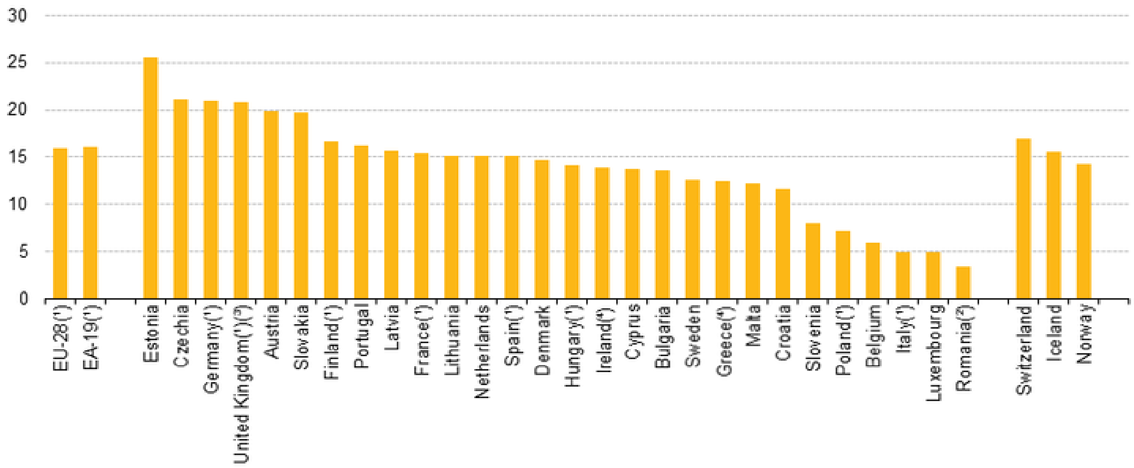
1. INTRODUCTION

Wages and salary are obtained from all payment that are given to the workers and not to a freelancer. There has been a lot of studies based on wage theory, that used to transform when the financial state changes.

There is a lot of gender discrimination in the society, that has different branches such as the gender wage gap, wage differential and gender pay gap. The society generates a lot of stereotypes in the labour force between men and women, race, religion etc.

Wealth is the key to be able to know the quantity of gender pay inequality, that has a psychological and sociological impact on the lives of people. In this case, I'm going to explain what is wage theory and its forms, and I am going to talk about how gender pay gap still exist in our society, by illustrating the causes and types of gender inequality in the European Union.

The unadjusted gender pay gap, 2017
(difference between average gross hourly earnings of male and female employees as % of male gross earnings)



Note: For all the countries except Czechia and Iceland: data for enterprises employing 10 or more employees, NACE Rev. 2 B to S (-O); Czechia: data for enterprises employing 1 or more employees, NACE Rev. 2 B to S; Iceland: NACE Rev. 2 sections C to H, J, K, P, Q.
(¹) Provisional data.
(²) Estimated data.
(³) Estimated by Eurostat.
(⁴) 2014 data.
Source: Eurostat (online data code: sdg_05_20)

eurostat

2. WAGE THEORY

2.1. DEFINITION OF WAGE THEORY

Wage theory refers to the income that is paid to the workers in the labour market. Adam Smith was one of the most important exponents with (The wealth of Nation) in 1776. Smith's reflection on wages was that they were produced through offer and demand in the market and that employees are self-centred in order to meet their own needs by seeking jobs where labour forces are mostly needed. He also discussed on the standard of workers capabilities that was essential for economic growth.

Economic production can turn into a way to have preferable effect in the economic environment and it does not seem to be unreasonable to explain wage as human labour. Talking about wages concerning companies and employees do not have the knowledge about workers skills and this explains about wage dynamics.

In a higher prospective, if companies cannot be impartial then the wage will be inflexible, but it may not be stiff if employees can choose to have another job that can give them best offer in the marketplace, and this will make wages to increase only if there is a difference between the market and the present one.

Wage dynamics tries to determine the relationship between employees and their skills, and to find out about how it works, through market image and acquisition. Becker and Mincer generated the model of human capital joint to an empiric assay. This is to show how incomes rises with a professional experience, and it can be determined only by the theory based on efficiency.

