SECTION 1. SECTORS AND EMPLOYMENT

In this module the indexes are set and described for the presentation of the evolution of employment in Greece per region and per employment sector. The available (published and unpublished) data of the NSAG were used in the analysis. More specifically, the analysis used the results of the 1988 inventory research of Industry - Handicraft outlets, the 1994 corporate register, and the labour power research for 1998 and 1999 (2nd quarter). Upon processing the data, certain cohorted data ensued for the corporate register per region and per 2-digit employment code (91 /NACE).

1.1. NUMBER OF OUTLETS AND MEAN ANNUAL EMPLOYMENT

The inventory of the 1988 industry – handicraft outlets used the term outlet to describe a "***unit with economic activity***", thus defining the observation units and the enterprise branches that are active in a different geographic space. The above clarification is necessary because later on (1994/1995 corporate register) it seems that the GNSA uses the term enterprise to describe its reference population and has thus incorporated the data from the branches into the enterprise headquarters. Given that, it is impossible to compare the 1988 data to those of 1994, which are described separately.

1.1.1. OUTLETS (1988)

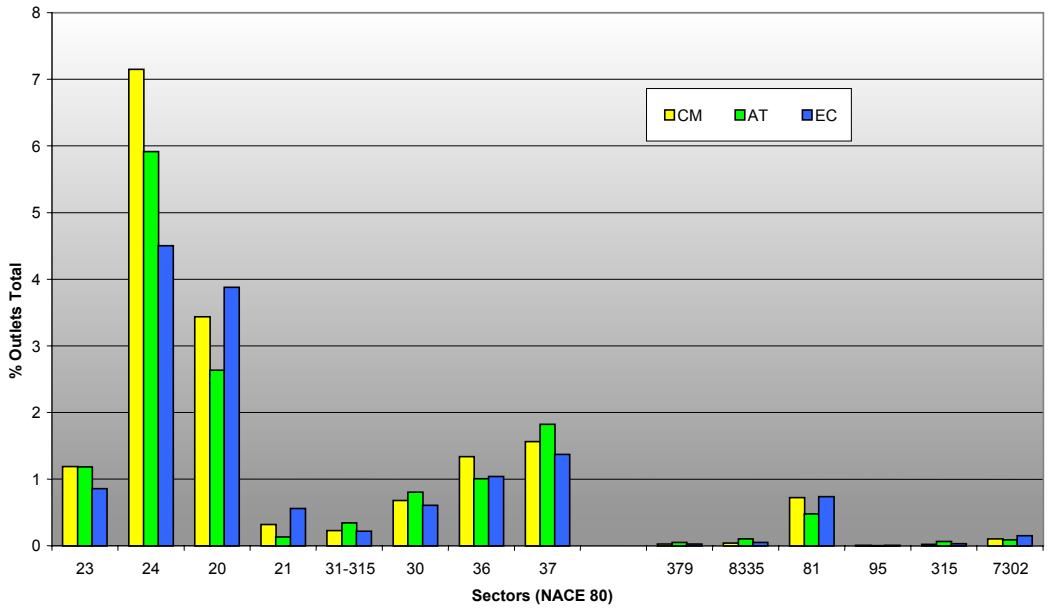
Figure 1.1.1.a provides the data for the observation sectors according to table 1.1 below. We deem it necessary to provide the correspondance between the codes, since in its various publications the GNSA has used different codes.

Table 1.1. Code correspondence NACE '80 and '90.

NACE 80	NACE 91		DENOMINATION
20&21	15	Traditional	FOOD – BEVERAGES
23	17		TEXTILE
24	18		CLOTHING
31(-315)	24(-244)		CHEMICALS
30	25		PLASTIC-RUBBER
36	29		MACHINES (NON ELECTRICAL)
37	31		ELECTRICAL APPLIANCES
379.1&379.8	30	Hi-tech	OFFICE EQUIPMENT- PCs
730.2	642		TELECOMMUNICATIONS
81	65		FINANCIAL PRODUCTS – BANKS
833.5	72		INFORMATION TECHNOLOGIES - RELEVANT ACTIVITIES
	73		RESEARCH - DEVELOPMENT
	74		OTHER BUSINESS ACTIVITIES
95	85		HEALTHCARE – HEALTH SERVICES
315	244		PHARMACEUTICALS

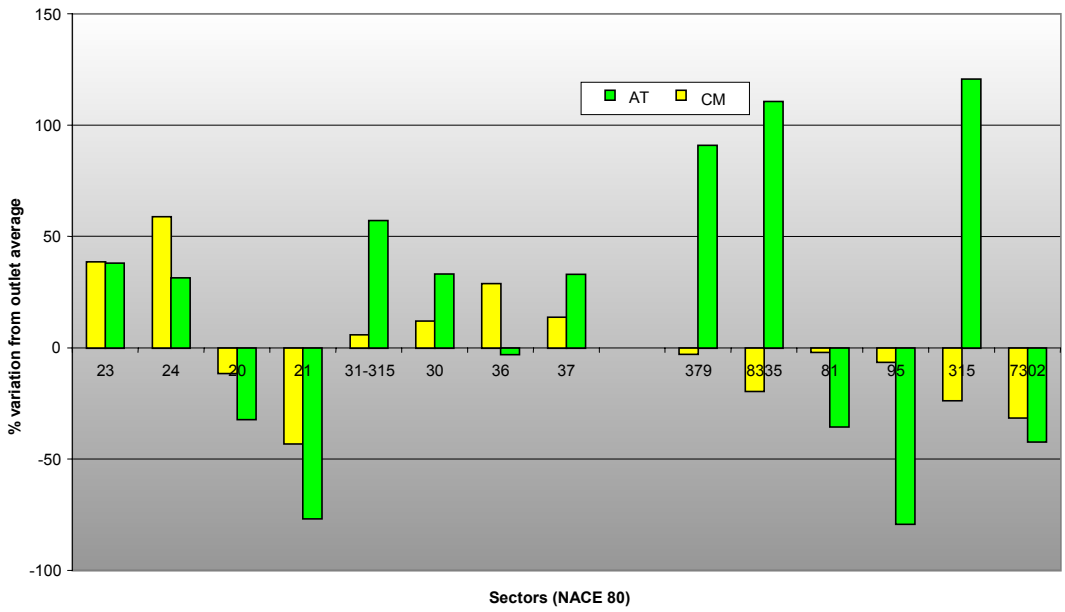
The correspondence is not always in absolute terms, but provides the desired accuracy to the general observation figures.

