# Workers displaced due to privatization in Turkey: Before versus after displacement<sup>1</sup>

# Aysıt Tansel

Department of Economics, Middle East Technical University, 06531 Ankara, Turkey

#### Abstract

This is the first study on the impact of privatization on dismissed workers in Turkey. Dismissed workers in the cement and petrochemicals sectors are interviewed about their pre- and post-dismissal labor market experiences: The results of the interviews are summarized in this paper. One of the main conclusions is that there were significant earnings loses. Second, welfare losses were higher than those indicated by the earnings losses since the post-dismissal jobs lacked formal arrangements and social benefits. This implies that for most workers the dismissals were a movement from the formal into the informal sector of the economy. The nonmonetary aspects of the losses were captured by two questions that required workers' subjective evaluations of their pre- and post-dismissal welfare. The results suggest that the private sector jobs lacked the attractive monetary and nonmonetary conditions of state employment.

This research was undertaken for the World Bank. The findings, interpretations, and conclusions expressed in this paper are entirely those of the author. They do not necessarily represent the views of the World Bank, its Executive Directors, or the countries they represent. I am grateful to Martin G. Rama for his comments and suggestions. Harold Alderman and the participants of the World Bank Conference on Public Sector Retrenchment and Efficient Compensation Schemes (November 6-7, 1996, Washington, D.C.) also provided helpful comments. I would like to thank Metin Kamış who implemented the greater part of the interviews and handled data entry skillfully. Şenol Haciefendioğlu, Bülent Aşçıgil and other students from Middle East Technical University, Dokuz Eylül University and Kocaeli University also helped in implementing the interviews. Mustafa Yöntem from the cement workers' trade union (Çimse-İş) Ankara office and local representatives of Çimse-İş were instrumental in securing the names and addresses of the dismissed workers. Any errors are my responsibility.

#### 1. Introduction

This is the first study on the impact of privatization on dismissed workers in Turkey. Dismissed workers in the cement and petrochemicals sectors are interviewed about their pre- and post-dismissal labor market experiences. The results of the interviews are summarized in this paper.<sup>2</sup> One of the main conclusions is that there were significant earnings losses. Second, welfare losses were higher than those indicated by the earnings losses since the post-dismissal jobs lacked formal arrangements and social benefits. This implies that for most workers the dismissals were a movement from the formal into the informal sector of the economy. The nonmonetary aspects of the losses were captured by two questions that required workers' subjective evaluations of their pre- and post-dismissal welfare. The results suggest that the private sector jobs lacked the attractive monetary and nonmonetary conditions of state employment.

The organization of this paper is as follows. Section 2 gives the history of the State Owned Enterprises and privatization in Turkey. Both the legal structure of privatization and the recent law of privatization as they relate to worker dismissals are discussed in Section 3. The major characteristics of the Turkish labor market are summarized in Section 4. Section 5 and 6 discuss the historical development of the cement and the petrochemicals sectors, respectively, and include the issues of productivity and profitability during the pre- and post-privatization periods. Information about the data collection process --a process based on interviews with dismissed workers-- is given in Section 7. The major characteristics of the interviewed workers are discussed in Section 8. Section 9 examines the way the workers used their severance payments. Finally the concluding remarks appear in Section 10.

## 2. State-owned enterprises and privatization

The history of the State Owned Enterprises (SOEs) in Turkey goes back to the early 1930s. The government developed plans at that time that emphasized primarily the production of producer goods and heavy industry, but also some consumer goods such as textiles and sugar. The aim was to establish large and basic industries; the motivation developed out of desire for economic autarky, etatist ideology and social factors in the rather difficult environment of the Great Depression and the post-Independence War period. To this end, the government established several banks which were charged with developing factories, workshops and participating in the semiprivate enterprises in the areas of

<sup>&</sup>lt;sup>2</sup> An analysis of the pre- and post- dismissal earnings of the workers with earning functions estimates are provided in Tansel (1998).

consumer goods, mining, industry, agriculture, transportation and communications.

The government, which took power in 1950, promised gradual transfer of the SOEs into private hands and denationalized the commercial shipping industry. The planned development and import substitution strategy of the 1960s led to an expansion of the SOEs. The role of the state in economic life was questioned during the crisis period of the late 1970s in Turkey as it was in other parts of the world. One of the aims of the Structural Adjustment and Stabilization Program of January 24, 1980 was to reduce the economic activities of the state. This led to a substantial decline in public investment during the post-1980 period, specifically in manufacturing. During this period, privatization was on the agenda of the governments and gained further momentum with the establishment of the Public Participation Administration (PPA), which was charged not only with administering the privatization process, but also with the reorganization and reform of the SOEs. The transfer of ownership was not difficult for the profitable SOEs. The ones needing reorganization were given the status of "under consideration for privatization."

Employment in the SOEs fluctuated at times, showing a jump during the periods following general elections, such as in the post election year of 1984, and declining in 1989 when two major firms were given the status: "under consideration for privatization". Although the public employment share in Turkey's total employment is not very high (9.8 % in the civil service and 3.2 % in SOEs in 1993) it nonetheless accounts for a large share of wage earners (about 30 % in 1993) (OECD, 1996). In fact, the employment shares of the SOEs in some sectors, such as in mining, transportation and communications were rather high (Artan, 1991:55).<sup>4</sup>

Overstaffing at the SOEs has been a concern throughout their history. In 1980-81 those positions which were vacated either from retirement or resignations were abolished altogether. In 1990-91, 70 % of these positions and, in 1992 only 20 % of such positions were refilled (Şenses, 1993: 24).

The SOE employees enjoy social security and health benefits, and the latter also extend to close family members. The fact that very few workers voluntarily quit in the SOEs compared to the private sector (OECD, 1996) suggests that SOEs provide an attractive package of earnings, social benefits, job security and

Teletaş, -a telecommunication firm, was the first to be privatized in February, 1988. This was followed by the privatization of another telecommunications firm, Netaş and several cement factories.

<sup>&</sup>lt;sup>4</sup> The regional distribution of the SOEs' employment share may be an indication of the government's view of the SOEs as instruments of regional development. In 1989, the employment share of the SOEs in regional employment were highest at the Black Sea and East-South East regions: 32.6 and 22.3 % respectively (Artan, 1991;56).

work effort.