We can also calculate a present worker's wage by subtracting his main wage to his years of age and his efficiency and secondly, we have even an inflexible wage, that does not increase with age and efficiency. Wages do not differ from people's devotion to the marketplace, because it must be the following dedication to labour force:

a. People see labour as a particular factor
b. There is a minimal boundary between struggles and profits
c. It is not appropriate for a benchmark and an extent in terms of wage

There are different types of wage theories which are the following:

1. **Just Price Theory**

This theory was determined by Plato and Aristotle, they assume that every human being will be predesignated in order to have the same life conditions of their household's life progression, but the community should allow them to progress by given them enough remuneration in order to be able to sustain a better lifestyle.

1. **Subsistence Theory**

The major exponent of the theory was David Ricardo, and it is also known as the iron law of wages. Ricardo determines that employees must be remunerated in order to survive, sustain mankind with the intention of avoiding any kind of fluctuation.

When there is a weak wage it reduces man force because of famine and decease, meanwhile if there is a rise in wages it brings a better lifestyle for human race. But this theory has some weaknesses and they are 4 in number, which are the following:

- **The rapport between wedlock and wages:** it does not seem right to determine that when there is a raise up of salary to a subsistence level, it means that the person can get married by increasing natality. And in the other way, when there is a raise up of salary, people tend to boost up their lifestyles.
- **Ignored Demand-side:** it values more the supply part and not the demanding part regarding the labour market.
- **The difference in wages**: it does not clarify the reason why wages vary from job to job and from individuals.
- **Ignored Trade unions:** it does not take into consideration the importance of the unions, but recently they have a major part in wages determination.

2. **Wage Fund Theory**

The economist Adam Smith determined this theory, he explained that the wage level procedure produces excess money for the firm and if the endowment is significant then the wage will be the same too. This theory concentrates on firms and its ability to remunerate. The theory has its own weaknesses such as:

- **The difference in wages**: there are no differences in wages because all jobs are paid fairly, and wages are different among individuals.
- **The demand factor ignored:** labour force supply is more essential than demand.
- **Existence of fund**: there is an existence of distinct amount of money that are used for salaries, but sincerely speaking there is not such that can demonstrate that.
- **Objection on homogeneous labour**: labour is uniformed in this theory, and it assumes that workers must receive payment evenly, but it just seems to be impossible.

3. **Surplus Value Theory**

Karl Marx explains this theory, by saying that labour force is considered as a product that is meant for trade and he assumes that labour can valorise products. The proprietor will not declare the real sum of money received from the client by, using a small amount to pay wages to the worker. Marx forecasted the constraint on the society, but it was not the reason why there was a herd to wages into subsistence level, but it is caused by a high level of inoccupation. Marx determined that the cause of inoccupation was because of capitalist, by clarifying to Ricardo that the equivalent of good was resolute by the amount of time of labour that is required to form it. In Marx's belief, labour force was only a tool, in order to trade for a job, so that a worker can have a high wage. Nevertheless, he supposed that the firm would constraint the employee to work harder in order to have a good salary and the excess rate would be held by the firm. But this discussion with the labour theory of value and the subsistence theory of wages were rejected.

5**. Residual Claimant Theory**

This theory was proposed by Francis Walker, he assumed that there are 4 elements that brings a surplus to goods and they are land, labour, capital and entrepreneurship. The earnings from goods was apportioned between the 3 elements, just like a remuneration that is contrary to their input. The residual part was given to workers as salary, that is contrary to their value and it is called residual claimant.

The theory has been denounced for some following aspects:

- **Supply influence ignored:** it does not consider the impact of supply, when talking about wage determination.
- **Role of trade unions:** it does not justify the reason of increase of salary.
- **Entrepreneur right**: we can say that the residual claimant theory is the right one and not labour force and it claims its own part in the manufacturing aspect.
- **Case of loss:** if a firm goes through a deficiency, then it will have a negative impact on labour too.

6. Marginal Productivity Theory

The exponent of this theory is Phillips Henry Wicksteed and John Bates, they assume that demand and supply function defines wages and that the employee are remunerated according to their financial pay. The minimal notion is that firms will always hire workers only on a condition that he generates surplus value than the worth and this will make the owner to have a higher gain by not remunerating the non-minimal employees.