Figure 1.1.1.a No of Outlets (1988) Central Macedonia, Attica and the Entire Country



In figure 1.1.a. we observe the comparison between each sector percentile on the outlet total for Central Macedonia, Attica and the Entire Country.

Figure 1.1.1.b Comparative position as to the Entire Country, Central Macedonia and Attica



In figure 1.1.1.b we see the ranking of Central Macedonia (CM) and Attica (AT) for each sector, as to its variation from the country average (horizontal axis at 0). This figure provides a picture of Attica's predominance over Central Macedonia in the "new economy" sectors and illustrates the intensity of CM in clothing, textile and machines-appliances.

1.1.2. AVERAGE ANNUAL EMPLOYMENT (1988)

For 1988, the average annual employment (AAE) was calculated as the average of employees in each outlet per month. The owner and assistants have been included in this calculation.

Figure 1.1.2.a illustrates the distribution per sector as to the total of employees for CM, AT and the Entire Country. We observe the intensity of employment in the sectors of textile, foods and clothing for CM. The comparative figure 1.1.2.b depicts the intensity of CM in the above-mentioned sectors (conventional traditional ones) and the intensity of AT in the "new economy" sectors. Compared to the Entire Country average, both regions are highly demarcated.

Figure 1.1.2.a. Average annual employment (1988) Central Macedonia, Attica and entire country

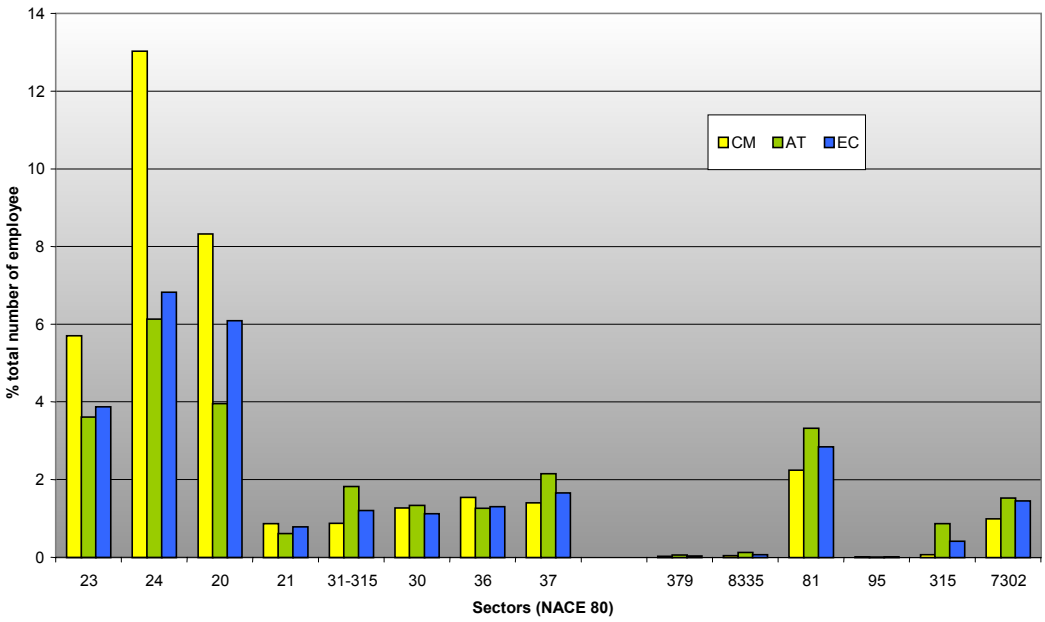
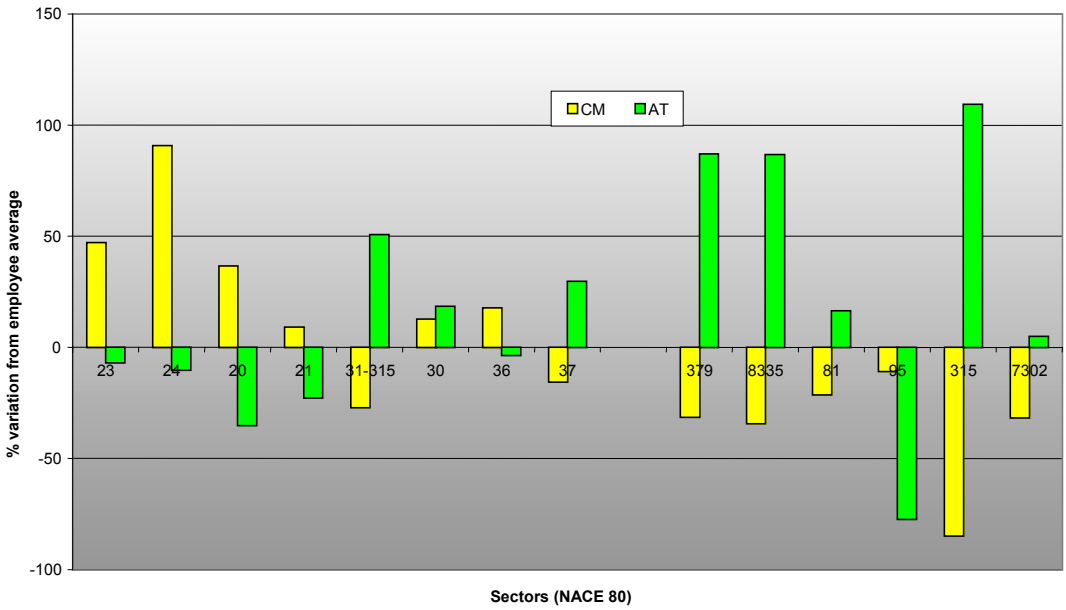


Figure 1.1.2.b Comparative position of Central Macedonia and Attica as to the Entire Country



1.1.3. ENTERPRISES (1994)

In the 1994 corporate register, the data for each enterprise is registered at the seat of the enterprise (headquarters). This leads to a relatively distorted picture – especially in some sectors such as banks – and for this reason the comparison with 1988 is practically impossible. Figure 1.1.3.a below illustrates the distribution of the number of enterprises per sector for CM, AT and the Entire Country.

The comparative figure 1.1.3.b depicts the percentile variation of the number of Central Macedonia and Attica enterprises as to the country average per sector. Thus, the intensity of CM in traditional sectors and of AT in "new economy" sectors is illustrated. The intensity of AT in some sectors is also due to the fact that many enterprises are seated in AT and the branches of those enterprises are registered in that region.

