirements of global capitalism.<sup>41</sup> Ağartan writes that the AKP "accomplished the necessary political and bureaucratic realignment that would foster the development of private sector and regarded privatization as an important vehicle for the formation of a more rational economic structure"<sup>42</sup> "In this process, the share of the SEEs investments in total public investments declined drastically."<sup>43</sup>

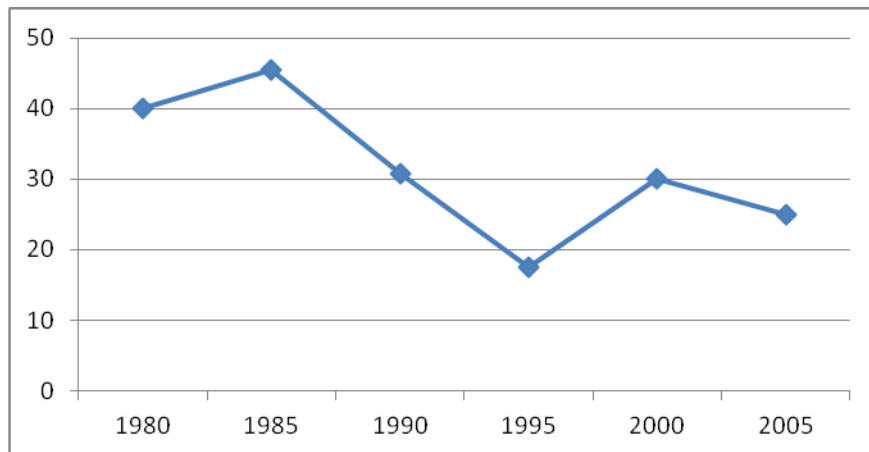


Figure 1: Gross fixed investments between 1980 and 2005 (Public/Total).<sup>44</sup>

The AKP promulgated a new law Labor Act, No. 4587, in January 2003 that prepared the legal ground for flexible working conditions. This labor act made legal

<sup>41</sup> Ibid., p. 142.

<sup>42</sup> Ibid., p.143

<sup>43</sup> Ibid., p.150

<sup>44</sup> Turkish Republic Ministry of Development, 2012, "*Temel Ekonomik Göstergeler*", Accessed on 15 November 2012, Available Online At <http://www.dpt.gov.tr/PortalDesign/PortalControls/WebIcerikGosterim.aspx?Enc=83D5A6FF03C7B4FC5A73E5CFAD2D9676> >

the division of the production process and so the prevalence of subcontracting practices. It created important legal obstacles for workers to organize in unions.<sup>45</sup>

The main event that restructured the labor market in the neoliberal period was the elimination of agricultural production. Especially in the last years of the 1990s, with the support of the IMF and the WB, the elimination of the agricultural production process gained impetus. Turkey became a country which had minimum agricultural subsidizations in the OECD. The elimination of agricultural production led to the proletarianization of the agricultural population. Most of them started to work in insecure positions and at informal jobs.

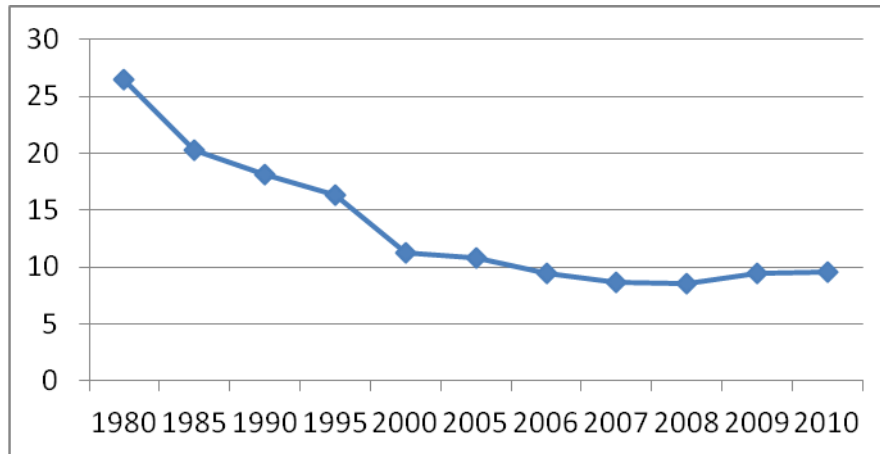


Figure 2: Agriculture value added (% of GDP)<sup>46</sup>

Another important development that characterizes the labor market in the neoliberal period is high rates of unemployment. The development model, which is based on financial movements, cannot create employment. Therefore, the link between economic growth and employment is reduced.

<sup>45</sup> Berna Güler Müftüoğlu and Bağdagül Taniş. *21. Yüzyıla Zonguldak Maden İşletmelerinde Çalışma Hayatı: Bir Kesit-Tek Gerçek*, Available Online at <[http://www.sendika.org/yazi.php?yazi\\_no=30676](http://www.sendika.org/yazi.php?yazi_no=30676) >

<sup>46</sup> Turkish Republic Ministry of Development, *Temel Ekonomik Göstergeler*.

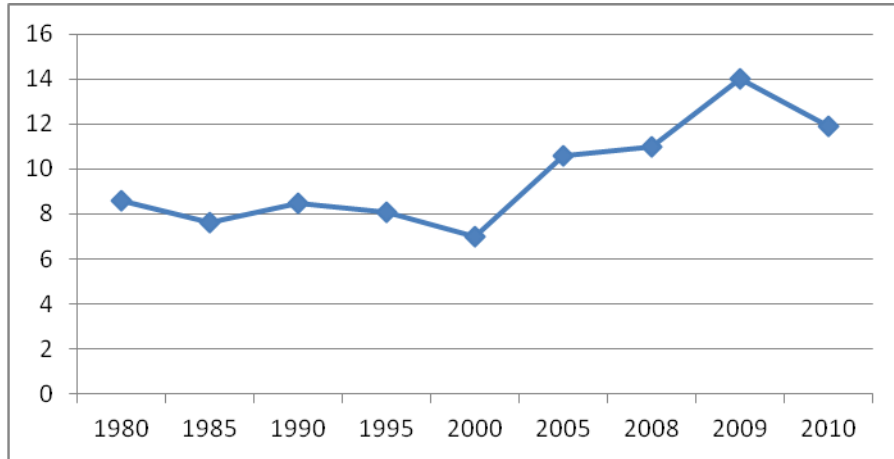


Figure 3: Unemployment in Turkey between 1980 and 2010 (% of population)<sup>47</sup>

In their comprehensive article "Crisis From the Perspective of the Country Which is Merely Grazed by It: Naivety of Theory, Crudeness of Reality," Serdal Bahçe and Ahmet Haşim Köse examine the 2008 Crisis of world capitalism's effects on laborers in Turkey. First, they argue that laborers gradually have started to work more hours. Second, real wages are increasing in parallel to an increase in the socially necessary cost of the reproduction of laborers. Third, average social capital has faced productivity pressure, but the big capitalists have no such problem. Last, although productivity pressures mean a decline in profit rates, total profit is still increasing.<sup>48</sup>

Consequently, the destruction of the organized political power of the working class in the transition to the neoliberalism process and the elimination of agricultural production, high unemployment rates, division of production process and so the

<sup>47</sup> Ibid.

<sup>48</sup> Serdal Bahçe and Ahmet Haşim Köse, "Crisis from the Perspective of the Country Which is Merely Grazed by It: Naivety of Theory, Crudeness of Reality," *Praksis* 22 (2010) p. 38-39.

prevalence of subcontracting practices are important parts of the flexible working regime in Turkey.



### CHAPTER III: THE CHANGING POLITICAL ECONOMY OF THE COAL PRODUCTION FROM A COMPARATIVE PERSPECTIVE

Together with the transition to neoliberalism the Zonguldak coal basin has experienced important transformations in the political economy of coal production. To understand these transformations first, the history of the Zonguldak hard coal basin must be discussed briefly. From the 1840s until the present, the basin has been one of the important workers' basins of the Ottoman and Turkish Republican periods. It has experienced important workers' resistance, movements various organizing and trade union practices, and two compulsory labor regime periods which have significance not on only the political, social and economic life of the basin but also on those of the whole country.

As parts of its, the national security strategies state always has assigned a duty to the basin: supplying coal need in the war conditions. For these reasons, before the transition to neoliberalism in the basin it must be viewed with the overall history of the place.

In the post-1980 period, the Zonguldak coal basin started to produce less hard coal and Turkey's hard coal needs started to be met by imports from other countries. These transformations cannot be understood by focusing on only Zonguldak or even Turkey. Developing a comparative perspective to understand these transformations is necessary especially in the neoliberal period, because a much more integrated economy was one of the important concerns of this period.

For this purpose, we will seek to understand the new coal production map. In this map, by the effect of international competition, coal production was transferred to regions where the labor power was cheaper and unorganized. While the coal production level in Europe, was decreasing due to the organized struggle of the

working class had won working conditions better than other regions. the coal production levels in the Asia and Oceania, where cheaper and more unorganized workers were available, were increasing.

In Turkey, while the total production of coal including boron, lignite, and hard coal was increasing, the rates of hard coal production were decreasing. The total production of coal in Turkey increased because the labor power was cheaper and less organized than core capitalist regions, while hard coal production decreased because of the organized workers of the basin was seen as a threat by the state.

The changing political economy of the coal production in the Zonguldak Coal Basin led to a decrease in the organized power of the basin's coal miners. This shows that the aim of the state had been realized. In the new political economy of the coal production, even when coal miners blocked production by strikes, the need for coal could be satisfied by imported coal. The rupture of the industrial linkage of the Turkish Hard Coal Enterprise (TTK) and iron and steel industry was important.

The great majority of the production of the TTK started to be sold to the Çatalağzı Thermal Power Plant, which was less important and strategic for the national economy when compared to the iron and steel industries. In the possible strike situation, this changing of the industrial linkage weakened the hand of the organized coal miners. As was emphasized in the previous chapters, work accidents can become common when the workers are unorganized. Consequently, analyzing the changing political economy of coal production is necessary to understanding work accidents in the Zonguldak Coal Basin.

Due to these reasons, first it the history of the Zonguldak Hard Coal Basin will be discussed briefly. Second, the new coal production map will be examined. To

develop a comparative perspective, the UK's and PRC's coal production experience will be compared to that of Turkey.

### An Overview of the History of the Zonguldak Hard Coal Basin

After the Industrial Revolution, the using of steam as an energy resource which was more economic and more productive instead of firewood and the coal, was turned to an important resource for industry. In addition to this, coal was also used for melting iron, which was used for producing important machines for industry. In 1800, the amount of total coal output of England, which was the center of industrial revolution, was 11 million tons, while that of France, Belgium and Germany's was only 6,000 tons.<sup>49</sup> This rate can help us to understand Industrial Revolution's importance in the coal production.

In these years in the Ottoman Empire there was a need of coal for the new-born industries and navy. In 1830, the Empire made an agreement with the USA and after this agreement Empire's navy turned to began to use steam ship.<sup>50</sup> Therefore, the Empire, which had important coalfields, decided to establish The Ereğli Coal Mines Company in 1841, for extracting mine from the Zonguldak coal basin.

In 1841, the state set up the Ereğli Coal Mines Company for the mining of the Zonguldak Hard Coal Basin. Between 1841 and 1846, the hard coal basin was managed by this company.<sup>51</sup> In this period the mining techniques were very primitive. In 1846, basin's administration was transferred to the *Darphane-i Amire*.

---

<sup>49</sup> Christine Rider, *An Introduction to Economic History* (Ohio: South-Western College Publishing, 1995), p. 192

<sup>50</sup> Hamdi Genç, *Ereğli Kömür Madenleri 1840-1920* (Ph. D. diss., Marmara Üniversitesi, 2007) p. 8.

<sup>51</sup> *Ibid.*, p. 9.

In 1850, *Darphane-i Amire* was turned into the Privy Purse, so the basin's administration transferred to Privy Purse.<sup>52</sup> Gürboğa writes that, in this period, “two factors called for early state involvement, once was *miri* (state-owned land) status of the basin and other was the establishment of monopson market relations between coal mining operators and the state.”<sup>53</sup> The mine operators had the status of *mültezim*. We also know that state gave these *mültezims* the rights of collecting taxes from surrounding villages. The duty of Privy Purse was to collect remittances of *mültezims* and to control the mining engineers.

In 1850, the state created a monopson market for the Zonguldak coal basin. This means that the State was the only buyer of whole mine production. This system continued until 1882. Gürboğa writes that in this period the Naval Ministry created a military order in the Basin.<sup>54</sup>

During the Crimean War, French and English steam war ships needed coal. Between 1854 and 1857, the English Company held the right of management of the coal basin.<sup>55</sup> In these years, the Ottoman State imported technical personnel from England, which was a very advanced country in coal mining techniques. The import of coal from England continued during the Crimean War years.

The bad management of the mines gave harm to the navy of the Ottoman Empire. Therefore, in 1865 the coal mine's management was transferred to the Naval Minister.<sup>56</sup> After the entry of the Naval Ministry to the region in 1865, Gürboğa writes that the state was responsible for the supply of the labor force.<sup>57</sup> Therefore, the state charged the Dilaver Pasha Regulation in 1867 to manage conditions of the labor

---

<sup>52</sup> Ibid., p. 14.

<sup>53</sup> Gürboğa, *The Zonguldak Coal Basin As the Site of the Contest 1920-47* p. 59

<sup>54</sup> Ibid., p. 60.