7. Demand and Supply Theory

This theory explains the interrelation between supply and demand and the rate of pay is figured out identically. The labour supply depends on elements like society, movability of labour and social organization. Perhaps, wages will be figured out to where demand and supply meets a break point

8. Bargaining Theory

The theory is determined by John Davidson, he assumes that the negotiation force of workers is figured out by the wage rate.

9. Behavioural Theory

Rules, cultures, purposes, kindliness and social tensions have an impact on pay configuration. Wages have to gratify worker’s necessity according to Maslow and Herzberg, like health, safety and etc.

10. Investment theory

This theory was founded by H.M. Gitelman, who presumed that every employee has a bundle of assets like background, practicing and skills, in which everyone are committed to in their job background. He determined that employee's remuneration is mended through labour ratio and employees can restraint their remuneration.

2.2 FURTHER STUDY ON WAGE THEORY

This discussion on wage theory was brought up by Adam Smith through literature but it was through the economist Pigou that analytically formed the theory. There is a way of how employees and owner's insight the highest and lowest wage rates that allows barriers, but the weakness in this discussion is that there is not a solution for this theory. Many have tried to find the best solution, but the nearest one was found by Hicks (1963), but it found out to be impossible to demonstrate. Another economist was Nash (1950-1953) who found the right solution to this theory with the so-called game theory, but it does not justify the level of impact on this theory.

There are 3 different models:

1. The contract zone of Pigou (1933) with the neoclassic approach
2. Bargaining power of Chamberlain (1951) with the behavioural approach
3. Bargaining solution of Nash (1950) with the theoretic game approach

1 The contract zone of Pigou (1933) with the neoclassic approach

It refers to minimum and maximum wage rate where the last one establishes itself. Pigou assumes that anytime wages are connected to negotiation that means that it has to be defined by the bipartite monopolistic theory, but it is not seen as the best concurrent answer and wages should not be defined by the demand and supply model. Wages do not equalize demand and supply force, only when both parts agree to define a higher and lower wage, but it can reduce the bargaining limits.

The barrier is the highest wage that trade asks for without any negative depletion and the lowest barrier is the lowest wage that owners should give so that they can have many workers.

This image below is the so called “sticking point” which must be private between union and employer and not public to third parties.

1

[1] Chamberlain, N. W., *Collective Bargaining,* New York: McGraw-Hill, 1951;
[2] Nash, J. F., Jr., "The Bargaining Problem," *Econometrica,* 1950, Vol. 18, pp. 155-162;
[3] Pigou, A. C, *The Economics of Welfare,* London: Macmillan and Co., Ltd., 1933.