Figure 1.1.3.a N° of Enterprises (1994) Central Macedonia, Attica and Entire Country

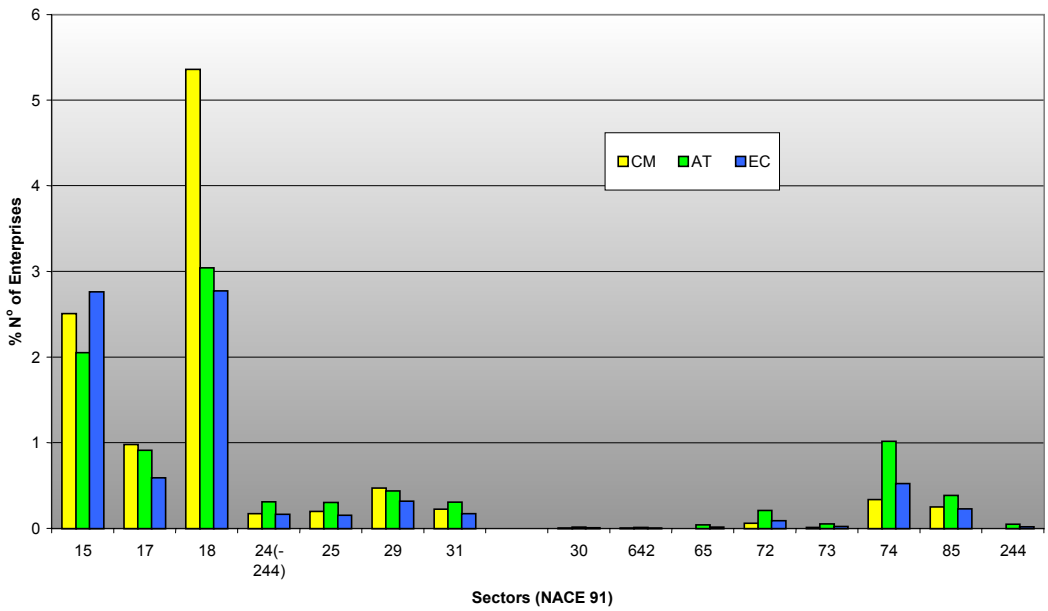
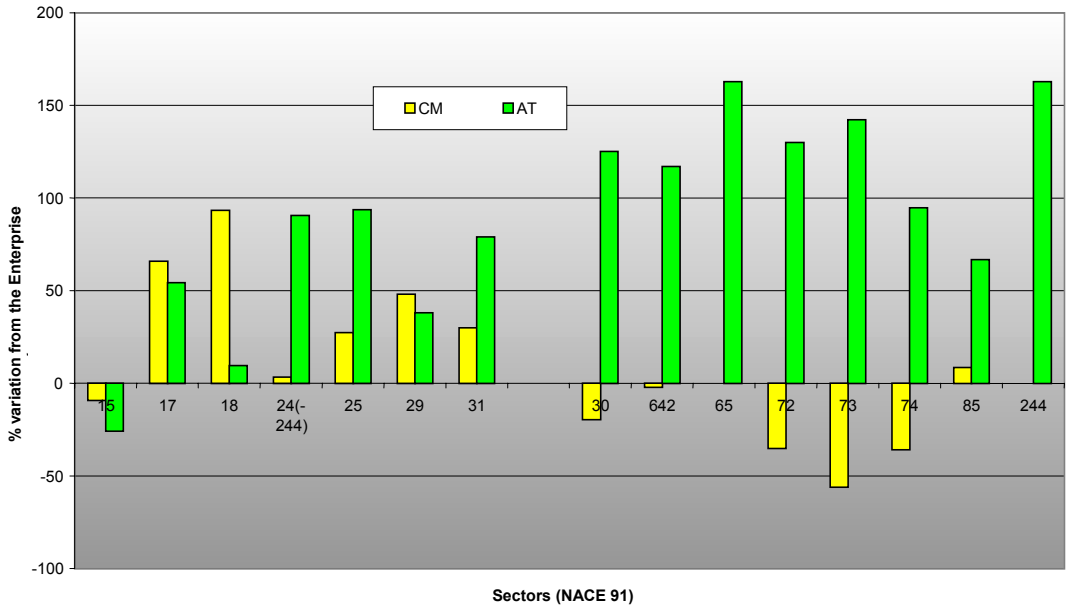


Figure 1.1.3.b Comparative position of Central Macedonia and Attica as to the Entire Country



1.1.4. AVERAGE ANNUAL EMPLOYMENT

The average annual employment for 1994 was calculated based on tax statements. figure 1.1.4.a depicts the comparative figures for CM, AT and the Entire Country, and the comparative figure 1.1.4.b. illustrates the position of CM and AT as to the variation of each sector Average Annual Employment (AAE) compared to the Entire Country average. The picture of the intensity of CM in "traditional" sectors is documented, as is the intensity of AT in the "new economy" sectors.

Figure 1.1.4.a Average annual employment (1994) Central Macedonia, Attica and Entire Country

