

# **Rising Unpaid Overtime: A Critical Approach to**

## **Existing Theories**

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### **Abstract**

In recent years there has been observed the phenomenon of employees working long hours without been paid. This trend is quite strong during the last fifteen years but there is ample evidence that it is a tendency generated even before. While there have been various explanations why employees work paid overtime, there is little theoretical interpretation of working unpaid overtime. This essay tries to analyse critical the existing interpretations and add some new explanations. We will try to pinpoint the main reasons and explain why this phenomenon takes place especially in three last decades.

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## 1. Working time in economic theory

Working time has been a hotly debated issue long ago. Beginning from the very birth of the science of economic relations and continuing today it is a theme that justifiably draws attention. Of course, the focus of this debate changed from period to period. From the end of 19th century till the beginning of the 20th century the main theme was whether a reduction of the till then long hours was beneficial or not for the economy. Once this was solved presumably in favour of reducing work time and the relevant labour laws were established, there was a widespread conviction that working time could only be decreasing. Thus, in the Post-World War II era there were numerous works scrutinizing why there is a tendency of working time to be reduced. Generally, we will try to review the basic schools of thought in economic relations and provide their analysis for working time.

### a. Working Time in the Classical Political Economy

To begin with, Classical Political Economy, is based on two fundamental keynotes. First, economic relations are analysed with connection to social relations; even the term “Political” displays the methodology which is followed. Economy cannot be analysed separately from Society. In particular, there is a kind of agreement among classical economists that social factors really determine, for example, the level of workers wage (Smith, Ricardo make a distinction between “natural” and “market” wage,

highlighting the social factors that determine wages), working time limits and overtime premia.

Second, in this school of thought, there is a deeper notion that describes in what way all independent economic units are united and synchronised with view to produce and exchange with each other; this notion is given by Labour Theory of Value. Based on this notion, labour “value” interpreted almost every economic relation. According to Classical Political Economy, value of products is counted based on the labour embodied to them. Therefore, the sphere of exchange is based on sphere of production which is determined by labour. Although labour was of big importance in determining the value of products, wage determination was not coming from that procedure. Wages and working time were formed under physical limits and social circumstances (Smith, Ricardo).

Generally, Classical Political Economy after heated debates draws the conclusion that "an acquisitive and hedonistic spirit was innate in humans and high wages would act as an inducement, motivating workers to labour both harder and longer"(Nyland 1986). Additionally to that, rationality determines economic beings' total behaviour; the assumption of rationality is of great importance in Classical Political Economy. Consequently, rationality is a property that describes, for instance, workers' preferences. In our case, free time (leisure time) is of big importance and consequently is contained in individuals' preferences. Leisure time is seen as a good. Income is also seen as a good that worker has to choose its amount. Leisure time and income have a competitive relationship with each other. To illustrate this point, workers either work more and receive higher income, or work less and enjoy more free time. Especially Smith argued that if workers had the chance to acquire greater income they would work harder and

longer. However, there are some workers who prefer leisure than higher income. Through this “sacrifice” Smith tries to explain the behaviour of work time. Consequently, Classical Political Economy views working time as the result of substitution and income effect. In conclusion, working time extension or reduction was examined based on these perceptions.

#### b. Working Time and the Factory Movement

Continuing, the Factory Movement with its scholars added a new perception on work-time debate. More specifically, this Movement, which springs from employees' struggles, demanded a legal maximum in work-time. Workers, through their struggles and their conflicts with capitalists, ended up to collective agreements. These agreements contained arrangements about wages, working time, premia etc. Consequently, working time collective agreements gradually urged capitalists and governments to impose this maximum. Thus, a reduction of work-time started taking place. Robert Owen is considered to be the father of Factory or Co-operative Movement. He maintained that there should be workers' control over production, and the means to achieve this goal is only by co-operation between them. Moreover, William King was another supporter of this Movement. He tried to implement these ideas by founding a monthly periodical called *The Co-operator*. On the contrary, some scholars opposed to this movement. Especially, Nassau Senior who was one of the most characteristic opponent of Factory Movement pointed out that the Industrial Revolution, which caused unemployment, facilitated capitalists to lengthen the of working time for the non unemployed. In other

words, by introducing new technology in production, a great amount of workers becomes unemployed. As a consequence, because of unemployment existence, capitalists press the employed workers to accept lower wages, longer hours etc. Concluding, Senior opposed to these factory acts, also, by claiming that these acts would eliminate profit and destroy industry, because working hours' reduction would reduce output. Therefore, a scientific opposition to working time reduction started to be defended.

c. Working Time in the Marxian Analysis

To this point, Marx contributed outstandingly to economic thought by providing a new labour theory of value, which as we will see below provides explanation for working time generally. He firstly highlighted the fact that utility value and (exchange) value are two different things, without the one determining the other; the former is used to describe the utility that one can acquire from a good and the latter is used to describe the necessary labour for this good's production. In contrary with Classical Political Economy which explained production process according to the Value Theory of Embodied Labour, the Critique of Classical Political Economy explained it according to the Value Theory of Abstracted Labour. Generally, Marx contradicted to the previous theory of value; although he deepened his analysis claiming that value is the socially necessary working time for a good's production, not the embodied labour of a concrete worker (Marx 1982).

Generally, Marx, by criticizing Classical Political Economy, highlighted basic methodological mistakes that lead to wrong conclusions. First, the Ricardian Labour

Theory of Value confused surplus value with one of its expressions, the profit. This comes from Ricardo's mistaken notion about the means of production. Ricardo sees them only as "accumulated labour". In fact, he does not provide any answer to the question where does profit come from, which is fundamental issue for capitalism's analysis. Second, Ricardo does not understand that prices are never the same with values. Marx maintained that prices fluctuate around values according to demand and supply. Generally, prices indicate to capitalists what kind of decisions should they take for their production. Third, Marx's criticized Ricardo's competition theory; because the latter considered that general average rate of profit is formed automatically. However, the general average rate of profit is formed through a procedure which contains technological change, changes in values and prices, firms' consolidations or their moving from one branch to another, and generally takes time.

The Critique of Political Economy, introduced by Marx, is considered of great importance, also because it reveals the complicated social relationships of capitalistic economy, and highlights that it consist a society of exploitation. In other words, Marx's theory argues that economic relationships spring from an historical procedure; there are classes, which are formed through history, especially by conflicts, and struggle for their rights and interests. Capitalists' profits, generally, are based in the unpaid work of the working class. For this reason, Marx claimed that capitalism is ruled by the law of Surplus Value. Consequently, the former try to keep the wage in low levels and extend the working day and the latter try to increase their wages and reduce working time. Workers have developed their own institutions in order to demand in a collective way their own institutions. Therefore, in capitalism bourgeoisies have a conflict with the

working class for the latter's wage, for the length of working day etc. In particular, the number of hours in a working day is a variable quantity. Capitalists, who buy a day's labour power, wishing to extract the maximum use value from the purchase. On the other hand, workers need to be able to work on the morrow and wish to continue doing so.

Thus, a conflict arises about the length of working time too. If working class does not resist capitalists' demands, capitalists extend the work period beyond its social and physical limits. If working class demands effectively the reduction of time the working day may be reduced. Even in the case in which the working class manages to put a daily time limit, capitalists would try to intensify the shortened work in which they resulted. This is done through an increase in the speed of existing machines and/or an increase in the quantity of machinery that workers had to operate or supervise. Concluding, the increase or the reduction of working time depends on class struggle. But there are also objective limits, and these limits are determined both by physical abilities (as an upper bound) and by necessary time for goods' production (as a lower bound).

#### d. Working Time in the Marginalist Analysis

After that, the marginalists came revising some basic assumptions of the Classical Political Economy's. Although for years there was no effort by scholars to use "utility value" as a means to interpret "value", neoclassical economists saw "utility value" as a measure of exchange value" (Theocharakis 2005). That is, instead of the Labour Theory of Value, they introduced the Subjective Theory of Value. Every commodity's price is determined by the value which is subjectively given to it by individuals. Moreover,

economic relations according to this theory are analysed by “methodological individualism”; with methodological individualism “social interactions are finally interactions between individuals” (Arrow 1994). In fact they cannot see any difference between acting individually and acting collectively.

Another important feature of neoclassical economic analysis is that there is no historical factor which determines capitalistic economic relations. In comparison with Classical economists, Neoclassical really argue that their theory can be expand to explain every economic system. There are no different economic laws in capitalism and feudalism. For instance, in every system there are individuals who try to maximise their utility or their profits.

In addition, the notion of equilibrium is introduced; individuals enter the market given their endowments and after exchange procedures come to equilibrium in which no one can become better without someone else's deterioration. An emphasis is given to a static distribution of given endowments for a given time (Sraffa 1960).

Generally, marginalists adopted the Classical Political Economy's idea that people are hedonistic spirits who maximize their pleasure subject to their budget constraints. In the marginalist approach, the notion value is not used, as their predecessors of Classical Political Economy used it. This analysis is based on prices, instead of values. And actually they study how prices are determined by demand and supply. In addition, the notion equilibrium consists of a central idea; individuals interact with each other, and finally equilibrium is achieved between them.

In particular, as for the working time, workers are assumed to have some constant preferences for their income and leisure time, and according to their constraints maximize

their utility; workers are those whose preferences determine whether they choose more income or more leisure. For instance, when hourly wages increase and there is more reward, workers are motivated to work longer. This is called substitution effect.