<sup>55</sup> Genç, *Ereğli Kömür Madenleri 1840-1920*, p. 29.

<sup>56</sup> E. Attila AYTEKİN, *Tarlalardan Ocaklara Sefaletten Mücadeleye, Zonguldak-Ereğli Kömür Havzası İşçileri 1848-1922* (İstanbul, Yordam Kitap, 2006) p. 30.

<sup>57</sup> Gürboğa, *The Zonguldak Coal Basin As the Site of the Contest 1920-47*, p. 60.

force in the mines. There was a scarcity of labor force in the region as were in other regions of the Ottoman Empire. To solve this problem, the Regulation created a compulsory labor force regime for the coal basin.

According to the regulation, all males who were between 13 and 50 years of age, and lived in the fourteen counties around the coal basin, had to work in the basin on a rotational system according to which miners worked in the mines for 15 days and then they returned to their villages where they continued farming. Quartet said that “this also enabled the continuous flow of agricultural taxes which were the financial base of the Ottoman economy.”<sup>58</sup>

This is an important point because the miners of the nineteenth century in the coal basin were not consistent with the ideal type of proletariat who sold their labor force in the market and had no ties with agriculture. The Ottoman State forced miners by using soldiers to work in the mines, so it can be said that this practice was meant to manage capitalist market conditions by using non-economic powers. Therefore, to understand the conditions of working class in the region we must focus on the Ottoman State’s approach to capitalism in this period.

The importance of workers’ relations with the soldiers was discussed above. With the application of a rotational system, the nature of the workers' relations with soldiers changed a bit. When the miners went to their village for fifteen days and did not want to return to mines, the soldiers forced them to return. Because of the rotational system, a worker was not able to leave the mine before another worker came to replace him. Therefore, the disputes between workers included the soldiers because the one who had to bring the worker who did not come was the soldier himself. The workers, who had good relations with soldiers, possibly took advantage

---

<sup>58</sup> Quataert, *Osmanlı İmparatorluğu'nda Madenciler ve Devlet*, p.97.

of this situation, so local relations pattern became more important in the working life in this period.

Another important point is the workers' ties with their villages. As we know from AYTEKİN's research, there was a problem of unpaid wages in the coal basin.<sup>59</sup> Large amounts of the wages of the workers were appropriated by the local authority as taxes. In this situation, the villages offered the workers a means to subsist. Therefore, to understand the nature of exploitation in the coal basin we must take into account of the workers' ties with their villages. In addition to this, the industrial-rural linkage was an obstacle for the creation of qualified labor power because the workers could not see themselves as only workers.

GÜRBOĞA writes that, "there is no doubt that the abolition of the state's monopsony over the coal market in 1882 constituted another breaking point in the history of the basin. The 1882 decision opened the path for the flow of large-scale capital, including capital of foreign origin."<sup>60</sup> Although the compulsory labor regime was not officially abolished until 1908, after 1882, the compulsory labor regime was not in operation.

Ereğli Company which was a French Company had 186 million kuruş capital which could not be compared to that of other small-scale companies. This company controlled 92 percent of total production of the basin at the end of the century.<sup>61</sup> Although this company tried to improve substructure conditions of the basin, the local mining companies and the people who lived in the region reacted negatively. There were many thefts and attacks against the company in these years.

---

<sup>59</sup> AYTEKİN, *Tarlalardan Ocaklara Sefaletten Mücadeleye, Zonguldak-Ereğli Kömür Havzası İşçileri 1848-1922*, pp. 51-65.

<sup>60</sup> GÜRBOĞA, *The Zonguldak Coal Basin As the Site of the Contest 1920-47*, p. 63.

<sup>61</sup> AYTEKİN, *Tarlalardan Ocaklara Sefaletten Mücadeleye, Zonguldak-Ereğli Kömür Havzası İşçileri 1848-1922*, pp. 32-33.

Serb, Montenegrin, Italian, Greek, French, English and Irish workers worked in the course of time in the Zonguldak Coal Mines. Especially Montenegrins continued to work in the mines after the independence of Montenegro. Some problems occurred between the foreign workers and Ottoman workers from time to time.<sup>62</sup>

After the 1908 Revolution, the economic policies aimed at the national capitalism.<sup>63</sup> In parallel with these economic policies, the Committee of Union and Progress (CUP) took control of the basin from the Naval Minister and first gave it to the Ministry of Public Works and then the Ministry of Commerce, Agriculture and Mines. "The abolition of the Naval Ministry's administration in terms of labor management and the management of mining activities."<sup>64</sup> The CPU wanted a highly centralized organization for the administration of the coal basin.<sup>65</sup>

According to Turkish Republic State Supervisory Council's Report of Health and Safety in Mines of Turkey "although there were more than three hundred small and big scale coal enterprise, the Basin was nationalized in 1911."<sup>66</sup> Until 1914 the Ottoman State had full control over the basin. However with the break out of World War I, German capital flowed into the Basin and gradually took shares of the Ereğli Company and control of the War Coal Center.<sup>67</sup>

After World War I, French armies invaded the Basin and occupied it until the end of National Struggle. War Coal Center was replaced with Entente Forces Coal Commission.<sup>68</sup> In June 1921 the French occupation ended. in June 1921. Between

---

<sup>62</sup> Genç, p. 327.

<sup>63</sup> Korkut Boratav, *Türkiye İktisat Tarihi 1908-2005* (Ankara: İmge Kitabevi, 2007) p. 22.

<sup>64</sup> Gürboğa, *The Zonguldak Coal Basin As the Site of the Contest 1920-47*, p. 65.

<sup>65</sup> Ibid., p. 66.

<sup>66</sup> Turkish Republic State Supervisory Council, 2011, *Report of Health and Safety in Mines of Turkey*, Accessed on 15 November 2012, Available online at <[http://hukuk.usak.edu.tr/dokuman/ddk2011\\_3.pdf](http://hukuk.usak.edu.tr/dokuman/ddk2011_3.pdf) ddk>

<sup>67</sup> Yasin Kaya, "Class Underground, Class Aboveground: Zonguldak Mineworkers and Their Unions" (M.A. Thesis, Boğaziçi University, 2009) p. 29.

<sup>68</sup> Ibid.

1914 and 1922, the coal production was interrupted by extraordinary conditions of World War I and the National Struggle<sup>69</sup>

In September 1921, "*Havza-i Fahmiye Amele Kanunu*" the first labor act in after the National Struggle was issued. This law regulated the working conditions, hours and some social security mechanisms. Gürboğa writes that "with the pro-labor provisions of the laws, the new government desired to show its sympathy towards the more oppressed sections of society, which the mine workers effectively represented."<sup>70</sup>In December 1923 the government established the *Amele Birliđi*... Until the foundation in the Basin of the first labor unions in 1946, the *Amele Birliđi* played its part bringing the state's paternalist policies to the workers and mine operators' representatives and functioning as a workers' representative organization."<sup>71</sup>

Gürboğa writes that "after 1922 the ruling elite of Republican state concerned with the capital composition of the basin, encouraged the entry of large scale national companies under the control of newly established national bank, Türkiye İş Bankası (Turkish Business Bank)."<sup>72</sup> The capital needs of the Basin were supplied by the Turkish Business Bank.

The first Law of Promoting Industry Law (*Tevsik-i Sanayi Kanunu*) in 1927 and the Global Economic Crises in 1929 led to a break in liberal economic policies. Turkish economic and political life were redesigned by the State-led industrial development policies. Boratav writes that "the state dominated the whole economic life by investing capital, operating enterprises and being a control mechanism."<sup>73</sup> In the 1930s, parallel to the state-led industrialization attempts, the basin gained further

---

<sup>69</sup> Gürboğa, *The Zonguldak Coal Basin As the Site of the Contest 1920-47*, p. 66

<sup>70</sup> *Ibid.*, p. 67.

<sup>71</sup> *Ibid.*, p. 70.

<sup>72</sup> Gürboğa, *The Zonguldak Coal Basin As the Site of the Contest 1920-47*, p.

<sup>73</sup> Boratav, *Türkiye İktisat Tarihi 1908-2005*, p. 68.



importance in the country's economic policies. These policies also put an end to foreign capital in the Basin.

Although Turkey did not participate in World War II, it experienced a war economy.<sup>74</sup> "In 1940, the state decided to operate the the mines directly in the Basin by *Ereğli Kömür İşletmeleri* which were connected with Etibank."<sup>75</sup>

During the World War II the need for coal was increased dramatically. "For the aim of satisfying coal need the government put compulsory labor regime (*iş mükellefiyeti*) into practice in the Basin."<sup>76</sup> The compulsory labor regime was a part of *Milli Korunma Kanunu* which suspended social purposes of the 1936 Work Law. Like in the Dilaverpaşa Regulation which had also put into practice a compulsory labor regime in the nineteenth century, in Second compulsory labor regime in 1940s, the labor process were restructured on the rotational basis. Workers spent half of the year in their village, the other in the pits. Yasin Kaya summarize the major consequences of the Gürboğa'a comprehensive work on compulsory labor regime

(i) The state who became the sole owner and the manager of the basin with establishment of 33 EKİ, applied practices of coercion and violence on the workers and villagers, and it intensified its existence in the region. (ii) Republican People's Party asked for the consent of the people in the region to ensure the compulsory labor and the propaganda practices helped the paternalistic ideology to deepen. (iii) The agricultural-based economy of the region collapsed due to the labor power fleeing from the villages to work in the mines.

Second Compulsory Labor Regime was abolished in 1947.

---

<sup>74</sup> Ibid., p. 81.

<sup>75</sup> Turkish Republic State Supervisory Council, 2011, *Report of Health and Safety in Mines of Turkey*, p. 192.

<sup>76</sup> Murat Metinsoy, "İkinci Dünya Savaşı Yıllarında Zonguldak Kömür Ocaklarında Ücretli İş Mükellefiyeti ve İşçi Direnişi," in *Zonguldak Kent Tarihi '05 Bienali Bildiriler Kitabı*, ed. Kürşat Coşgun and Ahmet Öztürk (İstanbul: Zonguldak Kültür ve Eğitim Vakfı, 2006) p. 93.

## The Golden Age of the Zonguldak Coal Basin

After the end of the compulsory labor regime in 1947, the administration of the little mines that had been brought together to be administered by the Ereğli Hard Coal Enterprise (EKİ), passed to the Turkish Coal Enterprise. In 1983, this enterprise was transformed into the Turkish Hard Coal Enterprise (TTK).<sup>77</sup>

For the history of the Zonguldak Hard Coal Basin, the importance of the Çatalağzı Thermal Power Plant, which was built in 1948 within the body of EKİ to meet the need of the electricity of the area, must be emphasized. Today, all of the needs of ÇATES are met by the TTK. Moreover, it also meets most of the coal needs of Karabük Iron and Steel Factory built in 1937 and Ereğli Iron and Steel Factory built in 1965 until the 1980s.<sup>78</sup>

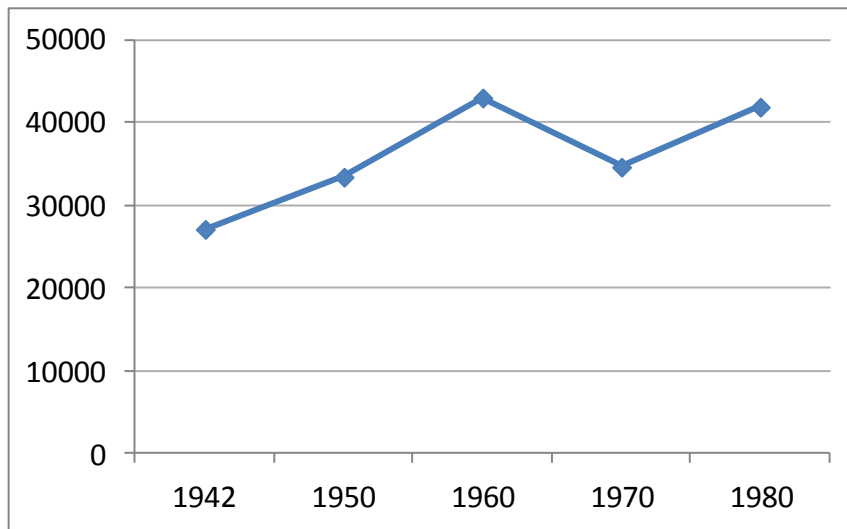


Figure 4: The worker numbers of TTK<sup>79</sup>

<sup>77</sup> Turkish Republic State Supervisory Council, 2011, *Report of Health and Safety in Mines of Turkey*, p. 192.

<sup>78</sup> *Ibid.*, p. 195.

<sup>79</sup> I prepared this figure by using data of Turkish Hard Coal Enterprise.

The geological characteristics of the coal found in the basin allow only labor-intensive production. For that reason, total production in the basin is directly proportional to number of workers of the basin.