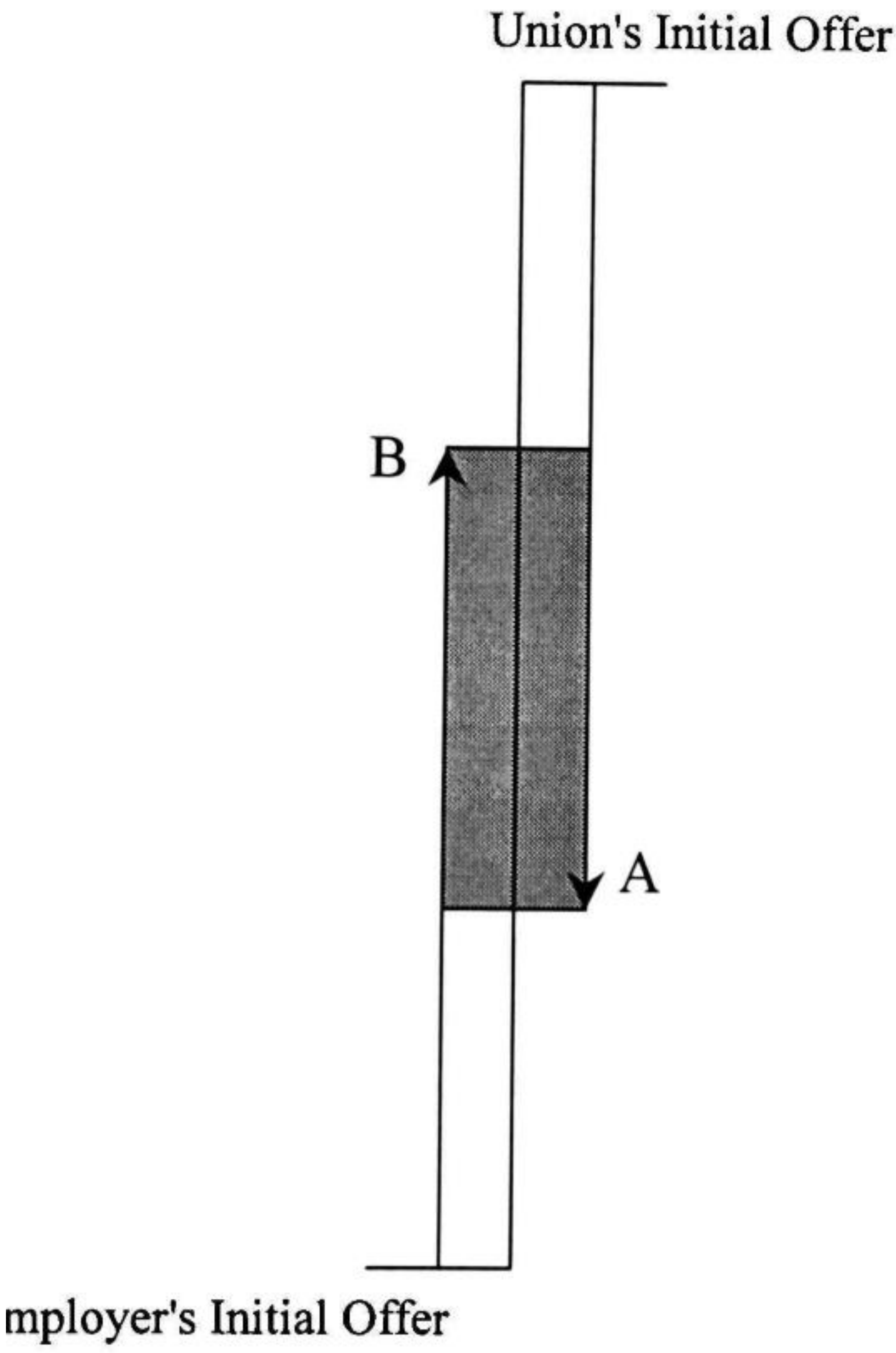


Figure 2.1. Pigou's Contract Zone

2. **Bargaining power of Chamberlain (1951) with the behavioural approach**

The model states that it is very highlighted, and it is known as the ability of groups to have an accord. The bargaining power is under the impact of ploy with the amount generated by not having a deal. The deal might be resolved when the amount of dissent is more than the amount of assent, which can be influenced by other variance and will have a repercussion on the power.

Chamberlain does not accept Pigou's model, because he sustains the reasons of the barriers are different and that when we consider the bargaining power, there is no need to differentiate situations and individuals' attitude towards the barrier.

3. **Bargaining solution of Nash (1950) with the theoretic game approach**

He determined this approach in order to have an opinion on the undefined disposition of Von Neumann and Morgenstem (1944) by saying that*: "In Theory of Games and Economic Behaviour a theory of n-person games is developed which includes as a special case the two-person bargaining problem. But the theory there developed makes no attempt to find a value for a given n-person game, that is, to determine what it is worth to each player to have the opportunity to engage in the game. This determination is accomplished only in the case of the two-person zero sum game...."*

He assumes that to have the right solution it is necessary to have a bit of premises, that usually differs from others and they are:

- Parties involved are sensible
- Parties involved tend to increase their own profit
- Ideal report
- Pareto optimality
- Hard work negotiation
- When the negotiator's last pay seems not suitable to have a deal, then the negotiators will have a profit that leads to default
- The parties involved differs from each other when their profit is not equal or else it will become an equality premise

And this is demonstrated by this graphic below:

2

[4] Chamberlain, N. W., *Collective Bargaining,* New York: McGraw-Hill, 1951;

[5] Nash, J. F., Jr., "The Bargaining Problem," *Econometrica,* 1950, Vol. 18, pp. 155-162;

[6] Pigou, A. C, *The Economics of Welfare,* London: Macmillan and Co., Ltd., 1933

