

Minimum Wage and Unemployment in Greek Labour Market: A Descriptive Analysis

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Abstract

The purpose of this paper is to investigate the relationship between the minimum wage level and the rates of unemployment and employment in the Greek labour market. More specifically, this study analyses the evolution of the minimum wage during the period 2000-2013 and also whether these changes have really affected the unemployment and employment rates or not. The main conclusion of our study supports several other studies conclusions suggesting that the level of minimum wage in Greece did not really affect the unemployment and employment rates. The views of economists on effect of the establishing of minimum wages are quite contradictory. The evaluation of relationship between labour market and minimum wage rate is either positive or negative or even not related at all, depending on the assumptions about characteristics of labour market.

Keywords: Labour Market; Minimum Wage; Unemployment; Employment; Greece.

1. Introduction

The institution of minimum wage defines the lowest hourly, daily or monthly remuneration that employers may legally pay to their workers. Although almost every country has a minimum wage rate, its implementation and the particular amount of money vary greatly across them. Sometimes the minimum wage level exists either by governmental law or as a product of agreement between employers and workers who work legally. Elsewhere the minimum wage rate is the outcome of the negotiations between labour unions and employers - at national level - covering all the workers under the protection of collective bargaining agreements (OECD, 1998).

In economic analysis there are many theoretical and empirical studies on the effects of



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minimum wage rates in labour market. There are three major theories (Gavroglou, 2013). First, the neoclassical economic theory (under the concessions of perfect competition and perfect information) that by mandating a price floor above the equilibrium wage, minimum wage law should cause unemployment; in other words, the price of labour and the quantity of labour they have reversal relationship. Second, variations of the neoclassical theory, under the alternative concession of monopsony in labour marker, suggest that the introduction of minimum wage rate contribute to the proper function of market and economy increasing the size of total employment. Third, the keynesian approach suggest that the introduction of minimum wage rate tends to increase the prices of products while the effect on the level of employment is *ex antes* undefined.

According to the most of theoretical and empirical studies, the relationship between labour market and minimum wage rate is either positive or negative or even not related at all, depending on the assumptions about the characteristics of labour market. For example, Brown et al. (1983) and Wellington (1991) studying the effects of minimum wage rates on employment and especially on youth unemployment, had a found reversal relationship between minimum wage level and teenage employment rates. Zavodny (2000) examines the effect of minimum wage rates on the working hours of teenagers and on the size of employment using panel data method both at state and individual level in USA. The state level data indicate that an increase in minimum wage rates may lead to lower employment rates. When a minimum wage is rising, the low-wage teenagers are less likely to remain unemployed in comparison to high-wage teenagers. Kard and Krueger (1994) surveyed 414 fast-food restaurants in New Jersey (where the minimum wage was increased) and in Pennsylvania (where the minimum wage was constant). They found that an increase in minimum wage rate increased employment when the initial wage level is low. On the Neumarck and Wascher, based on the same data, that minimum wages reduce employment among low-skilled workers. Similarly, Sabia et al. (2012) found that an increase in minimum wage had a major and negative role on youth employment. Herr and Kazandziska M. (2011) in a project with the support of International Labour Organization (ILO) on minimum wages in developed and developing countries found that increases of minimum wages do not have big systematic employment effects, positive or negative. Dube et al. (2010) analyze the effects on minimum wages on earnings and employment level during 1990-2006 in USA, concluding that there is no any detectable employment loses because of the increases in minimum wages. Also, S. Alegretto et al. (2011) based on datasets for the period 1990-2012 (in USA) suggest that the youth employment effects are quite small.

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2. Minimum wage rate in Greece

The labour relations represent a threefold relationship between trade unions of employers, employees, and the state. Until the uprising of recent economic crisis the key point during the negotiations was the free collective employment agreements establishing a number of various concessions, laws, conventions etc. According to the Law 1876/90, the social partners had the authority to involve in process of decentralized collective bargaining. In other words, employers and employees could constructively collaborate in order to sign collective agreements including a national collective agreement at national level.

However, in 2010 by the signing of Memorandum argument reducing unemployment and protecting jobs, the intervention of the state in the system of collective bargaining and in the level of minimum wage became more active. At the same time, shrank the bargaining capacity of unions. Hereafter, the terms that refer to wage apply only to workers that are employed by employers-members of the contracting employers' trade unions (Law 4093/2012).