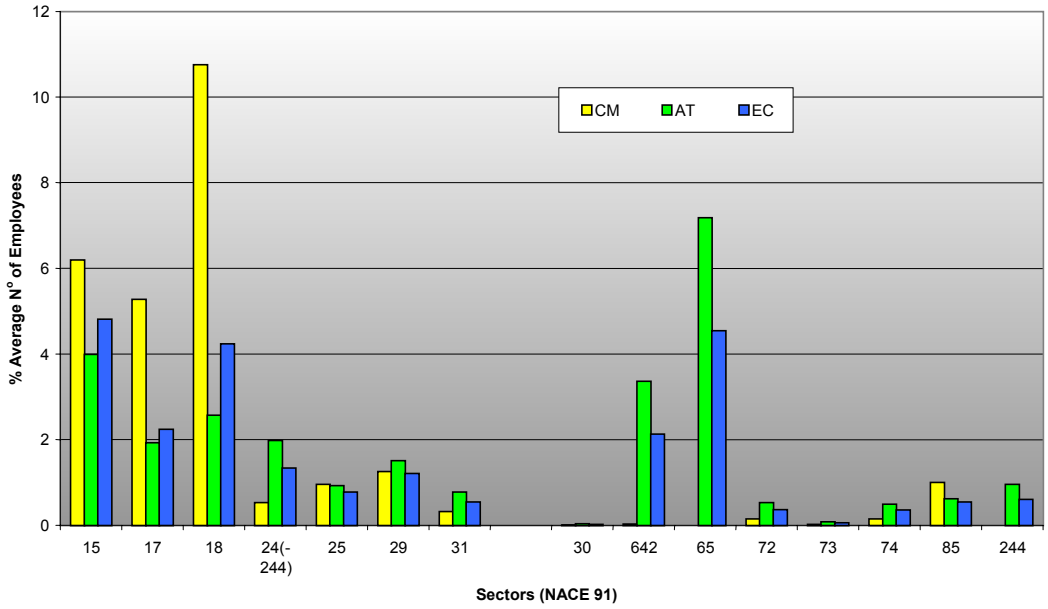
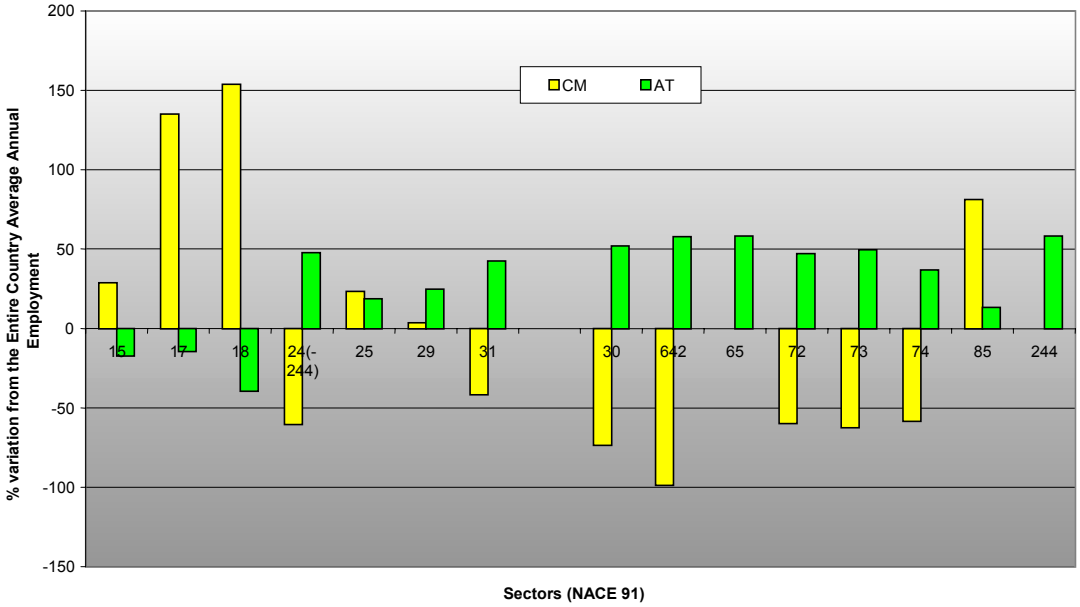


Figure 1.1.4.b Comparative position of Central Macedonia and Attica as to the Entire Country (1994)



1.2. 1994 TURNOVER

The above picture of the CM intensity in traditional sectors and of AT in the "new economy" sectors is also described by the turnover of the enterprises for 1994. Once again we stress the fact that sometimes the recording of the data leads to misconceptions due to the fact that the figures from the branches are calculated at the seat of the enterprise. Figures 1.2.a (absolute figures) and 1.2.b (comparative figure of CM and AT as to the variation from the Entire Country average) are presented. We should underline the differentiation in health services.

Figure 1.2.a 1994 Turnover, Central Macedonia, Attica and Entire Country

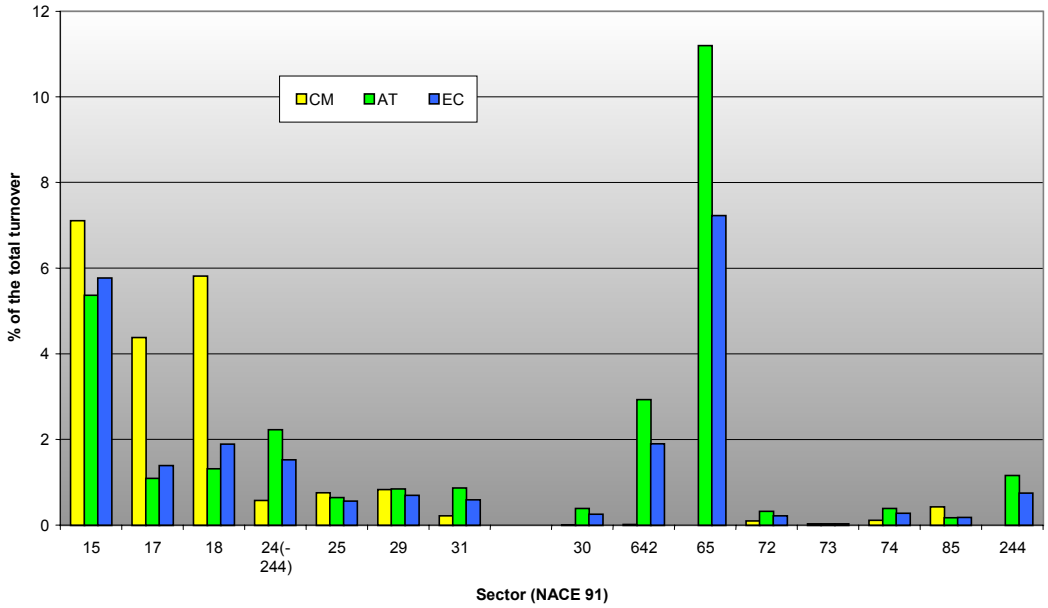
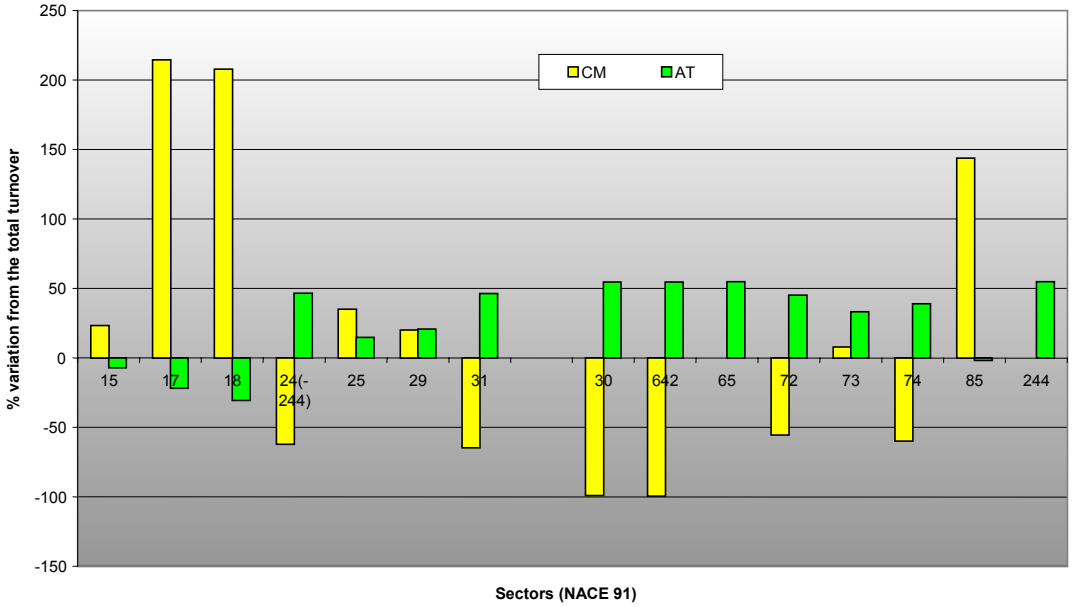