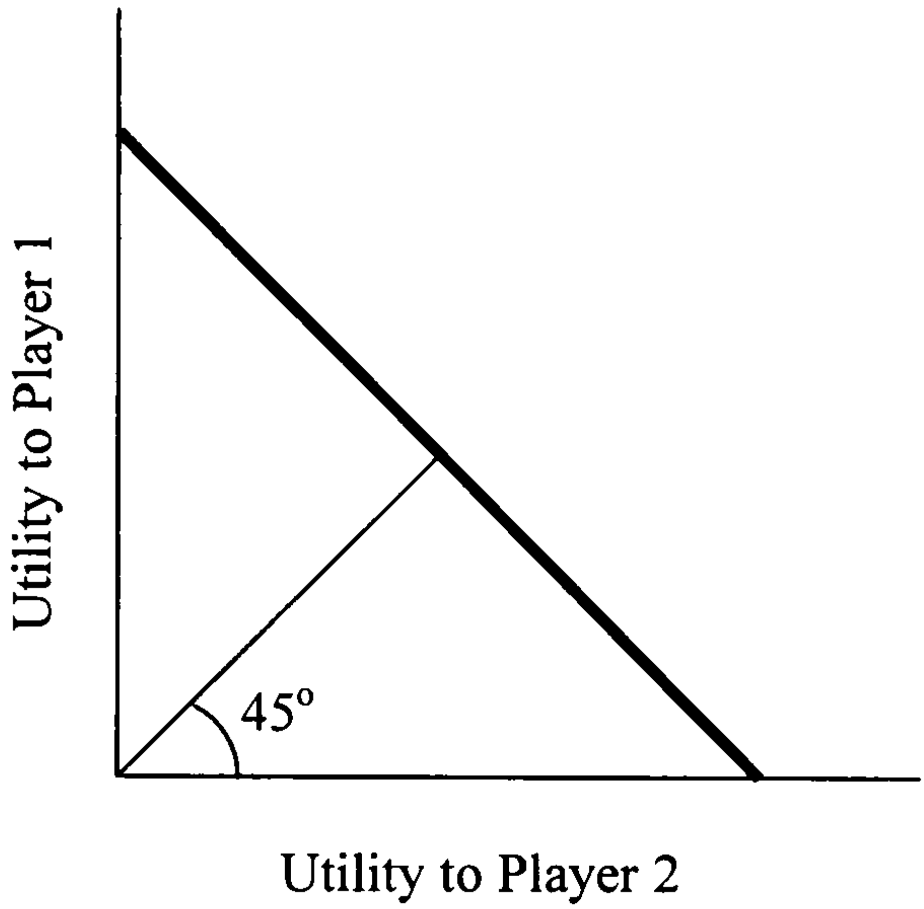


Figure 2.3. Nash's Solution

2.3 WAGE DETERMINATION

The wage determination is divided into several categories that are the following:

1 The Marginal Productivity Theory

It is the most important theory and it has been existing since the 19th century. It was I. von Tunen and M. Longfield who established the Marginal Productivity Theory, but it was J. B. Clark who described it in a better form. He was the one that assumed the theory as an utterance of social equality and his assumptions are the fundament of the theory. There are other exponents of this presumption and they are P. Samuelson, J. Hicks, E. Chamberlain, P. Douglas, and Joan Robinson. It was Hicks that promulgated the book that talks about wage determination theory.

This presumption is called the still condition of economics where we have a clean contest, but not a technical improvement, there is no doubt or exposure. But these conditions in an economic situation implies that the amount of salary can be resolved with the procedure of the production maximization into an econometric stage. This means that companies will have to reduce the production expense that is equal to the marginal productivity theory that lays on rate in order to expound about the assumption and it has a suggestion that say that the most hard-working worker obtains an increase of salary.

2 The Comparative Advantage (or Self-Selection) Theory

This assumption is usually in a deliberate trade presumption and it was expounded by Roy and Champemowne, D. G. This presumption has a diverse exertion when talking about competence and different kinds of work that necessitate of new ability and proficiency.

Champemowne explains the cohabitation of these conditions that they might produce an asymmetric allocation of salary remunerations. So, we can say that less employees might have a significant pay, but the rest of the workers will have a minimal pay.