Between 1960 and 1980, called also the Golden Age of the Zonguldak Hard Coal Basin, the worker number passed 40,000. In parallel with this, the production increased. Total annual production of run-of-mine approached 8 million tons. The coal exportation that had begun with 16,000 ton in 1973, passed 10 million ton in 1998.<sup>80</sup>

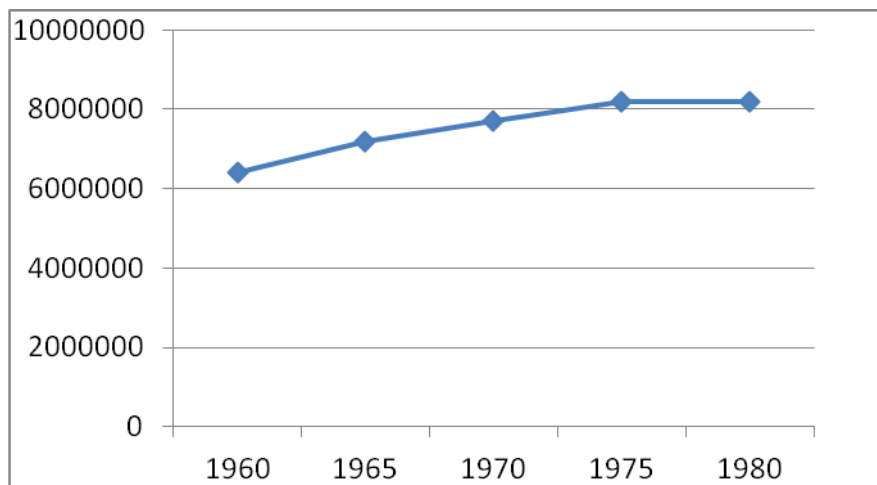


Figure 5: The total raw coal production (tone)<sup>81</sup>

The years of the compulsory labor regime during the Second World War did not leave pleasant memories in the minds of the laborers. On the other hand, 1960 and 1980, as a result of syndical struggles and policies aiming at the increase of domestic consumption, apparent progress was made in the working conditions of workers and the high wages given to the workers raised their life standards, as was mentioned in the second chapter.

---

<sup>80</sup> Ibid.

<sup>81</sup> Ibid.

In 1958, many small and big syndicates, including the Zonguldak Mine Workers' Syndicate founded in 1948 with 15,000 members, founded the Mine Workers Federation of Turkey. This federation becomes a member of TÜRK-İŞ in 1960. In 1983, it was transformed to the General Mine Workers Syndicate which is still active today.<sup>82</sup>

The syndical struggle is important in terms of the worker's history in the basin. Behind this history, is the dynamic agency of the mine workers, who organized the biggest strike after the 12 September 1980, and owned their achieved rights to their struggles, sometimes despite syndicates, before 1980. The worker's resistance of 1965, known also as "the Events of Kozlu," are one of the most important examples of the worker struggles of these years. These events began because of the oppression of the workers like beatings, profanities and because seniority pay rises were left to the discretion of the work chief.

As the result of the soldiers acting to break up the resistance, two workers died, ten workers were injured with bullets, twelve soldiers were hospitalized because of the injuries from stripes.<sup>83</sup> The agency of the workers in the basin continues until 1980.

### The New Coal Production Map

Although the golden age of coal production has been left behind, especially after 2000, the world's total coal production has increased because of the the Chinese effect. The increasing need for coal by the People's Republic of China has given impetus to world's coal production.

---

<sup>82</sup> Ekrem Murat Zaman, *Zonguldak Kömür Havzasının İki Yüzyılı* (Ankara: TMMOB Maden Mühendisleri Odası, 2004) p. 125.

<sup>83</sup> Ekrem Murat Zaman, *Zonguldak Kömür Havzasının İki Yüzyılı*, p. 126.

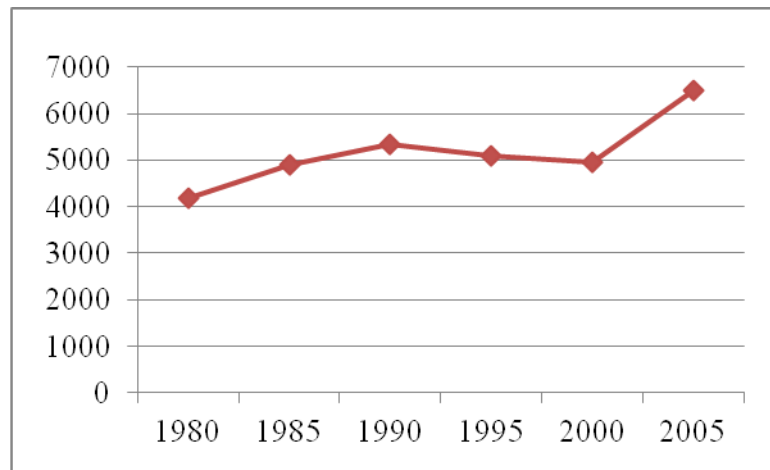


Figure 6: World's Coal Total Production, 2007 (million short tons)<sup>84</sup>

Although there has been a decline in the importance of coal especially after 1980s, its importance continues especially in industry in the production of iron and steel. Coal's high calorie makes it unchangeable for the iron and steel industry, which are very important as raw materials for any kind of industry. In addition to iron and steel, coal's importance for thermal power stations which produce electricity continues. Both iron and steel and electricity are essential for any kind of industry. For that reason, coal's importance for industry can be understood by taking into account all of the chains of industrial production.

<sup>84</sup> US Energy Information Administration, 2007, "World Coal Production, Most Recent Annual Estimates, 1980-2007", Accessed on 15 November 2012, Available online at <<http://www.eia.gov/emeu/international/coalproduction.html>>

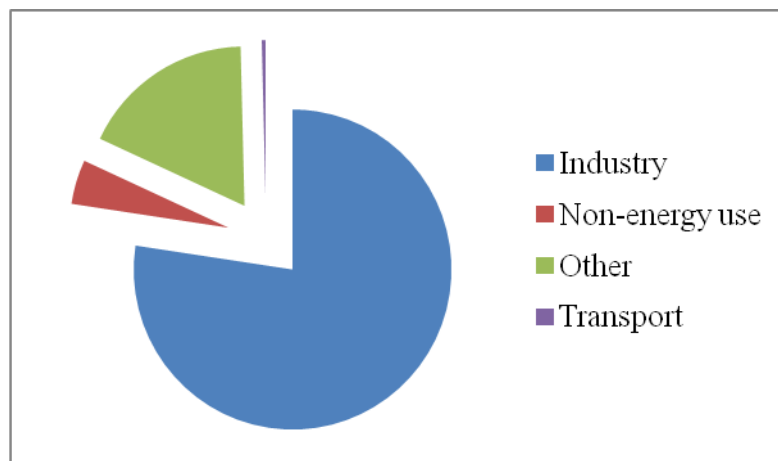


Figure 7: Shares of world coal consumption, 2009<sup>85</sup>

Although the coal production is mostly done for local markets, in the post 1980 period, the international coal trade has increased about 80%. In 2009, 15% of the total world coal production mean 940 million tons coal in the international trade arena. 91% of this trade is carried out by maritime transport.<sup>86</sup>

In the second part of the 1980s, in parallel to the increasing competition for the coal trade, the price of the coal started to decline. In the 1990s, the price of coal was about 40 dollars/ton. After 2003, in parallel to the increasing demand the price of the coal started to decline. In the trade agreement for coal trade between Australia and Japan in early 2008, the price of the coal increased to 325 dollars/ton. However, the 2008 financial crisis led to an important decline to, 180 dollars/ton in 2009. In 2011, the price of the coal rose to 225 dollars/ton.<sup>87</sup>

<sup>85</sup> International Energy Agency, 2011, "*Key World Energy Statistics 2011*." Accessed on 15 November 2012, Available online at

<[http://www.iea.org/textbase/nppdf/free/2011/key\\_world\\_energy\\_stats.pdf](http://www.iea.org/textbase/nppdf/free/2011/key_world_energy_stats.pdf)>

<sup>86</sup> Turkish Anthracite Enterprise, 2012, "*Sector Report of Hard Coal*" Available online at

<[http://www.enerji.gov.tr/yayinlar\\_raporlar/Sektor\\_Raporu\\_TTK\\_2010.pdf](http://www.enerji.gov.tr/yayinlar_raporlar/Sektor_Raporu_TTK_2010.pdf)>

<sup>87</sup> Turkish Anthracite Enterprise, 2012, "*Sector Report of Hard Coal*", pp 31-32

Europe's declining coal production, especially after the 1960s, and the increase of Asia and Oceania's coal production mark two important breaking points in the history of world coal production.

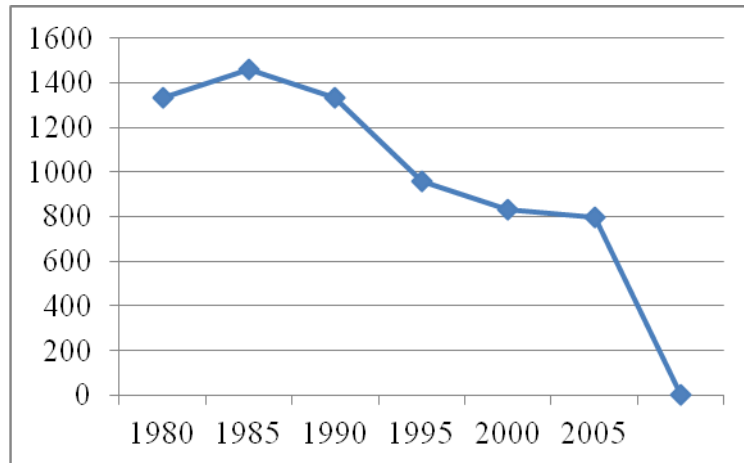


Figure 8: European total coal production, 2007 (short million tons)<sup>88</sup>

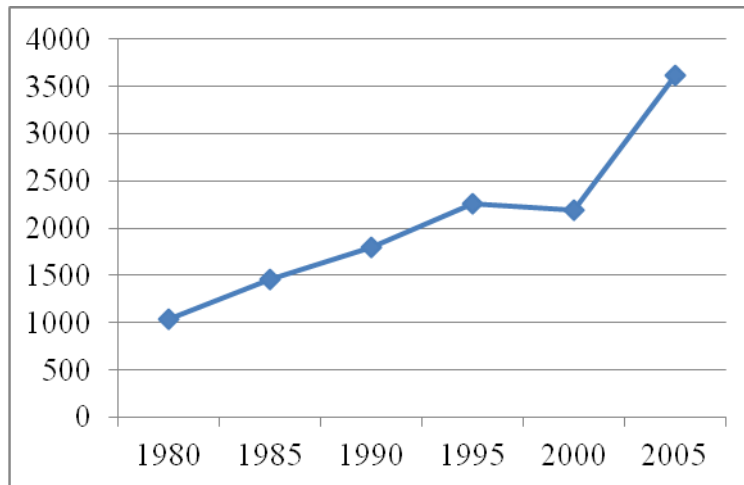


Figure 9: Asia and Oceania total coal production, 2007 (short million tons)<sup>89</sup>

Two examples from these regions will be examined to understand the regional transformations of coal production. The first one is England, as an example

<sup>88</sup> US Energy Information Administration, 2007, "World Coal Production, Most Recent Annual Estimates, 1980-2007"

<sup>89</sup> Ibid.

of the decline of coal production, and the second one is China, as an example of increasing coal production. In this way, the changing political economy of coal production on a global scale can be understood. In the transfer of coal production from regions that provide better working conditions to regions where with cheaper and unorganized workers is the main dynamic of these changes. After that, we can put Turkey on the new coal production map.

### The UK's Experience with Coal Production

The importance of the Industrial Revolution for UK's coal production is discussed before. Until the Second World War, the coal production had maintained its importance in the UK's economy and the world's coal production.

After the Second World War, petroleum started to take the place of coal as an energy resources throughout the whole world and so coal started to be less produced and consumed. It is important to remember that the USA, which had an important influence on Europe's political and economic system through its Marshall Aid Program after the Second World War saw the organized political power of the coal miners of the Europe as a threat. For this reason, As Mitchell writes,

they came up with a new mechanism to defeat the coal miners: to convert Europe's energy system from one based on coal to one based predominantly on oil. Western Europe had no oil fields so the additional oil would come from the Middle East. Scarce supplies of steel and construction equipment were shipped from the United States to the Persian Gulf, to build a pipeline from eastern Saudi Arabia to the Mediterranean, to enable a rapid increase in oil supplies to Europe. The diversion of steel and of Marshall Plan funds for this purpose was justified in part by the need to undermine the political power of Europe's coalminers.<sup>90</sup>

---

<sup>90</sup> Timothy Mitchell, "Carbon Democracy", *Economy and Society* 38, no 3(2009) p. 406



The USA's attempt to convert Europe's energy system from coal to oil was successful. Especially after the 1960s an important decrease in the coal production of Europe occurred. For instance, Germany's coal production was at its peak in 1957, with 150 million tons, and after that it gradually decreased. Today its production is about 20 million tons and in 2018 Germany wants to close all of its pits.<sup>91</sup> The UK's coal production has followed the same path. In 1957, coal production was about 200 million ton, while its production is about 15 million tons.