Generally, neoclassical economics, in order to analyse human behaviour, assumes that individuals have given their preferences, which they are not formed socially, but exist inside them, with given capacities etc. Based on that assumptions, wages are endogenously determined in a procedure that workers maximize their utility and employers their profits, thus they result in an equilibrium, where labour is added up to the rest of the means of production, and finally receives what it deserves. Wage is considered to be a fair reward.

In this model, competition is intense enough to prevent any possibility of exploitation (but in casual trades, competition is generally quite sufficiently intense to prevent any possibility of exploitation. Casual labour is often badly paid, not because it gets less than it is worth, but because it is worth so appallingly little (Hicks 1963/1932).

On the other hand, the fact that the worker receives greater reward for every hour laboured, the marginal utility of extra income is increased, is called income effect. If the substitution effect is dominant, then wages and hours will be positively related. But, if the income effect predominates, then wages and hours will be negatively correlated. Consequently, for years working time reduction or working time extension was explained by marginalists according to the dominance of substitution or income effects. However, nowadays that the phenomenon of unpaid overtime is rising, marginalists face a problem in providing arguments and explanations.

Although these schools of economic thought contributed, rightly or wrongly some explanation why the working day was decreasing for a significant historical period or why overtime increased in some cases, the question 'why unpaid overtime exists and gradually increases' poses considerable explanatory difficulties and thus it has been tackled by few scholars in recent years.

## **2. Unpaid Overtime: Evidence from developed countries and the existing theoretical explanations**

Generally, during the first centuries of capitalism there was little or no legal protection for workers; they were working for 16 hours per day, a lot of children were working from a very early age, women had no maternal rights etc. In addition, as it is obvious, there was no notion of overtime. Overtime was established as a notion after the first factory acts of the 19<sup>th</sup> century, when legal limits of the working day started to be established. Consequently, working time extension is not new in history. In several historical periods in the past it occurred that workers had to work more than their contracts. However, after the establishment of the legal limits of the working day, the general tendency of working time was to be reduced. Moreover, records of unpaid overtime started being kept rather recently. Additional to this, only nowadays after a long period of time in developed capitalistic countries working time started increasing again. Furthermore, not only working day is increasing but also we can observe rising unpaid overtime. Unpaid

overtime does not characterises only some sporadic cases, but is present and significant in wide areas of the economy.

#### a. Detecting Unpaid Overtime

To begin with, Schor (1991, 1999) was the first who observed the increasing working time after years of reduction in a research for American economy. In particular, overtime, as a way of working time extension, was observed that is increasing too. Not only paid, but also unpaid overtime boosted during three last decades. She pointed out the fact that leisure in US has been squeezed in a tremendous degree : Americans work 158 hours more per year -which means nearly an extra month of work each year- based on data from 1969 -1989 (Schor 1999 p.2). In addition, Golden and Figart (2000) found that in the US working hours per year have increased 4% since 1980 (p.16).

Thus, debate on work time ignited again. Bell and Hart (1999) added some new evidence about working overtime in conjunction with above findings. Moreover, Bell et al. (2000) based on data from both UK and Germany analysed the phenomenon of both paid and unpaid overtime. They concluded that overtime working is more prevalent in UK than in Germany (paid/unpaid), and that in both countries, paid overtime working is more common among manual workers, while unpaid overtime is more prevalent amongst managers and professionals. Additionally, Anger (2005) provides evidence from Germany proving that paid overtime hours are declining, but unpaid have the opposite tendency.

Moreover, various scholars revealed the existence of unpaid overtime for the countries mentioned above ( Campbell & Green (2002), Booth et al. (2003), Pannenberg (2005), Anger (2005), Bratti & Staffoliani (2007) ) plus Sweden ( Meyer & Walleto (2005)), Switzerland (Engellandt & Riphahn (2005)), Netherlands (Glebbeck & Van der Lippe (2004)) and Australia (Drago, Black, Wooden (2005)).

Most of these works analyse the phenomenon of unpaid overtime depending on variables such as the level of education, experience, sex, marital status, union membership, immigration, age, existence of debt, self employed/private/public sector.

The main conclusions derived from these empirical tests are that:

- white collar workers or workers with higher education demonstrate a kind of persistence in working unpaid long hours (Pannenberg 2005, Anger 2008),
- males work more long hours than females (Bell et al.2000),
- unionised workers or workers in more unionised countries do not work unpaid overtime or work less unpaid hours in comparison with those that are not unionised (Bell et al.2000),
- workers with short tenure also work unpaid overtime (Anger 2008) and also their unpaid overtime tends to be equal with paid (Bell et al.2000).
- Moreover, the majority of these scholars agree that this phenomenon is much more apparent and persistent in workers employed in services and the tertiary sector, than in the secondary sector. However, this does not mean that manufacturing workers are not

subjected in this working time extension. Golden and Figart (2000) show that overtime hours have reached a record level in manufacturing (pp 16).

- Moreover, Hetrick (2000) argues that during the economic expansion of the 1990s employers in manufacturing industries were more likely than in previous recoveries to increase overtime hours among existing employees than to hire new workers (p.30).

- In addition, unionisation in these surveys is a variable with a disputable impact; in some cases serves to reduce working time and increase overtime, but in some other cases it reduces overtime hours (Bell and Hart, 1999).

- Furthermore, overtime varies among groups of workers; unskilled workers exhibit lower overtime, but skilled workers higher (Bauer and Zimmermann, 1999).

- Also, unpaid overtime has been observed to be higher among temporary workers than among permanent by 60% (Engellandt and Riphahn, 2005).

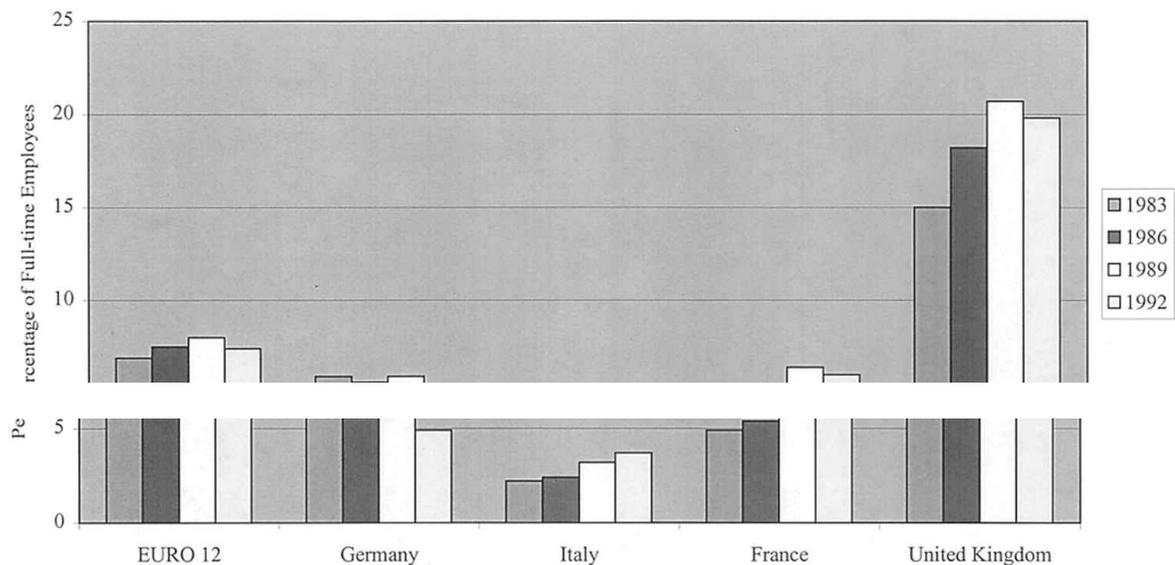
Generally, increasing unpaid overtime has been detected by all of them with convincing evidence. Furthermore, these projects display a variety of results. Although most of them agree about the existence and persistence of unpaid overtime to certain groups of workers (mentioned above), they differ in their results. Sometimes it is concluded that unpaid overtime has positive results as for future earnings, but some projects prove the opposite. One thing that can justify this deviation is that for different countries different methods are followed (data collection, sample examination) but the most important thing is that there is poor evidence for unpaid overtime considering the fact that no firm will provide statistical services with such data and few are the workers who speak about their unpaid work.

The majority of existing literature is based only on testing this phenomenon by using mainly full-time workers; but workers in the public sector, in agricultural, fishing or private households, self-employed persons and respondents with missing information on wages, standard and actual hours worked, overtime hours and overtime compensation are dropped. The most characteristic example of the previously mentioned empirical work is Pannenberg (2005), who proves that there is a positive relation between unpaid overtime and future earnings, claiming that unpaid overtime is not actually unpaid but an investment that a worker can do, based on the sample mentioned above. However, his results can be disputed if we take into consideration those of Anger's (2005) and Meyer and Wallette (2005), because they prove that there is no deferred compensation for working long hours. Moreover, in Anger's empirical analysis (2008) these categories of workers are excluded too; full time workers in the private sector are the main group of testing. Generally, there are few counterarguments regarding this sample collection, due to the fact that this group of workers is the most characteristic and proper to result in conclusions.