## 3. The legal framework for privatization and downsizings

The first attempts to provide a legal framework for privatization were undertaken in the 1980s. Law No. 2983, which was promulgated in 1984, did not contain explicit expressions about the sale of SOEs, but it did provide a basis for either the sale of the shares of SOEs or the rent of their operation rights. Law No. 3291, promulgated in 1986, gave the cabinet responsibility over decisions about privatization of the SOEs. Finally, Decree No. 414, promulgated in April 1990, made PPA responsible for the implementation of the privatization decisions.

To speed up the privatization process, a unified legal and procedural framework was deemed necessary. To this end, several decrees were issued and Law No. 3987 was promulgated in May 1994. This law, however, was declared void by the constitutional court, as were the decrees. One of those, Decree No. 513, which related to the reorganization and privatization of the Turkish Electricity Company (TEK), was issued and accepted on August 1993. The constitutional court opposed the decree and TEK's privatization process was halted. Finally, on November 27, 1994, Law No. 4046 was promulgated. The committee which prepared it considered the constitutional court rulings regarding the previous decrees and laws. It also sought input from the political parties and from the trade unions so as to achieve a consensus on the new law.

Until the promulgation of Law No. 4046, the Labor Law was used to dismiss workers from the privatized organizations. According to Article 13 of the Labor Law, an open ended contract could be terminated through a written notification of the employer. The notice period varies from two to eight weeks depending on the length of employment. The employer is liable to pay notice compensation in the amount of a worker's last basic wage, plus all wage supplements for the notice period if the notice period is not complied with. The workers interviewed for this study were dismissed according to the Article 13 of the Labor Law. They stated that they did not use the notice period but were given the notice compensation. Furthermore, there were workers who stated that they were abusively dismissed for either being active in the unions or for their open support of a political party. Nonetheless, they have not applied to the courts because the proof of burden rests with the worker and it is an expensive and time consuming process.

A worker dismissed according to Article 13 is entitled to severance compensation. Since there is no unemployment insurance scheme in Turkey, severance compensation is of utmost importance. It is the lump-sum payment given to a worker whose contract is terminated and who has at least a year of

continuous service in that employment. Each year of employment at an establishment is rewarded with thirty days of pay in the severance compensation. The time period exceeding one year is computed on a prorated basis. The last daily gross wage to which wage supplements of a continuous nature are added, is the basis for severance. A ceiling to the severance compensation was introduced first in 1975, later lifted and reintroduced in 1982. Its computational formula has also changed over time. According to the current formula, the severance compensation ceiling, which changes four times a year, cannot exceed the retirement bonus of the highest ranking civil servant, that is, the under-secretary to the prime minister (Süral, 1995).

Law No. 4046, the recent tool for privatization is unique because it covers both casual and permanent workers, as well as contracted personnel and civil servants. Since the contracted personnel and civil servants cannot be dismissed as workers, Law 4046 stipulates their transfer to other public establishments when layoffs are necessary. If they ask for their retirement within two months, those contracted personnel and civil servants who are entitled to retirements would receive their lump sum retirement pay plus 30 % extra. The 30 % bonus and the retirement bonus are to be covered by the Privatization Fund.

Law 4046 stipulates loss of job compensation for casual and permanent workers. According to Article 21 of this law, workers will receive both loss of job compensation and the severance pay (and notice pay if applicable) according to Article 13. The loss of job compensation will terminate when the worker is either placed at a job or he/she finds a job regardless of its nature or earnings. Compensation will be paid for at least three months, but not exceeding eight months. Loss of job compensation is a kind of unemployment insurance. However, it may be likened to a welfare payment since no premium payments are required.

Privatization Law No. 4046 also stipulates that dismissed workers will be provided help in finding a new job and will receive education and/or training. This will be provided by the Labor Placement Office and financed by the privatization fund. Finally, the Law stipulates, that those dismissed workers who earn retirement by the date of termination of their contract cannot receive loss of job compensation.<sup>7</sup>

According to the Article No. 25, twenty thousand positions of 10th degree are created for this purpose.

If the duration of employment is at least 550 days, 90 days of payment will be given. If the duration of employment is at least 1100 days, 120 days of payment will be given. If the duration of employment is at least 1650 days, 180 days payment will be given. Finally, if the duration of employment is at least 2200 days, 240 days of payment will be given.

According to Article 60 of the Social Security Law, a worker is entitled to retirement payment under one of three conditions: 1. The worker must reach 55 years of age (50 for women) and must pay at least 5000 days of premium; 2. The worker must reach 55 years of age (50 for

#### 4. The labor market

630

Strong supply side pressures due to rapid population growth, high rates of unemployment, large wage segmentation along various lines and declining participation rates are the main characteristics of the Turkish labor market. Unemployment is particularly evident in urban markets because of both high rates of rural to urban migration and the capital-intensive nature of the industrialization process, particularly, before the 1980s (Şenses, 1996). As a result, high unemployment is one of Turkey's major social and economic problems. Although the official 1994 unemployment rate was 8.2 %, it is generally considered to be higher (Mehran and Özel, 1992).

Table 1
Some Indicators of the Turkish Labor Market by Age and Sex, October 1994

Age:	12-24	25-54	55 +
Urban Participation Rate:			
Female	15.1	17.7	4.1
Male	46.2	85.2	33.8
Jrban Unemployment Rate:			
Female	24.6	13.4	2.7
Male	17.1	6.3	5.3

Source: SIS (1996: 103, 135).

In urban areas, wage earners (both regular and casual) account for about three- fifths of the urban labor force, in rural areas, by contrast, unpaid family workers and self-employment predominate. Widespread employment in small scale establishments is another feature of the Turkish labor market. About 56 % of urban employment is in establishments with less than ten workers, about 37 % of urban employment is in establishments with less than four workers (SIS, 1996). The non-agricultural informal sector is estimated to constitute 21 % of the total employment (OECD, 1996). Information about the informal sector is scanty.

