



**How different types of compensation affect employees'
motivation to work overtime:
an individual perspective**

Rotterdam School of Economics, Erasmus University

MSc Accounting and Control

Supervisor: Ted Welten

Co-reader: David Veenman

Student: Yiming Yang

Student number: 402931

Email address: 402931yy@eur.nl

Date: 20/10/2015

Abstract

Many literatures investigate the relationship between incentives and motivation, but the results are different from economic and psychological perspectives. This study investigates how motivation for overtime work is influenced by non-compensation, monetary compensation, or different non-monetary compensation types respectively. By filling in questionnaires, participants provide the motivation level by putting themselves into different scenarios. The result shows that employees think that holidays and intangible non-monetary incentives are the most effective motivators for overtime work, rather than monetary compensation. However, by linking compensation types as experienced in real life, the data shows that participants who experienced monetary compensation for overtime work are more motivated than with all other non-monetary compensation types. In addition, non-compensation always demotivates employees and is the least preferred type for motivating employees to work overtime.

Keywords: compensation for overtime work, incentives, monetary compensation, non-monetary compensation, motivation.

Table of contents

1	Introduction.....	5
1.2	Research Question.....	7
1.3	Motivations.....	7
1.4	Methodology	9
1.5	Structure	10
2	Literature overview.....	11
2.1	Introduction	11
2.2	Overtime work.....	11
2.2.1	Overtime work from history to nowadays	11
2.2.2	Overtime work definition	13
2.2.3	Reasons why employees are willing to work overtime.....	14
2.3	Reward system	15
2.3.1	Agency theory.....	15
2.3.2	Management Control and Incentive system.....	16
2.3.3	Compensation types.....	17
2.4	Motivation theories.....	20
2.4.1	Expectancy theory and Effort-Reward-Imbalance (ERI) Model.....	20
2.4.2	Extrinsic Motivation and intrinsic motivation	20
2.4.3	Motivation of overtime work.....	22
2.5	Summary and conclusion	23
3	Literature review	25
3.1	Introduction	25
3.2	Compensation and motivation	25
3.2.1	Money makes people less humane.....	25
3.2.2	Gift exchange theory	26
3.2.3	Motivation-Hygiene Theory	27
3.2.4	Motivation Crowding Theory	28
3.3	Conclusion.....	30
4.	Hypothesis development	32
4.1	Summary	34
5	Methodology.....	35
5.1	Quantitative research	35
5.2	Data collection.....	35
5.3	Design of the research	36
5.4	Sample.....	37
5.5	Description of variables and model formulation	38
5.5.1	Dependent variables	38
5.5.2	Independent variables	39

5.5.3	Control variables	40
5.6	Questionnaire	41
5.7	Data Analysis	41
5.8	Conclusion.....	42
6	Analysis and results	42
6.1	Bivariate correlations	43
6.2	Statistical results	44
6.2.1	Paired-samples results	44
6.2.2	Linear regression results	44
6.3	Conclusion.....	47
7.	Conclusions	48
7.1	Discussion	48
7.2	Theoretical and practical contributions	49
7.3	Research limitations	50
7.4	Recommendations for further research.....	50
8.	References	52
Appendix	57
Appendix1	-List of rewards.....	57
Appendix2	-Questionnaire	57
Appendix3	-Paired-samples results	59
Appendix4	-Results of motivation.....	59

1 Introduction

Our life contains different types of transactions. People are accustomed to receiving compensation that equals the value of what they gave. Economists say that all goods have a price. One goes to a supermarket and all prices are marked in front of the goods. Even if one is just wasting time watching movies, the time wasted also has a price: there is an opportunity cost for doing other things instead of watching a movie. However, in real life, the value of an item differs on an individual level and it might not get an economy-based price. For example, it is difficult to say how many euros are equal to the happiness a friend brings with a dinner. The compensation for a friend's invitation is fair to be a bottle of wine or repayment with another dinner, rather than monetary compensation. It seems that the world we live in is a mix of these two types of markets: monetary market and social market. Human beings always calculate their income and expenses in terms of monetary market, while in the social market it not everything is paid for in money. Social benefit, which cannot easily be calculated in terms of money, seems to have an impact on people's decision-making as well as monetary benefit. The world is a mixture of these two types of markets.

In a working environment, employers compensate employees with money in exchange for their work effort. We cannot deny that the main reason an employee is involved in a contractual working relationship is that the monetary compensation provided by the employer can at least cover his living costs. However, social benefit sometimes is given in addition to monetary compensation: the location of the office is close to the employee's residence, a company car is made available, career advancement opportunities, the chance to develop skills and abilities, or having a nice team to work with. The Dur et al (2009) study, "Gift Exchange in the Workplace: Money or Attention?", concluded that people's effort conduction may be influenced by reciprocal and altruism factors (in social market), besides monetary rewards. In the workplace, it is very common for managers to use monetary and non-monetary compensation¹ to motivate employees to work on their behalf. The contract hour usually involves monetary compensation, whereas overtime work period compensation can be paid by monetary compensation, non-monetary compensation, or even in some companies, there is no compensation for overtime in the real world. Then, exclusive of the contractual work inside the contract list, how employees

¹ In this thesis, I refer the non-monetary compensation to Holiday, Gift, Dinner and other compensation, etc., and the concepts for non-monetary payment and social payment are interchangeably concepts

will behave during the overtime work period seems to reflect the reality of employee's discrete marginal decision making in the work place.

Currently, overtime work is a prevalent phenomenon. Kodz et al., (2003) state that the overtime work status is caused by increased work pressure, an ever-expanding workload, the increase of underemployment, and reduction of working place limitation. They also mention that industrialized countries have more severe problems than any other countries. When considering overtime work, the most mentioned country is Japan, where many studies use it as an extreme case illustrating the relationship between overtime work and health problems. Essentially, in many Asian countries, employees work more than 60 hours per week (Amagasa et al., 2005; Iwasaki et al., 2006; Uehata, 1991). Several studies mention that the side effects of overtime work include diminished satisfaction in work-life balance and poor psychological and physical health (Dembe et al., 2005; Sparks et al., 1997; van der Hulst, 2003).

The fields of economics and psychology hold different opinions on how monetary incentives affect motivation and performance. On the one hand, according to Bonner and Sprinkle (2002) in terms of the effects of monetary incentives on effort and performance, the general hypothesis is that incentives lead to higher effort levels than when no incentives are offered. On the other hand, many psychological studies suggest that monetary incentives may decrease employee effort levels and performance. For instance, Stone and Ziebart (1995) propose that monetary incentives lead to an increased negative effect and, as a result, employee performance decreases. Although there is no consensus that different compensation incentives will lead to different degrees of work motivation, many signs show that lower levels of motivation are becoming a serious problem that accompanies overtime work. According to Lowe's research in Canada, one third of the questionnaire participants strongly agree that a job is 'hectic', a quarter of the participants think that a job is very stressful, one fifth of the respondents complain of repetitive boring tasks, and around 18% of the participants often/very often have difficulty keeping up with the workload. Among all occupations, senior management is the busiest occupation, based on working hours.

This paper examines how the motivation to do overtime work is influenced by monetary and non-monetary incentives. A fair, extra compensation is one method for an employer to attract employees that are more positive and motivated. It is of empirical value to determine what kind

of compensation is fair for employees and how the different compensation types will influence employee motivation to do overtime work.

1.2 Research Question

A fair, extra compensation is one method for an employer to entice people to work more efficiently during overtime work periods. It is important to determine what kind of compensation is attractive to employees and how the different compensation types will influence the motivation to do overtime work

This paper focuses on the effects of different types of non-monetary compensation (e.g. holiday, dinner, gift, etc.) on employee motivation to do overtime work. Consequently, both the direct and the indirect effect are investigated. Hence, the research question can be formulated as follows:

1) What is the influence of (non) monetary compensation on employees' motivation to do overtime work?

In order to give a more comprehensive understanding of the research question, the following sub-questions have been formulated:

- 1) How many different kinds of compensation are widely used in overtime work period?*
- 2) Compared with non-compensation, will compensation lead to more motivation to do overtime work?*
- 3) What is the preferred compensation type for employees to do overtime work?*
- 4) What is the optimal compensation type for overtime work in practice?*

1.3 Motivation

In contemporary society, increasing job pressure, workload, underemployment, and a diminishing boundary between work and home life have led to overtime work being a common occurrence in daily life. It is well known that overtime working is common in Japan. But overtime working is not a particular phenomenon only in Japan; it also occurs in the US and in European countries (Bejean, et al., 2003; Brett and Stroh 2003). According to Golden (2007), during the last decades, the working hours for managers and white-collar workers have increased in some countries, while working hours for blue-collar workers have been decreased dramatically. Several studies state that, in general, longer working hours and working overtime

are associated with lower degrees of job and family satisfaction and poor psychological and physical health (Dembe et al., 2005; Sparks et al., 1997; van der Hulst, 2003). The Fourth European Survey on Working Conditions (European Foundation for the Improvement of Living and Working Conditions, 2007) indicated that 14% of the European workforce worked, on average, 48 hours or more weekly. Moreover, 20% of males worked longer hours and 7% of females. This correctly reflects the greater number of men in fulltime jobs, who are also more likely to be employed in scientific and professional fields, which usually require longer working hours (E.g. management, scientific work, transportation, and hotel and restaurant work, etc.).

A survey conducted by TNO Quality of Life among 57,000 Dutch employees (Van Hooff and Van den Bossche, 2007), which is specifically focused on overtime issues, offered a general conclusion of the popularity of overtime work in the Netherlands. The survey study results indicate that moderate overtime work is quite usual in the Netherlands. Furthermore, 73% of the respondents indicated that they work approximately five hours overtime per week. Hence, we can infer that the majority of Dutch employees do work overtime, but most do not work long hours (weekly workload more than 48 hours). Furthermore, in the Netherlands, the tax rate for monetary compensation in overtime period is very high. As a result, some employees prefer non-monetary compensation (such as holiday compensation and location flexibility, etc.) instead of monetary compensation. Hence, how different types of compensation affect employee motivation to work overtime is discussed in this thesis.

According to the course Management Control in the Accounting and Control Master Program, existing literatures have variant results in how different compensation systems influence human motivation. Some results show positive results while others show negative relations in employee intrinsic motivation in an organization. Hence, it is important to know how incentives apply in reality. In addition, I have had some experiences during my internship. As employees, we need to do overtime work for urgent tasks. Sometimes the manager compensates us with a dinner and sometimes the compensation is a monetary benefit. As I recalled my knowledge gained in university, I wondered if the type of compensation led to different levels of work motivation for overtime work; would there be a difference in motivation according to the compensation received – whether a social or monetary benefit.

From my own experience, it seems that pay by monetary reward, social benefit, or not paying at all influences employee motivation to work. But which type of compensation is the most

attractive compensation to employees? In real life, employer motivation depends on the trade-off between one's own intrinsic needs and external interventions. The motivation to work overtime is important in daily business life. Much overtime work concerns the urgent tasks that have a deadline. How compensation type influence the motivation to overtime work in work place is worthy of study.

1.4 Methodology

This study investigates the compensation type that is most attractive to employees and increases motivation to do overtime work. Furthermore, it provides insightful and valuable information in different dimensions about different types of compensation for overtime work periods for decision makers, assisting them to make the most appropriate choice to reduce unintended costs. It is regarded as the first attempt to explicitly and directly test the effect of monetary and non-monetary compensation for overtime work periods in the Netherlands and is consequently unique compared to previous research.