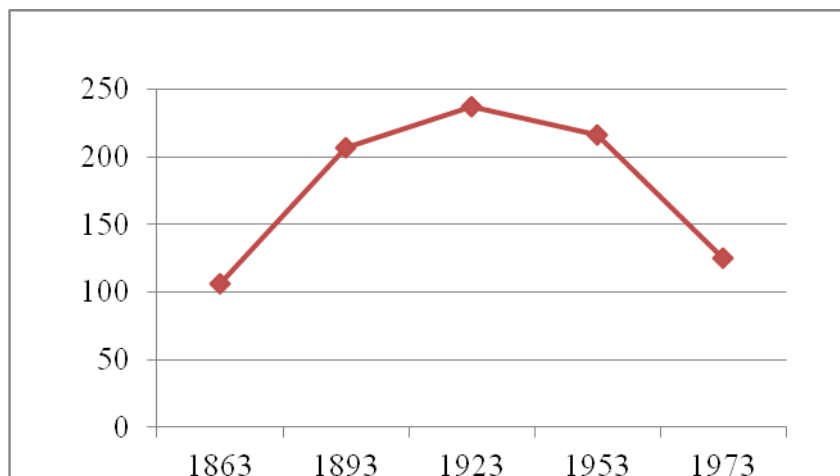


Figure 10: UK total coal production 1863-73, 2007 (short million tones)<sup>92</sup>

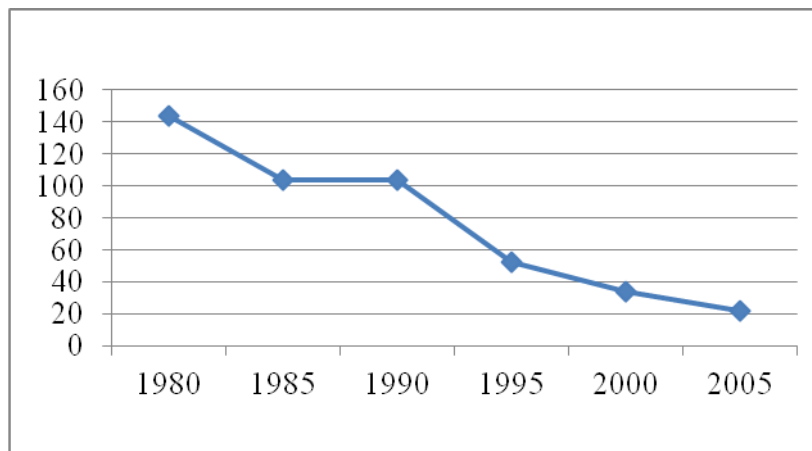
In England, the coal miners was seen as the core of the militant working class. In "Iron Lady" Margaret Thatcher's neoliberal agenda, there was no place for an organized working class. When she was Minister of Education and Science in the government of Edward Heath, she met with the power of the organized coal miners. The Heath government was broken down by the National Union of Mine Workers

<sup>91</sup> SPIEGEL Online, 30 January 2007, Available online at <http://www.spiegel.de/international/0,1518,463172,00.html>

<sup>92</sup> UK Department of Energy and Climate Change, 2010, "*Historical Coal Data: Coal Production, Availability, and Consumption 1853 to 2010*" Accessed on 15 November 2012, Available online at [http://www.decc.gov.uk/en/content/cms/statistics/energy\\_stats/source/coal/coal.aspx#>](http://www.decc.gov.uk/en/content/cms/statistics/energy_stats/source/coal/coal.aspx#>)

(NUM) in 1974. When she became prime minister in 1979, she applied a neoliberal economic program which consisted of abolishing the power of the unions, which could prevent the implementation of her policies. For this aim, Thatcher passed a series of law in the name of "The Employment Act," in 1980, 1982 and 1984. Those acts which limited the organization of workers naturally hindered the power of unions.<sup>93</sup> In 12 March 1984, the president of the National Union of Mineworkers (NUM), Arthur Scargili, called for a strike against the sale of mines. Thousands of coal miners went on strike. Almost 10,000 miners clashed with the police. Ten people died.

The suppression of the strike was not only an economic victory for Thatcher, but also a political one because if it was necessary to create a society in which people were atomized, they had to abolish any collective action. The suppression of the strike was related not only to coal mining, but to the whole of the neo-liberal program. Thatcher took revenge for the Heath government and overcame one of the most important obstacles for her policies. The Miners' defeat at the end of one year in the strike prepared a proper basis for a neo-liberal transformation.



---

<sup>93</sup> Eric J. Evans, "Thatcher and Thatcherism" (London: Routledge, 1997) pp. 37-38.

Figure 11: England total coal production, 2007 (short million tonnes)<sup>94</sup>

After the defeat of the coal miners, England started to liquidate the coal mining sector. The privatization of the sector in 1994 with the Coal Industry Act was an important step in this process. Following the privatization subcontracting practices that prevailed in the UK coal industry, it is not surprising that, as Walls, Winterton and Winterton write, that "...outsourcing was introduced by the National Coal Board at this time as part of a strategy to weaken the position of organized labor within the industry."<sup>95</sup> England's experience with coal production is a perfect example of, on the one hand, transferring labor intensive industries to regions where cheaper and less organized workers can be found and, on the other, weakening organized labor through subcontracting practices.

### The PRC's Experience with Coal Production

The People's Republic of China is the largest producer and consumer of coal in the world. An estimated 5 million people work in China's coal-mining industry. Its own coal reserves are not enough for its growing industry and so, after Japan, it is the second biggest importer of the world.<sup>96</sup>

---

<sup>94</sup> US Energy Information Administration, 2007, "*World Coal Production, Most Recent Annual Estimates, 1980-2007*"

<sup>95</sup> Emma Walls et al., "*Subcontracting in the Privatised Coal Industry*", *Work, Employment and Society* 14, no 4 (2000) p. 739

<sup>96</sup> International Energy Agency, 2011, "*Key World Energy Statistics 2011*"

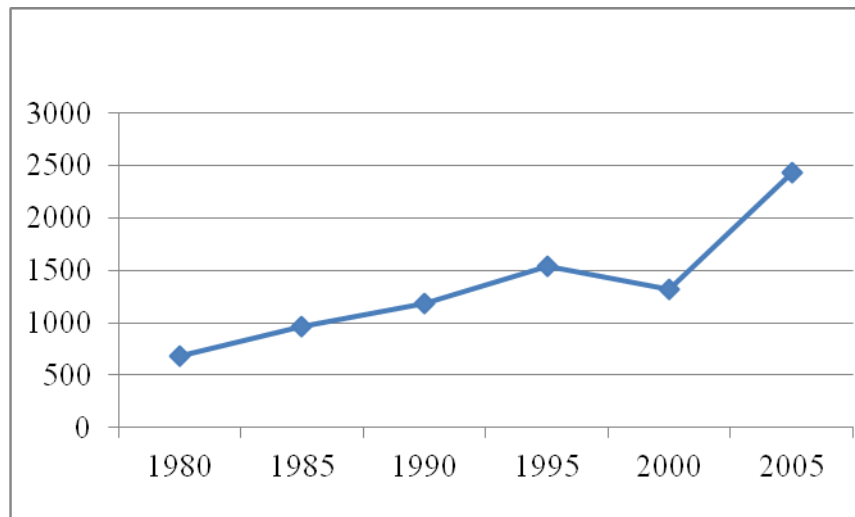


Figure 12: The PRC's total coal production, 2007 (short million tons)<sup>97</sup>

As Elspeth Thomson shows that the rise of the Chinese coal industry first happened under the influence of foreign investment. During the nineteenth century and the rapid expansion under Japanese control after the 1930s, coal mining in the PRC experienced rapid expansion.<sup>98</sup>

From the Socialist Revolution in 1949 to the Deng Xiaoping's neo-liberal reforms in the 1979, coal mining in China was run by the state. Thomson reports that, "the rate of growth of coal production was never sufficient to meet the actual demand because of the negative effects of inconsistent policies, artificially low prices, lack of investment, and questionable spatial distribution of production and consumption."<sup>99</sup>

Deng Xiaoping's neo-liberal turn in 1979 was critical for the PRC's coal mining industry. With the transition to neoliberalism, China became the epicenter of

<sup>97</sup> US Energy Information Administration, 2007, "World Coal Production, Most Recent Annual Estimates, 1980-2007"

<sup>98</sup> Elspeth Thomson, *The Chinese Coal Industry: An Economic History* (London: Routledge, 2003) p. 8

<sup>99</sup> *Ibid.*, pp. 33.

urbanization, which is neoliberal capitalism's engine sector.<sup>100</sup> In parallel to the increase in steel consumption through the 1980s and 1990s, coal consumption boomed.<sup>101</sup> Coal, which is produced and used annually in amounts of over two billion tons in recent years, dominates the national energy market by sharing 70% of China's primary energy consumption, generating over 80% of the national electricity and providing nearly 45% of final energy use.

In the 1980s, subcontracting practices in coal mining were started.<sup>102</sup> They prevailed easily because the essential part of the total mines are run by small enterprises which have terrible working conditions throughout the country. Another important result of the domination of small enterprises in the coal mining sector and so the prevalence of subcontracting practices is the high number of work accidents. As many as 20,000 miners die in accidents each year. For that reason, the PRC started a program of the restructuring of the mining sector by shutting down small enterprises. In this process 50,000 enterprises, which total led 420 million tons of production, were shut down.<sup>103</sup>

If we compare the transformations in the English and Chinese coal industries, we can say that coal goes out after the cheap and unorganized labor. As Harvey says, "a large, easily exploited and relatively powerless labor force are the most important characteristics of the neoliberalism in China." Therefore, it is not a surprise of rising coal mining industry in China.

---

<sup>100</sup> David Harvey, "The Right to the City" *New Left Review* 53 (2008) p. 30

<sup>101</sup> World Steel Review, 2012, *World Steel Production Report*, Available Online at <<http://www.steelonthenet.com/production.html>>

<sup>102</sup> Thomson, *The Chinese Coal Industry: An Economic History*, pp. 110-136.

<sup>103</sup> Turkish Republic State Supervisory Council, 2011, *Report of Health and Safety in Mines of Turkey*, p. 121

## Turkey's Experience with Coal Production after 1980s

Before focusing on coal production, to give some information about Turkey's mining sector in general is useful to understanding its experience with coal production.

Today, the mining sector accounts for about 1.4% of the GDP of the country.<sup>104</sup> 98% of the natural gas, 90% of the oil, 20% of the coal are imported.<sup>105</sup> Although the mining sector has important employment advantages, for instance, the employment capacity of the mining sector is 2.6% more than the manufacturing industry, 16.97% than energy sector, only 2.6% of the total state subsidies are given to the mining sector.<sup>106</sup>

In the light of this information, it is easier to focus on coal production.

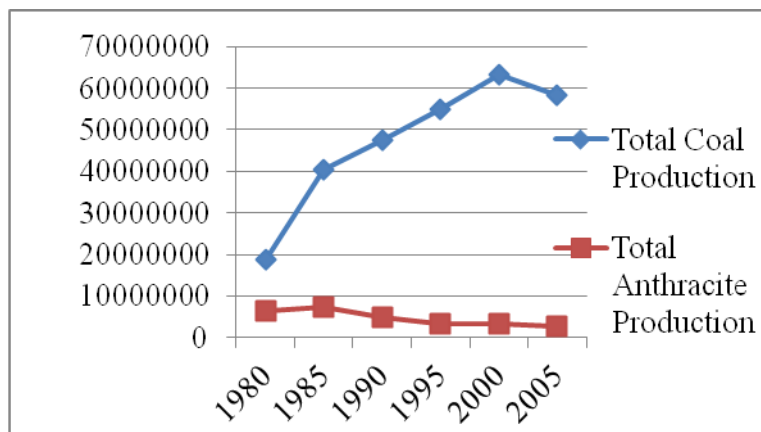


Figure 13: Total coal production and total hard coal production in Turkey (tonnes)<sup>107</sup>

<sup>104</sup> Ibid., p. 6

<sup>105</sup> Ibid.

<sup>106</sup> Ibid., p.8

<sup>107</sup> *World Coal Production, Most Recent Annual Estimates, 1980-2007*

As it can be seen in Figure 8, in Turkey while the total production of coal including boron, lignite, and hard coal is increasing, the rates of hard coal production are decreasing.

Coal production is a labor-intensive sector. As Mtevelliođlu and Iřık write that if 1990 is used as a base between 1991 and 2006, the unit labor cost decreased about 22%.<sup>108</sup> This rate shows that in the neoliberal period, the labor costs have been decreasing. Therefore Turkey's labor market is convenient for labor intensive sectors such as coal production. As was showed above, in the post-1980 period the total coal production in the whole world has been increasing. If the increase in the world's coal need and Turkey's cheap labor market are taken together it is easy to understand the increase in the total coal production in Turkey in the post-1980 period.

However, when hard coal production is examined, the situation becomes more complex. Why hard coal production is decreasing while the total coal production is increasing is must be examined on.

Before answering this question first, the hard coal production in Turkey must be discussed. Hard coal is produced only in the Zonguldak Coal Basin by the TTK, which was created in 1983 as a SEE, and subcontracting firms under the name of the *redevance system*, which will be examined in the next chapter. In addition to the TTK and its subcontractors, there are 250 informal pits in the basin.<sup>109</sup> The TTK's hard coal production satisfies the whole needs of the atalađzı Thermal Power Station. The hard coal reserve in the basin is 1.3 billion tons up to -1200 grades.<sup>110</sup>

---

<sup>108</sup>Nergis Mtevelliođlu and Saim Iřık, (2009) "Trkiye Emek Piyasasında Neoliberal Dnřm, In Kreselleřme, Kriz ve Trkiye'de Neoliberal Dnřm (pp.159-198) Istanbul: Bilgi niversitesi., p. 191

<sup>109</sup> Turkish Republic State Supervisory Council, 2011, *Report of Health and Safety in Mines of Turkey*, p. 193

<sup>110</sup> *Ibid.*, p. 194

The increasing rates of hard coal imports are the important aspect of the Turkey's hard coal production. Turkey first imported 16,000 tons of hard coal in 1973. After that, hard coal imports have increased gradually and they reached about 20 million tons in 2009.<sup>111</sup>

After this general information about hard coal in Turkey, the question of why hard coal production is decreasing while the total coal production is increasing can be answered. Two important factors are affective in this situation. First, the broken faulted and fragmental nature of the coal reserve of the Zonguldak Coal Basin make the mechanization of the production impossible. The hard coal reserve in the basin looks like a tree that has grown beneath the earth. Mechanized production systems for coal mining are suitable for the reserves like a cheese hoop. When the mechanized systems are set up at one point, they can produce from that point for many years. However, in the Zonguldak Coal Basin, when the mechanized systems are set up, the systems must be changed to reach another branch of the tree for short periods. This situation leads to important increases in the costs of mechanization. For that reason, production has not been mechanized in the Zonguldak Coal Basin. It is important because in the neoliberal period economic activities occur in international competition conditions. It is easy to estimate that mechanized basins' hard coal has a great competitive advantages in terms of production quantity and prices.