Labor force participation rates in Turkey have been declining over time. The overall participation rate, for the population 15 and over, declined from 72 % in 1960 (Bulutay, 1995: 260) to 50.7 % in 1994 (SIS, 1996:17). Rapid urbanization and increasing school enrollment rates at all levels explain this decline. Nonetheless, urban female participation rate is markedly lower than that of the male participation rate (Table 1).

women). be covered for at least 15 years by the Social Security Organization and pay premiums for at least 3600 days; 3. The worker must be covered at least 25 years (20 for women) by the Social Security Organization and pay premiums for at least 5000 days.

The Turkish labor market can be considered to be segmented along the lines of agricultural versus industrial sector, formal versus informal sector, public versus private sector, and small versus large establishments. There are thus large wage differentials for labor with the same qualifications in different sectors. In particular, the wages between agriculture and industry differ widely, as do wages between small and large establishments (Tansel, 1996). Finally, there is segmentation of the labor market between public versus private establishments (Bulutay, 1995).

# 5. Çitosan and the cement industry

In 1923, the Turkish Republic inherited İstanbul's Darıca Cement Factory, which had been established in 1911. In 1926, Ankara Çimento was the first public cement plant established in the Turkish Republic. In the following years, the İstanbul, Kartal and Sivas plants and several private cement factories were founded. In 1953, the state-owned cement plants were brought under a single administration, called the Turkish Cement Industry (ÇİSAN), which undertook construction of 15 new plants. ÇİSAN established plants in different provinces in order to meet regional demand. ÇİSAN's name was changed to ÇİTOSAN (Turkish Cement and Earth Industry) in 1984. By 1993, annual cement production had increased to 31.4 million tons in Turkey (SPO, 1993).

The privatization master plan prepared by Morgan Guaranty (1986) recommended the sale of Çitosan starting with the profitable plants located in the west of the country. With the decision of the Public Participation Administration and Law No. 54, Citosan was brought "under consideration for privatization" on April 30, 1987. Five plants under Çitosan were sold in 1989 to a French concern, Société Ciment Française (SCF). Three of these plants, Ankara, Balıkesir and Söke, are included in the present study. SCF is the third largest cement producer in the world and in 1992 it was number one in production in Europe. The five plants were sold for a total of 105 million US dollars<sup>8</sup>. The Denizli plant, which started production at the end of 1987, had a large capacity, employed energy-saving technology and was also environmentally clean. The Denizli plant was sold to Modern Çimento, a domestic concern on April 12, 1992 for 70.1 million US dollars. Similarly, the İskenderun plant, which is a clinker grinding plant, was sold to Oyak-Sabancı a domestic joint concern in 1992. The Konya plant was a joint ownership between public, domestic and foreign private concerns. Privatization was achieved with the sale of the 31 % of the 40 % state shares to the public in October 1990 for a total of 17.7 million US dollars. Finally, the Nigde plant of

The Söke plant was sold by SCF to Batt Çimento, a domestic concern, in September of 1993 for a total of 25 million US dollars.

**Avsit TANSEL** 632

Çitosan was privatized in two steps. First, 12.7 % of state shares were sold to the public in May 1991. Then, in 1992 the remaining state share was sold as a block to Oyak-Sabancı group, a joint domestic concern, for a total of 22.5 million US dollars.9

Table 2 Cement Plants, Sale Dates, Total and Subcontracted Employment

Plant Name and	Sale Date	Emplo	yment	Number of Workers
Location		1988	1995	Interviewed
Ankara	1989	407 (0)	257 (71)	78
Balıkesir	1989	399 (0)	172 (0)	94
Denizli	1992	305 (0)	243 (85)	56
İskenderun	1992	200 (0)	185 (86)	59
Konya	1990	349(0)	347 (165)	110
Niğde	1991/92	419 (0)	251 (99)	69
Söke	1989	289 (22)	235 (139)	98

Notes: The numbers of subcontracted workers are given in the parenthesis. Source: Sale dates, Privatization Administration (1995).

Employment: Saygılı (1996).

There have been several studies on efficiency, productivity and ownership in the cement industry. Zaim and Çakmak (1994) and Çakmak and Zaim (1991; 1992) found no significant relationship between plant efficiency and ownership. They concluded that the transfer of ownership should not be expected to increase efficiency unless supported by government policies to increase competitiveness in the sector. Although Saygılı (1995) found lower average technical efficiency in the public sector cement plants than in private ones, he also found that ownership change in the privatized plants did not significantly improve efficiency, which differed widely among the regions. Geographical location, local market share and local cement demand, rather than ownership, were found to determine efficiency. For example, performance of public sector and jointly-owned plants in the west of the country were better than those of private plants on the average. On the other hand, Suiçmez and Yıldırım (1993), Tallant (1993) and Saygılı (1995) found higher labor productivity in the private cement plants than in the public ones. Karataş (1995) also found marked improvements in labor productivity after privatization for the five Çitosan plants

By 1995, 21 cement plants were privatized. Sixteen of them were public plants (14 of them were block sold; 2 of them were partly offered shares to public and were partly block sold). Five of the 21 plants had joint public-private ownership and all of these were privatized by offering shares to the public (Privatization Administration, 1995). By 1995, Çitosan held only 7 plants, most of them located in Eastern and Southeastern Turkey. During June and July of 1996, the Elazığ, Gümüşhane, Kars, Lalapasa and Van plants were also privatized by block sales with a total proceeds of 203.4 million dollars (Cumhuriyet, 1996).

sold to SCF. Karataş and Saygılı both pointed out that this was due to a decline in employment --a policy pursued by the new management. Karataş also found that although each of the five plants had high financial profitability (except Ankara) before privatization, the post-privatization profitability of the Ankara and Balıkesir plants were negative. <sup>10</sup>

High profitability in the cement sector is partly due to market power. In fact, protectionist policies were in effect until 1984. In 1983, the nominal and effective protection rates were estimated to be about 58 and 44 % respectively (Togan and Olgun, 1989). More recently, the right to fix the cement price, subject to ministerial approval, was granted to the Cement Producers' and Employers' Union. This union is an effective organization, which conducts the collective bargaining agreements with Çimse-İş, the main trade union of workers in the cement sector. Control over prices was completely lifted in 1986, when producer plants were allowed to determine their own prices and since this date, cement prices exhibit differentials by both plant or region. Even today, however, it is difficult to claim that prices are determined under competitive conditions, precisely because the Cement Producers' and Employers' Union remains effective in price determination. Furthermore, there was, in the early 1990s, some state subsidies covering transportation costs in some public plants. 11

The majority of cement sector workers are members of the Çimse-İş trade union which is affiliated with the Türk-İş confederation. Çimse-İş maintains an anti-privatization platform. Their official reports note the decline by half in the unionization rate in the cement sector after privatization.