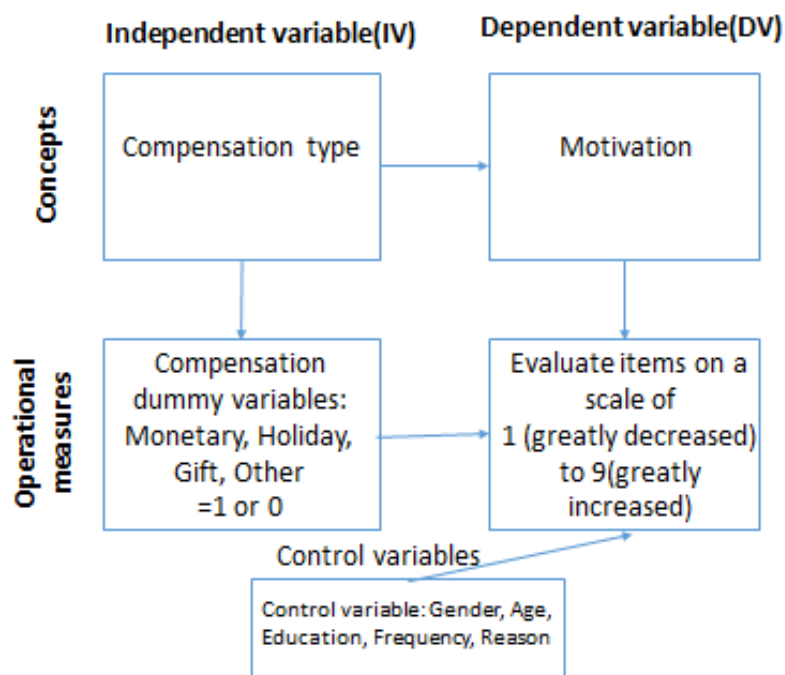


Figure1. Libby boxes

The research questions are mainly based on the Moynihan and Pandey (2007) study on “Finding workable levers over work motivation comparing job satisfaction, job involvement, and organizational commitment.” and Beckers’ (2008) study on “Overtime work and well-being: opening up the black box.” In order to investigate the possible relationships between different compensation types and employee motivation to do overtime work, a questionnaire survey is

conducted. This method is selected for several reasons. Firstly, as this paper aims to answer a question at the individual level of analysis, questionnaires seem to be an excellent method to collect data for this master thesis. Secondly, a questionnaire survey allows researchers to investigate a large random sample at relatively low cost and the collection of data enables the analysis of patterns and relationships (Dillman, 2000; Salant and Dillman, 1994). Finally, a questionnaire survey provides participants with a feeling of anonymity since it does not require participants' immediate answer (Dillman, 2000; Salant and Dillman, 1994). Even though a questionnaire survey involves the potential problem such as low response rates and non-response bias, based on the positive aspects mentioned above, the questionnaire is still considered the best option for this master's thesis study.

1.5 Structure

The remainder of the paper proceeds as follows. Section 2 presents a literature overview and theoretical framework. Firstly, some fundamental theory from previous studies is present, and then all the definitions of constructs involved in this study are illustrated, as well as the description of the overview of the conceptual framework. This is followed by Section 3 that introduces the literature review. It mainly includes discussion about the literature review for compensation types and motivation to do overtime work from prior studies. Afterwards, the hypothesis development is offered in Section 4. Section 5 sets out the research design and information about sample selection is mentioned. In the following paragraphs of Section 6, empirical study results data is intensively studied, including descriptive statistics, correlation matrix analysis, paired sample t-test, and simple linear regression. Lastly, Section 7 provides a discussion of the main findings, which consists of a summary of the study, research implications and limitations, as well as suggestions for future research.

2 Literature overview

2.1 Introduction

This chapter first introduces the overtime work phenomenon and gives the definition of how overtime work is defined in this thesis. Then, the relevant economics and psychology theories are listed in chapter 2.3 and 2.4 respectively. There is a conflict prediction of compensation-motivation relationship based on different assumptions. Economics assumes that people are rational and self-interested, while psychologists assume that people have intrinsic motivation and that they value autonomy. Chapter 2.3 starts with fundamental economics theories and then introduces the necessity of designing a reward system in an organization. The compensation types inside a company are defined thereafter. In Chapter 2.4, motivation theories are listed from a psychological perspective and a motivation of overtime work is discussed in chapter 2.4.3.

2.2 Overtime work

2.2.1 Overtime work from history to nowadays

"The innate human desire to improve one's lot is strong enough to make workmen apt to overwork themselves and ruin their health and constitution in a few years."

--Adam Smith, 1776, *Wealth of Nations*, Book One, Chapter VIII.

About two hundred years after Smith's conclusion about the association between the industrial revolution and humankind's natural perspective, the definition of overtime work was more comprehensively defined. There are several main streams of study across most advanced economies, which have enhanced desired working hours and the characteristics of working time on well-being. Specifically speaking, the studies show that an increasing number of people have a weekly workload of more than 40 hours (Jacobs and Gerson, 2001; Kuhn and Lozano 2005), they delay certain entertainment activities to their retirement years (Hurd, 1996; Kofi and Decicca, 2006), and break the general standard of 40 working hours per week (Presser, 2003).

In contemporary society, increasing job pressure, workload, underemployment, and a reducing boundary between work and home life have led to overtime work becoming common in daily life. Carr (1986) lists a few situations where overtime is necessary: when there is an urgent order, employee absence causes a shortage of labor, when peak season workload occurs, and when employers cannot find an appropriate full-time employee (e.g. with rare skills).

According to Golden (2007), during the last decades, the working hours for managers and white-collar workers have increased in some countries, while working hours for blue-collar workers have decreased dramatically. Several studies state that, in general, working long hours and working overtime are associated with a lower degree of job and family satisfaction and poor psychological and physical health (Dembe et al., 2005; Sparks et al., 1997; van der Hulst, 2003).

Several institutes, for example, the European Foundation for the Improvement of Living and Working Conditions and the International Labor Organization, present data on the global widespread phenomenon of overtime working and long working hours. These researches indicate that overtime working and long working hours are prevalent globally. However, these researches do not offer the detailed percentage of employees working long hours, because there are different definitions of overtime working or long working hours per country. Moreover, some of the research covered all the types of work, such as fulltime, part-time, employees and self-employed, while some others only mentioned fulltime employees.

In general, approximately 12% of the Japanese workforce work at least 60 hours per week and no less than 28% work less than 50 hours per week, which means that many work more than 60 hours per week. (Lee, 2004; Iwasaki, et al., 2006). In addition, if considered to only include the fulltime employees, these percentages can even be higher. According to Jacobs and Gerson (2004) and Caruso (2006), in the United States, approximately 25% of men and 11% women work more than 50 hours per week. According to the Fourth European Survey on Working Conditions (European Foundation for the Improvement of Living and Working Conditions, 2007), the proportion of European workforce that work on average 48 hours or more weekly amounts to 14%. In addition, males seem to work longer hours than females; 20% and 7% respectively. This correctly reflects the greater number of men in fulltime jobs, who are also more likely to be employed in scientific and professional fields, which usually require longer working hours (E.g. management, scientific work, transportation, and hotel and restaurant work, etc.).

Despite the fact that the proportion of employees doing long hours work vary in different occupations and gender, it also varies among European countries (European Foundation for the Improvement of Living and Working Conditions, 2007). Statistically speaking, the highest

proportion of those engaging in overtime work come from the eastern part of Europe (particularly Poland and Romania), Greece, and Turkey, which average about 57% of employees working 48 hours per week. In the United Kingdom, the prevalence of long working hours (in the European Foundation report defined as > 48 hours) reached 14%, which equals the European Union average. On the other hand, the lowest proportion of those engaged in long working hours consist of Nordic countries and Western European countries, such as Denmark, Norway, Sweden, Finland, France, Luxembourg, and the Netherlands, which are less than 10% (European Foundation for the Improvement of Living and Working Conditions, 2007). Even though these worldwide figures offer a general picture of the prevalence rate of overtime work globally, they still stand for an understating of all overtime executed, since the numbers mainly pay attention to the prevalence rate of long working hours (generally defined as more than 48 hours per week) instead of overtime hours. A survey conducted by TNO Quality of Life among 57,000 Dutch employees (Van Hooff and Van den Bossche, 2007), is specifically focused on overtime hours issues, and offers a general conclusion of the overtime work phenomenon in the Netherlands. The survey study results indicate that moderate overtime work is usual in the Netherlands, in terms of the question “How many hours do you work weekly on average”, and about 73% of the candidates answered that they do work overtime about five hours per week. Hence, we can infer that the majority of Dutch employees do work overtime, but most do not work long hours (weekly workload more than 48 hours).

2.2.2 Overtime work definition

Even though working overtime is a widely known phenomenon, the definition of working overtime and relevant concepts of long working hours are ambiguous. In traditional overtime-related researches, the concepts of overtime working and long working hours were often defined as the same things. Specifically speaking, long working hours refers to the working hours that exceed the standard fulltime weekly work. In the real world case, the definition is relatively complicated since there are different standards of fulltime weekly work among different countries [e.g. In Belgium, the full time weekly work is 38 hours; however, in the Netherlands the full time weekly work is 40 hours (McCann, 2005)]. Besides that, some other researchers define the 48 or 50 hours as long working hours. The reason these researchers pay attention to long working hours rather than overtime hours is mainly due to international working time regulations, in terms of protection of worker’s personal rights, which, in general, set the maximum working hours (i.e. long work hours) instead of overtime working hours. To some extent, overtime working and long working hours are interchangeable concepts; therefore, the

standard definition for overtime working is ambiguous. Taking into account the dictionary of the European Foundation for the Improvement of Living and Working Conditions (2007), Beckers et al (2004) define overtime working as the excess part of employees' total working hours on their contracts. Regarding fulltime employees, overtime working is in line with the long working hours (e.g. 37.5 hours for the contracts, 10 hours for overtime working). In addition, regarding part-time employees, it can also be the case that their working hours exceed their contractual working hours; however, it will not be considered as long working hours (e.g. 23 hours for the contracts and five hours for overtime working).

In this thesis, the term "overtime" is defined as the time spent on work-related activities outside the hours specified in one's employment contract, paid or unpaid, working in the office or working from home.

2.2.3 Reasons why employees are willing to work overtime.

The reasons employees are willing to do overtime work have attracted many researchers' attention. According to the Golden and Altman (2008) study of the American male and female managers' manner of longer working hours, they argue that people in higher job positions, especially male managers, tend to have more interest in monetary rewards from long working hours as well as experiencing peer pressure and looking for comfort from home. In addition, Golden and Altman (2008) also conclude that in Japanese organizations, overtime working has been considered a very important indicator for promotion structure. Therefore, these employees tend to do more overtime working despite the adverse influence on their health.

According to Yamada, et al. (2013), three main reasons explain why employees are willing to work overtime. First, employees willing to work overtime are indicating their commitment to the organization. Employees have a direct or indirect intention that working overtime frequently can help them obtain more opportunities to gain promotion in the organization. Namely, to some extent, employees consider frequent overtime work a strategy to maximize their individual compensation through potential promotion. Secondly, overtime work has been considered a signal that employees' lack some capabilities. Through frequent overtime work, some specific employees can hide their lack of capabilities, to some extent to prove their commitment to the organization. Thirdly, it is common that in the labor contract between the organization and employee, there are ambiguous parameters to reflect the way in which organizations evaluate employee incentives for overtime work. Due to the risk adverse attitude, employees usually intend to do some overtime work in these cases.