Second, most importantly, the organized power of the Zonguldak coal miners is an important political threat for the state, especially in the neoliberal period in which all organized activities have started to be seen as a political threat. The Zonguldak coal miners showed their organized power in the Big Miners' Strike (*Büyük Madenci Grevi*) between 1989 and 1991. The state wanted to destroy this

---

<sup>111</sup> Ibid., p. 195



organized power but the Big Miners Strike showed that would not be easy. In addition to the miners' organized power, the strategic importance of hard coal for the national security in possible war conditions could wholly block liquidation of the sector.<sup>112</sup>

---

<sup>112</sup> Ibid.

## CHAPTER IV: PRIVATIZATION THROUGH THE BACK DOOR: REDEVANCE SYSTEM IN THE ZONGULDAK COAL BASIN

The strike in 1990-91 was a turning point for the Zonguldak coal basin. The coal production has been done previously by only the TTK, which is a SEE would be done by TTK and subcontractors together with the application called the redevance system.

The redevance system, which is a subcontracting practice, must be examined for understanding the sociological, economic and political atmosphere in the Zonguldak Hard Coal Basin in the post-1980 period. Moreover, the redevance system offers important possibilities for understanding the contradictory and tense relation between the labor, the capital, and the state. From the perspective of the state, the elimination of the state as an economic actor by means of the elimination of the TTK, which was one of the important actors of the Basin history, becomes prominent in this process. From the perspective of the capital, this process lasts as a capital accumulation process that begins with small-scale enterprises, than continues with the investment of the bigger capital to the Basin. From the perspective of the labor, the possibilities of the organization decrease for the workers and even they manage to organize, the influence of their organization weakens (as the consequence of the changing political economy of the hard coal production).

Work accidents are one of the vital issues that are positioned in the center of the labor, capital and state triangle, which changes considerably in the post-1990 period. For that reason, this process must be examined more closely in order to understand the formation process, the reasons and the consequences of the work accidents in the Basin. It is only after this examination that the fact that the work

accidents are the consequence of the loss of the class struggle by the workers in the Basin can be understood.

Based upon the mortality numbers per ton it can be said that the rate of work accidents in subcontracting enterprises that work with redevance system is higher than the ones in the TTK pits. So it is vitally important to analyze the redevance system in order to understand the work accidents in the Zonguldak hard coal basin. In this chapter I will analyze the redevance system by using the data of the field survey I carried out in the Zonguldak coal basin as well. After that, in the next chapter I will focus on some work accident examples which I derived from field survey I carried out in Zonguldak coal basin.

While reviewing all of this process, to distinguish strictly between the period in which TTK produced alone and the period in which the TTK and the redevance enterprises produced together is not that easy. In the context of our issue, the health of the miners working in the TTK was seen as a cost element in the Keynesian-Fordist era and it continued to be seen like this in the neoliberal era. For that reason, the fact that the most important reason for the work accidents is the commodification of the worker's health must be remembered and the fault line that determines the work accidents is continuous must be emphasized.

### The Redevance System in General

Between 1960 and 1980 worker's struggles reached their apex. These years also saw import substitution industrialization policies. The Zonguldak Hard Coal Basin has not been left beside this process. In these years, the worker's deaths per 100,000 ton followed a decreasing course; it decreased in half between 1960 and

1980. This situation is one of the most important consequences of the worker's struggles in the Basin. On the other hand, in the years when the redevance system was applied, the death rate per 100,000 ton production increased dramatically. Even though the death rate per 100,000 ton production has decreased due to the legal arrangements of the 2000s, it did not reach the lowest rates of the early 1980s. In addition to this, when we compare the sites of the TTK and the redevance sites during the years of the redevance system, it is seen that the death rate per 100,000 ton was higher in the redevance fields.

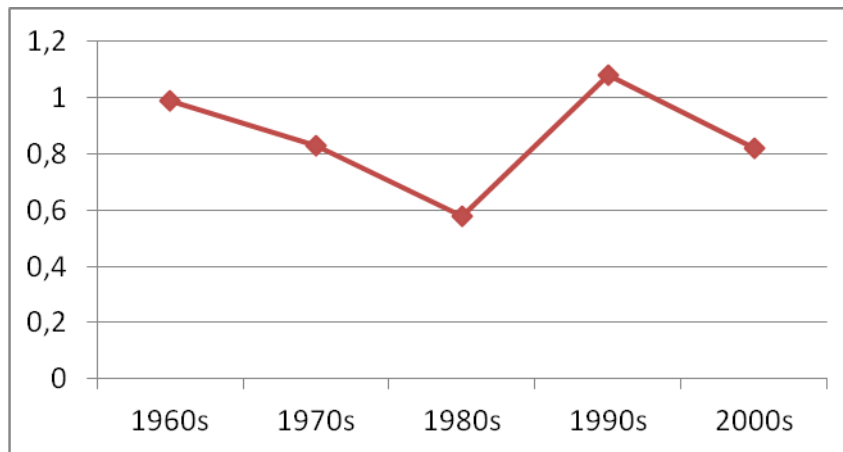


Figure 14: Death ratios for per 100,000-ton production<sup>113</sup>

There are two important features of the neoliberal period about the state, as was discussed in the second chapter. The first one is withdrawal of the state from being an economic actor, which means privatization. The other is that the state turned into an actor that managed the social and political life according to the needs of global capital accumulation process. The Zonguldak coal basin is not except from this global transformation. Therefore in the process of the elimination of the SEEs

<sup>113</sup> I prepared this figure by using the Mining Engineer Levent Usman's data and the Production data of Turkey Hard Coal Enterprise.

the privatization of the TTK came to agenda. However, the organized struggle against privatization of the coal miners in 1990-91 strike showed that the privatization process could be overcome in one night. Thus, state put the redevanca system on the agenda as a tactic of "privatization through the backdoor."

As was told in the first chapter, the subcontracting practices, in other words the redevanca system, spread into the Basin as a consequence of the neoliberal globalization after 1989. In this process, the TTK continued to its activity with fewer workers and with less production during time. As a result, a hybrid labor market was constituted with the workers in the TTK, the workers in the subcontractors of the TTK and the workers in the redevanca sites. This hybrid and multipartite labor market is one of the most important characteristics of the Basin history after 1989 must be emphasized strongly.

Alongside this hybrid and multipartite labor market, the unemployment is an important problem for the Basin, as well as for all Turkey. An explicative example of the unemployment problem occurred in 2008 during the process of the worker recruitment of the TTK. When the General Directorate of the TTK declared that it would recruit 3,000 underground workers, 37,247 workers applied. 1,033 of the applicants were university graduates.

As was mentioned in the first chapter, the reduction of the state to a facilitator for capital in the neoliberal globalization era is one of the factors that must be considered while analyzing the history of the Basin after 1989. The tense and fragile compromise between the capital, the state, and the workers of the Keynesian-Fordist era gave place to a conflictual ground constituted of capital, which gains strength while taking along the state and the workers, which can organize less and which are weakened for that reason.

As was mentioned in the second chapter, imported coal became cheaper due to the global political economy of the changing coal production. To use the import coal in the iron steel industry, which is the most important coal consumption area for the industry in Turkey, became rational. For that reason, the workers were dispossessed of the possibility to affect the industrial production chain through a strike. As a result, a possible movement of the coal workers became less “dangerous.” This situation, which was the result of the easier movement of the capital at the global level, was an important factor that limits the effects of the workers’ organization.

#### The Term: Redevice

The word “redevans,” which means tax paid as a result of using something, comes from French. It is understood from Paul Lafargue’s article "The Peasant Proprietary in France" published in 1884 where the word “redevans” is used to indicate the rent paid by serves in return for using a part of land belong to the church or nobles.<sup>114</sup>

Today the word “redevice” is rather used in mining literature. The term “redevice system” in mining literature is used for the model that a mining field is takes over a subcontracting company for a certain time in return for money.

---

<sup>114</sup> Paul Lafargue, The Peasant Proprietary in France, Accessed on 15 November 2012, Available online at <<http://www.marxists.org/archive/lafargue/1884/06/peasant-proprietary.htm>>

## The Workers Numbers and Production Level in the Redevice System

Today over one-third of the coal production is done by subcontracting enterprises in which approximately 7500 miners are employed.<sup>115</sup> It is important to emphasize that there are a lot of informal pits in the mine sites of subcontractors (as it will be examined in the next pages), but their workers are not included in this number. If those workers are taken into consideration the number will arrive at 10000. However, the number of miners will arrive about 15000 in the next months. For instance Soma Inc. and Hema Inc., which signed redevice contracts in 2012, declared that they would employ more 6000 miners in the next months. Total 32 mine sites are run by subcontractors.

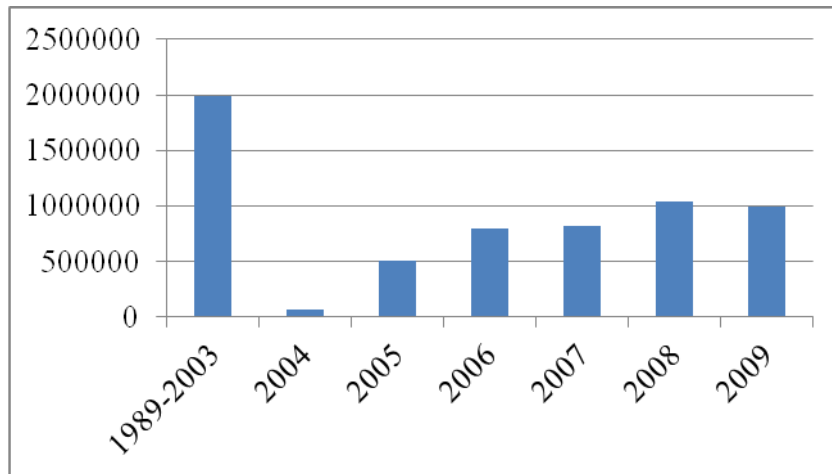


Figure 15: The coal production of subcontractors, 2011 (tonnes)<sup>116</sup>

## The (II)legal Background of the Redevice System in Zonguldak Coal Basin

According to the Article 168 of the Constitution of the Turkish Republic, the mines are commons and they are under the ruling and the control of the state.

<sup>115</sup>

<sup>116</sup> Turkish Republic State Supervisory Council, 2011, *Report of Health and Safety in Mines of Turkey*, p. 201.

According to the same article, the state can transfer these rights to other natural and legal people.

The legislation about the exploration of mines, their exploitation, to have the right upon them and their abandonment are regulated by the Mining Law No: 3213 of 1985. This law states that the mines are under the ruling and the control of the state and they are not dependent on the property of the land in which they are found. The point, which is important here, is that even though you possess the property of a land where there is a mine, the property of the mine belongs to the state. For that reason, to open an informal pit is an illegal act.

The mining activities in the Zonguldak Hard Coal Basin are regulated through the Regulation of Rock Pits from 1901 to 2004 and so, the mines of Zonguldak were not dependent on the Law No: 3213. The Law No: 5177 that came into effect in 2004, abrogated some of the articles of the Law No: 3213 and the mining activities of the Zonguldak Hard Coal Basin became dependent on the Mining Law No: 3213.

However, this law of 2004 could not meet the legal needs of the redevance system that gradually became widespread in the Basin. In response, the Law No: 5995 came into effect in 2010. This law aimed to remove the legal gaps and the contradictions born from the proliferation of the redevance system. For this aim, new regulations on license, permission to exploration and control are introduced. Moreover, through this law, the regulation of “the assurance of environmental compliance” is introduced. This regulation sets forth a payment equal to the royalty paid by the license owner. At the end of the license, if the license owner makes the field environmentally compliant, this amount will be returned to the license owner.

In addition to these, Article 21 of the Law No: 5995 states that in the case of a threat in terms of the security of life and property coming from the mining activities,



these activities must be stopped. However, in the period up until today in the Basin, this article that can be seen as a possibility on behalf of the workers did not have a chance to be applied.

The first redevance contract was made in 1988 in the Zonguldak Hard Coal Basin. Also the Report of Health and Safety in Mines of Turkey of the State Supervisory Council claims that the de facto application began in 1988. However, I learnt from the people I interviewed in the basin that production in the fields with redevance began in 1992, following the strike of 1990-91 although the first contract was made in 1988. On the other hand, legal arrangements at that period did not allow handing over mining to third persons, subcontractors, with special contracts as it is in redevance system in Zonguldak coal basin.