Full time workers in private sector may be considered the most characteristic and representative part of workers. On the contrary, full time jobs in recent years tend to diminish, and gradually part time jobs are on ascending. Consequently, full time workers are a crucial group and indeed verify such a tendency of the working time, but on the other hand we should not neglect the fact that we mentioned above; namely that part-timers are increasing. At this point, we have to bear in mind the whole labour market

deregulation that took place during last decades and converted the proportion of full time jobs to part time. Especially, during the 1980s decade, with USA and UK being pioneers, institutional changes determined significantly labour market. We will try to analyse it below and provide more evidence.

Under these circumstances, unpaid overtime started being observed more intensively since those days. Till that period, economic analysis was focused on questions such as that why working time has a tendency to be reduced. Since the early 1990s, this question was reversed, because the opposite tendency was taking place more and more. Schor (1991) highlighted the fact that Americans are overworked, and that there has been a big increase in working time. Later on, the initial evidence of unpaid overtime was reported and the first questions about what causes this fact arise (Bell & Hart (1999), Pannenberg (2005)).



Source: Eurostat, 1995

Since this phenomenon has been observed various explanations have been put forward to explain. There has been an effort of listing the theories of the unpaid overtime's existence and its gradual rising. As we mentioned above, unpaid overtime has inadequate theoretical explanation in mainstream economics due to the fact that has been observed relatively recently but also because of their very constitutional elements.

#### b. Classifying Theoretical Approaches for Unpaid Overtime

We will try to classify theories in two main groups:

Firstly, one classification that can be done is based on the acknowledgement that unpaid overtime is useful in production and contributes in output and profits. Thus, there are three main groups of theory based on this assumption:

- i) unpaid overtime and deferred compensation,
- ii) unpaid overtime interpreted by human capital theory,
- iii) unpaid overtime as coverage of a non Pareto Optimal external imposing.

However, some scholars defend the fact that unpaid overtime is not entirely useful in production, but it can be interpreted as a behaviouristic device between employer and employee. Therefore, this group of approaches can be classified as follows:

- iv) unpaid overtime as gift exchange and
- v) unpaid overtime as signalling device.

I) Unpaid Overtime and Deferred Compensation Theory

First and foremost, we will analyse the first approach: *unpaid overtime and deferred compensation*. This theory maintains that workers provide unpaid labour hours in order to increase overall output. It is based on the theoretical assumptions of neoclassical economic approach. Labour is an input in production which receives a wage, corresponding to the effort which was spent. Moreover, capital is an input too, and profits come from capital returns. In this case of unpaid overtime, it is argued that in fact it is not compensated, because workers in the future can be awarded with higher earnings or other benefits. When the increased output will provide increased profits for the firm, then workers' wages will be increased too. Pannenberg (2005) maintains that the term "unpaid" overtime is not appropriate to describe this phenomenon; he argues that from the employee's point of view these hours he spent on working may seem unpaid, but from the economic point of view these hours are finally paid in the future. It is claimed that present and future (from economic aspect) are substitutes, for this reason even if a worker is not compensated immediately after providing long hours, he will be compensated in the future with a potential promotion or wage increase. Moreover, a similar survey for the UK was carried out by Campbell and Green (2002) proving that an extra unpaid hour over 1991 to 1995 raised 1996 pay by 4%, an extra paid hour by 1%. Therefore, they conclude that labour still receives what it has invested, which is one of the most fundamental notions of neoclassical approach.

## II) Unpaid Overtime and Human Capital Theory

Another approach which is put forward to interpret the phenomenon we analyse is the *human capital theory*. Generally, this theory - which also is based on neoclassical assumptions about labour - considers labour as an input, and knowledge or education as a factor that improves it. Acquisition of knowledge and education, as tools that equip labour, is considered human capital acquisition. That is, individuals who potentially work acquire human capital through formal education which is provided to them. This acquisition is seen as an investment. Education in that schema is considered an input that contributes to production.

This approach applies to cases that substitution effects are dominant rather than income effects. In other words, an employee with high level of education would work long hours in order to increase his return in human capital investment. If we specify it in the case of unpaid overtime, education or knowledge can be acquired while an employee is working. Consequently, working long hours are seen as an investment too and used to raise individuals' productivity. Gradually, workers who have "concentrated" a stock of human capital will be rewarded (Booth et al. (2003)). Substitution of providing future more than present work has more dominant effects than income effects i.e. staying in job within contractual hours and receiving an analogous wage. As we can observe, this approach does not go far from the notion that labour finally receives its award corresponding to the effort which was spent.

### III) Unpaid Overtime as a Pareto Improvement

The third theory attributes the existence of unpaid overtime to a *Pareto Improvement*. First of all we should refer to the assumptions on which this third approach is based. As we mentioned above, this model is based on neoclassical assumptions (with some deviations). Labour is seen as an input too in production procedure. However, in this model, markets bare little relation with the typical Walrasian centralized market, where labour demand and labour supply are met determining wage and employment, but workers and firms meet each other in a decentralised market with view to match their preferences. It is still based on the neoclassical assumptions that there is an aggregate production function, employers maximize their profits and employees their utility function.

In this model, workers and entrepreneurs bargain with each other, and in that way they determine optimal wage, optimal working time limits and optimal working overtime premia. However, institutions (Governments, Unions, Agreements) are exogenously introduced and change this optimal outcome of bargaining. Consequently, the phenomenon of unpaid overtime occurs in order to cover this inefficiency that was caused by these exogenous factors; in this case, inefficient overtime premia, which happen to be higher than efficient ones, lead employers and employees to a new arrangement. In this arrangement, the latter offer more hours of work in order to satisfy the equilibrium conditions, therefore higher overtime premia are weighted by long hours, and efficiency is achieved (Bell & Hart 2000, Trejo 2001). Again in this approach labour receives what has already contributed in terms of Pareto Efficiency.

#### *IV) Unpaid Overtime as a signalling Device*

According to this theory, unpaid overtime is seen as a signalling *device*: by working long hours the employee may signal to his employer that he or she is of high value. To make it clear, it is argued that incomplete information is responsible for market's failure to be efficient. In some cases basic assumptions of General Equilibrium do not hold, such as the hypothesis of perfect information. Then Adverse Selection problem appears where agents have imperfect information about products' or individuals' quality. Then, in order to avoid a potential market failure agents can use some device to solve the inefficiency caused. Signalling is based on the axioms of Imperfect Information Dynamic Games. At each information set the player with the move must have a belief about which node of the information set has been reached by the play of the game (for a non sighted information the belief is a probability distribution), given their beliefs players' strategies must be sequentially rational (Gibbons 1992). Sequential rationality consists of a strategic profile for each player, with which he maximizes his utility given his beliefs for the game.

In order to solve this inefficiency that was caused by imperfect information, players of the game send messages to provide information. One of the devices used is signalling, which means that individuals who are active in a market try with various means to show their quality and provide some information to other individuals. For signalling there is a sender and a receiver.

In this case, when there is lack of information by the employer for the quality of the employee, the employee can show if he is of good or bad quality by the amount of unpaid

overtime he offers. Employee is the sender and the employer is the receiver. In existing literature, separating equilibria have been used to describe this kind of situations: in equilibrium distinct types of employees choose distinct strategies; high ability workers can afford working more unpaid overtime, while low ability workers cannot. Thus, the firm finally gives benefits to high ability workers (Meyer & Wallette (2005), Anger(2008)). Unpaid overtime, according to this approach, does not serve productive reasons (every single unpaid hour does not contribute to output increase), but functions as a detective device for an employer to recognize the employee's ability and productivity. This theory is described as presenteeism or absenteeism in work.

This particular model was adapted by Akerlof (1970), who describes ways of solving Adverse Selection problems with asymmetric information, and by Spence (1973) who specified it in labour market. More specifically, this model is based on assumptions such as:

- the existence of many identical potential firms that can hire workers,
- each firm produces the same output
- using an identical constant returns to scale technology
- in which the only input is labour,
- the firms are risk neutral and seek to maximize their expected profits and
- act as price takers (Mass-Collel & Whinston and Green 1995).

In this classification, screening tactics of employers to recognise employee's quality can be also considered. Unpaid overtime has been tested as a *screening device* by Engellandt and Riphahn (2004) for the Swiss case. Screening is an other detecting device which can be implemented in cases of imperfect information. However, in this model

screening is not used by employees but by employers to detect employees' "quality". In this case, the sender is the entrepreneur and the receiver is the worker, while unpaid overtime is a screening device.

V) *Unpaid Overtime as a Gift Exchange*

There are also some approaches which try to attribute economic phenomena to behaviouristic interpretations, or to some particular jobs. To illustrate this point, there are theories which present unpaid overtime as an *exchange of a gift between a worker and his employer* as a reward to higher wages or other benefits. However, this perception consists of a "work devotion schema" (a worker's devotion to his employer) and indicates some behaviour rules for the workers. Sometimes, one can include it in the "ideal worker norm" approach. It can be said that it is a kind of marketing policy from employer's side, and the worker's gift is "work in excess of the minimum standard" (Akerlof, G A 1982).

*Other approaches for unpaid overtime:*

Furthermore, there are views which associate unpaid overtime with the *uncertainty over a task completion* (Bell & Hart 2000). In complex tasks there is uncertainty about when a job finishes. Thus some workers may have to provide more labour hours than their contract determines. In other words, there are some jobs which are rewarded per output and not per hour; lawyers, managers and generally some professions that provide

services. Consequently, if a concrete task cannot be completed in time (due to various reasons) usually employees have to prolong their working hours in order to finish it. For these reason, this uncertainty over task completion can lead to working unpaid long hours.