Figure 1.2.b Comparative position of Central Macedonia and Attica as to the total turnover



1.3. NUMBER OF EMPLOYEES

This paragraph makes a comparative analysis of the data from the manpower GNSA survey for the second quarter of 1998 and 1999. Based on the comparative data we note the distribution of manpower per sector in CM, AT and the Entire Country (figure 1.3.a) and the comparative position of CM and AT as to the Entire Country (figure 1.3.b). It illustrates the intensity of employment in the "new economy" sectors in AT and the "traditional" sectors in CM. It is worth noting that CM lags behind in the sectors of chemicals and plastics.

Figure 1.3.a N° of Employees (1998) Central Macedonia, Attica and Entire Country

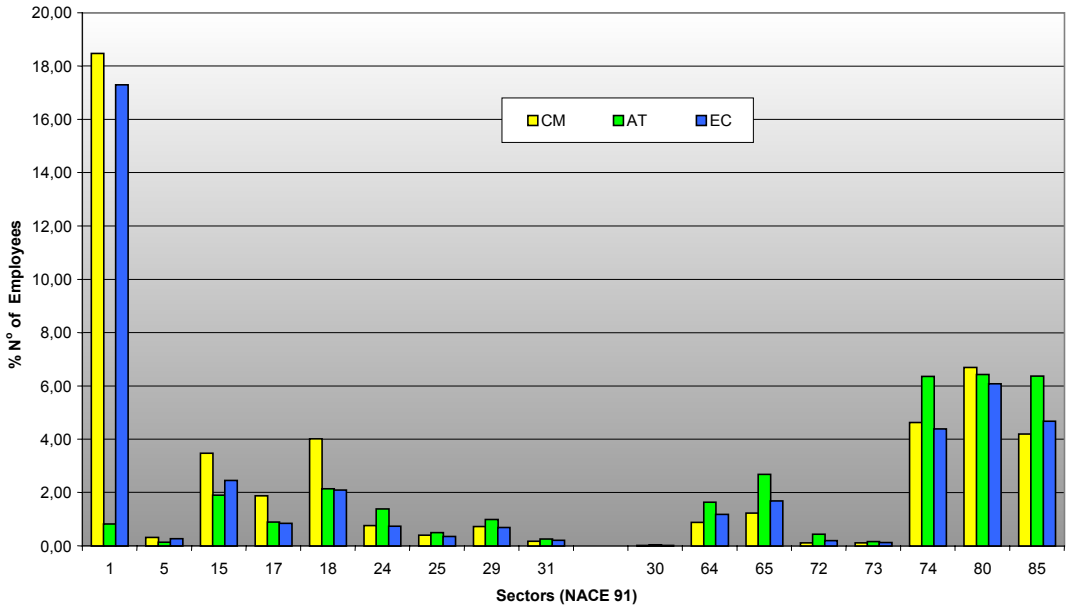


Figure 1.3.b Comparative position as to the N° of employees 1998 Central Macedonia and Attica