# 6. Petkim and the petrochemicals industry

Petkim Petrochemicals A.Ş. was established on April 3, 1965. It has two complexes: Aliağa and Yarımca. The Yarımca complex, which is the older of the two, started operations in 1970. Over time, new units were added due to the rapid growth in demand. With the experience and know-how of the Yarımca complex, it was relatively easy to establish the Aliağa plant in 1984. These plants produce all varieties of chemicals extracted from petroleum, mainly for domestic demand. Nonetheless, the exports-to-sales ratio was 16.9 % in 1991,

Two authors (Tallant, 1993; Saygılı, 1995) pointed out that at the outset the relatively more profitable public and jointly-owned cement plants were privatized. Privatization thus proceeded from the most profitable to the least profitable plants.

For example, SCF increased the price of cement by almost 170 % from mid-1991 to mid-1992. To ease the supply in the Ankara region. Citosan transported cement from its Corum and Ladik plants (not yet privatized at that date) with transportation subsidies reaching 40.000 TL per ton (Bakar *et al.*, 1993).

which made Petkim the largest exporting firm of Turkey --one with foreign sales of 840 million US dollars in 1991. Petkim had a total of 7,899 employees in both plants before assuming the status of "under consideration for privatization" in 1987. Because of this status, approximately one thousand employees were dismissed in 1993 and 1994.

**Table 3**Petkim Sale Details

Complex Share		Employment		Numbers of
Name Sale Date	1990	1995	Workers Interviewed	
Aliağa	1995*	7297 (0)	7504 (1350)	83
Yarımca	1995*	7277 (0)		601

Notes: \* The date some shares and real estate were sold.

The number of subcontracted workers are given in the parenthesis.

Source: Petkim (1995a; 1995b).

In 1990, 8 % of Petkim's shares were sold to 76,119 individual buyers for a total of 150 million US dollar. Of these shares, the employees of Petkim bought approximately 6 %. Since that date, Petkim shares are being offered for sale in the major foreign stock exchange markets. Throughout its history, Petkim has been a profitable SOE. Its profitability increased from 4.38 % in 1983 to 7.23 % in 1986 at constant prices. Around the time of privatization, Petkim's profitability showed remarkable increases with the rate of profit rising to 28.65 % in 1989 and 13.52 % in 1990 (Karataş, 1995: 252). Nonetheless, it is more likely that these improvements were due to the rehabilitation undertaken rather than partial privatization. In terms of labor productivity Petkim achieved substantial improvements during 1989 and 1990. However, Karataş attributes these to the rising gross value added achieved during this period and to the monopoly market power of Petkim.

The majority of Petkim workers are members of the Petrol-İş trade union, which is affiliated with the Türk-İş confederation. Petrol-İş wants to halt the privatization of Petkim and actively lobbies against privatization efforts.

#### 7. Data

I collected the data analyzed in this paper via interviews with dismissed individual workers. The interviews took place during the period of May through December in 1995. A total of 564 former workers of the cement factories in

Ankara, Balıkesir, Denizli, İskenderun, Niğde and Söke were interviewed in each of these cities and their environs (Table 2). A total of 684 former workers of the Aliağa complex and of the Yarımca complex of Petkim in İzmir. İzmit and environs were interviewed (Table 3).

With the help of the cement workers' union (Çimse-İş), some of the cement plants agreed to provide a list of all the workers dismissed since privatization. In some cases, the local chapter of the union provided partial lists. By contrast, the privatized cement plants located in the north and the southeast of the country refused to cooperate. Using these lists, it was possible, to interview, on average 63 % of the workers in the lists. Some of the workers had moved, some died and some refused to interview. When the cost of going to the new town was reasonable and when there were two or more workers to be interviewed, I attempted to track down the migrated workers. Since many of these addresses were in rural areas, the sample may underrepresent those workers who moved and took up farming after dismissal.

Information collected during the interviews is summarized in the appendix table. The next section will examine the main characteristics of the workers referring to this table. 12

#### 8. Main characteristics of workers

## 8.1.Education

As seen in Appendix Table 1, there were twice as many Petkim as cement workers with a regular or vocational high school education or above. In addition, Petkim workers had one and one-half years more mean years of schooling than the cement workers. <sup>13, 14</sup> Workers in our sample seem to have

A total of 1,248 workers were interviewed. Two of the workers were dismissed from their jobs for disciplinary reasons, and one worker left to emigrate. These three workers were dropped, leaving a total of 1,245 observations on which most of the tables are based in this paper. 859 workers were retired. While 240 of these retirees continued to work, 619 of them (about 50 %) were no longer economically active. However, about 49 % of these nonactive retirees stated that they were looking for a job and would work if they found a suitable one. Of the 619 nonactive retirees, about 21 % were cement workers and about 79 % were Petkim workers. The 240 working retirees and the 344 working (nonretirees) provided a total of 584 (about 47 % of the total subjects) currently working. Five of these did not report their current earnings and were therefore dropped from the sample, leaving a total of 579 currently working people on which the tables are based. Together with the 42 unemployed this gave a total of 626 people in the sample labor force.

Except in the Denizli and Söke plants a majority of the cement workers were primary school graduates. In Denizli, about 52, and in Söke, about 41 % of the workers were regular or vocational high school graduates. Furthermore, about 7 % of the Denizli plant employees

more schooling than the general labor force of Turkey. In fact, the overall mean years of schooling (7.5 years) of sample workers is about a year and one-half more than the mean years of schooling (5.95 years in 1990) of the male labor force of Turkey (Tansel and Güngör, 1997).