Furthermore, there is a possible reason that explains why employees accept overtime work, as shown from the example of American female and male managers. These kinds of managers who remain in high positions associate more responsibility with more monetary compensation from long working hours as well as suffering peer pressure and looking for an emotional remission from family. In reality, these American study results on work stress are directly linked to longer working hours among male employers, similar to the RENGO survey indicating the results with Japanese union workers. In addition, among Japanese companies, working overtime is a very important indication in the promotional system.

2.3 Reward system

2.3.1 Agency theory

According to Jensen and Meckling (1976), conflict of interest and information asymmetry exist between principal and agent, since their different starting points and personal benefits lead to different personal objectives. Each party tends to maximize their net utility in terms of income, which can be considered as the benefit part of the agent, and the degree of work effort is disregarded. Therefore, most of the agents are likely to minimize their effort in order to maximize their net utility (Alchian and Demsetz 1972). As long as the principals do not take actions to punish agents, agents will tend to take opportunities to decrease their work effort.

A basic assumption of agency theory (e.g. Baiman, 1982, 1990; Eisenhardt, 1989) is that people are fully rational and have well-defined preferences, and they are presumed to be motivated by self-interest (e.g. wealth and leisure). Besides that, most models of economic behavior assume people will shirk (i.e. give low or no effort) to a task, especially when the task will not contribute to their own economic well-being (Bonner and Sprinkle, 2002).

We can predict that if employees always behave in the best interest of the organization, management control would be unnecessary. However, we have to admit that sometimes employees are unable or unwilling to behave in an organization's best interest and, as a result, some related controls must be taken in order to avoid unintended behaviors or encourage preferred behaviors (Merchant 1982).

According to Merchant (1982), even though employees have some good knowledge and are able to finish the job well, some still do not act in the organization's best interest, because it is

less likely that employee objectives and organizational objectives are aligned. As the direct influence of different types of compensation on employee motivation is mixed, the following chapters investigate employee performance and motivation to work.

2.3.2 Management Control and Incentive system

The control function of management is of no value if all employees automatically behave in the best interest of the organization. Merchant (1982) lists three possible reasons why control function is needed in organizations. One reason is that the employee may not understand what the organization wants from them due to personal limitations such as lack of skills. The second reason is that the organization may have not shown the employee the right direction. However, even if employees understand what the organizational direction is, they may still be unwilling to behave consistent with organization objectives rather than their own interests. This kind of motivational problem, as the third reason of incongruity, is addressed to the agency theory that addresses the interest conflict between agents and the principals. In order to keep employee behaviour aligned with the principal's best interest, a set of controls and a reasonable compensation system should be set to ensure organizational strategy and that employees behave as required.

Merchant (1982) states that management and control systems are used to solve problems of employee motivation and direction ambiguity. However, there is no perfect control because there is always unexpected risk. A good control system inside an organization is able to encourage required behavior and to discourage undesirable performance.

Incentive systems, as part of a control system, are set to motivate people to work in a correct manner. The design of incentive systems is very important. Usually, designers only get good results from that which is measurable. Kerr (1975), in his paper, "On the folly of rewarding A while hoping for B", mentions the importance of rewarding the ends instead of the means. However, in reality, incentive systems often reward negative behaviors. For example, if an organization hopes for teambuilding in the workplace, the reward system should not be based purely on individual performance. This kind of inefficient reward system does not only happen inside organizations. Kerr (1975) lists examples in many areas in society. Take orphanages, for example; the government establishes an orphanage to help orphans find good homes. However, at same time, government sets and encourages critical and rational rules to select good homes for orphans. It makes the finding of an ideal home even more difficult, because the critical rules

limit many families who are willing but do not meet the rational rule’s requirement to adopt an orphan. It is good to be rational but, sometimes, rational rules encourage rewarding highly visible criterion/behavior instead of invisible love, which is the key factor for providing a good home. Kerr (1975) suggests having more personnel control and better designed methods. Nowadays, how to design a good incentive plan still catches many researchers’ attention.

Within organizations, pay for performance is widely used in business. Bonner and Sprinkle (2002) developed a conceptual model on the process that details how monetary incentives influence performance. They clarify monetary incentive as being positively related to the effort people contribute, and more effort leads to higher performance. Between incentives and effort, an employee’s cognitive and motivation mechanism will influence the level of effort they are willing to exert after monetary incentive. In this model, rewards and compensations are positively related to the employee’s willingness to exert effort, and effort is further positively related to employee performance. In this instance, a motivation to work means the willingness to exert effort in the overtime period.

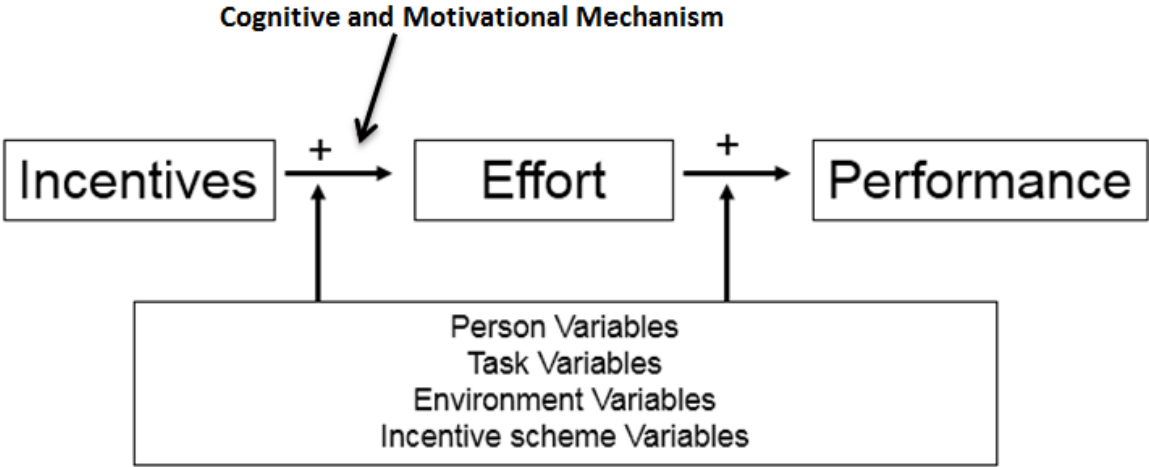


Figure2- Management Control and Incentive system

2.3.3 Compensation types

In order to create incentives for employees to achieve the organization’s goal, different types of rewards are used. Rewards consist of monetary rewards (e.g. bonuses and loan rises), as well as nonmonetary rewards (e.g. recognition and autonomy). Thus, besides the monetary reward such as bonuses or personal salary raises, nonmonetary rewards such as recognition and autonomy are also involved.

Merchant (1998) lists some major forms of rewards that organizations use (see appendix A). Merchant lists the examples of positive and negative rewards given in organizations. The regular positive rewards are, for instance, autonomy, power, salary increases, bonus, stocks and options, praise, recognition, advancement, vacation trips, time off, and training opportunities, etc. According to Merchant’s positive reward pool, this thesis further divides compensation types into two categories: non-monetary and monetary rewards in figure 3.

Monetary compensations	salary increases, bonus, stock options, restricted stock
Non-monetary compensations	autonomy, power, opportunity to participate in decision making, praise, recognition, promotion, titles, reserved parking places, club memberships, job security, vacation trips, participation in development programs, time offs

Figure3 - list of reward types

Monetary compensation

Kohn (1993) states that internal commitments are not influenced by monetary compensations. In addition, he also recommends rewarding employees in the most appropriate manner, for instance, by using other kinds of incentives to enhance employees’ internal commitment instead of using monetary incentives. A classical example is the Hawthorne-effect, which studies the associations between lighting and productivity at a production plant. The study results state that, regardless of the kind of changes in the production plant environment, appropriate lighting will lead to increased productivity. The only reason for a change in productivity is the monitoring and the extra attention given by people.

It is important for employers to use fair and justifiable compensation, especially monetary compensation, for individual employees. Since employee motivation dramatically decreases when they feel that the compensation is not fairly decided upon, in general, employees are naturally inclined to compare their effort level and deserved compensations with that of other colleagues. Herpen et al (2005) strongly advise that employees consider the performance measurement system as a positive mechanism. Otherwise, when they consider the mechanism unfair or ambiguous, it will lead them to lose motivation, commitment, and the respect of the company.

Based on the discussion mentioned above, this thesis defines monetary reward for overtime as the compensation offered to employees in the form of money. Even though the monetary compensation may also involve other financial compensations such as stocks, options, and bonds, etc., these kinds of compensation are not involved in the overtime period. It means that in this thesis, it will only cover one type of monetary compensation, namely, the hourly overtime work salary.

Non-monetary compensation

The Dur et al (2009) study on “Gift Exchange in the Workplace: Money or Attention?” demonstrates the foundation of models on how employees will respond to different types of compensation for their effort level and how to motivate them to work in the best interest of company. Nevertheless, despite the fact that monetary compensation is the main incentive to motivate employees to work, other incentives will also influence employees’ utility of work, for instance, reciprocal response and altruism are potential factors that may also affect employees’ efforts for each other. Some companies use several non-monetary compensations frequently; for instance, when an employee does some additional work, the manager will make compliments and offer flowers or dinners. To some extent, if employees really do a good job for overtime work, the managers will offer them promotional opportunities. This thesis refers to non-monetary compensation as all tangible and intangible compensation that does not belong to monetary compensation and that may lead to reciprocal behavior and altruism. For example, a gift has monetary value, but in this thesis, it only belongs to non-monetary compensation. In addition, Hardré et al (2006) state that flexibility gives power to motivation. Beside non-monetary compensations discussed above, holidays or a few hours off are a benefit of a flexible control system. In this thesis, flexible work hours and flexible work place are both types of non-monetary reward.

To sum up, the category of non-monetary compensation is divided into three different types: 1) holiday/flexible time, 2) tangible non-monetary compensation (e.g. Flower, Dinner, coupon, etc.) that use “gift” for short and 3) other non-monetary compensation (e.g. recognition, promotional opportunities, praise, etc.) that covers all non-monetary compensation not mentioned in category 1 and 2 and are mostly intangible compensation.

2.4 Motivation theories

2.4.1 Expectancy theory and Effort-Reward-Imbalance (ERI) Model

According to Vroom's (1964) study on expectancy theory, people act to maximize their expected satisfaction with outcomes. Specifically speaking, two factors influence individual motivation in a particular situation: 1) "effort–outcome expectancy" refers to the relationship between effort and a particular outcome, for example, a certain level of compensation matches a certain level of performance. 2) The attractiveness of the outcome. In another words, a person's choice of a level of effort that they think will achieve the desired outcome is based on these two factors mentioned above (Bonner and Sprinkle, 2002).

The expectations of people are mostly influenced by significant others. Adams (1965) elucidates the equity theory by stating that people always calculate their input and output. People think a fair compensation is that the output-input ratio should remain the same. Otherwise, they feel they have been unfairly treated and are demotivated.

According to Synergists' (1996, 1998) effort-reward-imbalance (ERI) model, which states that, in general, employee effort levels at work are considered an important part of the social exchange procedure, namely, the employees' expectation of appropriate rewards of compensation should be in line with their invested effort level. The theory is based on an assumption that the reciprocity between efforts and rewards is missing, for instance, high effort levels of working do not result in appropriate compensation. As a result, it leads to low job satisfaction and high work distress. Regarding the case of overtime work, this model can also be easily applied. Overtime working indicates extra working hours and extra working effort, however, which may or may not be compensated by means of monetary compensation or non-monetary compensation. Based on ERI-theory, we can predict that not paying extra compensation for overtime work is generally considered associated with a negative influence on employees' different perspective of well-being.