In 1985 Heckman and Sedlacek, approximates the significance of accumulation prejudice into a measured accumulation of salary ratio and they assessed the part of freedom of choice into disparity in registered wage ratio.

3

[7] Champemowne, D. G., "A Model of hicome Distribution," *Economic Journal,* 1953, Vol. 63, pp. 318-51

[8] Heckman, James J., and Sedlacek, Guilherme, "Heterogeneity, Aggregation, and Market Wage Functions: An Empirical Model of Self-Selection in the Labor Market," *Journal of Political Economy,* 1985, Vol. 93, No. 6, pp. 1077-1125.

[9] Hicks, J., *The Theory of Wages,* 2"^^ ed., London: Macmillan and Co., Ltd, 1963.

They assume that the so-called self-selection decreases the accumulation of wage disparity at almost 1/10 of the USA market, and another economist called Teulings established that this theory would be suitable for the Netherlands in 1995. Teulings assumes that wage disparity is scheduled to see the differences in allocations and divergences among occupations.

3 Compensating Difference Theory

It regards to some adverse, unwanted and unfriendly work specifics. This theory is a representative of Adam Smith's book called the The Wealth of Nations, but it has been existing years back where it was withheld till when the information gathering technology and estimations were upgraded and it was shaped by Friedman and Kuznets in 1954. In 1986 a physicist called Rosen argued on this theory, by saying that a lot of occupations are difficult, unsafe, untidy, rowdy or too much of heat or cold in the work environment, but some employers finds them appealing. Like what a Japanese professor called Tachibanaki said in 1996 that "*this theory considers the case in which workers' tastes and satisfactions differ*". The people that work in this kind of unfriendly occupation are remunerated with a higher pay, or else it might be hard for a firm to entice employees. People have different preference, so if there is a lower pay it means that it does not interest the employees to get the job. We call premium pay, the amount of money paid by the firm in order to attract the employees to accept the job.

The premium pay is used to allow labor force finance to be fruitful but it is shown as an unpleasant job. Rosen affirms that**,** *"the actual wage paid is therefore the sum of two conceptually distinct transactions, one for labor services and worker characteristics, and another for job attributes .... The observed distribution of wages clears both markets overall worker characteristics and job attributes.... The resulting market equilibrium associates a wage with each assignment"*

There are some forms of non-pay characteristics of occupations that are figured out by McConnel and Brue in 1995 and Rosen in 1986, that are the reason why there are unequal labor distribution curves and remedial remuneration.

4

[10] Teulings, Coen N., "The wage distribution in a model of the assignment of skills to jobs," *Journal of Political Economy,* 1995, Vol. 103, No. 2, pp. 280-315

[11] Tachibanaki, Toshiaki, *Wage Determination and Distribution in Japan,* Oxford: Clarendon Press, 1996.

[12] Friedman, M. and Kuznets, S., *Income from Independent Professional Practice,* New
[13] York:NBER, 1954.
Rosen, Sherwin, "The Theory of Equalizing Differences," Ashenfelter, O., and Layard, R., ed. *Handbook of Labor Economics,* Amsterdam: North-Holland, 1986, pp. 641-692.
[14] McConnell, Campbell R. and Brue, Stanley L., *Contemporary Labor Economics,* New

4 Onerous Working Conditions: Risk of Job Injury or Death.

Death and injury at work have a bad impact on labor provision. The possibility of this bad situations and discomfort in occupations are significant for the function of labor supply. The salary ratio represents intrinsic costs that are defined by them, that are known as compensating wage differentials. According to the neoclassic aspect, we can say that the trade will redress employees that do a risky job with a better pay than what they collect in a safer occupation.

There are different types of premises that are emphasized, and they are:

(1) workers with similar skills will look for a job in the same labor market.

(2) workers prefer higher wages than lower wages.

(3) workers are risk averse.

(4) firms offer varying combinations of wages and risk.

(5) workers have mobility or exit options.

(6) workers have enough information about which job is hazardous or safe.

7) workers are rational.

With these premises, it will be easier to determine the right rate in order to cover the tacit side that is significant to the expensive job situation.