### 8.2. Pre -and post-dismissal earnings

Prior to dismissal, Petkim workers earned on average, about 1200 TL more per month than the cement workers. This large differential in mean earnings between the two sectors is possibly due to the differences in their capital intensity. The petrochemical sector is more capital-intensive and employs workers with higher skills and educational attainment. The mean monthly current earnings for the 579 currently working were less than the earnings under state employment by about 2000 TL. Cement workers lost an average of 61% and Petkim workers 57% of their pre-dismissal earnings. These percentages changed little when an interest income from the severance payments, assuming a 10% real return on the severance compensation, is added

were university graduates. This differential in the educational attainments was probably because these plants are of a more recent vintage compared to the others. Specifically. Denizli is the most recent plant in Turkey, and started operations in 1988. Workers of the Aliaga complex had higher educational attainments than those at the Yarımca complex. About 66 % of the Aliağa workers and 43 % of the Yarımca workers had high school education or higher. These differences in educational attainments could, again, be due to the differences in the vintages of the two complexes. The Aliağa complex, which started operations only in the mid-1980s, possesses a more modern technology than the Yarımca complex and thus requires better trained workers.

There were 27 women respondents, 2.2 % of the total sample. Sixteen of the 27 women worked at Petkim. The distribution of men and women by educational attainment revealed an observation that was characteristic of other wage earner samples from Turkey, namely, the wage earner women tend to be more educated than wage earner men. In our sample, about 41 % of women and 31 % of men were high school (regular or vocational) graduates. Similarly, while 37 % of women had tertiary education only 3.8 % of men were university graduates.

All of the monetary figures in this study are deflated by the monthly consumer price index (CPI) of base 1987. The cities of Ankara, İzmir and Konya are assigned their monthly CPIs. The other cities in the study are assigned the monthly CPI of the region in which they are located. They are assigned the regional urban or rural monthly CPI according to whether their population is over 20,000 or 20,000 and under. Since the severance compensation is asked retroactively, the figures are deflated by the similar indices applicable to the layoff dates. Since the interviews were implemented during May-December 1995, the current earnings are deflated by the monthly CPIs. The annual rate of inflation was 97 % in 1995.

Obviously, the workers do not work the same amount of hours in their current jobs. Rather than computing the hourly wage, I have instead used the monthly wage since there were very few (2.2 %), less than full-time workers. The majority of the workers worked eight hours or more.

to the post-dismissal earnings. When asked to compare pre-and post-dismissal levels of income, about 92 % of the cement and 87 % of the Petkim workers said that their post-dismissal level of income was lower or much lower than their level of income under state employment. Compared to cement workers, more Petkim workers were dissatisfied with their current income.

## 8.3. Age and the years of tenure

About 66 % of the cement and 94 % of the Petkim workers were in the 41-55 age group. Cement workers were a younger group by an average of 5 years and had 5 years less tenure. There were, however, wide differences among the cement plants in terms of the workers' average ages. For instance, the dismissed workers at the Denizli plant were about 14 years younger than those at the Ankara plant. More than half of the Petkim workers had over 21 years of service at the state employment while only one-fifth of the cement workers had this many years of service.

# 8.4. Payments in kind, social security membership and union membership

Almost all of the workers had subsidized lunch, transportation, heating fuel and child support at their state employment. In the post-dismissal jobs however, more than half of the sample had no such payments in kind. The social security coverage was 100 % during state employment. In the post-dismissal period this coverage dropped substantially. In their state jobs, about 97 % of the cement workers and 87 % of the Petkim workers were union members. In the post-dismissal sample union membership was nil. This suggests that the post-dismissal jobs not only paid lower wages, but were also lower quality in terms of payments in kind, fringe benefits, job security and probably in the work effort required. This implies that for most, workers dismissals were a movement from formal into the informal sector of the economy.

## 8.5. Pre-and post-dismissal welfare

In two questions, workers were asked to compare their pre- and post-dismissal welfare. After considering the severance compensation, the new employment and other things, about 92 % of the cement and 85 % of the Petkim workers stated that their current situation is worse than during their state employment. The respondents were also asked if, had they the choice, would they have preferred to stay or leave state employment. About 93 % of the cement and 85 % of the Petkim workers stated that they would have preferred to stay. These overwhelmingly high percentages of workers who preferred the state sector and who considered their current situation worse than before

suggest that workers have suffered significant monetary and nonmonetary welfare losses.

#### 8.6. Other characteristics

The 50 % labor force participation rate among the dismissed workers is lower than the urban male participation rate for the 25-54 age group in Turkey (Table 1). Among the post-dismissal labor force participants, the unemployment rate was 6.7 %, which is about the same as the urban male unemployment rate for the 25-54 age group in Turkey (Table 1). The unemployment rate and unemployment spells were higher among workers in the cement industry compared with Petkim workers. This may be related to their lower educational attainments or regional characteristics. In fact, the average unemployment spell is somewhat lower for the higher educational groups. Cement plants are located in small to medium size cities or townships, whereas petrochemical complexes are near metropolitan cities. The Aliağa complex, for example, is located near the third largest metropolitan city (İzmir) of Turkey and the Yarımca complex is located near a highly industrialized metropolitan area İzmit (Kocaeli). Kocaeli and İzmir ranked first and second respectively in terms of their per capita gross domestic product (GDP) among the provinces of Turkey in 1994.

The activity distribution shows that about half of the active workers were self-employed. This is much higher than the 19 % rate for self-employed among Turkey's urban male population (SIS, 1996: 121). The severance payment received may have facilitated the dismissed workers in the sample to establish their own business, within the prevailing economic environment of high cost credit. Among the self-employed, retail trade was the most common sector of work. Longer spells of unemployment among wage earners rather than the self-employed could be the result of the search for hard to come by formal sector wage earner positions, similar to those positions once held. Further, 35 % of the self employed and 15 % of the wage earners had no spells of unemployment implying that the self-employed had an easier transition to the private sector.