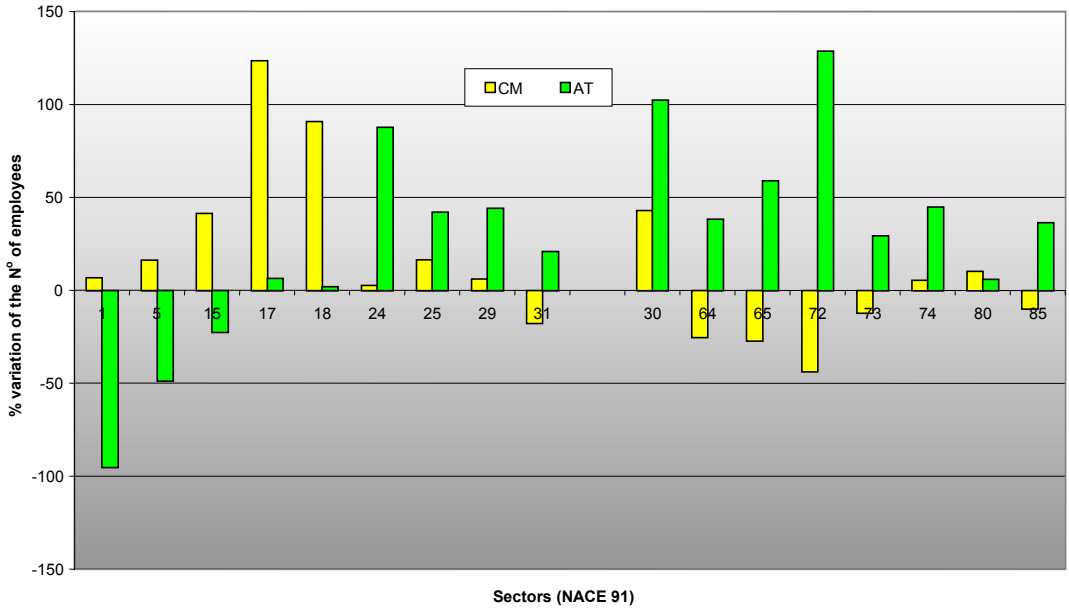
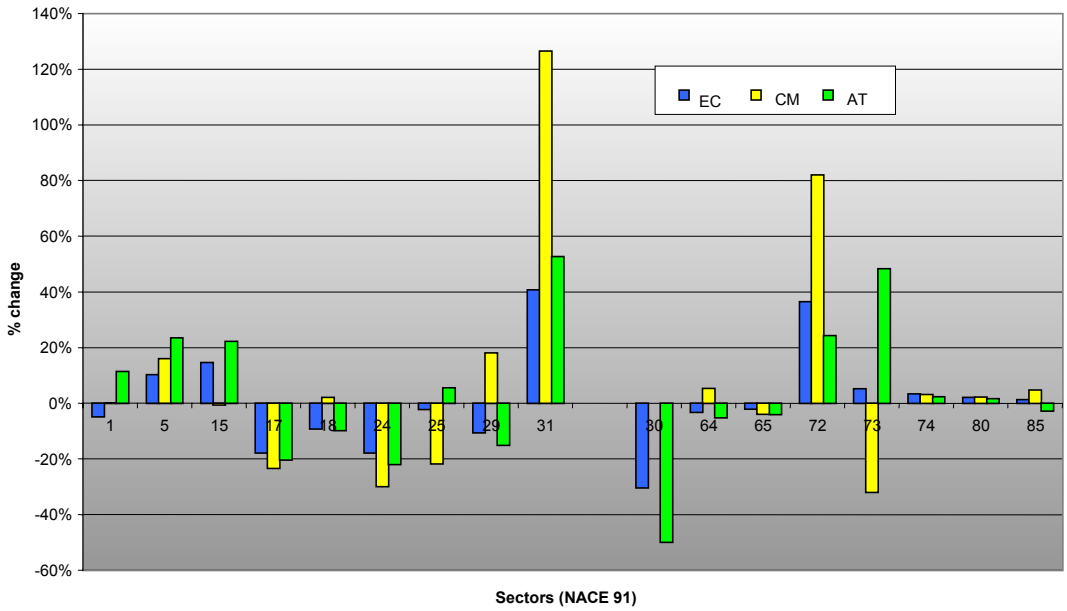


Figure 1.3.c illustrates the differentiation of employment between 1998 and 1999 for the Entire Country, CM and AT. CM and AT follow the general trend of the total, with a noted increase in the sectors of chemicals and information technology and a decrease in research - development.

Figure 1.3.c Manpower change (%)1998 - 1999



1.4. REMUNERATION

This subsection presents the data from the GNSA publication "Labour Statistics" referring to relevant sample surveys. Table 1.4.a and table 1.4.b illustrate the absolute figures per sex.

Table 1.4.a. Monthly remuneration per sector – men (in national currency – drachmas)

Male	**TOTAL**	**CM**	**AT**
20 – Food industry.	431143	375164	475421
21 – Beverages industry.	459956	500973	502549
23 – Textile material production.	397662	383723	357942
24 – Manufacture of clothing items, fur puering & dying.	291936	400406	287262
30 – Manufacture of elastic products (rubber) & plastic material.	323873	314997	277053
31 – Production of chemical substances & products.	524810	700672	503042
36 - Manufacture of machinery & equipment items m.a.m.	418908	595881	400608
37 – Manufacture of office equipment & computers.	527867	441974	553352
37 – Manufacture of electrical machines & appliances m.a.m.	527867	441974	553352
Total 2-3	**462529**	**426765**	**468639**
Overall Total 1, 2-3, 4	**472857**	**440739**	**476543**
61 – Wholesale	352069	292559	374959
64-65 – Retail	267870	254802	277438
81 – Banks	538604	504204	560862
82 - Insurances	512856	457947	521112

Table 1.4.b. Monthly remuneration per sector – women (in national currency – drachmas)

Female	**TOTAL**	**CM**	**AT**
20 – Food industry.	323763	291017	348010
21 – Beverages industry.	353926	363520	384187
23 – Textile material production.	297370	298417	295425
24 – Manufacture of clothing items, fur puering & dying.	250952	277132	243135
30 – Manufacture of elastic products (rubber) & plastic material.	253082	261638	248666
31 – Production of chemical substances & products.	373155	397941	371648
36 - Manufacture of machinery & equipment items m.a.m.	278038	262741	275261
37 – Manufacture of office equipment & computers.	360916	300346	369667
37 – Manufacture of electrical machines & appliances m.a.m.	360916	300346	369667
Total 2-3	**328668**	**293310**	**338415**
Overall Total 1, 2-3, 4	331684	296022	339806
61 – Wholesale	293839	251714	297504
64-65 – Retail	236201	218293	247321
81 – Banks	413738	402275	426490
82 - Insurances	327467	314236	328821

Figure 1.4.a and figure 1.4.b illustrate the variations of remuneration, pers sector, for men and women respectively. We observe that in CM there are significant variations in the sectors of clothing, chemicals and machines as to men, whereas for women there is significant variation from the average.

Figure 1.4.a Remuneration (1998) Comparative position of Central Macedonia and Attica, Men