2.4.2 Extrinsic Motivation and intrinsic motivation

Many prior studies indicate that monetary incentives are often used as a tool to motivate and improve performance (E.g. Atkinson, et al., 2001; Horngren, et al., 2000; Zimmerman, 2000). Money, as an external intervention, motivates people to behave in the rewarder's interest. Alternatively, Deci (1981) and Ryan (1985) introduce two types of motivation by orientation difference. Intrinsic motivation implies that a person engages in an activity purely because of the enjoyment of work itself, while extrinsic motivation is caused by an external intervention

(e.g. money) and the intervention leads to a separate benefit that people care. Hence, if people engage in an activity purely for enjoying the inherent satisfaction, there is no need to give people extra incentives to do it. According to Skinner (1953), intrinsic motivation means that the reward motivating people is within the activity.

Deci et al. (1981) and Ryan (1985) introduce Cognitive Evaluation Theory (CET), as the sub-theory of Self Determination Theory (SDT), which postulates that people are intrinsically motivated and value autonomy. Reward systems, as a type of control, signal distrust and eliminate autonomy. They suggest that monetary incentives lead people to focus much attention on the external reward related to a task. Therefore, intrinsic motivation will decrease, and thus, effort and task performance will potentially decrease. Underlying these CET theories, it is been assumed that people need to feel autonomous and competent. As a result, social-contextual factors that stimulate the feelings of autonomy and competence increase the degree of intrinsic motivation, leaving people commanded by contingence, or feeling demotivated. Deci et al. (1981) and Ryan (1985) list a taxonomy of human motivation in the figure 4.

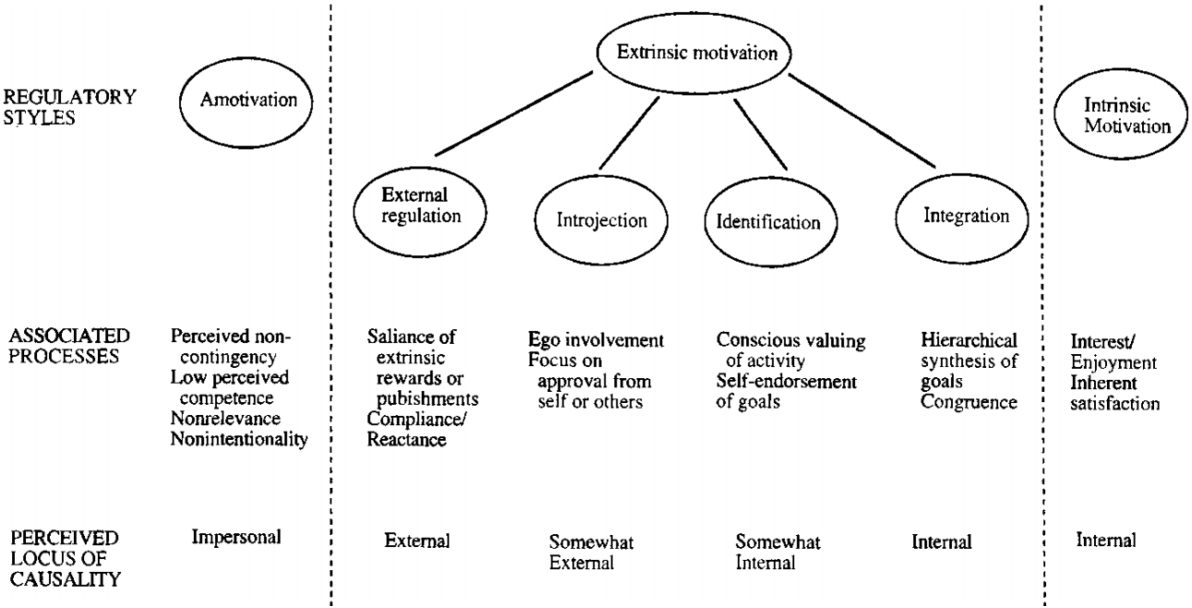


Figure 4- taxonomy of human motivation

Specifically speaking, cognitive theory states that external factors, for instance, tangible compensation, deadlines (Amabile, et al., 1976), scrutiny (Lepper and Greene, 1975), and appraisal (Smith, 1975), tend to reduce feelings of autonomy, lead to a switching of perceived locus of causality (PLOC) from internal to external (deCharms, 1968; Heider, 1958), and the intrinsic motivation is weakened. On the other hand, external factors, for instance, offering the opportunity to decide on task arrangement, leads to increased feelings of autonomy and, as a

result, switching of PLOC from external to internal, and enhancing intrinsic motivation (Zuckerman et al., 1978). In addition, CET theory also emphasizes that feelings of qualification and autonomy are important factors for intrinsic motivation. Many studies state that most appropriate challenging tasks are highly intrinsically motivating (e.g., Danner and Lonky, 1981), and the positive responses (Deci, 1971) associated with intrinsic motivation by cultivating a sense of competence leave people feeling accountable for their successful performance (Fisher, 1978; Ryan, 1982). Besides that, a negative response, which decreases the sense of competence, is considered to weaken intrinsic and extrinsic motivation. As a result, people are demotivated (Deci and Ryan, 1985a).

According to Beckers (2008), voluntary overtime work usually leads to relatively levels of tiredness and low job satisfaction, especially when employees are working overtime involuntarily *and* without compensations. This group of employees also has a high burnout risk. However, employees working overtime voluntarily are not fatigued or dissatisfied, even when there is no reward. Therefore, it has been stated that managing overtime and compensations are significant factors for employees' wellbeing when working overtime. Moderate overtime work is not considered a significant problem if it is voluntary. In addition, the negative impact of obligatory overtime work can be alleviated through appropriate rewards for the excess part of work.

2.4.3 Motivation of overtime work

As discussed above, Deci et al., (1981) and Ryan (1985) introduce the intrinsic and extrinsic motivations. In the workplace, external motivators (e.g. salary, supervision, policy, safety, security, and relationships) are widely used to extrinsically motivate employees. While intrinsic motivation means that employees are willing to participate in an activity for its own sake.

According to the previous study, there are several definitions for motivation:

- 1) The psychological process which offers a direction and goal for people's behavior (Herpen et al., 2005)
- 2) The hope people want to achieve (Bedeian, 1993)
- 3) The internal motivation to fulfill an unsatisfied need (Higgins, 1994)
- 4) The willingness to exert effort (Bonner and Sprinkle 2002)

Work motivation is defined in different ways:

- 1) Pinder (1998) defines work motivation as a kind of energetic power that handles both within and beyond the level of the employee.
- 2) Locke and Latham (2004) give work motivation a very broad definition, which is internal factors that drive behavior and external factors that stimulate a behavior.
- 3) Allen and Meyer (1990) define work motivation as a multidimensional concept that reflects individuals' feelings of involvement, commitment, and achievement. It is a broad concept related to how people access and cooperate with their organizations.
- 4) Donald (1980)'s work motivation includes job satisfaction, organization commitment, and job involvement.

In this thesis, work motivation is limited to motivation to work overtime. Hence, job satisfaction changes to overtime work satisfaction as a sub-boundary of overtime work motivation, as this thesis is focused on the study of overtime work instead of regular hours work. Satisfaction is an emotional factor that defines how much pleasure is felt in the overtime work period. In this case, satisfaction in overtime work hours is more appropriate than a broad view of satisfaction of the job.

To sum up, motivation is mainly about offering a reason, stimulation, inspiration, or interest that leads to a relevant movement or certain behavior. This thesis takes overtime work motivation into a broad perspective similar to Donald (1980), and also includes overtime work satisfaction and organization commitment.

2.5 Summary and conclusion

This chapter introduces the overtime work phenomenon and exhibits relevant conceptual foundation theories related to compensation and motivation in both economics and psychology fields. Beginning with some background knowledge of overtime work, this thesis provides the definition of overtime work and explains the reason why employees are willing to work overtime. Then, agency theory, the foundation theory of business and economics, explains that the main assumption in economics, which states that humans are self-interested and always seek maximum self-interest. Management and Control systems inside organizations are set to ensure that employees understand and follow company strategies and reach organizational objectives rather than their own goals. In business life, reward systems are a widely used method to control and motivate people to work in line with managers' expectations. There are different types of

rewards to fit different situations and to meet different goals: monetary or non-monetary, tangible or intangible, long term or short term. After listing these economic theories from the rewarder's side, the definition is given of compensation types as used in this thesis. Furthermore, theories from the field of psychology are listed to explain how employees calculate their utility in exchange for rewards. From a psychology point of view, people have an intrinsically motivated side that differs from economics assumptions. Employees have expectations on the value of what they can receive and expect similar rewards with significant others to signal fairness. Employees may be demotivated by unfairness or external intervention that does not measure up to their intrinsic motivation.

3 Literature review

3.1 Introduction

This chapter reviews the conceptual literature listed in chapter 2 and discusses the theories that directly contribute to the research questions. Practical theories are included to elucidate the relationship between compensation and work motivation.

3.2 Compensation and motivation

3.2.1 Money makes people less humane

Some studies postulate that money makes people recall utility function, which shows people's antisocial side. Millar (2012) proves that people have an antisocial side when they are wealthy. He further concludes that more money makes people act less human or at least less humane. It seems that money makes people less likely to do a "favor".

In Heyman and Ariely (2004)'s two-market theory, they divide four types of social relationships into two markets based on Fiske's relational theory. In detail, the monetary market contains market-pricing relationship (MP), while social market is related to common sharing (CS), authority ranking (AR), and equality matching (EM). They discuss the relationship with monetary compensation and nonmonetary compensation (gift). The monetary compensation is positively related to the effort people want to exert, while effort contribution is not sensitive to the magnitude of the gift given in social market. Their study results show that in social market relationships, people are more likely to be altruistic, in other words, they are insensitive to the non-monetary compensation (e.g. magnitude of the compensation). It means that the different non-monetary compensations may have similar motivation influences. Whereas in the monetary market, people tend to care more about reciprocity and the effort exerted is positively related to the magnitude of the compensation.

According to Vohs et al. (2006), many existing studies point out that money is better used for motivating people, while it also influences the manner in which people treat others. She believes the money itself brings people into functionality mode, which makes people become independent and act less humane. Vohs et al. (2006) designed an experiment in which she asks individuals to remain in a room alone for 10 minutes with a table with many colored money bills on it. When they think they have finished the experiment and leave the room, they will –

on purpose – Individually bump into a person whose arms are piled precariously high with books and office supplies. The person who stayed in the room with the bills is less willing to help this person compared to those who did not count the money. Her explanation is that by only thinking of the money, people feel more independent and also think that others should be independent and help themselves. It coincides with Heyman and Ariely (2004)'s two market theory which states that only by thinking of the money, many people will behave similar to within a monetary market. It seems that paying money makes employees more independent and less likely to be willing to put extra effort in the work place, but keeping utility in mind.

Overall, giving people money makes people less likely to be helpful. Money makes people more independent, keeps them calculating their input and output, and makes them less willing to help others. If overtime work is covered by monetary payment alone, employees tend to feel more independent and less social exchange is expected for overtime period. It seems the overtime motivation depends on whether the employee's contribution is covered by the magnitude of the overtime salary paid.