## 9. How is the severance compensation used?

During the interviews, the respondents were asked about the way they used the lump sum severance payment which included the notice compensation. They were faced with a number of possible choices and asked to choose as many as that were applicable. As seen in Table 4, buying a house was chosen most often. The second most often chosen item was using the severance compensation for daily expenses. This suggests that the interest earnings on the severance compensation were not enough to support daily expenses. The third most often chosen item was establishing one's own business. Next, we observe

that about one-fifth of the time workers bought a car with their severance compensation which may have been used to set up a business in transportation. Still, a substantial proportion bought gold or foreign exchange. Purchase of house, gold or foreign exchange are traditional investment activities as well as hedging against high rates of inflation.

What conclusions can we reach from these observations? Were the severance payments wisely used? Did the severance compensations provide enough security until one's own business is set up? Were compensations sufficient to set up a business? Although a precise answer to these questions cannot be given based on the information collected, half of the workers were nonetheless able to establish a business.

How is the Severance Compensation Used?

	Cement Workers	Petkim Workers	Total
Established Own Business	22.0	12.8	17.0
Used for Daily Expenses	28.2	31.4	30.0
Lent Money *	1.7	6.0	4.0
Time Deposit in a Bank	5.4	22.1	11.2
Bought a House	36.1	40.0	38.2
Bought Gold or Foreign Exchange	18.3	9.4	13.3
Bought Treasury Bills	0.4	1.6	1.1
Bought Securities	0.7	0.9	0.9
Use Interest Income for Daily Expenses	5.0	7.1	6.2
Use Rental Income for Daily Expenses	3.4	4.2	3.8
Bought a Car	18.0	18.1	16.7
Bought Land	1.4	3.5	2.6
Total Number	563	682	1245

#### 10. Conclusions

This study evaluates the pre- and post-dismissal working conditions of the dismissed workers due to privatization in Turkey. The study is based on interviews with dismissed workers from seven privatized cement plants and from two petrochemical complexes which were under consideration for privatization. The labor force participation rate among the dismissed workers was less than that among the urban male labor force of the same age group. About 70 % of the interviewed workers retired upon dismissal or shortly thereafter. One-third of the retirees, however, continued to participate in the labor force adding up to a 50 % economically active sample. About half of the

economically active workers were self-employed. This was much higher than the proportion of the self-employed among urban males in Turkey. Presumably, the severance pay was helpful in establishing a business, in the current environment of high cost credit. The fact that the self-employed earned more and experienced shorter spells of unemployment than wage earners suggests that public programs to assist dismissed workers in identifying self-employment opportunities may be a useful policy for the authorities in facilitating the reabsorption of former state workers into the private sector labor market.

Earnings at state employment were higher for Petkim workers than for cement workers possibly due to higher capital intensity of the petrochemicals sector compared to the cement sector. Post-dismissal earnings were significantly lower than the state earnings. Further, post-dismissal jobs were of a lower quality than the state employment in terms of nonmonetary attributes such as social security membership. In this sense, for most workers the dismissals were a movement from the formal to the informal sector of the economy. Thus, welfare losses were higher than those indicated by the earnings losses. Full welfare losses are anticipated by the subjective welfare evaluations of the workers. Considering the circumstances of new job or retirement and the severance payment, an overwhelming majority of the workers considered their current welfare worse than it was during the state employment and would have preferred to go back if they had the choice. These results suggest that attractive monetary and nonmonetary conditions of state employment was unattainable in the private sector. Improving quality of private sector jobs is a challenge to Turkey's governments.

**Appendix Table**Main Characteristics of the Workers

	Cement Workers	Petkim Workers	Total
1. Educational Distribution		1 CIRIII WOLKEIS	Total
Nongraduate	-	2.1	1.1
Primary School	70.9	45.6	57.0
Middle School	5.3	6.7	6.1
High School	9.2	7.2	8.1
Voc. High School	13.7	30.9	23.1
University	0.9	7.5	4.5
Mean Years of Education	6.7	8.3	7.5
(Standard Deviation)	(2.6)	(3.5)	(3.2)
Total Numbers	563	682	12.45
2. Distribution by Age (%):			
25-40	32.3	2.8	16.1
41-55	65.5	94.3	81.3
56-65	2.1	2.9	2.6
Mean Years of Age	42.7	47.9	45.5
(Standard Deviation)	(6.4)	(4.0)	(5.9)
Total Number	563	682	1245
3. Monthly Earnings During	State Employment (%	∕₀):	
2000 or Less	29.3	8.4	17.8
2001-3000	41.9	23.2	31.6
3001-4001	16.7	30.5	24.3
4001-5000	8.0	23.3	16.4
5001 or More	4.1	14.7	9.9
Mean Monthly Earnings			
(TL at 1987 prices)	2646	3831	3295
(Standard Deviation)	(1084)	(1653)	(1541)
Sample Size	563	682	1045
4. Post-Dismissal Monthly E	Earnings (%):		
500 or Less	10.5	11.1	10.7
501-1000	51.7	32.1	45.3
1001-1500	21.6	20.0	21.1
1501-2000	11.1	11.6	11.2
2001 or More	5.1	25.3	11.7
Mean Monthly Earnings			
(TL at 1987 prices)	1042	1634	1236
(Standard Deviation)	(652)	(1514)	(1055)
Sample Size	389	190	579

5. Post-Dismissal Monthly Re	tirement Paymen	ts (TL at 1987 prices)	):
1000 or Less	38.1	10.1	16.3
1001-2000	61.9	89.6	83.5
2001 or More	, 1 - marin 1	0.3	0.2
Mean Monthly Payments	1100	1130	1123
(Standard Deviation)	(190)	(141)	(153)
Sample Size	189	670	859
6. Post-Dismissal Income Cor	npared to State Ir	ncome (% reporting):	
Higher	1.1	3.2	2.2
Same	7.3	9.4	8.4
Lower	24.5	57.9	42.8
Much Lower	67.1	29.5	46.5
Total Number	563	682	1245
7. Years of Tenure at the State	e Employment:		
Less than 5	6	0.7	3.5
6-10	16.9	1.3	8.4
11-15	21.7	5.4	12.8
16-20	32.9	36.4	34.8
21-25	19.5	51.2	36.9
26 or More	2.3	5.0	3.8
Average Years Tenure	15.3	20.8	18.3
(Standard Deviation)	(5.9)	(3.9)	(5.6)
Total Numbers	563	682	1245
8. Payments in Kind at the Sta	ate Employment (	% reporting):	
Subsidized Lunch	100.0	98.0	99.3
Subsidized Housing	0.4	4.5	3.2
Transportation Service	100.0	98.0	99.1
Heating Fuel Support	100.0	94.3	97.1
Child Support	100.0	92.0	95.8
Child Care	0.3	3.0	2.1
Total Numbers	563	682	1245
9. Post-Dismissal Payments in	Kind (% reporting	ng):	
None	58.1	95.5	54.1
Subsidized Lunch	41.9	3.9	31.6
Subsidized Housing	-	0.1	0.2
Transportation Service	12.8	1.3	14.0
Heating Fuel Support	0.7	0.1	0.9
Child Support	0.7	0.1	0.2
Child Care	-	- ·	-
Total Numbers	563	682	579