In addition, there is an approach which connects a leadership worker with unpaid overtime; workers with *leadership roles* may work more unpaid overtime, due to the fact that when enterprises organize workers into teams, leaders often cover the task completion of the less productive workers who did not manage to fulfil it. Consequently, leading workers tend to work unpaid overtime in order not to loose their reputation or future benefits (Bell & Hart 2000).

However, these analyses are used in order to explain some sporadic cases; they concern some certain professions and cannot provide justification for rising unpaid overtime in the whole economy. Moreover, the same uncertainties or the same professions existed thirty years ago, before this phenomenon being observed in such degree. In conclusion, the fact of collectively rising unpaid overtime in - at least- the most developed countries (USA, UK, Germany, Australia, Netherlands, Sweden, Switzerland) has to be interpreted in terms of analysing a social , and in particular, economic phenomenon, and not interpreting it individualistically and referring to sporadic cases.

### **3. Critique of the proposed analyses**

All these five explanations of unpaid overtime however have significant explanatory deficiencies. For this reason, we will try to examine them critically.

#### *1) Unpaid Overtime and Differed Compensation Theory*

Regarding the first approach, which maintains that unpaid overtime is deferred compensated, there is a lacuna in justifying how workers who are not (for example) promoted are finally paid for the extra working time they have offered.

Firstly, is everyone who works unpaid overtime being compensated in the future? Finally, only few of the employees will be compensated with future benefits. Especially, in cases of a subsequent promotion; among all workers who compete with each other only one or at least few of them will be promoted. Therefore, the rest of the workers will receive nothing. However, they have already offered unpaid work hours, and have already contributed to their entrepreneurs' profits. Thus, an inefficiency arises and doubts can be cast on the fact that finally everyone receives what he has contributed.

Secondly, it depends on whether the firm makes profits or not, if workers will be finally rewarded. In the case that the firm does not increase its profits, employees will never be paid despite the fact that they worked unpaid long hours.

Third, all these future earnings that employees receive are their total “cummulative” (Pannenberg 2005) contribution to output (or to profits)? Doubts can be cast also on this fact. Even if everyone is finally rewarded in some way, there is no confirmation that

employees will receive what they really produced. For example, 1 hour contribution per week results in the long run in 2% increase of earnings ceteris paribus (Pannenberg 2005). However, for the entrepreneur this “hour” may be crucial for his profits maximization; usually, employers acquire higher percentages of profits increase than, for example, 2%. Consequently, in those cases workers under no circumstances receive their additional contribution. In other words, further research has to be done with view to find out whether future earnings represent the real value of working long hours in comparison with profits earned. On the contrary, Anger (2005) shows that from 1993 to 2004 in Germany, unpaid overtime hours cannot be seen as an investment, due to the fact that there is little evidence for future wage growth and promotion, and in fact do not help to prevent future lay-offs.

For the above reasons and examples, the theory of deferred compensation has both analytical and empirical lacunae that incapacitate its explanation of unpaid overtime. Therefore, in no way this approach can justify convincingly that finally there is no unpaid overtime by economic perspective.

## *II) Unpaid Overtime and Human Capital Theory*

Regarding the human capital theory, we can only but highlight the fact that labour has different characteristics, than a simple input. First of all, we should refer to the distinct role of labour as a commodity in capitalism, due to the fact that the worker sells his labour force in order to receive a wage. It is different from other commodities, firstly, because of the fact that the entrepreneur pays to worker his wage after his labour

spending. On the other hand the rest of commodities are paid before their use. Thus, an employee selling his labour power is depended on his employer's wills. When a buyer acquires a new product, he knows that the product will behave as a product, but when a buyer acquires a new worker (labour has the form of commodity, but does not behave as a typical commodity), is not necessary that he will complete the concrete task. Moreover, labour has social and collective characteristics. There are certain historical and social procedures which formed a distinct economic system that turned labour power into a commodity. Additionally, we cannot neglect the fact that labour in capitalism has been socialized. That is to say that people, in comparison with previous ways of production, work in big groups producing goods; they are connected within this procedure and one need other's work in order to complete a task. Consequently, workers interact with each other. Generally, labour cannot be considered as a simple input in the production process, because of the fact that the other elements which are involved in this process – land, machinery, raw materials- cannot have an equal and self-contained role. In fact, they are motivated by human labour.

Furthermore, regarding the human capital theory a similar critique, as in theory of deferred compensation can be applied. Finally everyone is compensated, by having acquired knowledge about their jobs and receiving higher wages in the future? Both theories (deferred compensation and human capital) at the end imply that in fact there is no unpaid overtime, because working long hours is finally being paid. We will not cite again the same arguments which consider that everyone is finally compensated (see above), because not every employee is awarded for his investment in knowledge by working long hours, or they do not receive their real contribution to profits. Another

argument which arises contradicting this approach is that unpaid overtime is not only a phenomenon of newly entrant workers in a certain profession, but extends to a wide age range. Little can we demonstrate for the fact that this phenomenon is major in young ages or in employees with little job experience. However, in almost every empirical research unpaid overtime concerns every age group and every group with different experience (in a smaller or bigger degree). It is more likely that new entrants work unpaid overtime, not because they “want” to acquire new knowledge, but due to the fact that they are of a sensitive group of workers, and in order to remain in their jobs cannot easily react to a working contract's violation by their entrepreneurs.

### *III) Unpaid Overtime as a Pareto Improvement*

Analysing this approach, the same critique can be applied for the assumption that labour is considered a simple input in production procedure. Especially, in this model where workers have bargaining power and there are laws which impose “externally” wages and premia.

Moreover, workers’ preferences are not fixed and stable; they have been formed through this historical procedure, and still “preferences” are subjected to changes, depending on social factors or technological improvement. When, new technology is available in production, their “preferences” for wages or working time limits adjust to this new level of technology, leading them demand, for example, lower working time limit, due to the fact that the same amount of task can be completed in less time.

In addition to these, wages which in this model are considered to be determined endogenously, in fact they are determined by the historical, social and technological factors too. For instance, when a new technological accomplishment is introduced in production and labour productivity is raised, workers have the demand to increase their wages. Due to the fact that in the same amount of working time the output and have been increased. Consequently, their demands will be adjusted according to new circumstances. For the above reasons and examples, workers cannot be considered as individuals who maximize their utility with given preferences, but social beings who have a contact with the social reality.

Additionally to the fact that as was mentioned above labour has social characteristics workers form a distinct as separate class according to their position in the way of production. Consequently, they form a social class and because some of them have realized this fact, in order to defend their rights have formed collective groups of demanding them. Thus, collective bargaining starts.

Therefore, collective bargaining cannot be considered an exogenous process that imposes inefficient wages or overtime premiums, because always it was a part of the production's process. For this reason, institutional factors or collective agreements cannot be analysed as exogenous factors. As we mentioned above, despite that production has been socialized, profits are individualized and are taken by those who own means of productivity, the capitalists. Under these circumstances worker and employer begin bargaining from very distinct and unequal positions. In other words, this relationship between them has little equal characteristics; the entrepreneur owns means of production, but the second owns his labour power, the first one holds a job position and the second

one demands this job, the employer in a case of no filling this job faces lower profits, but the employee in this case faces unemployment. For the employer the filling of this job position is important for the existence and the growth of his firm, but for the employee this job is important for his survival. Thus, they begin bargaining from different and unequal positions.

This bargaining takes place in a social environment that has been formed (through years and with various changes and conflicts) with institutes and generally with political factors that determine in a lot of cases economy too. These unequal positions, which are expressed in the field of economy, can be as well expressed in the field of institutes; entrepreneurs have the holy right of individual property protected by laws and constitutions, but workers do not have any right of social property. They have just some certain rights which have vested through their conflicts for working time maximum, social insurance, minimum wages etc. Therefore, this unequal position is reinforced more, when we take into consideration under what circumstances this “bargaining” takes place.

In addition, even if there is some degree of liberty from the employee's side before signing the contract– disagreement on the contract and search for another one better-, this liberty does not exist when he starts working after bargain's establishment. He cannot bargain in an individualistic base due to his restricted power. Even if he does so, he cannot achieve outstanding outcomes, because it is easy for an employer to fire him and hire another. Only with collective bargaining may demand higher wages, higher overtime premia and working time reduction. However, this gets more difficult if we take into considerations that not in every job workers are covered by unions.

But even if we analyse the phenomenon in terms of Pareto Efficiency, then this argument cannot really justify the existence of working unpaid long hours. In other words, Pareto Improvement would be the situation that everyone's position becomes better and no one is worse. Despite this, employer's position becomes better and worker's worse because he sacrifices his leisure without receiving compensation. Concluding, this model offers a weak explanation for the recently increasing phenomenon of unpaid overtime; neither preferences are exogenously given, neither wages are endogenously determined, neither collective agreements can be considered exogenous, nor the employer can be analysed as an equal person with the employee.

#### *IV) Unpaid Overtime as a signalling Device*

As for this approach, signalling is used as a complement to the above mentioned theories in order to explain the existence of unpaid overtime for non productive reasons. Based on the assumptions of this model, we will try to see how this model can really be applicable to reality. Firstly, we can observe that signalling theory is very restrictive on its assumptions. As for the assumption that workers maximize their utility given employer's strategies, the same critique has to be done as in the third (III) approach.