3.2.2 Gift exchange Theory

Akerlof (1982) proposes a gift-exchange hypothesis. The theory states that employees will reciprocate with hard work as a "gift", provided they get higher wages than that which is determined by the market. Arbak and Kranich (2007) and Ellingsen and Johannesson (2008) prove the gift-exchange hypothesis. Their study results show that altruistic managers that give employees high wages do so as a sign of their caring. Dur (2009) investigates the relationship between managers and employees in the work place. As employees cannot determine the manager's intention directly, they try to determine whether their manager truly cares for them by observing the manager's actions. The results show that the managers who pay attention to employees may build up better manager-employee relations than self-interested managers, even if altruistic managers pay less money to employees. The results of Wagner and Harter (2006) shows that employee engagement, work motivation, and job satisfaction will remain at a high level and the employees are less likely to quit the organization, provided the employee believes that his manager cares about him as a real person, rather than seeing him as machine to make future profits. Rhoades and Eisenberger (2002) and Cropanzano and Mitchell (2005) show similar results in the managerial implication area. The social relationship exchange in the workplace results in a positive employee attitude and organization commitment. In other words, from an organizational psychology aspect, a successful manager should have the personality or

caring and try to build good personal relationships with employees. Manager's attention, as a non-monetary compensation, is an effective motivator in the work place.

A questionnaire study by Kube et al. (2008) shows that a wage increase is less likely to signal manager's kindness compared to a gift. It seems that non-monetary compensation is more likely to signal kindness than monetary compensation, and will lead to higher work motivation.

To conclude, reciprocity factors play an important role in influencing employee motivation. Employees care about the intentions and the way in which a manager treats them. The wage increase and the manager's praise signals a manager's caring and good intentions. Employees tend to reciprocate with hard work to managers, depending on the level of wage as well as the non-monetary payment they receive. The more money is paid to employees, the higher the level of reciprocity. Also, the closer manager-employee relationship leads to higher work motivation.

3.2.3 Motivation-Hygiene Theory

Herzberg develops the Motivation-Hygiene Theory, also called two-factor theory, to explain how to make employees satisfied or dissatisfied with their job. Herzberg (1986) finds that the most effective motivator is the intrinsic motivators of the work rather than good compensation decided by good management. He argues that one may hear from demotivated employees that they complain about bad management within the company. But good management still does not make people work harder. He also claims that lower wages leads to demotivation, but increased wages may not be an effective motivator and may result in greedy employees who ask for more wages in exchange for their hard work in future. Company administration and salary are Hygiene factors, which lead to dissatisfaction when not optimal, but do not lead to constant high work motivation when optimal. On the contrary, the intrinsic motivators are defined as achievement, recognition, work itself, responsibility, advancement, and growth, and lead to extreme satisfaction if done well, but do not lead to extreme dissatisfaction if it does not reach a certain level. To conclude, Herzberg (1986) finds that the factor that causes employee satisfaction is always the work itself, while the hygiene factors that cause dissatisfaction are not a part of work but an extra incentive. Herzberg (1986) also defines "KITA" (kick in the ...) factors to explain hygiene factors that describe the process of using extra incentives or punishment to make employees move rather than to motivate. He gives an example of the dog and biscuit. He gives the dog a biscuit and the dog moves; next time the dog does not move until he sees the biscuit. The biscuit does not motivate the dog. The man who gives the biscuit

wants to motivate the dog to move. Employees are like the dog in the example, and the reward system does not motivate the employee to work. According to Herzberg, managers are motivated to make people work for them, but employees work just for the extra reward or to avoid punishment, and are not motivated to work.

To summarize, Herzberg (1986) finds that the intrinsic motivators make people more satisfied with their job and motivated to work, while hygiene factors as “KITA” factors explain dissatisfaction but fail to explain motivation to work (see figure5).

Factors affecting job attitudes as reported in 12 investigations

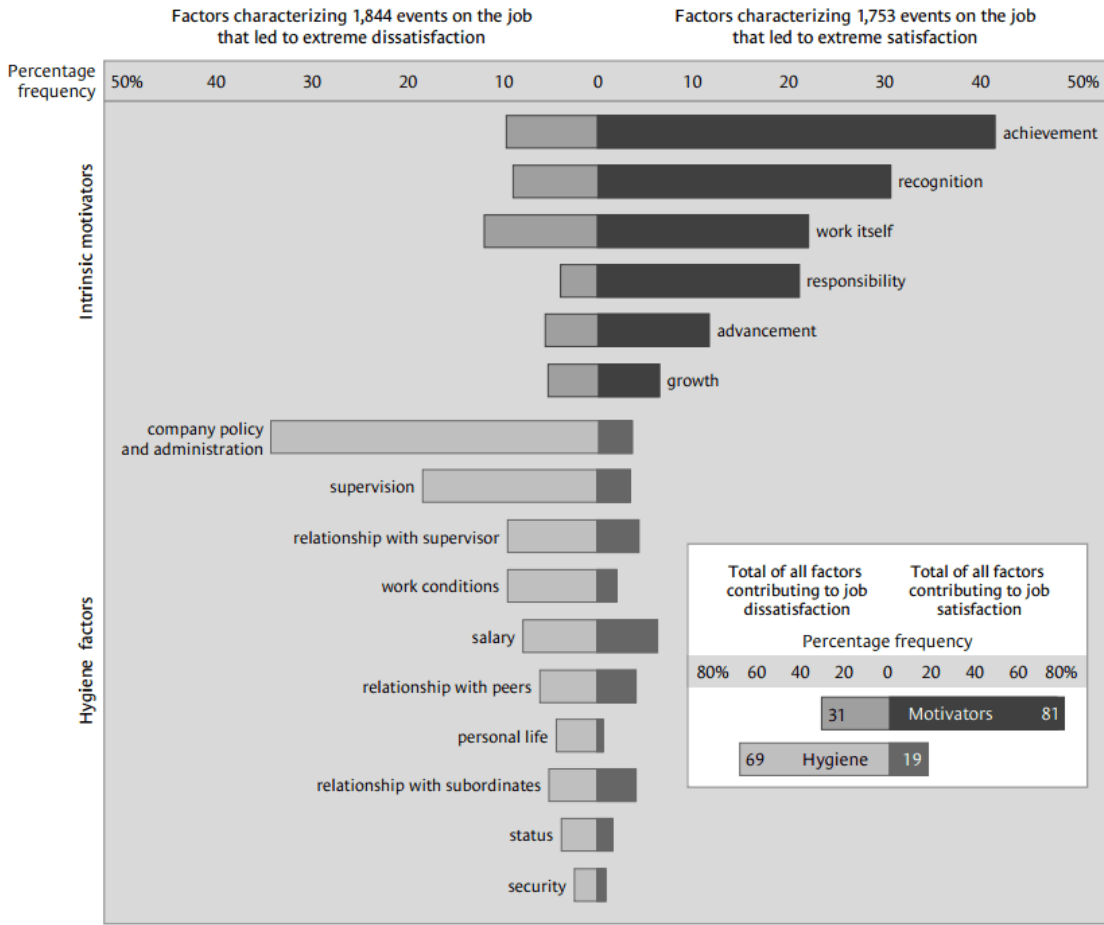


Figure5-list of factor affecting job attitudes

3.2.4 Motivation Crowding Theory

Work motivation is a factor that always is considered seriously in workplace. Steers et al, (2001) states that highly motivated employees are vital assets to organizations. Some literature shows a positive relationship between work motivation and performance. Christ et al. (2012) finds that lower intrinsic motivation results in lower performance in all aspects of the job. Grant (2008)

supports this argument by saying that demotivated employees cannot handle their work well. Moreover, the demotivated employee may influence other employees' motivation, since employee feelings are sometimes influenced by comparisons with the significant other in the workplace.

Deci (1981) and Ryan (1985) distinguish intrinsic motivation and extrinsic motivation. Frey (1997) describes monetary incentive as a type of extrinsic motivator that can achieve motivation externally. On the contrary, intrinsic motivation is within the activity itself and can only reward through the activity instead through the external part (Deci 1972). The cognitive evaluation theory explains that competence and autonomy influence intrinsic motivation. If employees are required to behave in certain ways, the self-determination is harmed and intrinsic motivation will decrease. Herzberg's theory gives a method to increase intrinsic motivation. It states that if a manager gives employees more authority, advancement opportunities, promotions, and interesting tasks, employees will enjoy working and their intrinsic motivation is increased. The dual factor theory coincides with motivation crowding theory in that the external intervention, like money, will crowd intrinsic motivation if employees regard it as supportive. Empowerment is a way to increase the level of intrinsic motivation by helping employees to enjoy the activity by providing more autonomy and empowerment, and can be reached by giving more power, capacity, and flexibility. Hence, holiday and time-off as flexibility benefits can be seen as non-monetary compensations to empower employees and lead to higher motivation to work.

Frey and Jegen (2001) introduce Motivation Crowding Theory as an approach that attempts to mediate the standard economic model and the psychological theories by defining a systematic mutual effect between intrinsic and extrinsic motivation. Crowding-out effect means external interventions, like money, decrease the intrinsic motivation. They state that tangible rewards will negatively influence the intrinsic motivation for interesting tasks. In another word, tangible rewards crowd out employees' intrinsic motivation to overwork. Overwork is not a sign of hardworking anymore; employees only seek for the reward rather than be motivated to enjoy the work. Moreover, they state that reward might not crowd out intrinsic motivation in two ways: Give employees verbal rewards, which are intangible, to increase intrinsic motivation. When giving an intangible reward, give the employee the reward they did not expect or the reward that is not contingent on the task.

To conclude, employees engage in overtime activities because they have intrinsic motivation and are enjoying the challenge of the activity itself, or because they are forced or attracted by external interventions, which may be job requirements or a generous payment. Money as an extrinsic motivation usually crowds out the intrinsic motivation of a person, while advancement opportunity is positively related to the employee's intrinsic motivation to work. Motivation Crowding Theory states that extrinsic intervention may crowd out or replace intrinsic motivation. Hence, the net motivation depends on the interaction between intrinsic and extrinsic motivation. In this thesis, the motivation to work overtime refers to the net motivation after interaction between intrinsic and extrinsic motivations.

3.3 Conclusion

Nowadays, employees that engage in overtime work is a common phenomenon. Because of the different types of compensation, the employees' motivation to do overtime work is influenced. This thesis is mainly an exploration study, investigating different types of compensation influence on individual employees during overtime work period.

Akerlof (1982)	Gift-exchange theory: hard working is a gift from employee to pay back managers generosity
James and David (1999)	Employee not only perceive cost of gift by the magnitude of the gift, but also by how costly in terms of money and time by the manager to offer the gift
Wagner and Harter (2006); Rhoades and Eisenberger(2002); Cropanzano and Mitchell (2005)	Social relationship exchange result in higher motivation to work hard.
Kube, Maréchal and Puppe (2008); Arbak and Kranich (2007); Ellingsen and Johannesson (2008)	Both high wage and gift are signal of manager's kindness, which positively related with work motivation.
Dur (2009)	Altruistic managers may build better manager-employee relationships by offering lower wages than self-interested managers offer.
Gibbon (1998)	intrinsic motivation and social relation as non-economic realities may be dampened by management practice based on an economic model
Frey and Jegen (2001)	Tangible rewards crowd out employees' intrinsic motivation for interesting tasks, while verbal reward is positively related with intrinsic motivation.
Deci (1971); DeCharmes (1968)	Intrinsic motivation comes from within the person.
Heyman and Ariely (2004)	In monetary market, people's willingness to contribute effort is positively related with the magnitude of money paid.

	In social market, people tend to be altruistic and their effort level is not sensitive to the magnitude of reward.
Zanella (1998)	Incentive contracts crowd out reciprocity, which can be considered as a special type of intrinsic motivation.
Gneezy and Rustichini (2000)	The overall net motivation depends on the interaction between intrinsic and extrinsic motivation.
Frey and Goette (1999)	Intrinsic motivation has been argued to be important when it is voluntary
Herzberg (1986)	Intrinsic motivators make people more motivated to work. But salary as hygiene factor only makes employees move instead of motivated.