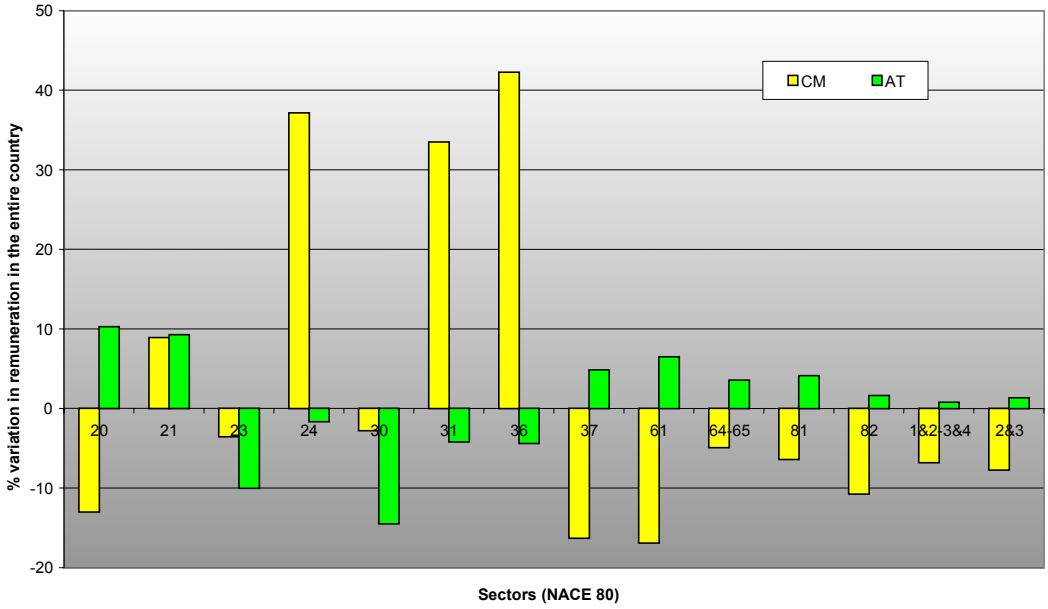
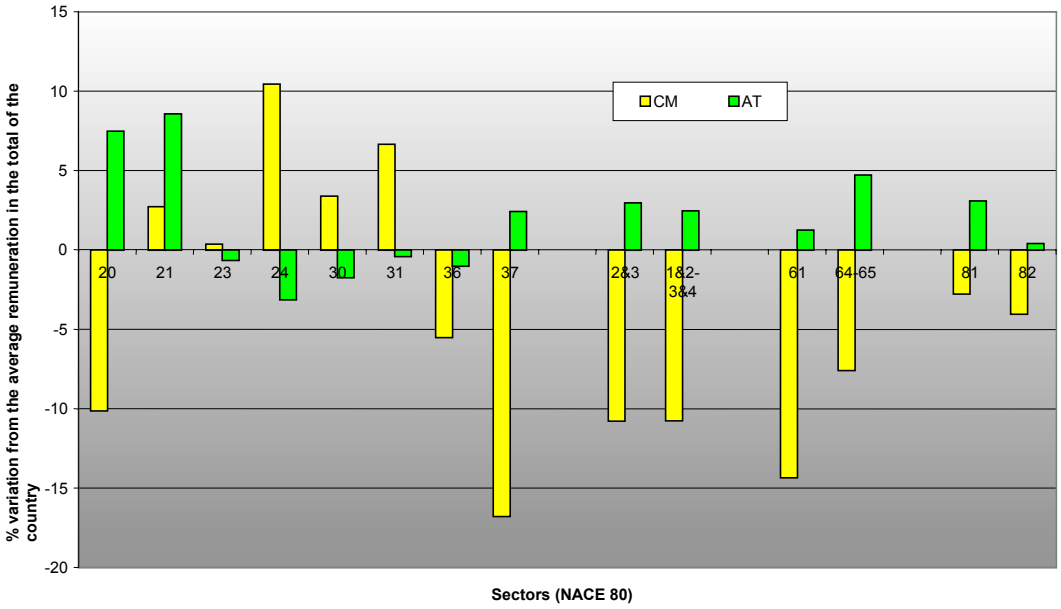


Figure 1.4.b Remuneration (1998) Comparative position of Central Macedonia and Attica Women



Further on, figures 1.4.c and 1.4.d compare the average remuneration of men and women as to the average remuneration in the Handicraft-Industry for each region. In general, in CM men are better remunerated in chemicals, machines and beverages, whereas women are better remunerated in chemicals and beverages.

Figure 1.4.c Remuneration 2&3 (1998) Comparative position of Central Macedonia and Attica, Men

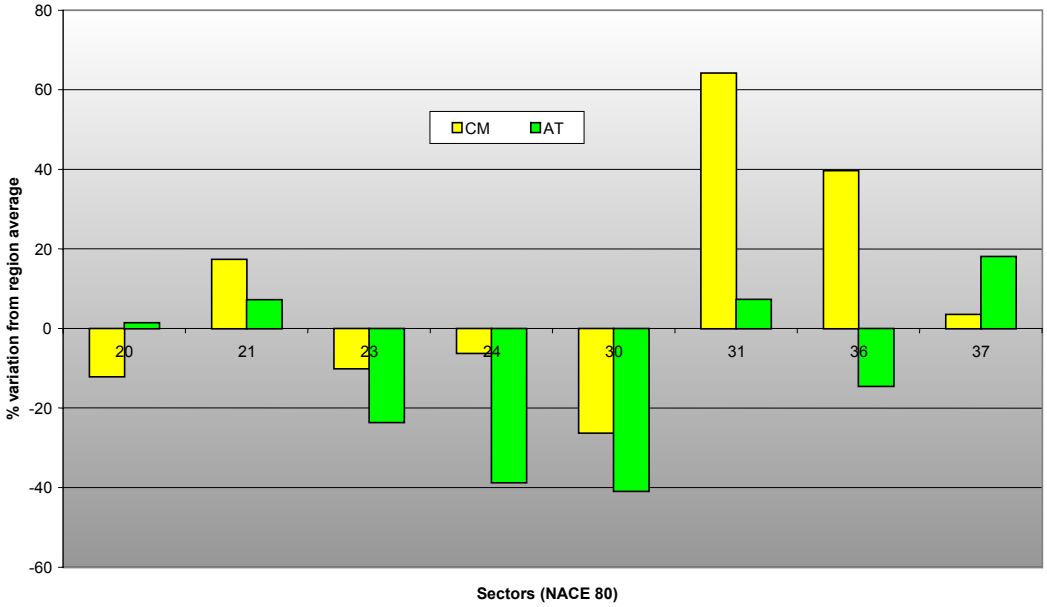
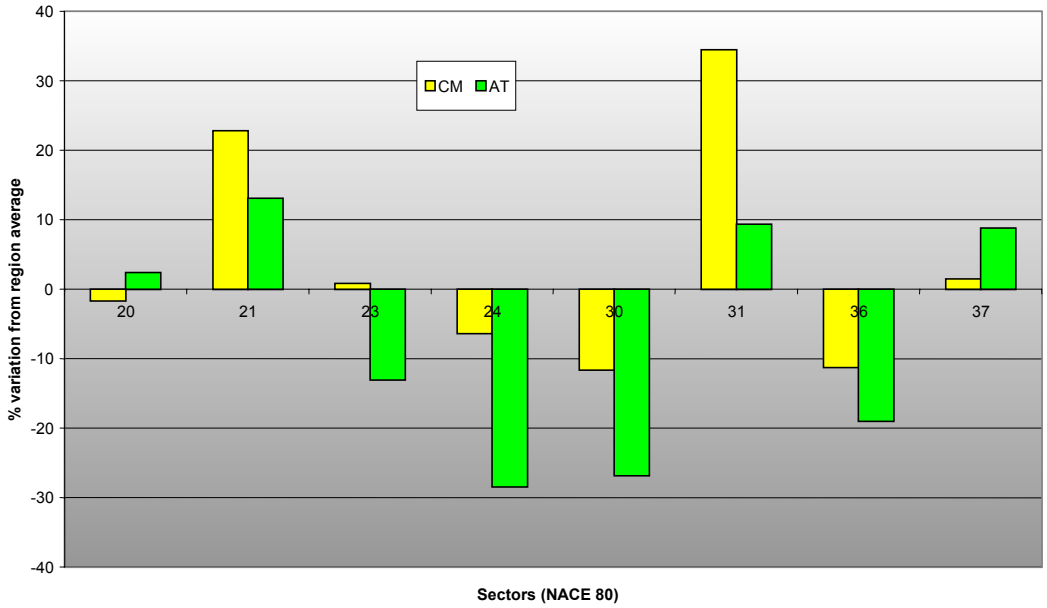