An additional argument that one can have against the use of game theory in that kind of economic analysis, is that workers or entrepreneurs do not always have a strategy i.e. a complete plan which will respond to every potential. Consequently, sequential rationality is not appropriate tool, and analysing unpaid overtime as a device in a game deduction. In real world, not every firm produces the same output level. It cannot be used even for

simplicity, because in the real economy nowhere this has been observed. It is an arbitrary abstraction. And that is exactly the substance of competition between firms; firms compete with each other due to different outputs and profits.

Moreover, output level is an important factor of decision-making for the production process, including the amount of labour that is going to be used, the working time and wages. In other words, output level and profits that are acquired by its selling make firms become more or less competitive; hire or fire employees, increase the working hours or not, introduce new technology or not etc. We cannot take as constant the output level of firms.

In addition, labour cannot be seen as a simple input in the production as we mentioned above. Labour is the element that activates the whole production process. On the other hand, every production unit does not need only labour; machinery, buildings, raw materials etc. are also necessary for a firm to exist. Also, an employer does not take decisions about his production based only on the amount of labour he needs, but also on the amount of, for example, machinery. Or, for instance, if there is a new technological improvement, entrepreneurs may consider to introduce it in their production, under the condition that this is profitable. In consequence, the assumption of labour as the only input is very simplistic unrealistic.

Furthermore, the technology which is used is not always known by employers. This is a very fundamental assumption of neoclassical economics, which unfortunately does not apply in real economy. Even in the cases that production function is known, it is not taken into consideration for the decision making of each firm. Moreover, in this model, technology does not present always constant returns to scale. In other words, there is an

increase in output analogous with the increase of inputs that insert in production process. This assumption is not applicable in reality, since few or unknown are the firms with such a technology. Therefore, it can be said that this model is becoming more simplistic and unrealistic.

Finally, the fact that this model is based on perfect competition makes it more vulnerable to stand on reality's test. A perfect competitive market nowhere and in no time had existed. And this assumption is fundamental for signalling theory, especially for separating equilibria; all of the results that the employee cannot pretend another quality, that the low ability worker will act as high and the low as low ability worker are proved with the assumption of zero profits (Spence, 1973). In fact, markets are not perfectly competitive and employers earn positive profits. If they did not earn positive profits, there would be any incentive for employers to produce. Consequently, all these firms try to acquire market power, and in fact all economies are characterised by -what neoclassical economics argue- imperfect competition. In real economies, there is market power which is concentrated in few firms (in a smaller or bigger degree), and those firms are not price takers; even in the terms of neoclassical analysis, there are monopolies and oligopolies which determine prices. For these reasons, signalling theory, which is based on the assumption of zero profits, has a fundamental weakness to defend the existence and augment of unpaid overtime.

In addition, there is a lacuna in explaining the use of workers' ability. This approach argues, that staying long hours in job has no productive use, but only informative one. Even in the case that one worker has more physical or mental capabilities for working long hours, but these abilities play no productive role, then there is no use in this method

of acquiring useless (for the production) information. By using signalling in order to send information, a lot of precious effort is wasted inefficiently. Consequently, a new inefficiency is created, while it was used with view to solve a previous one. Also, worker's ability cannot be observed only by his long work, but from other things during his participation in production, while working in the limit of contractual hours. Unpaid overtime is not a good tool to solve existing inefficiency.

Apart from that even the empirical analysis in some projects (Anger 2008) do not prove the fact that unpaid overtime can act as a signalling device. Especially, it has been shown that in West Germany there is a positive signalling for the workers, but negative in East Germany. In the same project, human capital theory, theory of deferred compensation and gift exchange theory are tested but were not found "capable of explaining earnings differentials between workers" (Anger 2008). In addition, Meyer and Wallete (2005) do not find evidence for future benefits from working overtime. Especially, they tested whether overtime has an effect in the transition from a temporary jobs to open-ended jobs, and if this signalling device leads to any positive result, but they conclude that "absenteeism had, in general, no effect on the probability of exiting to either a permanent job or to unemployment" (Meyer & Wallete 2005).

#### V) Unpaid Overtime as a Gift Exchange

As for the approach that interprets unpaid overtime as a gift for the good behaviour of employer, in fact it cannot be characterised clearly economic. If we go further we may find more ways that an employer can extract unpaid work. In this case, we have to

consider that conflict between workers and entrepreneurs does not only have economic and political form, but also an ideological one. In other words, when we analyse people who belong to social groups (e.g. a class), we have to bare in mind that they interact with each other and through their conflicts they can change their opinion, and adapt ideas which are in fact in contrary with their interests. For example, in our case management, as a knowledge field, has been developed in a high level. Techniques and strategies of manipulating employees have been introduced and improved by their employers.

Consequently, employers can “convince” their employees, by giving them various reasons and incentives, to work unpaid overtime. One of these incentives may be a higher-than the average- wage, pleasant working environment, more leaves from their work etc. Therefore, by using these incentives, the employee can feel “obliged” to correspond to these offers, by providing for example unpaid overtime. But, generally, this approach as it was mentioned above cannot provide any economic explanation of the rising phenomenon of unpaid overtime, except if we consider management improvements the main factor which determines this phenomenon. However, even in that case, there must be a deeper answer to the question why employers give such an importance to management and what they call 'human resources administration’, and this answer can have its roots in economic interpretations.

Furthermore, in all these theories there was no answer to the question why this phenomenon of unpaid overtime is rising in recent years. No answer for this fact has been given in existing literature. In some cases, this highly debated issue of working time is analysed, for instance, with respect to changes in the production organisation; Engellandt

(2004) refers to the post-fordist organisation of economy as an important factor which leads to this phenomenon. However, there is a general absence in the existing literature of providing an explanation and giving an historical perception to working time extension, and particularly unpaid overtime, that takes place in recent years.

#### **4. Working time extension and Unpaid Overtime: potential explanations**

In this section, we will follow an analysis based on the foundations of Marxist theory of working time. For the reasons and examples mentioned above, we cannot but take into consideration that society consists of classes with opposing interests, but not of individuals who maximize their utility. Each class is determined by its position in production procedure; those who own means of production are capitalists, and those who work on them and receive a wage are workers. Profits, in fact, do not come from the sphere of exchange, but from the sphere of production. To illustrate this point, profits come from the unpaid labour of worker. That means that the working day is divided in two parts: the first part is called necessary working time and the second additional working time. Worker receives a wage equal with the labour he spent in the first part, and the second part consists of surplus value that is taken by employers. Consequently, profits come from each worker's surplus value. That is to say employers want to maximize their profits by adopting new technology, extend working day, reduce wages etc., but workers try to resist and impose their interests for higher wages, working day reduction, less intensification of production etc.

Moreover, labour is not an input like any machinery, but it has a special role: labour is what gives value to products. To this point we have to make a distinction between labour and labour power; labour power is the physical and mental capabilities of a worker, but labour is the whole procedure, with which humans intervene to nature in order to fulfil their necessities. Labour power however in capitalism has been transformed into a commodity. Consequently, labour power is what receives a wage, not labour as neoclassical economics defend. Also, during a working day, only a part is paid to workers with the form of wage, and the rest is unpaid labour with which worker has produced surplus-value. Surplus-value, generally, comes from the unpaid part of working day, in which workers have produced new values (commodities). By the procedure of extracting surplus value capitalists have profits. Consequently, they try with various means to get as much as they can.

Furthermore, capital in this analysis is not a restricted notion as in neoclassical economics. Capital is considered to be “value that creates surplus-value” (Marx 1982) , and consists of all these values that participate in production process. Additionally, capital consists of the amount of money that capitalists use to buy i) factories, buildings, technical equipment, raw materials and ii) labour power. The first is named constant and the second variable capital. The new value produced through the combination of constant and variable capital is surplus-value.

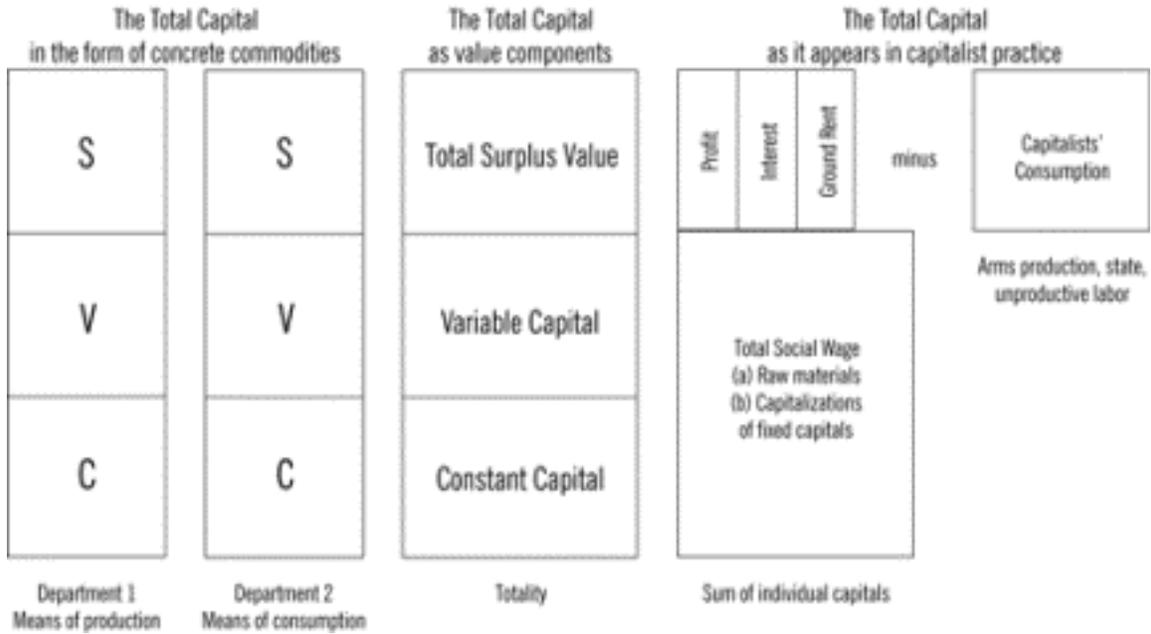
Generally, employers try to extract as much surplus-value as they can, in order to maximise their profits. There are two ways by which surplus-value can be extracted. This can be achieved by

i) either expanding the whole working day, while necessary working time is kept constant, and worker's wage remains constant too. This is called absolute surplus value extraction, because the whole working day has been prolonged.