Figure6-List of literature summaries

4. Hypothesis development

According to the Effort-Reward-Imbalance Model, employees' expectation of appropriate rewards of compensation should be in line with their invested effort level. If the reward they receive does not reach their expectation, they will feel unfairly treated and demotivated to work.

Heyman and Ariely (2004) distinguish monetary market and social market; people are more likely to tend to altruism in social market relationships and reciprocity in monetary market relationships. People who receive non-monetary compensation in social market will reach a stable effort level that is not influenced by the magnitude of the reward. The monetary compensation is positively related to the effort people want to exert, while people's effort contribution is not sensitive to the magnitude of the gift given in social market. The more the manager pays in money, the more effort employees' are willing to contribute.

Most studies in psychology insist that intrinsic motivation comes from within the person. According to Deci (1971), when a person obtains no obvious incentives except the activity itself, they are considered to be intrinsically motivated to perform a certain behavior. According to Frey and Jegen (2000), there are two processes defined that allow us to obtain the psychological condition through which the crowding-out effect happens. Firstly, external intervention crowds out intrinsic motivation when people think they are controlled. In this case, their self-determination and self-esteem are undermined. As a result, their intrinsic motivation is reduced. Secondly, external intervention crowds in people's intrinsic motivation when they treat it as supportive. In this case, their self-esteem is developed and they will feel that they have more freedom to do activities; therefore, their self-determination will also increase.

Deci et al (1999) conclude that rewards are able to influence people's activities, which explains why they are so broadly advocated. The main negative influence of rewards is that they negatively affect self-regulation. As the result of proposing rewards, people tend to take less responsibility to motivate them.

According to Frey and Jegen (2000), Motivation Crowding Theory is considered a theory that attempts to mediate the standard economic model and the psychological theories through defining a systematic mutual effect between intrinsic and extrinsic motivation. Some social scientists and economists admit that, from a theoretical point of view, if there is a previously

non-monetary built relationship that transforms to an obviously monetary relationship, it is possible that motivation will be negatively influenced.

Tangible incentives have been considered to have a significant (Deci et al., 1999) negative influence on intrinsic motivation for interesting tasks. Nevertheless, oral rewards have a significant positive influence on intrinsic motivation. If the tangible rewards are unexpected or not contingent on task behavior, it will not crowd out people's intrinsic motivation.

Herzberg (1986), in Motivation-Hygiene Theory, states that only intrinsic motivators influence job satisfaction and work motivation in the work place. Hygiene factors (e.g. control, salary, and relationship) only make people "move" in the way manager's want, rather than "motivate" them to do the task by themselves. Recognition, achievement, and responsibility positively influence motivation, and belong to intrinsic motivators, according to Herzberg (1986), and within this paper's definition of non-monetary compensation.

Having considered all the above-mentioned previous research and the literature review, a hypothesis is formulated as follows:

H1: Compensation will positively affect employees' motivation to do overtime work

H1a: Compared with no compensation group, monetary compensation will positively affect employees' motivation to do overtime work.

H1b: Compared with no compensation group, extra holiday/leave as compensation will positively affect employees' motivation to do overtime work.

H1c: Compared with no compensation group, gift compensation (e.g. dinner, flower, coupon, etc.) will positively affect employees' motivation to do overtime work.

H1d: Compared with no compensation group, other non-monetary compensation types (e.g. recognition, promotional opportunities) will positively affect employees' motivation to do overtime work.

H1e: Compared with non-monetary compensation group, monetary compensation will positively affect employees' motivation to do overtime work.

4.1 Summary

Figure 7 presents a conceptual model that reflects the relationships among different compensation types and employees' motivation to do overtime work and it is interchangeable with the Libby Box in figure 1. This conceptual framework mainly highlights the discussions from previous chapters (including both chapter 2 & 3), in order to offer a transparent and logical overview. Specifically speaking, in terms of employees' motivation to do overtime work, this consists of employees' intrinsic and extrinsic motivation. First, compared with monetary compensation, offering non-monetary compensation will positively affect employees' motivation during overtime period (hypothesis 1). In addition, compared with monetary compensation, offering non-monetary compensation will positively affect employees' performance during overtime period. The next chapter illustrates the methodology of this framework in detail.

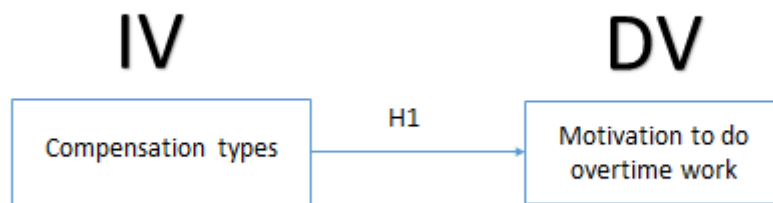


Figure7. Conceptual framework link hypothesis to Libby Box

5 Methodology

The main objective of this thesis is to explore the influence of different types of monetary and non-monetary compensation on employees' motivation for overtime work. An employees' motivation to work can be assessed through different methods. However, there is limited empirical study evidence on these aspects. This study proposes that the impact on employees' motivation to work is mainly based on two statistical testing methods. One is based on different scenario situations and the other is based on participants' real life experience. In the following paragraphs, the detailed description of data collection and execution of the research is demonstrated.

5.1 Quantitative research

The research questions are mainly based on the Moynihan and Pandey (2007) study on "Finding workable levers over work motivation comparing job satisfaction, job involvement, and organizational commitment" and Beckers' (2008) study on "Overtime work and well-being: opening up the black box." In order to investigate the possible relationships between different compensation types and employees' motivation to do overtime work, a questionnaire survey is conducted. This method is selected for several reasons. Firstly, as the aim is to answer a question at the individual level of analysis, a questionnaire seems to be an excellent method to collect data for this master thesis. Secondly, a questionnaire allows researchers to investigate a large random sample at relatively low cost and the collection of data enables the analysis of patterns and relationships (Dillman, 2000; Salant and Dillman, 1994). Finally, a questionnaire survey provides participants with a feeling of anonymity since it does not require participants' immediate answers (Dillman, 2000; Salant and Dillman, 1994). Even though the questionnaire survey involves potential problems such as low response rates and non-response bias, based on the positive aspects mentioned above, the questionnaire is still considered the best option for this master thesis study.

5.2 Data collection

The reference population of this research includes office employees who have experience of doing overtime work at the office, as well as college students who have fulltime internships or working experience of overtime work in the Netherlands. The sample of this study is 70. The snowball sampling method is used in this study (Goodman 1961). In order to avoid selection bias problems, white-collar workers from different industries were recruited to complete the questionnaire, and varied age, gender, and nationality groups are represented by incorporating

individuals employed in different companies in the Netherlands. Furthermore, emails, social networking services, and hard-copy questionnaires were also used to maximize the variety of participants. Participation is voluntary and the only incentive provided is a feedback about the study results. In terms of the question format, each participant had to answer some demographic questions, such as gender, age, education level, the frequency of doing overtime work, and other personal characteristics. Afterwards, there are six scenario questions, and all statements are scored on a nine-point Likert scale with anchors: 1 (strongly disagree) to 9 (strongly agree). After gathering the data, in order to tests whether the means of different groups are different from each other, analysis of regression test is used through SPSS and descriptive statistics.

5.3 Design of the research

Most of the questions in the questionnaire are derived from the existing academic literature, for instance, the study of Moynihan and Pandey (2007) on “Finding workable levers over work motivation comparing job satisfaction, job involvement, and organizational commitment” and Beckers (2008) study on “Overtime work and well-being: opening up the black box.” The draft version of this questionnaire has been reviewed by the thesis supervisor to evaluate the validity of the design. Before distributing the final version of the questionnaire, ten people took part in a pilot study to ensure that the questions are clear and are understood in the same way for each person. The final version of the questionnaire can be found in the Appendix 1

The questionnaire includes five main parts: 1) Introduction, 2) Demographic information, 3) Overtime work related questions 4) Experience of doing overtime work 5) Motivation related scenario questions. More specifically, section 1 offers a brief introduction to the intention of this questionnaire, section 2, 3, and 4 provide general information about participants, which are considered control variables and independent variables respectively in this study. Finally, section 5 covers the specific scenario-based questions related to the motivation measurement for investigating the hypotheses.

Under the scenario-based questions, all participants are asked to put themselves into different scenarios where they receive different types of compensation for working overtime as follows:

- A. If you do not receive any compensation
- B. If you receive monetary compensation
- C. If you receive extra holiday/leave as compensation
- D. If you receive gift compensation (e.g. dinner, flower, coupon, etc.)

E. If you receive other non-monetary compensation types (e.g. recognition, promotional opportunities)

They are also asked to indicate under each scenario how their perspectives on the elements are affected through levels of agreement or disagreement from 1 to 9 (e.g. 1=strongly disagree, 2=disagree, 3=moderately disagree, 4=mildly disagree, 5=neutral ...to 9=strongly agree) as follows:

- 1) I feel motivated to do overtime work
- 2) Doing extra work is fine to me
- 3) I feel pleasant during overtime work
- 4) This organization deserves my loyalty
- 5) I have obligation to finish tasks
- 6) Collective goals are more important than my personal preference

5.4 Sample

The sample details are listed in the Figure 8. The total valid results count for 70, which include 41 male and 29 female participants. Among these participants, most belongs to age group 25-34, followed by the age group under 16, and age group 35-54. The survey did not include any participant older than 55 years. In terms of the education level, most have a master degree (37 of 70), followed by bachelor (26 of 70); the remainder are equal to or below high school and equal to or above PhD (3 and 4 respectively). For overtime frequency, most participants do overtime work occasionally (31 of 70), then follows regular overtime group (27 of 70). Five out of 70 participants mentioned that they do overtime work seasonally, and the remaining seven participants stated that they have never engaged in overtime work before. Seven out of 70 participants who were requested to fill in the same scenario-based questions have been excluded in the linear regression because of no overtime experience; the total valid data for linear regression results is 63. Finally, 27 participants answered that they work overtime because the job requires it (e.g. assignments/projects that require extra hours due to the urgency), and 16 participants do overtime work because of a consistently high workload that cannot be completed within regular working hours.

Gender	70
Male	41
Female	29
Age	70
Age under 24	16
Age 25-34	44
Age 35-54	10
Age older than55	0
Education	70
Equal or below high school	3
Bachelor	26
Master	37
Equal or above PhD	4
Frequency of overtime work	70
I never work overtime	7
I work overtime occasionally	31
I work overtime regularly	27
I work overtime seasonally	5
Reason for overtime work	70
I enjoy working itself.	10
Advancement of career opportunities in future.	12
Job requires(e.g. assignments/projects that require extra hours due to the urgency)	27
Constant high workload which could not be completed within regular working hours	16
Compensation for extra hours spent in the office	5

Figure8- sample distribution

5.5 Description of variables and model formulation

5.5.1 Dependent variables

The relevant data is collected through randomly assigned questionnaires. Firstly, motivation is assessed by six questions developed from similar studies: Moynihan and Pandey (2007)'s study on "Finding workable levers over work motivation comparing job satisfaction, job involvement, and organizational commitment" and Beckers' (2008) study on "Overtime work and well-being: opening up the black box."

The effectiveness of different compensation types on motivation is measured from six different motivation relevant questions: 1) I feel motivated to do overtime work 2) Doing extra work is

fine to me 3) I feel pleasant during overtime work 4) This organization deserves my loyalty 5) I have obligation to finish tasks 6) Collective goals are more important than my personal preference. Participants are asked to evaluate these items on a scale of 1 (strongly disagree) to 9 (strongly agree).