Retirement Fund	0.9	0	0.4
Social Security Institut.	99.1	100.0	99.6
Total Number	563	682	1245
1. Post-Dismissal Social Secu	urity Membership		1213
Retirement Fund	0.8	-	0.5
Social Security Institute.	65.8	6.8	46.5
Bağ-Kur	2.8	2.1	2.6
None	30.6	91.1	50.4
Total Number	389	190	579
2. Union Membership Before	Dismissal (% repo	orting):	317
Union	96.8	87.2	91.6
Nonunion	3.2	12.8	8.4
T - 131 1		.2.0	0.4
Total Number	563	682	1245
3. Could You Have Stayed at			:
Yes, same work	4.3	9.7	7.2
Yes, different work		0.7	0.4
No	95.7	89.6	92.4
Total Number	563	682	1245
4. Did You Have Help in Find	ding a New Job? (	% reporting):	
Yes	0.5	0.1	0.3
No.	99.5	99.1	99.7
Total Number	563	682	
. Are You Now Looking for	a Job? (% reportir		
Yes	33.0	44.9	40.0
No	67.0	55.1	60.0
Total Number	563	682	
. Since You Were Dismissed freporting):	, Did Anyone in Y	our Family Look fo	or a Job?
Yes	8.0	30.4	20.2
No	92.0	69.6	79.8
Total Number	563		
		682	1245
. Since You Were Dismissed porting):	Did Anyone in Y	our Family Start W	orking!? (%
Yes	7.3	18.5	13.4
No	92.7	81.5	86.6

8. Since You Were Dismisse	ed, Did You Think of		
Yes	2.5	11.9	7.6
No	97.5	88.1	92.4
Total Number	563	682	1245
19. Compare Your Situation	Γoday to the State En	nployment Period? (	% reporting):
Same	2.8	8.2	5.8
Better	5.5	6.6	6.1
Worse	91.7	85.2	88.1
Total Number	563	682	1245
20. If You Could Go Back W	ould You Prefer to L	eave or Stay? (% rep	porting):
Leave	7.3	15.0	11.5
Stay	92.7	85.0	88.5
Total Number	563	682	1245
21. Marital Status (%):			
Married	97.2	97.9	97.6
Other	2.8	2.1	2.4
22. Sex (%):			
Men	98.0	97.7	97.8
Women	2.0	2.3	2.2
23. Household Head (%):			
Household head	98.8	98.5	96.6
Spouse	0.9	1.5	1.2
Children	0.4	-	0.2
24. Distribution of the Curre	ntly Employed by Se	ctor of Current Wor	k (%):
Self Employed:	46.3	57.4	49.9
Agriculture	5.9	2.1	4.7
Manufacturing	5.7	6.9	6.0
Retail Trade	19.0	37.9	25.2
Service	7.7	5.8	7.1
Transportation	8.0	4.7	6.9
Wage Earner:	53.7	42.7	50.1
Civil Servant	0.8	-	0.5
Manufacturing	35.7	16.9	29.5
Service	17.2	25.8	20.0
Total Number	389	190	579

Nongraduate	-	6.0	6.0
Primary School	8.8	6.6	8.3
Middle School	9.7	8.1	9.1
High School	6.6	4.6	6.2
Voc. High School	9.1	6.4	7.8
University	7.8	4.2	4.6
Mean Number of Months	8.7	6.2	7.9
Standard Deviation)	(9.7)	(7.5)	(9.1)
Total Numbers	389	190	579

#### References

- ARTAN, F. (1991), "KİT'lerde İstihdam" (An Analysis of Employment in State-Owned Enterprises), DPT:2283-IIPGM:431, Ankara: State Planning Organization.
- BAKAR, D.H., BAKAR, S., ÖZDEN and M. SARAL, H. ÖKTEM (1993), "KİT'ler ve Özelleştirmeler", (SOEs and Privatizations) in *Kamu Sektöründe Devletin Rolü; KİT'ler: Değerlendirme, Öneriler ve Özelleştirme* (The Role of State in the Public Sector, SOEs, Privatization, An Evaluation and Proposals) Proceedings of the 1993 Industry Congress, Vol. 3, Ankara: Makina Mühendisleri Odası, 48-67.
- BULUTAY, T. (1995), *Employment, Unemployment and Wages in Turkey*, Ankara: International Labor Office and the State Institute of Statistics.
- ÇAKMAK, E.H. and O. ZAİM (1991), "Kamu ve Özel Teşebbüslerde Etkinlik Karşılaştırması: Veri Zarflama Yöntemi ve Çimento Sanayii Üzerine Bir Uygulama", (Comparative Efficiency in the Public and Private Sectors: Data Enveloping Procedure and an Application to the Cement Industry), *METU Studies in Development*, 18(4): 228-43.
- ———— (1992), Privatization and Comparative Efficiency of Public and Private Enterprise in Turkey: The Cement Industry, *Annals of Public and Cooperative Economics*, 63(2): 271-84.
- CUMHURIYET, "Privatizations in the Cement Sector", September 12, 1996.
- KARAKAŞ, C. (1994), "Has Privatization Improved Profitability and Performance of the Public Enterprises in Turkey?", in P. Cook and C. Kirkpatrick (eds.) *Privatization Policy and Performance, International Perspective*, New York: Prentice-Hall, Harvester.
- MEHRAN, F. and H. ÖZEL (1992), "Assessment of Employment and Unemployment in Turkey", in *Proceedings of the Seminar on Employment, Unemployment and Wages in Turkey*, October 15-16, 1992, Ankara: State Institute of Statistics and International Labor Office.
- MORGAN GUARANTY BANK (1986), *Privatization Master Plan: SOEs Recommended for Sale, Action Plans*, Ankara: Morgan Guaranty Bank.