$$\begin{array}{r}
 8 \text{ hours} \\
 4 \text{ hours necessary work} \quad 4 \text{ hours surplus work} \\
 \text{-----} + \text{-----} \\
 10 \text{ hours} \\
 4 \text{ hours necessary work} \quad 6 \text{ hours surplus work} \\
 \text{-----} + \text{-----}
 \end{array}$$

ii) or by keeping working day constant, despite the fact that necessary working time has been decreased (either due to new technology or due to improvement of skilled work). This is called relative surplus value extraction, because the increase of unpaid working time has been relatively increased.

$$\begin{array}{r}
 8 \text{ hours} \\
 4 \text{ hours necessary work} \quad 4 \text{ hours surplus work} \\
 \text{-----} + \text{-----} \\
 8 \text{ hours} \\
 3 \text{ hours necessary work} \quad 5 \text{ hours surplus work} \\
 \text{-----} + \text{-----}
 \end{array}$$



We can express the above situation in formal type:

$$T = V + S \quad (1)$$

where:

T: total daily work-time

S: Surplus-value (unpaid work-time)

V: the value of labour power (paid work-time)

which implies that:

$$S = T - V \quad (2)$$

and  $s' = S/V$  (3) is degree of surplus value or degree of exploitation.



In our diagram line AB depicts equation (1), which is the total working time (T). Let us begin from the situation that  $T = 8$  hours, and under some given technical and social conditions necessary working time is  $V_1 = 4$  hours and additional working time (unpaid working time) is  $S_1 = 4$  hours. This point is depicted by letter K. The slope of the line from the beginning of axes till point K (OK) is  $s' = S_1/V_1 = 4/4 = 1$ , and reflects the degree of exploitation.

Here, in the case of an increase in relative surplus value, we move towards line AB, to a new point I, where there is less necessary working time  $V_3 = 2$ , and unpaid working time is  $S_4 = 6$ . Here, the slope of the line (OI) is  $s' = S_4/V_3 = 6/2 = 3$ .

Now, if we take the case of an increase of absolute surplus value, we move in another line A'B', which represents an increase in total working hours, for example  $T = 10$ . In this case, surplus value extraction has been increased ( $S_2 = 6$ ), due to the fact that necessary working time remains the same ( $V_1 = 4$ ). Consequently, degree of exploitation  $s' = S_2/V_1 = 6/4 = 1.5$ .

Therefore, the extraction of relative surplus-value has a limit, and cannot be increased without constraints, because a minimum wage has to be paid to the worker for his survival. Thus, when employers have to maximise their profits but technology, for example, restricts their capacity for relative surplus value extraction, result to prolong the whole working day, and finally extract absolute surplus value.

Unpaid overtime is the case of absolute surplus value extraction. Capitalists prolong working time - by violating a labour contract - while the necessary part remains constant. Workers' wage remains constant, while they remain in job and produce output.

Moreover, capitalists are interested in maximising their profits comparing with the capital which is at their disposition, or generally make decisions according with the rate of profit, which is the ratio of profits over capital:

$$p = \frac{s}{c + v} \quad (4)$$

where p is rate of profit, s are profits, c is stable capital and v is variable capital. And, if we analyse it further, by dividing with variable capital: we can observe that it consists of two important ratios:

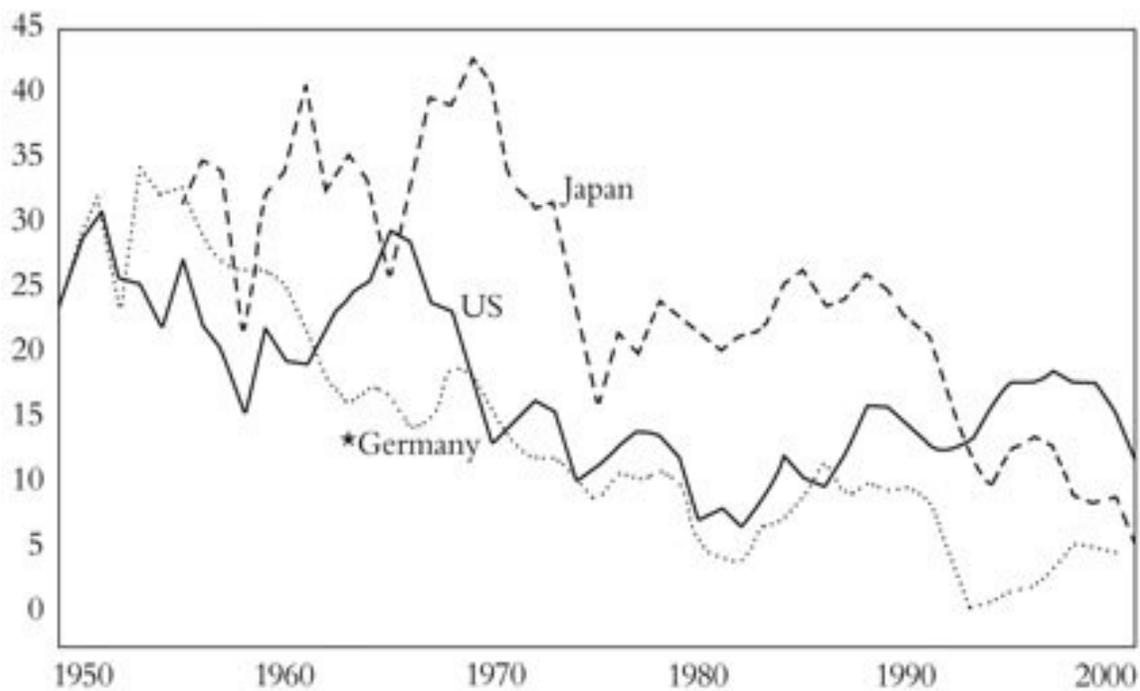
$$p = \frac{\frac{s}{v}}{\frac{c}{v} + 1} \quad (5)$$

i)  $S/V$  is the rate of surplus value or rate of worker's exploitation. This shows the proportion of profits that were earned to the workers' wage.

ii)  $C/V$  is the organic synthesis of capital. This ration shows how much stable capital is used in the production in comparison with variable. For example, in a car industry more money are spent for technical equipment than for workers' wages, but in a clothing industry the opposite. Therefore, organic synthesis of capital is higher in the first industry and lower in the second.

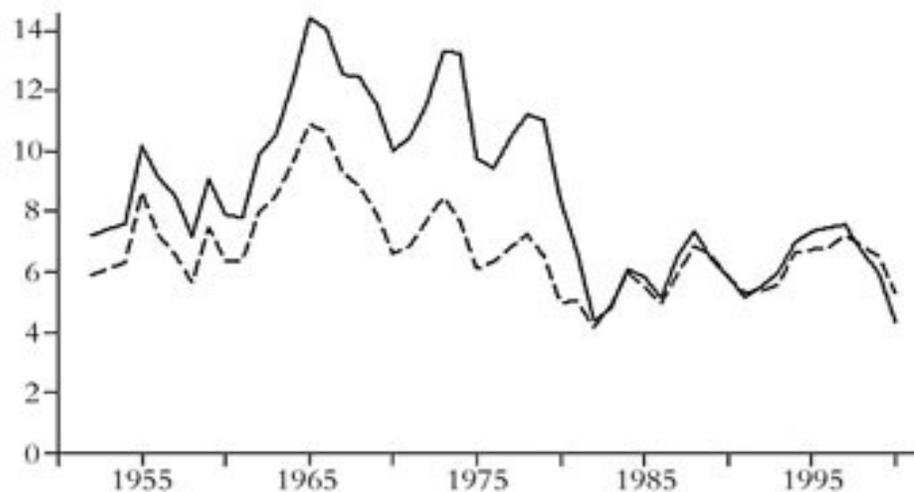
Generally, due to the fact that there is competition between capitalists, in order to increase their profits, introduce new technology in their production. Therefore, in the long run, employers' competition leads to a generalised technological adaptation in by all production units in the economy. And as a consequence, the ratio  $C/V$  is rising, which finally leads to the falling of rate of profit ( $p$ ) (see equation 5).

This falling tendency of rate of profit leads finally to 1973 economic crisis. In this diagram (Harman 2007), we can observe the evolution of net rates of profit last 50 years. We see that generally rate of profit has a tendency to fall through all these years (USA, Germany, and Japan).