Motivation6

$$\begin{aligned}
 &= \beta_0 + \beta_1 \text{Monetary} + \beta_2 \text{Holiday} + \beta_3 \text{Gift} + \beta_4 \text{Other} + \beta_5 \text{Gender} \\
 &+ \beta_6 \text{Education} + \beta_7 \text{Age} + \beta_8 \text{Frequency} + \beta_9 \text{Reason} \\
 &+ \varepsilon
 \end{aligned}$$

Where the dependent variable “Motivation6” is a combined variable of six different variables: 1) I feel motivated to do overtime work 2) Doing extra work is fine to me 3) I feel pleasant during overtime work 4) This organization deserves my loyalty 5) I have obligation to finish tasks 6) Collective goals are more important than my personal preference. Each of these six variables stand for one relevant question about motivation effectiveness in the questionnaire. Since the Cronbach’s Alpha of these six variables was 0.74, this number is high enough to indicate that all the six variables are testing the same concept and thus can be combined into one variable. In this model, the influence of different types of compensation, participants’ demographic information on the motivation, the frequency of doing overtime work and reason to do overtime work are captured by parameters β_i . By comparing the β_0 - β_4 we derive which is the most effective compensation type to do overtime work.

5.5.2 Independent variables

I define variable compensation types as dummy variables, just like year dummy variables in other studies. Specifically speaking, compensation type variables including dummy variables on 1) Monetary compensation, 2) Overtime converted into holidays/leave, 3) Gift, (e.g. dinner, flowers, coupon, and etc.), 4) Other non-monetary compensation types (e.g. praises, recognitions, promotional opportunities). For instance, if an employee has experienced no compensation for working overtime in most cases, all of these dummy variables will equal to 0. This model could be potentially used for determining the most appropriate compensation type for employees’ motivation to work. The reason for categorizing compensation types into these five types is that these are major types in the real working life for most of the employees.

The remaining parts in this model consist of control variables and error term; control variables is explained in the following paragraphs.

5.5.3 Control variables

The following paragraphs are used to describe demographic variables that are considered the control variables, in order to alleviate the confused effects on employees' motivation to do overtime work and to mitigate rival interpretations between the observed relationships among the variables: gender, age, education level, overtime frequency, and reason to do overtime work.

Gender

Stereotyped thinking classifies a group of people or certain behaviors (McGarty et al 2002). However, these stereotyped thoughts may or may not always be applicable (Judd, et al 1993), for example, men are smarter than women, men are in higher positions than women, etc. According to Judge et al. (2012)'s study on the joint influences of gender and accordance with salary, men benefit from being disagreeable in the workplace and that the compensation is positively related to disagreeableness. Another reason men are more likely to disagreeable is that they believe it is part of the male stereotype. Here, I assume that male employees have more sensitive to monetary compensation than women employees do.

Age

The age factor is also considered an important factor for this research. Intuitively speaking, the young employees may have different characteristics than older employees and, as a result, their motivation to do overtime work can also be different. Therefore, this factor should be considered an important control variable. In this study, age is categorized into groups: age under 24, age 25-34, age 35-54, and age above 55 as different dummy variables.

Education level

The education level factor should also be taken into account as an important control variable. In this study, the education level has been categorized into groups: equal to or below high school degree, bachelor degree, master degree, and equal to or above PhD degree. These are different dummy variables.

Overtime frequency

Overtime frequency factors may influence the relationship of payment for motivation. In this study, the frequency of employees to do overtime work is categorized into the following groups as different dummy variables:

1) Never work overtime,

- 2) Work overtime occasionally,
- 3) Work overtime regularly and
- 4) Work overtime seasonally

Reason to do overtime work

Tangible incentives have been considered to have a significant (Deci et al., 1999) negative influence on intrinsic motivation for interesting tasks. Nevertheless, verbal rewards have a significant positive influence on intrinsic motivation. If the tangible rewards are unexpected or not contingent on task behavior, it will not crowd out people's intrinsic motivation. As result, this factor should be taken into account as an important control variable. In this study, the reasons for employees to do overtime work as different dummy variables are the following:

- 1) I do overtime work because I enjoy working itself,
- 2) I do overtime work for advancement of career opportunities in future,
- 3) I do overtime work because my job requires it e.g. assignments/projects that require extra hours due to the urgency,
- 4) I do overtime work due to constant high workload that cannot be completed within regular working hours, and
- 5) I do overtime work in order to receive compensation for extra hours spent in the office

5.6 Questionnaire

Before examining the data from the questionnaire, there are some issues needing to be solved. To ensure the analysis is correct, some questions need to be transformed into dummy variables in the database. The scales are normal distributed, and Cronbach's alpha (α) has a significantly important use as a measure of the reliability of the scales. In general, the acceptable range of Cronbach's alpha (α) is about 0.7. The Cronbach's Alpha of six variables in the thesis was 0.74, which was high enough to indicate that all the six variables were testing the same concept and thus can be combined into one variable. It also indicates that these six questions are closely related to each other.

5.7 Data Analysis

To test the hypothesis stated in chapter 4, the paired samples t-test and simple linear regression are used. Under the scenario-based questions, paired-sample t-test are used to test whether, under the different situations, participants' perception of motivation to do overtime work are different from each other, in terms of simple linear regression, which is a statistical analysis to

assess the relationship between two variables. In this thesis, simple linear regression is used to analyse the association between different types of compensation that individual participants have experienced and their related motivation to do overtime work. The specific hypotheses results are listed in Chapter 6.2 Statistical results.

5.8 Conclusion

This chapter describes the research method, data collection method, description of variables, and model formulation as well as the data analysis. Creating a well-designed survey is a challenge. The draft version of this questionnaire has been reviewed by thesis supervisor to evaluate the validity of the design. Before distributing the final version of questionnaire, ten persons took part in a pilot study to ensure that the questions are clear and have the same meaning for each person. In other words, the survey can guarantee the quality of data and the participants' real opinions. The final version of questionnaire can be found in Appendix 2.

6 Analysis and results

The beginning of this chapter includes a short introduction of demographic data and information of bivariate correlations for performance and motivation. Then, the detailed statistical results are illustrated, which consist of compared means of each scenario group, as well as the specific linear regression results of effect on motivation.

6.2 Statistical results

6.2.1 Paired-samples results

The compared mean results (see detail in Appendix 3) demonstrate that under scenario-based situations, most of the participants have the highest motivation rate to do overtime work if they receive extra holiday/leave as compensation (Mean=6.1103, Std. Deviation=1.3584) and other non-monetary compensation types (e.g. recognition, promotional opportunities, Mean=6.1077, Std. Deviation=1.3851). This is followed by monetary compensation (Mean=5.9205, Std. Deviation=1.4261) and gift compensation e.g. dinner, flower, coupon, etc. (Mean=5.3718, Std. Deviation=1.2585). It is no surprise that, under the no compensation situation, employees tend to have the lowest motivation to do overtime work (Mean=4.6462, Std. Deviation=1.5181). To sum up, under the scenario-based situations, most participants believed that their motivation to do overtime work is the highest if they receive the holiday compensation or other non-monetary compensation, followed by monetary compensation, gift compensation, and no compensation respectively.

Compensation type	Mean	N	Std. Deviation	Std. Error Mean
No compensation	4.6462	70	1.5181	0.1331
Monetary compensation	5.9205	70	1.4261	0.1251
Holiday compensation	6.1103	70	1.3584	0.1191
Gift compensation	5.3718	70	1.2585	0.1104
Other non-monetary compensation	6.1077	70	1.3851	0.1215

Figure 10-compared different compensation-related means

6.2.2 Linear regression results

A linear regression (performed with $\alpha=0.05$) analysis was conducted to identify effects of different types of compensation on motivation. The analysis was based on the formula (See Chapter 5.1.1). Seven out of 70 participants who were requested to fill in the same scenario-based questions have been excluded in the linear regression because of no overtime experience; the total valid data for linear regression results is 63. The detailed results of the linear regression for the motivation scale can be found in Appendix 4. The total model has an explained variance 42.3% ($R^2=0.423$). The control variable “Age under 24” (Standard error=0.325, $p <0.05$), “Bachelor education degree” (Standard error=0.301, $p <0.01$) and “job requires to do overtime work” (Standard error=0.551, $p <0.05$) are significant. The remainder of the control variables are not significant.

	Beta	Std. Error	t	Sig.
<i>Intercept</i>	5.222	0.319	16.366	0.000
<i>Monetary Com</i>	2.046**	0.399	5.128	0.000
<i>HolidayCom</i>	1.276**	0.351	3.636	0.000
<i>GiftCom</i>	1.859	1.313	1.416	0.160
<i>OtherNonCom</i>	1.326**	0.363	3.654	0.000
<i>Female</i>	-0.105	0.256	-0.409	0.684
<i>Under24</i>	0.665*	0.325	2.045	0.043
<i>Age35_54</i>	-0.259	0.656	-0.395	0.694
<i>Highschool</i>	1.189	0.632	1.883	0.062
<i>Bachelor</i>	-0.892**	0.301	-2.962	0.004
<i>PHD</i>	-0.925	0.567	-1.633	0.105
<i>Regularly</i>	-0.689	0.470	-1.465	0.146
<i>Occasionally</i>	-0.468	0.256	-1.824	0.071
<i>Seasonally</i>	-0.727	0.785	-0.926	0.356
<i>Enjoy</i>	0.395	0.397	0.996	0.322
<i>Opportunities</i>	0.435	0.323	1.347	0.181
<i>Cannotfinish</i>	0.067	0.349	0.191	0.849
<i>Extracompensation</i>	1.247	0.918	1.358	0.177
<i>Job Requires</i>	-1.149*	0.551	-2.084	0.039
<i>Number of observation</i>	63			
<i>Model Sig.</i>	.039			
<i>R²</i>	42.3%			
<i>Adj. R²</i>	20.5%			

***. Correlation is significant at the 0.01 level (2-tailed).*

**. Correlation is significant at the 0.05 level (2-tailed).*

Figure11-Simple linear regression results

The linear regression results indicate that compared with no compensation situation, monetary compensation ($\beta=2.046$, $p < 0.01$), holiday compensation ($\beta=1.276$, $p < 0.01$) and other non-monetary compensation ($\beta=1.326$, $p < 0.01$) have a significantly positive effect on employees' motivation to work. In addition, among all of these compensation types, monetary compensation is the most effective compensation type to motivate employees to do overtime work. This also confirms the conclusion by Heyman and Ariely (2004) that people are more likely to tend to reciprocity in monetary market relationships. The monetary compensation is positively related to the effort people want to exert. The more the manager pays in money, the more effort the employee is willing to contribute.