- OECD (1996), Economic Surveys: Turkey, Paris: OECD.
- PETKIM (1995a), Annual Report, İzmir: Petkim, Petrochemical Holding.
- (1995b), Statistical Yearbook, İzmir: Petkim, Petrochemical Holding.
- PRIVATIZATION ADMINISTRATION (PA) (ÖZELLEŞTİRME İDARESI BAŞKANLIĞI) (1995), Türkiye'de Özelleştirme (Privatization in Turkey) Mimeograph, Octorber 2, 1995. Ankara: Başbakanlık Özelleştirme İdaresi Başkanlığı, Basın ve Halkla İlişkiler Daire Başkanlığı.
- PUBLIC PARTICIPATION ADMINISTRATION (PPA) (KAMU ORTAKLIK İDARESI) (1993), "Türkiye Çimento Sektöründe Özelleştirme" (Privatization in the Cement Sector in Turkey), mimeograph, Ankara: Kamu Ortaklığı İdaresi.
- SAYGILI, Ş. (1995), *Privatization and Efficiency: The Case of Turkish Cement Industry*, M.A. Thesis, Ankara: Middle East Technical University.
- ——— (1996), "Çimento Sektöründe Firma Performans İlişkisi" (Firm Performance Relationship in the Cement Sector), Ankara: Processed.
- ŞENSES, F. (1993), "Labor Market Response to Structural Adjustment and Institutional Pressures: The Turkish Case", METU Economic Research Center, Working Paper. ERC/1992-1, Ankara: Middle East Technical University.
- ————(1996), "Structural Adjustment Policies and Employment in Turkey, Economic Research Center", Working Paper ERC/96-1, Ankara: Middle East Technical University.
- STATE INSTITUTE OF STATISTICS (SIS) (1996), *Household Labor Force Survey Results*, *October 1994*, Ankara: State Institute of Statistics, Publication No. 1876.
- STATE PLANNING ORGANIZATION (SPO), (1993), *Çimento Sektörü Özel İhtisas Komisyonu Raporu*, (Cement Sector Special Commission Report), mimeograph. Ankara: SPO.
- SUIÇMEZ, H. and S.YILDIRIM (1993), *Dünya'da ve Türkiye'de Özelleştirme Uygulamaları* (Privatization in Turkey and the World) Ankara: Milli Prodüktivite Merkezi Yayınları, No. 508.
- SÜRAL, N. (1995), *Labor Law: Basic Concepts, Principles and Institutions*, third edition, Ankara: Department of Labor Economics and Industrial Relations, Middle East Technical University.
- TALLANT, D. (1993), "Relative Efficiency of Public and Private Sector Ownership and the Privatization of the Turkish Cement Industry", *Boğaziçi Journal: Review of Social, Economic and Administrative Studies*, 7(1-2).
- TANSEL, A. (1996), "Self Employment, Wage Employment and Returns to Education for Urban Men and Women in Turkey", in *Education and the Labor Markets in Turkey*, Ankara: State Institute of Statistics.
- ———— (1998), "Earnings of Turkish Workers Before Versus After Dismissal Due to Privatization", Ankara: Department of Economics, Middle East Technical University.
- TANSEL, A. and N.D. GÜNGÖR (1997), "The Educational Attainment of Turkey's Labor Force: A Comparison Across Provinces and Over Time", *METU Studies in*

Development, 24(4): 531-547.

- TOGAN, S. and OLGUN, H. (1984), 1980'li Yıllarda Türkiye'de İthalatın Liberizasyonu ve Gümrük Vergilerinin Yeniden Düzenlenmesi: Bir Değerlendirme (Import Liberalization in Turkey in the 1980s and the Reorganization of the Custom Duties: An Evaluation) Ankara: Ankara Sanayi Odası.
- WORLD BANK (1996), World Development Report 1996: From Plan to Market, New York: Oxford University Press.
- ZAİM, O. and E.H. ÇAKMAK (1994) "Kamu Sektörü Özelleştirme ve Etkinlik" (Public Sector, Privatization and Efficiency), in A. Polatoğlu (ed.) *Özelleştirme Tartışmaları* (Privatization Discussions) İstanbul, Bağlam Yayınları, No. 72: 147-165.

#### Özet

Türkiye'de özelleştirme nedeniyle işten çıkarılan işçiler: Çıkarılma öncesinde ve sonrasında durumları

Türkiye'de özelleştirme nedeniyle işten çıkarılan işçiler üzerinde özelleştirmenin etkilerini araştıran bu çalışma, bu alanda yapılmış ilk çalışmadır. Çimento ve petrokimya işkollarında, özelleştirme dolayısıyla işten çıkarılmış işçilerle, çıkarılma öncesi ve sonrası işgücü piyasası deneyimleri konusunda görüşmeler yapılmıştırç Bu görüşmelerin sonuçları bu makalede özetlenmektedir. Ana sonuçlardan biri, önemli derecede kazanç kayıplarının olduğudur: çünkü işten çıkaırlma sonrası bulunan işler. çoğunlukla iş kontratı gibi formel düzenlemelerden ve toplumsal güvenceden yoksundur. Bu da, pek çok işçi için, ekonominin formel sektöründen, enformel sektörüne kayma anlamına gelmektedir. Kayıpların parasal olmayan yönlerini tahmin için, işçilerin, işten çıkarılma öncesi ve sonrası refah düzeylerini, öznel olarak değerlendirmelerini sağlayan iki soru sorulmuştur. Bu sonuçlar. kamu kesiminin parasal ve parasal olmayan çekici koşullarına özel sektörde ulaşılamadığını göstermektedir.