So, gradually introduced a new legislative framework for changing the system setting the minimum wage from bilateral negotiation employers and employees under the NGCA, the statutory minimum wage from the government. The statutory minimum wage will now be set by the Government in consultation with social partners, scientific and research institutions depending on the perspectives of Greek economy, especially on the rate of total employment and unemployment (Law 4093/2012).

At the same time, according to the provisions of the Law 4046/2012, a reduction in the minimum wage was unilaterally permitted for the workers receiving the minimum wages agreed in the National General Collective Agreement (NGCA) 2010-12 by 22% for those aged 25 years and 32% for youth under the age of 25. The above minimum wage would be increased only with seniority allowance and for the service provided until February 14, 2012. Any other automatic increase including the seniority allowance based on length of service after the above date was suspended until the unemployment rate falls below 10%.

In the following Table 1 and Figure 1 we can detect the evolution of nominal wage and day wage during the period 2000-2013, according the provisions of the NGCA's and the governmental legislative interventions.



Table 1: The nominal evolution of the minimum wage in Greece

Year	NGCA	Wage (in €)*	Day Wage (in €)*	Percentage Change
2000	2000-01	457,66	20,50	-
2001	2000-01	472,76	21,18	+3,3%
2002	2002-03	498,86	22,35	+5,4%
2003	2002-03	519,87	23,29	+4,2%
2004	2004-05	559,98	25,01	+6% (+8,00€&8,5€/month)
2005	2004-05	591,18	26,41	+5,5%
2006	2006-07	625,97	27,96	+5,8%
2007	2006-07	657,89	29,39	+5,1%
2008	2008-09	701	31,32	+6,45%
2009	2008-09	739,56	33,04	+5,5%
2010	2010-12	739,56	33,04	0,0
2011	2010-12	751,39	33,57	+1,6%
2012 >age of 25 2012	Law 4046/12	586,08	26,18	-22%
<age 2013<="" 25="" of="" td=""><td>Law 4046/12</td><td>510,95</td><td>22,83</td><td>-32%</td></age>	Law 4046/12	510,95	22,83	-32%
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Source: NGCA 2000-2012, Law 4046/2012

^{*}In the annual personal income were included 2 extra monthly payments (holiday bonuses) according to the provisions of Greek labour law.





Figure 1: The nominal evolution of the minimum wage in Greece (NGCA 2000-2012, Law 4046/2012)

Studying the nominal evolution of minimum wage in Greece during 2000-2013 we can see how fast is being reduced under the pressure of recent austerity measures. Specifically,

- between 2000 2011, when the level of minimum wage was determined after negotiations between social partners and the signing of NGCA's, the nominal minimum wage was increased by almost 60%, from 457,66€ (20,5€) the year 2000 to 751,39€ (33,57€) the year 2011, levels that are above the median inflation rate.
- In 2012-13, when the level of minimum wage rate was imposed by the law, the gross minimum salary was reduced by 22%, from $751,39 \in (33,57 \in)$ to $586,08 \in (26,18 \in)$.
- For the first time in Greece was introduced a different level of minimum wage for the workers under the age of 25 in order to increase the youth employment. For these workers the minimum wage in 2013 was reduced by 32% in comparison to that of 2012. Today the minimum wage for this age group is 510,95€ (22,83€).

3. Employment and unemployment rates in Greece

The effects of economic crisis and the implementation of austerity measures severely affected the labour market, especially the rates of employment and unemployment. The reduction of disposable incomes and the feeling of insecurity for the future resulted in the reduction of employment and the dramatic rise of unemployment. In particular,



3.1 Employment

With reference the beginning of economic crisis $\kappa\rho i\sigma\eta \zeta$ the year 2008 the total employment in the Greek economy, decreased by 945.000 people reaching to 3,6 million, in 2013. It was a huge reduction, in comparison with the increase of employment by 11% during the period 2000-2008 - when the adoption of euro and the preparation of Olympic Games 2004 gave an impulse to Greek economy. The employment population in 2000 was about 4,1 million and in 2008 reached to 4,6 million; namely, during that period of 9 years, it was created about 500.000 new jobs (Tables 2 and Figure 2).