\*Profit rate for Germany covers West Germany 1950-90 and Germany 1991-2000

Moreover, in the diagram below, we can see US profit rates accounting for (—) and abstracting from (-) the impact of financial relations (Harman 2007).



Consequently, employers, in order to equalize this tendency of falling rate of profit ( $p$ ), due to increasing organic synthesis of capital ( $C/V$ ), try to increase rate of surplus value ( $S/V$ ).

After providing the assumptions on which we will be based on, we will try to list the factors which lead to this phenomenon in recent years:

- Changes in organisation of production,
- introduction of informatics,
- increasing tertiary sector of economy,
- deregulation of labour market and
- weakening of trade unions are seen as the most important factors which made unpaid overtime phenomenon rising in recent years.

*i) Changes in the Organisation of Production – Capitalist Restructuring*

There is a contradictory enhancement of tendencies of concentration and centralisation of capital. Whereas under the pressure of crisis the average firm has tended to become more “lean” there was considerable increase of the weight of constant capital (both because of the wage reduction and new technologies introduction). Organic composition of capital increased leading to falling rate of profit. This was the main cause of 1973 crisis according to Shaikh & Tonak (1994) and Dumenil & Levy (1993).

On the one hand the centralisation of capital increased, through waves of merges and acquisitions. On the other hand, however, it increased the sub-contracting of peripheral activities; there was a centralisation of all the critical processes, whereas secondary activities were sub-contracting but under the almost direct control of the central firm. Therefore, essential control was restricted to even fewer centres and sub-contracting, in the cases that resulted to a proliferation of the operating firms, are more or less appendages of the central firm (Mavroudeas 1999).

Generally, this re-organisation of production was based firstly on making small enterprises (in contradiction with those huge factories of the past), with which capitalists can eliminate fixed costs. And secondly, after the creation of small enterprises and the elimination of fixed costs, the amount of workers that are necessary has been decreased. Therefore, a certain task is undertaken by less workers. By this way there has been an intensification of labour. Additionally to this, working time extension is taking place. Employees work long hours in order to complete the task that have undertaken. For this reason we observe unpaid overtime in this period of time.

*ii) Technological Improvement, Introduction of Informatics and Unemployment*

Technological improvement plays an important role in production; new technological implementations can be adopted in the production, and increase workers' productivity, and finally profits, because in the same amount of time workers produce more output. This fact may lead employers either to fire workers or to keep the same number of workers with the same wage (which in fact reduces their wage per hour). In the first case, an employer can take advantage of it, because an increase in unemployment functions as a pressure mechanism for employed workers to accept their employers' conditions. Therefore, unpaid overtime may be imposed by entrepreneurs with view to increase their profits without any additional cost of their employees' working long hours. The existence of unemployment, especially this one caused by technological improvement acts as a mechanism of pressure to employees to work unpaid long hours.

However, unemployment always existed, therefore one can wonder why this phenomenon of unpaid overtime happens in recent decades. In our case, at the late 70's and early 80's informatics development and their introduction in production was the main technological and scientific factor that changed in a degree capitalistic production. After the 1973 crisis, profitability and growth rates are faltering (Shaikh & Tonak 1994, Dumenil & Levy 1993). The labour and production process is changing towards the so called flexible labour as we will see below.

The introduction of information technology plays a significant role since enhances capitalist control of the labour process. In consequence, it is achieved an increase in the

rate of exploitation. At the same time it enables vital economies in the use of constant capital. In this sense, flexible labour represents an outstanding restructuring of the labour process. Consequently, by flexible labour there is a new balance between relative and absolute surplus value. During recent years absolute surplus value extraction has been strengthened (Mavroudeas 1999). One direct method is altering total labour-time. In this case, we can observe it by working time extension and especially by unpaid overtime.

However, introduction of informatics is not responsible for changing the whole architecture of capitalism, like many scholars argue with the Theory of New Economy. According to “Solow Paradox” (Solow 1987), which has proved that although there has been a great investment in informatics technology, this led only to an extremely small increase in productivity of labour. In fact, the sphere of production changed in a small degree. However, the sphere of exchange adopted to a bigger degree these new technological accomplishment. Services changed in a degree with the introduction of information technology, but in manufacturing not. In service sector, information technology was adopted, especially in administration and logistics; great tasks are undertaken by a smaller number of workers, and consequently there is an increase of intensification of labour.

### *iii) Secondary and Tertiary Sector of the Economy*

Generally, inter-temporal technological introduction (not particularly informatics) had also a result in labour force translocation from one sector of economy to the other. All this technological introduction and these changes in organisation of production,

especially in service sector, determined the fact that working time extension takes place especially in these kind of professions.

Moreover, as a lot of scholars mentioned above, the unpaid overtime phenomenon is more prevalent in skilled than unskilled labour. This fact can be easily justified if we take into consideration that in unskilled labour workers are restricted by their physical limits. Working time cannot be easily prolonged and the surplus value cannot be easily extracted too. For this reason, we can detect unpaid overtime to be more prevalent in skilled than in unskilled labour, as scholars argue above.

#### *iv) Deregulation of the Labour Market*

Generally, when capitalists face their falling rate of profit, as it was mentioned above, they do not only try to implement new technology or introduce new organisation methods in their production but also to implement new policies for their profits to increase. In particular, after 1973 crisis and after years of Keynesian policies' implementation, employers cast doubts on state's intervention to market affairs. Consequently, new measures were at need to be implemented and new policies that could make profits arise. These new measures should bare little relationship with those of the past. Consequently, by using their power and affecting governments, a new policy of markets' liberalization started to take place. This liberalization could not, but include labour market too. Generally, deregulation of working relations, especially since 80's decade, has taken place widespreadly. For this reason, working time extension and especially unpaid

overtime should not be examined separately from the whole deregulation of working relations.

Pioneers in this labour market deregulation were UK and United States. Initially, the effort of making working relations more lax began with the implementation of laws and acts that restrict labour unions' bargaining power. In England this was expressed with Thatcher's '80, '82,'84, '88, '90 and '93 employment and trade union acts, in which gradually unions' power was weakened (e.g. Strikes could easily announced illegal and abusive, government had the right to intervene in unions' internal procedures) and finally workers' vested rights were abolished (e.g. Lower minimum wages, increased working hours and lower benefits due to the weakened bargaining power of workers). In addition, semi-employment was increasing due to these working laws' introduction. Generally, a new notion was created to describe this deregulation, Thatcherism, which was implying i) less state intervention in markets ii) privatization of till then public sector and iii) entrepreneurial-ism, which means providing incentives to employers. The same procedure took place to US with the famous Reaganomics; ( by Reagan's government) economic measures that made working relations more relaxed and were appealing to entrepreneurs too. At the end, Canada, Japan and Sweden, Denmark, Iceland and gradually the rest of European countries adopted the same measures.

Moreover, labour unions participation to economic policy-making, as for employment legislation, was reduced significantly. For instance, Crompton (1995) analysed this participation from 1970-1993 in German, Italian, France and UK economies, where it is

proved that there is a correlation between participation of labour unions and influence on policy's implementation. Especially, for these countries which mentioned above, a relatively high participation till early 80s changed to a lower one afterwards. In some cases, this participation became negligible in periods of conservative governments.

In addition, there have been efforts by various scholars to correlate labour's deregulation with the existence of right or social-democratic governments, and the power the left wing. For example, Juan Botero et al. (2003) have examined 85 countries and finally found that the political power of the left is associated with more stringent labour regulations and more generous social security systems. It is also shown that socialist and French legal origin countries have sharply higher levels of labour regulation than do common law countries, and the inclusion of legal origin wipes out the effect of the political power of the left. Generally, it is commonly justified that political circumstances are not separated from countries' economies; they affect and/or determine to a larger or smaller scale the sphere of economy, not only national one but also international. For this reason, our analysis would be incomplete if we did not include these new conditions under which working relations formed and transformed.

Furthermore, we can focus on working time extension generally can be consider the major issue that we should analyse. Unpaid overtime is one part, the illegal one, of this extension. In other words, in recent years there is a big effort to extend working time limits, through employment legislation, especially in Europe. A lot of recent examples

can testify this fact such as the 35-hour work, work-sharing, flexicurity, the distinction between active and inactive working time.

Firstly, in France recently 35 hours working week was established by government. Although there was legislation, this law is observed to be substantially weakened and exceptions have become established. Secondly, by 'working-sharing' programmes, an agreement between workers and employers can be arranged as for the working time. Thus, a potential result is the shortening of the working week to about three days and the paying of reduced wages. In addition, Social Insurance offers some compensation to employees for the time that they are unemployed. However, there are some scholars that disprove these work-sharing effects. For example, Andrews et al. (2005) contradict the perception that a shorter work-week will lead to more jobs (work-sharing). In their panel data analysis find that a cut in standard hours lowers the proportion of overtime workers in a plant and increases the proportion of standard time plants. That means that work-sharing had contributed to an increase of working time.

Thirdly, the new definition of 'flexicurity' ( the term was firstly has been introduced by the social semocratic Prime Minister of Denmark Poul Nyrup Rasmussen in the 1990's). The term flexibility effectively encompasses two different models, on the one hand 'numerical flexibility', i.e. the idea of easier to hire and fire contracts as well as 'functional flexibility', closely linked to the concept of 'knowledge society' or 'lifelong learning' (LLL), whereby the European workforce is being prepared for a changing working life, where only a multitude of skills (polivalency) will ensure employment (Crouch, 1999). In order to describe i) workers' flexibility and adaptation, ii) rights' and

obligations' equalisation, iii) working force's mobility, iv) hiring and firing flexibility and v) constant workers' training. This new invented notion indicates the type of new employee that is needed in new economic circumstances, especially by European Union which create this notion.