No matter it that lacks a legal bases redevance has continued since 1988. The 32<sup>nd</sup> Article of the Regulations related to the Mining Law was changed in 1990. With that change third persons and institutions are allowed to operate in mining field by the Ministry of Energy and Natural Resources based on redevance contracts between license holders and the governments. Application of redevance achieved a legal base at a level of regulations with this change. The Council of State (*Danıştay*) decided that redevance contracts were not legal and they should be abolished; however, this decision was not implemented. Finally Law No 5177 made a change in Mining Law No 3213 in 2004 and the application of the redevance system achieved legal base only in hard coal.<sup>117</sup>

The application of the redevance system has been defended by the TTK by claiming that this system prevents the informel pits and the opening of the new pits

---

<sup>117</sup> Esra Ergüzeloğlu Kilim, 2010, "*Madencilik Sektöründe Taşeronlaştırma ve Özelleştirme Yöntemi: Rödovans*", Available online at <Esrakilim.blogcu.com

which are near to surface are not used by the TTK. Therefore it is important to know the reality of the Zonguldak coal basin: informal pits.

### A Zonguldak Coal Basin Reality: Informal Pits

Informal pits with no legal registration have existed since the initial years of coal production in the Zonguldak Coal Basin. The coal reserve in the basin is under the city and almost everyone in Zonguldak know something about the coal production techniques. These factors have made harder to struggle against informal pits.

The informal pits can be found in secluded areas, such as on the sides of distant mountains or the garden of the houses for the aim of escaping from any legal control. The mining operators who have informal pits bring miners together for the production in informal pits. The miners have a daily wage. The people with whom I talked in Zonguldak said that the total of the daily wage of the miners who work in informal pits was near the minimum wage if they worked the whole month. It goes without saying that the workers who work in the informal pits have no social security.

As was emphasized in the second chapter, high unemployment rates is an important characteristic of the neoliberal period. It is easy to guess that especially in the high unemployment conditions, the informal pits prevails. Starting to work as a miner for the TTK requires some conditions. For instance, completing the military service and physical strength are important conditions. The informal pits give an opportunity to people who can not meet the conditions. I learnt from the people I interviewed in the basin that many 15 year old boys work in informal pits.

There is no necessary mining equipments against the threat of the firedamp or the sudden flood of the water in the informal pits. For instance, the lighting and airing systems are crucial aspects of the security of the workers. These systems must have an anti-firedamp feature. However, this anti-firedamp equipment is very expensive so in the informal pits, ordinary electric bulbs are used for lighting and an accumulator is used for the ventilation equipment.

The TTK does not monitor the informal pits. However, if there is a denunciation about an informal pit the TTK engineers will destroy it.

The people who live in Zonguldak use informal coal for heating in general. It is about half the price of the coal which is sold by the TTK.

The Zonguldak Chamber of Commerce estimates that there are about 250 informal pits in the Zonguldak Coal Basin. Although it is impossible to know the exact number, this estimation gives an idea about the widespread existence of the informal pits.

Although one of the aims of the redevance system is the prevent the prevalence of the informal pits, the redevance system leads to growth of informal pits. To understand this situation, it is necessary to focus on the redevance system in practice.

#### Subcontractors of the Subcontractors in the Redevice System

The redevice system is a kind of subcontracting practices in which the TTK has the position of primary employer and small companies that have redevice contract are in the subcontractor position. Therefore, it is important to emphasize that the redevice system is the local reflection of the division of the production as a

global process to create new profit advantages at all steps of the production process, which is the important characteristics of the neoliberal period, as was said in the second chapter. However it is important to emphasize that in the redevance system informal pits serve as the subcontractors of the subcontractors of the TTK.

In the redevance system, the TTK give the right to produce coal at the mine sites, which are defined in the redevance contract to subcontractor companies. In these mine sites coal seams are close to surface. Because the subcontractor companies mostly have small capital, they cannot afford to built the necessary infrastructure to produce coal from the deep coal seams. Until 2012 there were no redevance contracts for deeper coal seams than, -180 grade. However, in the last years the companies with bigger capital have started to invest in the Zonguldak coal basin. Therefore, redevance contracts have started to allow producing coal from deeper coal seams. For instance, in the Soma and Hema A.Ş.'s redevance contracts signed in 2012 give permission to produce up to -540 grade.

In the redevance system, the subcontractor companies give a royalty (redevenca) for per ton production to the TTK. There is a necessary production level in the contract. If the subcontractor company produces less than necessary production, it must pay a royalty for the necessary production. Therefore, accelerating the production process to complete the necessary production is a crucial point for the subcontractors. For that reason, the workers of the subcontractors work more than 8 hours. This serve also the purpose of the workers because their wages are calculated by per ton production.

To complete the necessary production, the subcontractors give permission to informal pits in their mine sites. Their production is showed as the production of the subcontractors. The subcontractors both complete their necessary production and

take a share from the informal pits' production. If informal pits are determined, the subcontractors' have no responsibility. Therefore, it can be said that the informal pits serve as the subcontractors of the subcontractors in the TTK redevance system.

## CHAPTER V: AN EXAMINATION OF THE WORK ACCIDENTS IN THE ZONGULDAK HARD COAL BASIN

In this chapter, the focus will be on the subcontracting pits working on the Zonguldak Hard Coal Basin. The former chapters emphasized that the work accidents, or in a larger sense, the worker's health and the work security areas, are the areas where the class struggle is concretized. The strengthening of the capital's hand via the weakening of the workers' organization because of the standardization of the flexible working regime in the neoliberal era was also emphasized. Therefore, the policy of reshaping the global map of the coal production and the increase of the coal production in the areas where the labor power are unorganized and cheap were also discussed.

For that reason, it was claimed that the Zonguldak Hard Coal Basin was not out of this process and that all of these developments at the global level had important reflections on the Basin. One of the most important developments was the decrease of the hard coal production where each worker was organized even though the total coal production (the boron, the lignite, the hard coal) in Turkey had increased. Other important reflections of the mentioned global transformation are the decrease of the Turkish Hard Coal Enterprise's share in the sector, the decrease in the number of employed by this enterprise, and in parallel with the increase of the ratio of the imported coal, the proliferation of the redevançe basin where the coal is extracted through subcontracting.

It must be said that all these developments have important costs from the viewpoint of the laborers of the Basin. These costs include not only low wages, the insecurity of the whole working life, the transformation of the state into a tool to provide the needs of the capital and, as a result, the erosion of even the legal gains

of the workers, but also at the intersection of all these points, the increase of the work accidents, which result in disability in the best case and, in death in the worst case.

As this thesis tries to illustrate, the work accidents, which is a moment when the class struggle is concretized in the body of the laborers that come down to a cost element, are the most important price that the workers pay because of their power loss in opposition to the capital.

In sum, in this chapter, the answer to the question of how and why the flexible working regime applied to the Zonguldak Hard Coal Basin pave the way for the work accidents will be sought.

#### A Comparison between the Fordist Working Regime and the Flexible Working Regime in Terms of Work Accidents in the Zonguldak Hard Coal Basin

To be able to discuss the relationship between the flexible working regime and the work accidents, enough information about the work accidents during the previous era, the Fordist era, must be given. To be able to claim that the work accidents have increased in the flexible working regime, historical records on the work accidents in all, or at least, some of the prominent sectors must be known. However, it is quite difficult to reach this kind of data for many reasons. Still, it can be said that the most significant reason is that the state, which was an economic actor itself during the Fordist era, did not record such data or even if keep records, it did not declare them to the public.

The Zonguldak Hard Coal Basin stays out of this generalization about state recording. For a long time, the coal mining was the only means of existence in the area. Another reason why mining became an essential part of the daily life in

Zonguldak is that the workers' culture developed due to the basin, which is one of the most important worker's basins in the country from the Ottoman era. It is especially difficult to erase the death, a phenomena that corrupted the daily life, from the city's memory. Thanks to the powerful syndical structure, the local newspapers of the city and opponent mining engineers, there is quite a lot data on fatal work accidents that occurred in the Zonguldak Hard Coal Basin. Unfortunately, this data has not been the object of inclusive academic research. This is a serious lacking in the social sciences literature of Turkey.

Figure 14 shows the death ratios in 100,000-ton production since the 1960s. In this figure, all the work accidents (whether they occurred in the TTK, in subcontractor pits or in illegal pits) are included. This graph is prepared according to the data of annual production of the TTK and the published documents on fatal work accidents of Levent Usman, a mining engineer of the TTK.

This figure provides the possibility to deduce important aspects of the flexible working regime and the work accidents in the Zonguldak Hard Coal Basin. As is seen, between the 1960s and the 1980s, during the period when the labor struggles were most intensive, there was a sharp decline in fatal work accidents. However, in the years following the military coup of 12 September, there was a sudden increase of fatal work accidents, even a return to the period before 1960. This fact is due to the weakening of labor organizations and to the transition to the flexible working regime, two central issues that were discussed in earlier chapters. Therefore, in the light of the data at the hand, it can be argued that the flexible working regime in the Zonguldak Hard Coal Basin increased the work accidents.

A decrease in fatal work accidents occurred at the end of the 1990s. The main reasons for this development were the legal transformations and the change in the



capital composition. As was discussed earlier, the steps in the EU harmonization process and the decisions of the Council of State about the illegality of the redevance enterprises were the legal reasons for this decrease of fatal work accidents. On the other hand, the entry of bigger capital groups to the Basin and their little attempts at institutionalization constitute the reason related to the capital composition.

### The Fragmented Labor Market and the Work Accidents

It must be emphasized that the flexible working regime is not a monolithic, total or one-sided process, but an uneven and u-turned process developed in patches with an articulation with the old regime. For that reason, the working conditions of the previous period and the flexible working conditions can be discussed through the present interpenetrating working conditions in the Zonguldak Hard Coal Basin.

It was emphasized above that together with the flexible working regime, there is a fragmented labor market in the Zonguldak Hard Coal Basin. It can be argued that there were always illegal pits, from the first time when the coal was mined in the basin until today and, for that reason, there was always diversity in the labor market. However, the number of the people working in illegal pits never reached a number comparable to the number that of the workers in the TTK. The illegal pits always remained marginal. On the other hand, together with the flexible working regime, the number of the workers in the subcontractor pits approached the number of TTK workers; moreover, even the workers working in the subcontractor firms of the subcontractor pits reached important numbers.

It will be appropriate to focus on the effects of this diversity of the labor market in work accidents.

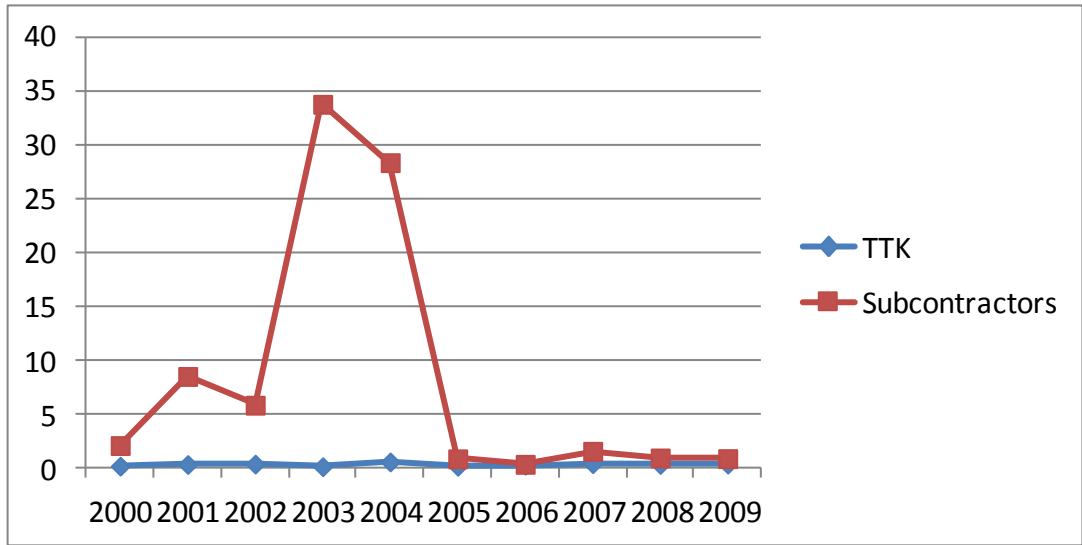


Figure 16: Comparison of Death Ratios<sup>118</sup>

In figure 16, the fatal work accidents ratio in the TTK per 100,000 ton production and the same ratio in subcontractor and in illegal pits (with accessible data) are compared. As the production amount of illegal pits is unknown, the production ratio of subcontractor firms is used as a base for the data on subcontractor and illegal pits. If the production of illegal pits is taken into consideration, it can be said that the death ratio in subcontractor and illegal pits would decrease a little bit. However, it is also true to say that the unregistered accidents of illegal pits can balance the unaccessed production data of the illegal pits. For that reason, it can be said that the data of the graph are very close to the real ratios.

It is observed in figure 16 that the death ratio per 100,000 ton production in redevance firms and illegal pits is at least four times the ratio in the TTK. This data

<sup>118</sup> I prepared this figure by using the Mining Engineer Levent Usman's data and the Production data of Turkey Hard Coal Enterprise.

proves the argument according to which the flexible working regime increases the number of work accidents in the Zonguldak Hard Coal Basin. In figure 17, the death numbers in TTK and the subcontractors and illegal pits.