Table 2: The evolution of employment and unemployment in Greece (in millions)

Year	Employment	Unemployment	Average Percentage Unemployment*	Percentage Unemployment 15-24 years old*
2000	4.088,5	523,5	11,3%	n.a.
2001	4.086,3	493,9	10,7%	n.a.
2002	4.175,8	480,2	10,3%	n.a.
2003	4.274,5	460,0	9,7%	n.a.
2004	4.313,2	505,7	10,5%	26,7%
2005	4.369,0	477,5	9,9%	26%
2006	4.452,3	434,5	8,9%	25,1%
2007	4.509,9	406,9	8,3%	22,9%
2008	4.559,3	377,9	7,7%	22,1%
2009	4.508,7	471,1	9,5%	25,5%
2010	4.388,6	628,7	12,6%	32,6%
2011	4.090,7	876,9	17,7%	43,6%
2012	3.763	1.203,8	24,3%	55,2%
2013	3.613,4	1.353,5	27,2%	58,5%

Source: EL.STAT data processing

^{*}The average annual percentage of unemployment was extracted from the monthly and quarterly surveys of labor force of Hellenic Statistical Authority (EL.STAT.)



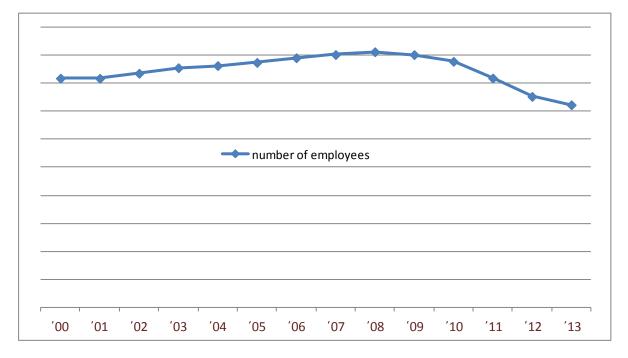


Figure 2: The evolution of employment in Greece (EL.STAT data processing)

We have to stress that because of the employment reduction the ratio of the number of employees in total of productive population 15-64 years is just at 52.2%, almost 11% lower than that for 2008 which stood then at around 63% (Ioannidis, 2013). This has to do not only with the characteristics of labour market in Greece (vacancies, labor conditions, salary) but also to some individual characteristics of Greek workers (sex, age, level of education, ethnicity, etc) (NILHR, 2012).

3.2 Unemployment

The significant reduction of employment was accompanied by worsening the unemployment rate. In 2013, the unemployment rate increased substantially to 27,2%, 19,5% higher than that for 2008. In particular, during the period 2008-2013 there was a rise in unemployment by 975.000 people. By about 378.000 who were unemployed in 2008 arrived in 2013 in number of 1.353.500. In contrast, during the period before the economic crisis, the unemployment rate declined from 11,3% in 2000 to 7,7% in 2008. (Table 2 and Figure 3).

We have to mention that, the recent deep economic recession and the employment crisis deteriorated significantly labour market conditions and its characteristics (NILHR, 2012). The size of unemployment among young people is certainly one of them. Although the youth unemployment rate was already high during the pre-crisis period, after 2008 escalated to record levels. More specifically, from 22.1% in 2008 nearly tripled as 2013 the unemployed young people arrived at 58.5% (Table 2 and Figure 3). The massive unemployment of younger people could be explained because of their decision to enter the labour market at an unprecedented scale in order to increase the family income (Joannidis, 2013).



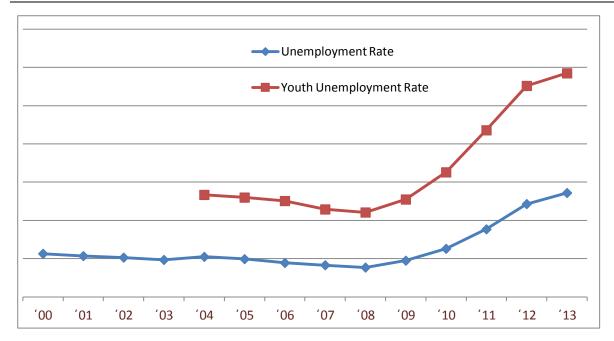


Figure 3: The evolution of unemployment rate in Greece (EL.STAT. data processing)

Our conclusion is that the current ratio in Greece between unemployed and employed civilians is about 1 to 3. In other words, in every three employees is about an unemployed.

4. Comparison of minimum wage rate and unemployed rate in Greece

As we mentioned according to neoclassical economic thinking there is a causative relationship between the level of minimum wage and the unemployment rate. If that is true then the countries with low minimum wage will have also lower levels of unemployment. Conversely, countries with a high minimum wage should have higher unemployment rates.