The correlation among wage and these requirement are a topic in an economical and psychic documents and the menaces connected to them are: *" cigarette smoking, cancer, motor vehicle accidents (Jones-Lee,1976; Viscusi, Magat, and Huber, 1991; Miller and Guria, 1991), asteroid,*

York: McGraw-Hih, hicl995.

[15] Leigh, Paul J., "Compensating Wages for Job-Related Death: The Opposing Arguments," *Journal of Economic Issues*, 1989, Vol. 23, No. 3, pp.823-842.

work accident (Acton, 1973; Gerking, DeHaan, and Schulze, 1988), home accident, poisoning (Viscusi and Magat, 1987; Viscusi, Magat, and Huber, 1987; Viscusi, Magat, and Forrest, 1988), fire, aviation accident (Jones-Lee, 1976). Viscusi (1979) has estimated a five percent average-earnings premium for risk of injury or death in the American economy".

Paul, Charles, and Keith (1997) determines that the gains of employees that have a higher percentage of decease, have a large income, more than other employees that do not mug any danger. A better insight on this discussion is made by Viscusi (1993).

But the empiric research shows the favorable connection among death risk and salary ratio and Leigh (1989) affirms that the market does not produce a better salary for risky jobs.

5

5. The Composition of Pay Packages: Vacations, Pensions, and Other Fringe Benefits.

Remuneration consists of salary and merits that is even called benefits that consists of retirement, medical coverage, vacations and other welfares. Welfares are very different between firms that

[15] Jones-Lee, Michael W., The value of life: An economic analysis, Chicago: U. of Chicago Press, 1976.
[16] Viscusi, W. Kip, Magat, Wesley A. and Huber, Joel, "An Investigation of the Rationahty of Consumer Valuations of Multiple Health Risks,"

Rand J. Economics, 1987, Vol. 18, No. 4, pp. 465-79.
[17] Viscusi, W. Kip, Magat, Wesley A. and Forrest, Anne, "Altruistic and Private Valuations of Risk Reduction," *Journal of Policy Analyses and Management,* 1988, Vol. 7, No. 2, pp. 227-45.
[18] Viscusi, W. Kip, *Employment hazards: An investigation of market performance.* Cambridge: Harvard U. Press, 1979.
[19] Viscusi, W. Kip, "The Value of Risks to Life and Health," *Journal of Economic Literature,* 1993, Vol. 31, No. 4, pp. 1912-46.
[20] Miller, Ted and Guria Jagadish, *"The Value of Statistical Life in New Zealand,"* Report to the Ministry of Transport, Land Transport Division, 1991
[21] Gerking, Shelby, DeHaan, Menno H. and Schulze, William, "The Marginal Value of job Safety: A Contingent Valuation Study," *Journal of Risk Uncertainty,* 1988, Vol. 1, No. 2, pp. 185-99.
[22] Acton, Jan P., *Evaluating public program to save lives: The case of heart attacks,* R-950- RC. Santa Monica: The Rand Corporation, 1973.
[23] Viscusi, W. Kip, "The Value of Risks to Life and Health," *Journal of Economic Literature,* 1993, Vol. 31, No. 4, pp. 1912-46.
[24] Leigh, Paul J., "Compensating Wages for Job-Related Death: The Opposing Arguments," *Journal of Economic Issues,* 1989, Vol. 23, No. 3, pp.823-842

employs people by paying the same high salary, but the salary that is given to the employee can be similar to the one of the bosses by paying even welfares with the salaries.

It is known that employees would rather choose jobs that gives welfare benefits or companies that gives higher benefits than others. There is a parable narrated by firms that hire workers that says, *"a dollar as a dollar*", this implies their distress over full remuneration due to the fact that it has an impact on production and gains.

Woodbury and Huang, 1991 says that: *“. There are some reasons why an employer should spend a dollar on benefits rather than on wages. One of the most important reasons is that the money put into pensions and health services is not taxed”*.

There are some other probabilities that welfare benefits might expand employee’s performance by joining employees to employers in order to decrease rotation price. This discussion has an opposite correlation among salary level and the price of welfare benefits to firms.

6

[25]Woodbury, Stephen A. and Huang, Wei-Jang (1991), The tax treatment of fringe benefits, Kalamazoo, Michigan: W. E. Upjohn Institute for Employment Research

https://www.brocardi.it/tesi-di-laurea/gender-european-union/312.html