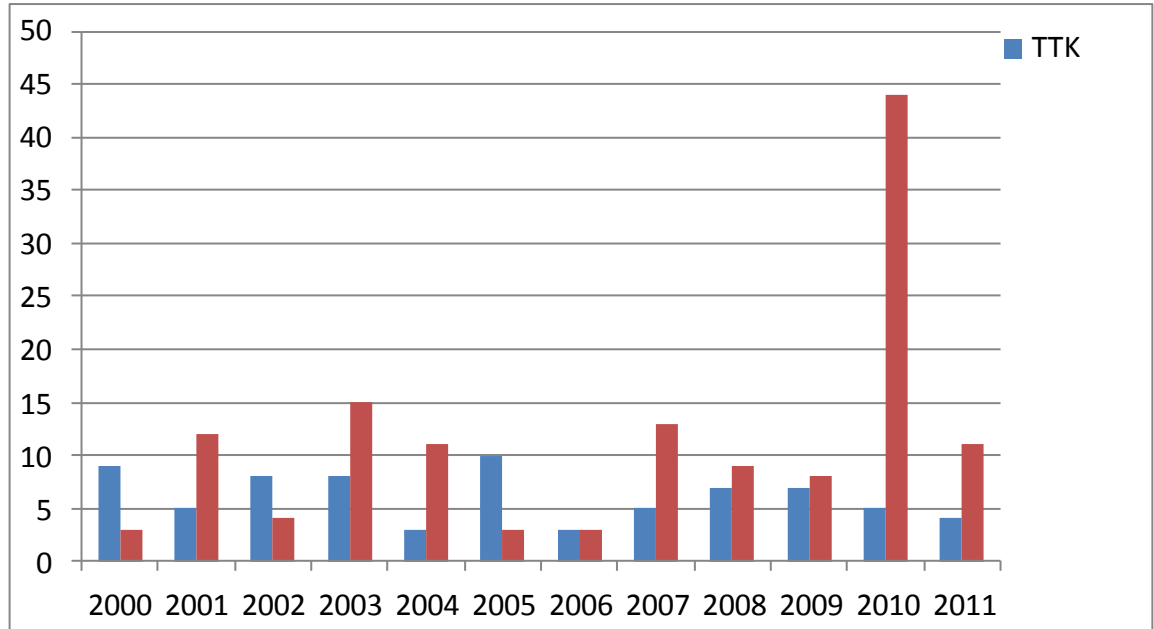


Figure 17: Comparison of death numbers<sup>119</sup>

Now, how the flexible working regime increases the risk for work accidents can be discussed. In the following part, how the flexible working regime changed the working conditions in practice and why this change increased the accident ratio will be discussed.

#### The Practical Consequences of the Transformation of the Production Process in Terms of the Work Accidents

As was examined in detail throughout the previous chapter, the flexible working regime resulted in important transformations in the basin in terms of the

<sup>119</sup> Ibid.

production process. In this part, the relation of the work accidents with the transformations of the production process will be discussed.

One of the most important transformations is the arrangement of the subcontractor firms' contracts by means of deadline. In the basin where their production approaches that of the TTK (and it is estimated that their total production will pass the production of TTK by the end of 2013), these kind of contracts result in production pressure upon the subcontractor firms. For that reason, capital owners adjust wages according to the production per ton of every worker for producing consent to this rhythm and to this intensity. The wage system of production per ton is a fact that fundamentally transformed all the production process structure from the viewpoint of the miners who work collectively in the underground with groups of at least six people. The competitive atmosphere created through the wage system per ton has had a deconstructive effect on the collective production process. In addition, the workers began to work faster to increase the production amount which they are paid for. This haste becomes an essential threat to the secure and under control working atmosphere.

For example, landslips are the leading reason of fatal work accidents in the subcontractor firms. The main reason for the landslip is the faulty fortification, the process for preventing the collapse of the rocks from the ceiling while tunneling. During the interviews conducted with the workers of subcontractor firms, the workers said that those responsible for the fortification are extra paid when they do more than a definite meter, and that for that reason they do this process in a hurry and that this results in serious deficiencies and faults. As a result, originating from the pressure of the production, the acceleration of the production rhythm, the increase of its density and the wage system per ton, shortly the aim of increasing the

relative and the absolute surplus (the *raison d'être* of the capitalism) results in work accidents when it is associated with a sector like mining, where an increase of the physical and the mental exhaustion of workers is fatal.

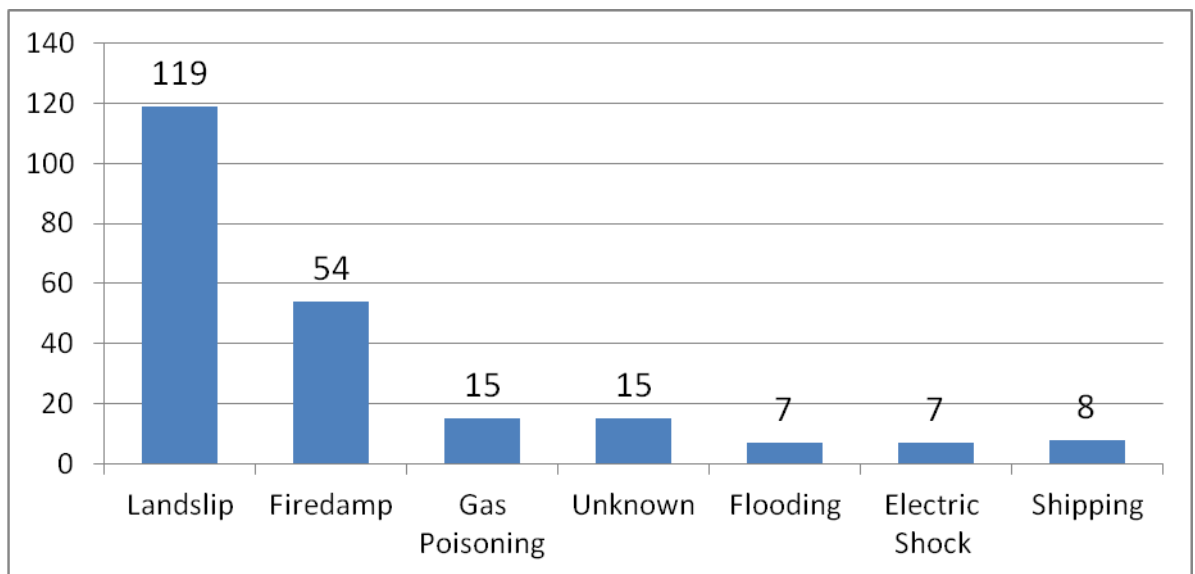


Figure 18: Death numbers according to death reasons in redevance firms since 1989<sup>120</sup>

Another course of the work accidents is that the lack of precautions taken regarding miners' health and security by the redevance firms because these precautions are considered too costly. As was mentioned in the previous chapters, the redevance firms are companies that have small capital, generally found by retired miners. It is impossible for these firms to prepare a vital technical substructure like having instruments to measure the gas flow all the time or building a ventilation system.

<sup>120</sup> I prepared this figure by using the Mining Engineer Levent Usman's data.

From one side, the investment of big capital groups like Hema and Soma A.Ş. in the area in the last 3-4 years and from the other side, the growth of local small-scaled firms point out an important change in the capital structure of the area. This change results in small attempts at institutionalization of the mining firms and bigger investments from their part.

In an interview conducted with the company Doctor X of the mining company D, which has been producing for years in the area and which has a significant influence in the Zonguldak Chamber of Commerce, said that now every worker employed undergo a medical examination immediately. This development, which could be read as a step forward from the perspective of workers, is in fact a result of the competition between capitalists. Because the absence of these examinations carries the risk of paying compensation to workers from the perspective of capitalists.

For example, Doctor X said that the patients that he had sent to Zonguldak Atatürk Education and Research Hospital with the suspicion of pneumoconiosis (an occupational lung disease caused by the inhalation of dust) during the recruitment. However, these same patients had been given clean bills of health when they were working at the TTK. He reported this fact as an example of the negation of the sickness of workers by a public hospital for not condemning to indemnity the TTK, another public institution. From the other side, Professor Y from the Zonguldak Atatürk Education and Research Hospital, argued that company doctors like Doctor X made diagnose at the onset of pneumoconiosis to newly employed workers as often as possible to save their company from paying compensation in the case of a possible pneumoconiosis case in the future.

Miners work in groups of six people underground. These six people gain the capacity of acting collectively as they know each other. This capacity of acting collectively is a very important factor when they are working under the sudden threats of a flood, or an explosion or a landslide. The ease of firing and the casualization of labor during the flexible working regime result in the corrosion of the capacity of the collective act and in the disappearance of the cumulative experience. During an interview conducted with one of contract worker A, he said that they did not have stable positions, that they worked in the line of work, in which there was a need for worker, that sometimes they constructed fortifications for a half day and they dig tunnels for the other half. This condition prevents specialization in a specific position.

For example, the TTK retired miner B who works now as a contract worker is the dynamiter. Blasting is necessary for tunneling. He said that this job requires great concentration and experience. However, he remarked that some of the newly employed workers were assigned to the blasting operation. He emphasized that it is very important to know the emission of different gas for a dynamiter and that this requires education and experience.

Another important point is the lack of the occupational education in subcontractor firms. This is very critical in mining because this profession is a quasi-craft. Any unconscious act done in underground can result in the death or injury of many people. For that reason, a long education that continues also after employment is necessary. However, as said above, the prevention of specialization in a line of work and the absence of occupational education results in the lack of the orientation of the miner to the underground, to this different world that has its own rules.

Another point that is as important as occupational education is nutrition. Mining is an exhausting job. For that reason, as expressed by the mining engineer C, a miner must take in 4,300 calories per day. However, (the TTK included) neither firm gives food to miners. This results in the weakening of the miner physically as well as psychologically. Similar to any human eating an insufficient number of calories, the possibility to act impulsively increases among miners. The cost of these impulsive acts can be heavy when they occur underground.

Moreover, the mining engineer C said that according to his research, he had reached the fact according to which the work accidents caused by impulsive acts concentrate towards the end of the shift. The main reason for this is that mining is basically a war against nature and that the miner who finishes his shift believes that he has overcome nature at this day, too, in his subconscious. It is said that the ratio of acting impulsively increases with this joy of victory. The mining engineer C emphasizes especially the work accidents when miners go up in the lift. He said that workers say things like “we were so cheerful, we did not understand what it happened,” and he argued that this situation was the result of the thought of “overcoming nature,” more precisely the thought, “I did not die this day as well.”

The last important factor about work accidents to be discussed is the absence of registration of the accidents that have occurred in the relevant areas. This helps the main firm “purge” itself and results in an amnesia about work accidents. “Memory” is a very important factor in the struggle of workers against work accidents. A struggle to develop can grow based on this memory and to the updates on it. Beyond any struggle, this memory can be the keystone of a miners’ culture against work accidents.



Yet, the non-record of work accidents and the prevention of their notice by capitalists through their local connections (on-site doctors, media, etc.) are important actions to limit the work accidents to those who have the accident. Besides, the non-record of the work accidents is a “cleaning operation” to support the argument of the firm about “the production in healthy conditions” for the next bidding process.

At this point, it will be appropriate to mention unemployment, which is an important factor in why the workers keep working in this sector in spite of all of the above-mentioned factors. Any research done on the working conditions of the workers in the subcontractor firms of the Zonguldak Hard Coal Basin must consider the pressure of “either you work in these conditions or you starve” created by the fact of the unemployment. Looking carefully at the relationship between the working conditions in the subcontractor firms of the Zonguldak Hard Coal Basin and the unemployment, it is possible to say that the “free market” argument of the capitalism is groundless, at least in the context of this research. The issue is not the confrontation in equal conditions of individuals whose rights are protected by laws. On the contrary, the issue is the abdication of the right to healthy and secure work because of the threat of unemployment for those who are obligated to sell their labor power.

As was emphasized in previous parts, there are important consequences of the inclusion of Turkey to the model of the growth without employment in the neoliberal era, especially in terms of the present labor market. Before anything else, unemployment strengthens the hand of the capitalists in creating competition in the labor market. The fact that there are so many unemployed who can substitute workers who will be fired increases the advantages of the capitalists.

Moreover, let us think about the reflections of this fact on the worker's health and on the work security, not for all the Turkish labor market where it is valid, but for the specific example of Zonguldak, where a single sector shapes almost all the economic life.

The workers with whom the interviews were conducted said that they would not have become miners if they had had the possibility to work in other sectors with more secure conditions. The miner E said: "After I go home, even after I take a bath and I brush my teeth, there is still the scent of coal on my breath. I wonder how uneasy my wife is... Even just for this, I would like to work in another sector." Meanwhile, most of the workers interviewed say that they did not want their children to become miners.

However, another important point must be emphasized here. Working in the TTK means having a fair wage in the conditions of Zonguldak. The workers in the subcontractor pits consider contract labor as a step towards being a TTK worker. Further, for those working in the firms that are subcontractors of the subcontractor firms, the aim is first to become the worker of the main subcontractor and then, becoming worker of the TTK. Once becoming a TTK worker, the worker can get a bank loan easily for a house or a car and his retirement becomes guaranteed. Therefore, he can have a better position in the labor market of Turkey.

It must be emphasized that the contract workers interviewed in the basin try to take advantage of local and national political figures to become TTK workers. Some of the interviewed workers had just returned from Ankara where they went to see the former TBMM president, Köksal Toptan, who was the deputy of Zonguldak for a long period. Their request was to favor contract workers in the process of the new recruitment of the TTK which happens rarely. The workers introduced their

request as “prioritize the experienced.” A group of five people from different political views went to Ankara to become TTK workers. The reason to mention this anecdote is to emphasize how important is to become a TTK worker for contract workers.

During the interviews, the workers answered negatively to the question of “if they made such an attempt for secure working conditions.” For that reason, such a deduction is possible: the pressure of unemployment represses the demand for healthy work conditions.