However, this conclusion is far beyond the current study results in the case of Greece. Studying the evolution of minimum wage and unemployment rate there is no positive or negative effect of minimum wage on the rates of unemployment. This finding is similar to other empirical studies and investigations in developed and developing countries, namely, the minimum wage does not substantially affect the employment rates (Herr and Kazandiska M. 2011; Allegretto et al., 2011, Dube et al., 2010).

In particular, in the Greek labour market, during the period 2000-2008, the unemployment rate reduced from 11,3% to 7,7% while the rise of minimum wage was more than 50%. From 457,66€ (20,50€) who was the 2000 arrived in 2008 to 701€ (31,32€). On the other hand, during the period 2011-2013, the above relationship is quite reverse; although the minimum wage suddenly dropped by 22% (from 751,39€/33,57€ to 586,08€/26,18€), unemployment rate rapidly increased by 10% from 17,7% to 27,2%, or about 500.000 additional lost jobs (Figure 4).



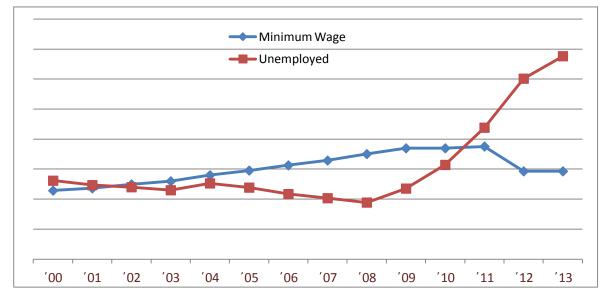


Figure 4: Comparison of Greek minimum wage and number of unemployment (EL.STAT. data processing)

The data on youth unemployment are particularly interesting. Many economists support the need of existence of a lower than minimum wage pay for the new employees. The reason is the lower productivity and the peculiarities of younger working groups (Gavroglou, 2013). In order to facilitate the entrance of younger people in Greek labour market the statutory minimum salary for the employees under the age of 25 additionally reduced by 10%. So, the minimum wage currently in force is $510,95 \in (22,83 \in)$, namely 32% lower than the level of minimum wage for 2011 (751,39 \in /33,57 \in). However, the youth unemployment during 2011-2013 increased by 15%, reaching to 58,5% in 2013 from 43,6% for 2011. In other words, the proportion of youth unemployment (people under 25 of age) and total unemployment almost doubled since 2011 (Figure 5).

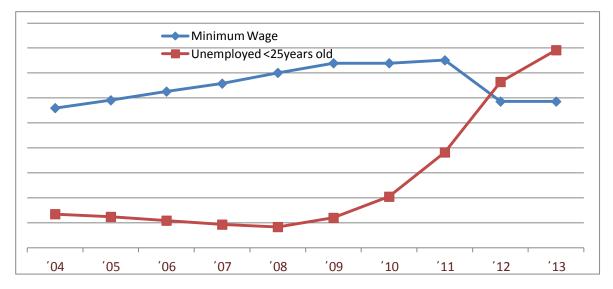


Figure 5: Comparison of minimum wage and number of unemployment under the age of 25 (EL.STAT. data processing)



5. Conclusions

The present study examines the relationship of the minimum wage level and unemployment rate in the Greek labour market during the period 2000-2013. The economic crisis and the implementation of austerity measures deteriorate the living standards of Greek people and affected severely the labour market. The short-term implications were significant not only on the employment and unemployment rates but also on their qualitative characteristics, for example the dramatic rise of youth unemployment. So, the implementation of Memorandum policies in order to reserve the existed jobs and reduce unemployment, led to a direct cut of minimum wage. In particular, to facilitate the entrance of younger people in labour market the statutory minimum wage for the employees under the age of 25 reduced evens more. However, our descriptive results are supported by the findings of other studies (Gavroglou, 2013; Herr and Kazandiska M. 2011; Allegretto et al., 2011; Dube et al., 2010) concluding that there is no any obvious relationship between the amount of minimum wage and employment /unemployed rate, despite theoretical claims to the contrary.

The major reason for the extremely high unemployment rates could be explained by some of the structural characteristics of Greek economy. According to recent bibliography (Kingdona & Knight 2007; Machin S. & Manning 1999; Dolado & Jimeno 1997; Krugman 1994) the lack of special market skills, the structure of the Greek economy, the poor level of investments, the allocation of workforce and the high non-wage labour costs, are only some of basic reasons for persistently high unemployment rates. As a result, the design and the implementation of labour policies should be based on real standards in order to response adequately to the devastating problem of unemployment in Greek society.

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