Figure 1.4.d Remuneration (1998) 2&3 Position of Central Macedonia and Attica, Women

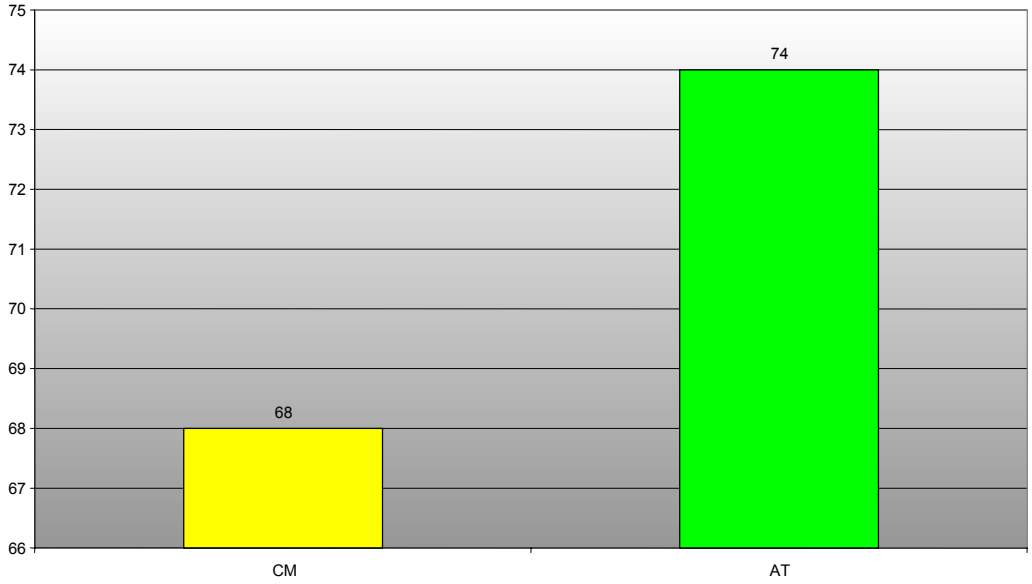


1.5. REGIONAL R.D.P.

This paragraph presents the comparative position of CM and AT as to the entire country, regarding the per capita GDP (as % of the average community GDP) as an index of describing the overall picture of the economic situation of CM.

Figure 1.5.a GDP for Central Macedonia and Attica (%EU GDP)

Baseline value 66 (Country GDP as % EU GDP)



1.6 CALCULATIONS

The procedure for the calculation of the relevant AAE and manpower indexes for 1998 are described. All the other comparative indexes are calculated in the exact same way.

1.6.1. AVERAGE ANNUAL EMPLOYMENT

The organisation of the data per region was effectuated based on data from the corporate registers (Source: GNSA). The initial index calculated for each region provides a percentile rate of the average annual employment for each of the previous sectors per region as to the average annual employment for all the sectors of the specific region, that is to say:

$$I_{i,j}^{MEA} = \frac{MEA(i,j)}{MEA(j)} 100\%$$

where MEA(i,j) stands for the average annual employment for sector i in region j and MEA(j) stands for the average annual employment for the total of the sectors in region j

The respective index for the entire country was also calculated, that is:

$$SI_i^{MEA} = \frac{SMEA(i)}{SMEA} 100\%$$

where SMEA(i) stands for the average annual employment for sector i in the country and SMEA stands for the average annual employment for the total of the sectors in the country.

The numerical description of the position of C. Macedonia as regards the average annual employment in the entire country was calculated according to the following index:

$$\frac{I_{i,K.MAK}^{MEA} - SI_i^{MEA}}{SI_i^{MEA}}$$

where i stands for the sector and K.MAK for the region of Central Macedonia.

In much the same way, the respective numerical description of the position of Attica as regards the average annual employment in the entire country was calculated according to the following index:

$$\frac{I_{i,ATT}^{MEA} - SI_i^{MEA}}{SI_i^{MEA}}$$

where i stands for the sector and ATT the region of Attica.

1.6.2 NUMBER OF EMPLOYEES

The organisation of the data per region was effectuated based on a selection of the data from the second quarter for 1998 (Source: GNSA). The initial index calculated for each region provides a percentile rate of the manpower for each of the previous sectors in each region as to the total manpower in the specific region, that is to say:

$$I_{i,j}^{E\Delta} = \frac{E\Delta(i,j)}{E\Delta(j)} 100\%$$

where EΔ(i,j) stands for the manpower for sector i in region j and EΔ(j) stands for the total manpower in region j. The respective index for the entire country was also calculated, that is to say:

$$SI_i^{E\Delta} = \frac{SE\Delta(i)}{SE\Delta} 100\%$$

where SEΔ(i) stands for the total manpower for sector i in the country and SEΔ stands for the total manpower for the total of the sectors in the country.

The numerical description of the position of C. Macedonia as regards the manpower for 1998 for the entire country was calculated according to the following index:

$$\frac{I_{i,K.MAK}^{E\Delta} - SI_i^{E\Delta}}{SI_i^{E\Delta}}$$

where i stands for the sector and K.MAK for the region of Central Macedonia.

In much the same way, the respective numerical description of the position of Attica as regards the entire country was calculated according to the following index:

$$\frac{I_{i,ATT}^{E\Delta} - SI_i^{E\Delta}}{SI_i^{E\Delta}}$$

where i stands for the sector and ATT the region of Attica.