### Work Accidents in Illegal Pits

As was mentioned before, illegal pits have always been present in the history of the basin. However, along with the redeavance system, a new phase where the illegal pits have increased has begun. The subcontractor firms themselves opened the illegal pits to meet their deadlines in the contract signed with the TTK on the redeavance area. This production done by mostly by under-aged miners who work without insurance, at low wages and with the hope of “becoming the subcontractor’s registered worker later,” has not any official record. For that reason, there is no inspection. The lack of inspection has serious results in this sector of mining where the worker’s health and security are very important. In this context, the target of the TTK is not to locate or to close down the illegal pits, but to explode the pit when there is a notice of such a pit.

During the interviews conducted with the mining engineers who went to explode the pits, they strongly emphasize that the miners who opened the illegal pits knew mining very well and most of these miners were retired miners.

The mining engineer F said during the interview that the miners who open informal pits develop amateur, cheap, but very dangerous solutions to the central technical issues of the mining like the ventilation, the lighting, fortification, and the use of water. For example, in a pit, only anti-firedamp instruments must be used. All the electrical and battery operated instruments are dangerous. However, in many illegal pits, the lighting is done with lanes and extension cables. There are also plug sockets and power supplies in illegal pits. Moreover, in a illegal pit that the mining engineers went to with a notice in 2007, they found a heater. A heater in a pit is the same as a bomb. In another example of an illegal pit exploded by engineers, water engines were working with accumulator.

All these indicators show that the production in the illegal pits is made with the conditions of the nineteenth century.

## CHAPTER VI: CONCLUSION

This thesis, I found that in the flexible working regime in Zonguldak Hard Coal Basin there has been an important increase in the rate of work accidents. Instead of seeing work accidents as destiny or the result of simple neglect, I emphasized that the increase in the work accidents is related to the decrease of class power of the workers.

I argue that the commodification of the labor power lead to the commodification of the health of the workers. Therefore, I claimed that healthy and secure working conditions are the issue of the tense and contradictory relations between capitalists and workers.

I highlighted that labor intensive industries have transferred to regions where the labor power is cheaper and unorganized. It is closely related to the smooth flow of capital in the neoliberal period. Coal production is not out of this tendency. Although there is a need to make comprehensive studies consisting of different countries, to make the new coal production more clear, I tried to develop a comparative perspective by comparing England, the People's Republic of China and Turkey. When England near to close out the coal pits, the PRC turned into the biggest producer and the importer of the world. In Turkey, the labor power is cheaper and less organized than core capitalist regions so the total coal production including lignite, boron, and hard coal is increasing while the hard coal production in which workers mostly organized is decreasing. However, in the subcontracted hard coal mining companies' in which workers are unorganized production is increasing. The subcontracted companies are also a project of the privatization through back door means.

How the prevalence of the subcontracted companies not only led to unsecure and unhealthy working conditions, but also prevalence of the informal pits were discussed. I focused on why the subcontracted practices lead to more work accidents. I emphasized that the production pressure, the acceleration of the work rhythm, wage for per ton system, the destruction of the collectivity between miners, the abandonment of the work place education, the deletion accident records for the destruction the collective memory against work accidents are the main causes of the work accidents.

This thesis, makes a modest contribution to our understanding of work accidents in the neoliberal period. Although we need more comprehensive studies about different sectors to claim that in the neoliberal period the work accidents in Turkey increased, I tried to show that this argument is relevant, at least for Zonguldak Hard Coal Basin.

In Turkey, each day at least four workers die while working. However we have no information about occupational diseases because there is no registration of occupational diseases. The data are enough only to emphasize the need for more studies and activities about work accidents and occupational diseases. At this point, I want to talk about the activity of the Occupational Health and Safety Assembly,<sup>121</sup> which has a center in Istanbul and which is working to create branches in other cities. The Occupational Health and Safety Assembly publishes Work Accidents Reports monthly. They bring together information, statistics about work accidents, hold some panels and interviews about the occupational health and safety.

There are important shortcomings of this thesis without doubt, among them, dealing only with fatal work accidents is an important shortcoming. However, it is

---

<sup>121</sup> The assembly has a web site : <http://www.guvenlicalisma.org>

inevitable as I tried to show that we have no data about work accidents in the subcontracted companies and informal pits unless workers die. Even we have some information, it is hard to discover the real causes of the accidents.

Another important shortcoming is that the occupational diseases are not handled in this thesis. To develop a comprehensive view about working life conditions, we must discuss occupational diseases. However there are not enough confidential reports or statistics about occupational health in the Basin. The mining engineers and doctors I interviewed said that pneumoconiosis, which is a lung disease caused by the inhalation of coal dust, is mostly prevented. Not only pneumoconiosis, which has a long history in the Basin, but also herniated discs, the psychological disorders because of the long working time underground, and loss of hearings are very common in the Basin.

I think that comprehensive studies including not only workers but also retired mine workers could develop our understandings about mining and health relations. Coal mining also damages the environment, but it was not discussed in this thesis. This is also important shortcomings of this thesis. Not only air and environment pollution, which are caused by coal production, but also the use of timber in the galleries of the pits lead to the destruction of the surrounding forests. The damage of coal production for not only the mine workers but also for the public is an important issue that has a capacity to be discussed within the context of environment policy in the neoliberal era.

## BIBLIOGRAPHY

- Ağartan, Kaan. *Privatization and Limits to Economic Liberalization in Turkey: Erdemir Case Study*. Ph.D. diss., State University of York, 2009.
- Buroway, Michael. *The Politics of Production*. London: Verso, 1985.
- Cohen, Gerard. *Karl Marx's Theory of History*. New York: Oxford Press, 2000.
- Duménil, Gérard and Dominique Lévy, *The Neoliberal (Counter)Revolution*. Accessed on 15 November 2012. Available Online at <http://sanhati.com/wp-content/uploads/2007/03/neoliberalcounter.pdf>.
- Ercan, Fuat. *Tarihsel ve Toplumsal Bir Süreç Olarak Kapitalizm ve Esneklik*. Accessed on 15 November 2012. Available Online at <http://fuatercan.wordpress.com/2007/01/09/tarihsel-ve-toplumsal-bir-surec-olarak-kapitalizm-ve-esneklik/>.
- Evans, Eric J. *Thatcher and Thatcherism*. London: Routledge, 1997.
- Genç, Hamdi. *Ereğli Kömür Madenleri 1840-1920*. Ph.D. diss., Marmara Üniversitesi, 2007.
- Germany to Close Its Coal Mines*. SPIEGEL Online (2007, January 30). Accessed on 15 November 2012. Available Online at <http://www.spiegel.de/international/0,1518,463172,00.html> .
- Guvenicalisma.org. Accessed on 15 November 2012.
- Gürboğa, Nurşen. *The Zonguldak Coal Basin As the Site of The Contest 1920-47*. Istanbul: Ottoman Bank Archives and Research Center, 2009.
- Hardt, Michael and Antonio Negri, *Labor of Dionysus*. London: University of Minnesota Press, 2003.
- Harvey, David. *The Condition of Postmodernity*. Cambridge: Blackwell Publishers, 1989.
- Harvey, David. *A Brief History of Neoliberalism*. Oxford: Oxford University Press, 2007.
- Harvey, David. *The Right to the City*. New Left Review 53. 2008.
- Harvey, David. *Organizing for The Anti-Capitalist Transition*. Accessed on 15 November 2012. Available Online at <http://davidharvey.org/2009/12/organizing-for-the-anti-capitalist-transition/>
- Hobsbawm, Eric. *The Age of Extremes*. London: Abacus Publishing, 1995.



- Hovden, Jan et al. *A Need for New Theories, Models and Approaches to Occupational Accident Prevention?* Safety Science 48, no 8. 2010.
- ILO. April 2009. *Facts on Safety and Health at Work Report*. Accessed on 15 November 2012. Available Online at [http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms\\_105146.pdf](http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms_105146.pdf)
- International Energy Agency. *Key World Energy Statistics 2011*. Accessed on 15 November 2012. Available Online at [http://www.iea.org/textbase/nppdf/free/2011/key\\_world\\_energy\\_stats.pdf](http://www.iea.org/textbase/nppdf/free/2011/key_world_energy_stats.pdf)
- Itoh, Mokoto. *Japan In New World Order*. Socialist Register 28. 1992.
- Kilim, Esra Ergüzeloğlu. 2010. *Madencilik Sektöründe Taşeronlaştırma ve Özelleştirme Yöntemi: Rödivans*. Accessed on 15 November 2012. Available Online at [Esrakilim.blogcu.com](http://Esrakilim.blogcu.com).
- Klein, Naomi. *Shock Doctrine*. New York: Metropolitan Books, 2001.
- Marx, Karl. *Capital: Volume 1: A Critique of Political Economy*. Middlesex: Penguin Books, 1992.
- Metinsoy, Murat. İkinci Dünya Savaşı Yıllarında Zonguldak Kömür Ocaklarında Ücretli İş Mükellefiyeti ve İşçi Direnişi. In *Zonguldak Kent Tarihi '05 Bienali Bildiriler Kitabı*, ed. Kürşat Coşgun and Ahmet Öztürk. İstanbul: Zonguldak Kültür ve Eğitim Vakfı, 2006.
- Mitchell, Timothy. *Carbon Democracy*. Economy and Society 38, no 3. 2009.
- Mony, Annie Thebaud. *Çalışmak Sağlığa Zararlıdır*. İstanbul: Ayrıntı Yayınları, 2012.
- Müftüoğlu, Berna Güler and Bağdagül Taniş. 2010. *21. Yüzyıla Zonguldak Maden İşletmelerinde Çalışma Hayatı: Bir Kesit-Tek Gerçek*. Accessed on 15 November 2012. Available Online at [http://www.sendika.org/yazi.php?yazi\\_no=30676](http://www.sendika.org/yazi.php?yazi_no=30676)
- Mütevellioğlu, Nergis and Saim Işık. "Türkiye Emek Piyasasında Neoliberal Dönüşüm". In *Küreselleşme, Kriz ve Türkiye'de Neoliberal Dönüşüm* ed. Faruk Ataay and Nergis Mütevellioğlu İstanbul: Bilgi Üniversitesi, 2009.
- Polanyi, Karl. *The Great Transformation*. Boston: Beacon Press, 2001.
- Republic of Turkey. Ministry of Development. 2012. *Temel Ekonomik Göstergeler*. Accessed on 15 November 2012. Available Online At <http://www.dpt.gov.tr/PortalDesign/PortalControls/WebIcerikGosterim.aspx?Enc=83D5A6FF03C7B4FCC6AECA659BD6F05648192E81EB0C9848AAD19E7579B3250E>
- Quataert, Donald. *Osmanlı İmparatorluğu'nda Madenciler ve Devlet*. İstanbul: Boğaziçi Üniversitesi Yayınevi, 2009.

- Thompson, Edward Palmer. *The Making of English Working Class*. New York : Vintage Books, 1966.
- Thomson, Elspeth. *The Chinese Coal Industry: An Economic History*. London: Routledge, 2003.
- Turkish Anthracite Enterprise, 2012. *Sector Report of Hard Coal*. Accessed on 15 November 2012. Available Online at [http://www.enerji.gov.tr/yayinlar\\_raporlar/Sektor\\_Raporu\\_TTK\\_2010.pdf](http://www.enerji.gov.tr/yayinlar_raporlar/Sektor_Raporu_TTK_2010.pdf)
- Republic of Turkey. State Supervisory Council. 2011. *Report of Health and Safety in Mines of Turkey*. Accessed on 15 November 2012. Available Online at [http://hukuk.usak.edu.tr/dokuman/ddk2011\\_3.pdf](http://hukuk.usak.edu.tr/dokuman/ddk2011_3.pdf) ddk
- UK Department of Energy and Climate Change. 2010. *Historical Coal Data: Coal Production, Availability, and Consumption 1853 to 2010*. Accessed on 15 November 2012. Available Online at [http://www.decc.gov.uk/en/content/cms/statistics/energy\\_stats/source/coal/coa.aspx#](http://www.decc.gov.uk/en/content/cms/statistics/energy_stats/source/coal/coa.aspx#)
- UN. December 1948. *Universal Declaration of Human Rights*. Accessed on 15 November 2012. Available Online at < <http://www.un.org/en/documents/udhr/>>
- US Energy Information Administration. 2007. *World Coal Production, Most Recent Annual Estimates, 1980-2007*. Accessed on 15 November 2012. Available Online at <http://www.eia.gov/emeu/international/coalproduction.html>
- Walls, Emma et al. *Subcontracting in the Privatised Coal Industry*". *Work, Employment and Society* 14, no 4. 2000.
- Wood, Ellen Meiksins. *Democracy Against Capitalism*. Cambridge: Cambridge University Press, 2000.
- World Steel Review. 2012. *World Steel Production Report*. Accessed on 15 November 2012. Available Online at <<http://www.steelonthenet.com/production.html>>
- Yeldan ,Erinç and Hakan Ercan. 2011. *Growth, Employment Policies and Economic Linkages: Turkey*. ILO Employment Working Paper No.84. Accessed on 15 November 2012. Available Online at [http://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/---emp\\_policy/documents/publication/wcms\\_166290.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_policy/documents/publication/wcms_166290.pdf)
- Zaman, Ekrem Murat. *Zonguldak Kömür Havzasının İki Yüzyılı*. Ankara: TMMOB Maden Mühendisleri Odası, 2004.