Last but not least, the recent debate about the distinction of working time in 'active' and 'inactive' and the fact that working week can reach 65 hours enhances the concern for this topic. European Union Council after December 2008 voted this instruction to be given to member-states and followed by them. "Active" working time is finally considered this part of working time where employee produces output, and "inactive" this part where worker is not considered to produce, but he is still available for working for his employer.

Generally, as we can see above, there are institutional changes which concern working time. Consequently, our debate should not contain only unpaid overtime, but general working time extension. In other words, overtime is usually used to express the hours worked further than a contract determines. However, recently there is an effort (see measures which were mentioned above) to make these contracts more flexible. That means that the notion unpaid overtime tends to be extinguished, because is going to be "legal" and be contained officially in labour contracts.

v) *Labour Unions*

Additionally, we cannot but include in our analysis another important subjective factor that determines significantly economy, labour unions. As we mentioned above, labour unions cannot be considered an exogenously given variable in our analysis about the route of working time during history. Conflicts between working class and capitalists have formed and determined wages, working time limits and premia, social insurance etc.; based on technological progress or on social circumstances changes, workers demands are changing, varying and developing. Working class consists of the majority of economically active population, especially in developed economies, and through history has created its own institutions to demand their interests, as mentioned above. Workers formed union, not only in their specific industry, but also coalitions in the whole economy. Each of these unions and groups are united or synchronised in a way, having impact not only on wage formation and working time limits in their industry, but also in the whole economy.

For years, we can observe, working time going decreased; generally working time reduction was included in demands of workers. Definitely, it does not mean that working class and labour unions suddenly excluded from their demands working time reduction recently, we see its rising. We can only but speak about a weakness of “bargaining” position of trade unions and a strengthen that of the employers. This can be shown by the decline in trade union membership, especially in three last decades, for example in Europe (this decline is especially strong in the new member states), and more specifically in these countries which were mentioned above. In particular, union density in the EU declined from 32.6% to 26.4% between 1995 and 2001, in the EU-15 union density

decreased from 31% to 27.3% and in EU-10 from 42.7% to 20.4% (European Commission 2004a:18)<sup>13</sup>. But we can also observe it by the data offered by International Labour Organisation (ILO). This weakening of bargaining power has its consequence on working time extension and particularly in rising unpaid overtime. In 1977, according to USA data, over one in five union members had collective bargaining agreements that restricted mandatory overtime, according to the QES. But as many unions have lost membership, in particular those in manufacturing and communication industries, workers' bargaining power to obtain such contract provisions may have diminished (Golden & Jorgensen 2002).

Trade unions do not only play an important role in the whole economy, but also a particular one in each industry and sector. A wide range of scholars can justify this role. For instance, in the book 'Unions and Collective Bargaining in a Global Environment' (World Bank Group, 2003) it was mentioned that “workers who belong to unions earn higher wages, work few hours, receive more training, and have longer job tenure on average, than their non-unionised counterparts”(Ebbinghaus 2004; European Commission 2004a). Apart from that, scholars who study unpaid overtime have found that participation in unions increase workers' possibilities of receiving overtime premia (Bell et al. 2000).

Therefore, taking all above into consideration, union weakening is responsible too for the whole deregulation of labour market. Union density is a very important index of workers' bargaining power. Accompanied with all these laws and acts, which were

<sup>13</sup>Maarten Keune, *Collective Bargaining and working time in Europe: an overview*,  
[http://www.etui.org/research/Media/Files/CB\\_WorkingTime/CB\\_WorkTime\\_Chap1](http://www.etui.org/research/Media/Files/CB_WorkingTime/CB_WorkTime_Chap1)

implemented for first time in 80s decade and officially restricted union centralisation and participation in States' administration, we are led to this situation today. The unpaid overtime phenomenon generally springs from restricted bargaining power of unions too.

Union Density	Australia	Germany	Italy	Japan	Netherlands	Sweden	Switzerland	United Kingdom	United States
1970	44,15	32,03	36,97	35,1	36,5	67,73	28,92	44,79	27,43
1971	45,39	32,13	39,73	34,57	36,23	70,05	29,17	45,27	26,95
1972	46,33	32,37	41,79	34,31	36,62	71,36	28,87	46,18	26,26
1973	47,23	32,43	43,32	33,47	36,24	72,45	28,65	45,46	23,54
1974	48,8	33,75	46,22	34,26	36,05	73,54	28,96	46,43	23,17
1975	50,06	34,58	48,05	34,53	37,76	74,47	32,34	48,26	21,64
1976	50,23	35,11	50,46	33,7	37,12	73,88	33,81	49,42	21,61
1977	49,06	35,24	49,8	33	37,18	76,03	33,05	51,09	23,16
1978	49,48	35,54	50,41	32,6	37,01	77,03	32,52	51,78	22,42
1979	49,87	35,3	49,71	31,76	36,59	77,31	31,89	51,61	23,4
1980	49,9	34,9	49,58	31,15	35,28	78,02	31,11	50,68	22,34
1981	49,24	35,15	48,03	30,89	33,5	78,35	30,3	50,54	21,01
1982	47,96	35,02	46,69	30,57	32,78	78,95	29,75	48,72	19,69
1983	50,9	35	45,52	29,75	31,28	79,64	29,55	48	19,45
1984	50,24	34,9	45,31	29,22	29,97	80,77	29,03	47,53	18,23
1985	48,96	34,67	42,49	28,79	28,75	81,28	27,57	46,22	17,45
1986	45,06	33,92	40,38	28,19	27,32	82,51	26,33	44,81	17
1987	41,16	33,33	40,05	27,71	24,85	82,42	25,82	44,46	16,52
1988	41,15	33,11	39,81	26,94	24,7	81,45	25,2	42,58	16,25
1989	41,13	32,41	39,38	26,13	25,1	80,69	24,76	40,61	15,86
1990	40,5	31,22	38,81	25,37	25,45	80,02	24,32	39,32	15,45
1991	39,87	35,99	38,66	24,78	25,6	80,07	22,65	38,45	15,47
1992	39,53	33,86	38,87	24,5	25,18	82,91	23	37,22	15,15
1993	37,55	31,82	39,22	24,34	25,87	83,86	22,92	36,12	15,14
1994	34,67	30,38	38,73	24,25	25,63	83,73	23,29	34,16	14,92
1995	32,58	29,22	38,07	23,97	25,66	83,14	22,85	34,08	14,32
1996	31,01	27,75	37,36	23,4	25,09	82,75	22,86	33,19	14,02
1997	30,26	26,98	36,23	22,79	25,05	82,19	22,59	32,05	13,55
1998	27,91	25,94	35,69	22,53	24,53	81,29	21,72	31,55	13,4
1999	25,45	25,57	36,08	22,18	24,56	80,63	20,96	31,44	13,37
2000	24,55	25	34,92	21,54	23,12	79,08	19,38	31,22	12,83
2001	24,25	23,53	34,85	20,88	22,5	78,03	17,77	30,73	12,84
2002	22,93	23,22	33,96	20,26	22,09	78	18,21	30,41	12,62
2003	22,93	22,91	33,06	19,64	21,68	78	18,65	30,09	12,4

*Union density %, Data from ILO (International Labor Organization)*

## **5. Conclusions**

Working time was always a very important part of economic analysis. Till now scholars were trying to explain the causes of working time reduction. However, in recent years the opposite tendency appeared. Working time is observed to be increased. Consequently, all these schools of economic thought which argued that working time can always decrease face a theoretic deficiency. In particular, not only working time extension appeared, but also the phenomenon of unpaid overtime.

These theoretic deficiencies stimulated, especially mainstream economics to find some new approaches for the explanation of this phenomenon; theories of differed compensation, human capital, Pareto Improvement and Signalling emerged to explain unpaid overtime. Every theory mentioned above is based on assumptions of neoclassical economic analysis. In our critique, we do not only detect an analytical lacunae, but also an empirical one. Every approach analyses labour as a simple input in production process and neglects its social character. Moreover, every of these theories avoid to cast doubts on the basic neoclassical assumption that labour wage is the reward of labour contribution generally.

Following the foundations of Marxist analysis, we argue that working time extension generally and unpaid overtime particularly are forms of absolute surplus value extraction. In addition we observe this phenomenon especially in recent years for some particular reasons. The falling tendency of rate of profit, which led to the economic crisis of 1973, pressed capitalists to implement radical changes in production process; changes in production organisation, to introduce informatics technology in the sphere of exchange.

Additionally to them, the developing tertiary sector of economy are structural factors which facilitated capitalists to extract more surplus value. Furthermore, the so called capitalist restructuring, which was described above, was also accompanied by institutional changes too; the labour market was also deregulated having its impact on working time extension, that we can observe nowadays.

Moreover, unions weakening took place during last years due to previous structural changes, social and historical reasons. This fact led workers to a situation with restricted bargaining power. Consequently, employees cannot demand effectively a possible working time reduction or to be rewarded for the labour which have offered. All these factors played a determinant role in working time extension and particularly in the rising phenomenon of unpaid overtime.

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