In addition, compared with the employees who are older than 24 years old, the younger employees have more motivation to do overtime work ($\beta=0.665, p <0.05$) and the employees who have the bachelor education degree have less motivation to do overtime work ($\beta=-0.892, p <0.01$) than the other employees. In addition, the data shows that employees working overtime on request have less motivation ($\beta=-1.149, p <0.05$). This is in line with Beckers' (2008) result that doing overtime work involuntarily usually leads to relatively high levels of fatigue and low satisfaction with the job, especially when employees are working overtime involuntarily *and* without compensations,

Hypothesis	Result
H1a: Compared with no compensation group, monetary compensation will positively affect employees' motivation to do overtime work.	Support, positively significant ($t=5.128$)
H1b: Compared with no compensation group, extra holiday/leave as compensation will positively affect employees' motivation to do overtime work.	Support, positively significant ($t=3.636$)
H1c: Compared with no compensation group, gift compensation (e.g. dinner, flowers, coupon, etc.) will positively affect employees' motivation to do overtime work.	Reject
H1d: Compared with no compensation group, other non-monetary compensation types (e.g. recognition, promotional opportunities) will positively affect employees' motivation to do overtime work.	Support , positively significant ($t=3.654$)
H1e: Compared with non-monetary compensation group, monetary compensation will positively affect employees' motivation to do overtime work.	Support , positively significant ($t=5.128$)

Figure12-List of hypotheses

6.3 Conclusion

The linear regression results indicate that compared with the no compensation situation, monetary compensation ($\beta=2.046, p <0.01$), holiday compensation ($\beta=1.276, p <0.01$), and other non-monetary compensation ($\beta=1.326, p <0.01$) lead to a significantly positive effect on employees' motivation to do overtime work. Thus, the hypotheses H1a, H1b and H1d have been accepted. Moreover, the results indicate that monetary compensation seems to be the most effective compensation type for motivating employees to do overtime work ($\beta=2.046, p <0.01$). This is in line with the conclusion by Heyman and Ariely (2004), which states that people are more likely to tend to reciprocity in monetary market relationships. The monetary compensation is positively related to the effort people want to exert. The more the manager pays in money, the more effort employees are willing to contribute. Within non-monetary compensation types, extra holiday/leave compensation and other non-monetary compensation types (e.g. recognition, promotional opportunities) have a similar positively significant effect on employee motivation to work overtime ($\beta=1.276, p <0.01$ and $\beta=1.326, p <0.01$ respectively). This is in line with a large number of previous studies in accounting control and intrinsic/extrinsic motivation for employee behavior. The general conclusion is that rewards are able to influence people's activities, which explains why they are so broadly advocated (Deci et al 1999). Furthermore, even verbal rewards have a significantly positive influence on intrinsic motivation. If the tangible rewards are unexpected or not contingent on task behavior, it will not crowd out people's intrinsic motivation. Therefore, in general, giving a reward is always better than giving nothing.

Additionally, under the scenario-based questions, the compared mean results (see detail in Appendix 3) demonstrate that most of the participants have the highest motivation rate to do overtime work if they receive extra holiday/leave as compensation (Mean=6.1103, Std. Deviation=1.3584) and other non-monetary compensation types (e.g. recognition, promotional opportunities, Mean=6.1077, Std. Deviation=1.3851), followed by monetary compensation (Mean=5.9205, Std. Deviation=1.4261), and gift compensation (e.g. dinner, flower, coupon, etc. Mean=5.3718, Std. Deviation=1.2585). It is no surprise that, under the no-compensation situation, employees tend to have the lowest motivation to do overtime work (Mean=4.6462, Std. Deviation=1.5181)

7. Conclusions

This thesis analyzes how different types of compensation influence the motivation to work overtime. The results show that no compensation negatively influences employee's motivation and all compensation types have a positive impact on motivation to do overtime work. Then, compared with monetary compensation and non-monetary compensation, people prefer to have non-monetary compensation when they put themselves into different scenarios. It means that employees believe non-monetary compensation can make them more motivated to work overtime. However, due to the data analysis on participants who engage in overtime, the employee-favored compensation type is not the most effective motivator in practice. The data shows that people who experience monetary compensation in overtime work have higher motivation than people who receive all other types of non-monetary compensation.

7.1 Discussion

A monetary compensation system leads to higher motivation in practice while, under a different scenario, people seem to think that non-monetary compensation leads to higher overtime work motivation. A possible reason is that non-monetary compensation, including holiday and advancement opportunity, makes people feel that the workplace is more like a social market than a monetary market. People's working intention is not purely for money but also for future achievement and wanting to have a good work-life balance. However, in reality, the organization compensation system is under a fixed rule to cover all people and does not distinguish between individual preferences. Hence, in practice, it is possible that the reward type the company offers is not the one the employee wants. Thus, monetary compensation is the second-best choice that can be converted into another benefit.

Another possible reason is the "gift exchange in work place", which means that the employee wants to be cared for as a person in the workplace instead of being regarded as a machine with a task to perform. Such employees access the manager's intention by their actions. The altruistic manager pays more attention to employees and is rewarded with more work motivation and less turnover, even with a lower wage. However, a social benefit seems to depend more on a personality that allows people to feel that they are not receiving compensation for their contribution, but doing a favor for a friend. The data seems to explain that in daily practice, people want to find friendship and build good social relations with colleagues. Moreover, non-monetary reward systems for overtime work, in practice, fails to allow people to feel that are

they are cared for as a friend, but are more like a compensation in exchange for effort. That is why people under a monetary compensation system in real life have a higher satisfaction.

7.2 Theoretical and practical contributions

This thesis extends the scope of overtime-work studies. Prior overtime-work studies mainly focus on examining the relationship between overtime work and health of employees (Yamada et al 2013; Ala-Mursula et al 2002). According to Golden (2007), during the last decades, the working hours for managers and white-collar workers have increased in some countries, while working hours for blue-collar workers have decreased dramatically. Several studies state that, in general, working long hours and working overtime are associated with a lower degree of job and family satisfaction and poor psychological and physical health (Dembe et al., 2005; Sparks et al., 1997; van der Hulst, 2003). Other mainstream overtime-work literature focuses on work-life balance or family relationship. Motivation of overtime work only gained the attention of few studies. This is the first paper view overtime work separate from normal working hours in order to analyze the influence of the compensation type.

Furthermore, this study extends the body of existing literature on motivation for compensation. Many existing studies analyze the way in which compensation influences human motivation and behavior, in the field of both economics and psychology. This thesis appears to support economic theories that propose monetary compensation is the most effective motivator for overtime work.

This research focuses on the monetary compensation effect on motivation of overtime work as well as the influence of social compensation. Other existing literature mostly focuses on either monetary *or* non-monetary compensation influences on work motivation. This paper refers to social benefit as a type of compensation since social benefit also influences people's decision-making. According to Vohs et al. (2006), many existing studies emphasize that money is the greater motivator of people, while it also influences the way people treat others. She believes that the money itself brings people into functionality mode, which causes people to become independent and act less humanely. However, other literature holds the view that monetary compensation may decrease employee motivation, but social compensation encourages employees' intrinsic motivation to work.

In practice, managers can analyze this topic and gain from a better trade off in the reward-system design and have more insight into how people are motivated between different types of compensation, which includes both monetary and non-monetary compensations. It is helpful to further motivate people and increase efficiency by keeping people in line with company objectives and strategies. The study also shows that the most effective motivator differs between what people think and practice. It suggests that the reward-system design is preferable, taking into account the subjective bias.

7.3 Research limitations

The snowball sampling method was used to collect questionnaires, which may cause bias in the sample's representation of the population. I gave my questionnaire to my friends and colleagues, and they gave it to their friends and colleagues. My colleagues make up nearly one third of the sample and most of the people I contacted work in accounting, finance, and organization. So the result may have bias in that it represents employee motivation in other areas to which I personally have no access.

Furthermore, people may be subjective when filling in a questionnaire. For example, a participant thinks they were 80 % motivated to work under monetary compensation system; however, they may actually be 90% motivated in real life. The cognitive difference between how people feel and the reality is somewhat different.

7.4 Recommendations for further research

First, in this thesis, non-monetary reward as a part of social benefit is only considered in the manager-employee relationship, because the non-monetary benefit is seen as a part of a reward system. Nevertheless, reciprocity and altruism factors may influence relationships between employees that influence work motivation, but is not covered in this thesis. Future workplace motivation study is suggested to review a broader scope of workplace relationship motivators that influence motivation.

Furthermore, encouraging group tasks may cause higher motivation under non-monetary compensation by involving more social exchange, such as communication in the workplace.

Future study can also involve more job content differences, position differences, and industry difference factors to make the relationship more practical and so provide a guide.

Finally yet importantly, this thesis does not include short-term or long-term mechanisms. According to Herzberg (1986), monetary compensation is only a short-term solution, because employees will expect to get more money the next time. Intrinsic motivators, such as recognition, will give employees long-term motivations to enjoy work, in and for itself. But attitude changes need time. It is a good direction to further investigate how the compensation type influences motivation under a one-time job or a repetitive task in the overtime period.

8. References

- Adams, J. S. (1965). Inequity in social exchange. *Advances in experimental social psychology*, 2(267-299).
- Akerlof, G. A. (1982). Labor contracts as partial gift exchange. *The Quarterly Journal of Economics*, 543-569.
- Ala-Mursula, Leena, Jussi Vahtera, Mika Kivimäki, May V. Kevin, and Jaana Pentti. (2002). "Employee control over working times: associations with subjective health and sickness absences." *Journal of epidemiology and community health* 56, no. 4 Page: 272-278.
- Alchian, A. A., and Demsetz, H. 1972. Production, information costs, and economic organization. *The American economic review*, 777-795.
- Allen, N. J., and Meyer, J. P. (1990). Organizational socialization tactics: A longitudinal analysis of links to newcomers' commitment and role orientation. *Academy of Management Journal*, 33(4), 847-858.
- Amabile, T. M., DeJong, W., and Lepper, M. R. (1976). Effects of externally imposed deadlines on subsequent intrinsic motivation. *Journal of Personality and Social Psychology*, 34, 92-98.
- Amagasa, T., Nakayama, T., and Takahashi, Y. (2005). Karojisatsu in Japan: characteristics of 22 cases of work-related suicide. *Journal of occupational health*, 47(2), 157-164.
- Arbak, Emrah, and Laurence Kranich (2007). "Can Wages Buy Loyalty?" Working paper, Department of Economics, University at Albany, SUNY.
- Atkinson, A. A., Banker, R., Kaplan, R. S., and Young, S. M. (2001). *Management Accounting* (3rd ed.). Upper Saddle River, NJ: Prentice-Hall.
- Baiman, S. (1982). Agency research in managerial accounting: a survey. *Journal of Accounting Literature*, 1, 154-213.
- Baiman, S. (1990). Agency research in managerial accounting: a second look. *Accounting, Organizations and Society*, 15,341-371.
- Baron, J. N., and Kreps, D. M. (1999). Consistent human resource practices. *California Management Review*, 41(3), 29.
- Beckers, D.G.J., Van der Linden, D., Smulders, P.G.W., Kompier, M.A.J., Van Veldhoven, M.J.P.M. and Van Yperen, N.W. (2004). Working overtime hours: relations with fatigue, work motivation, and the quality of work. *Journal of Occupational and Environmental Medicine*, 46, 1282-1289.
- Beckers, D. G. J. (2008). Overtime work and well-being: opening up the black box. [Sl: sn].
- Bedeian, A. G. 1993. *Management*. 3rd ed. New York: Dryden Press.
- Bejean S, Sultan-Ta'eb H, Wolff N (2003) Modelling the Social Cost of Work-Related Stress
- Bonner, S.E. and Sprinkle, G.B. (2002). The effects of monetary incentives on effort and task performance: theories, evidence, and a framework for research. *Accounting, Organizations and Society* 27, 303-345.
- Brett JM, Stroh LK (2003) Working 61 plus hours a week: Why do managers do it? *J Appl Psychol* 88: 67-78
- Carr, D. (1986). *Time, narrative, and history* (p. 19). Bloomington: Indiana University Press.
- Caruso, C., Hitchcock, E., Dick, R., Russo, J., and Schmit, J. (2004) Overtime and extended work shifts: Recent findings on illnesses, injuries, and health behaviors. National Institute for Occupational Safety and Health (NIOSH), publication number: 2004-143.
- Caruso, C.C. (2006). Possible broad impacts of long work hours. *Industrial Health*, 44, 531-536.
- Christ, M.H., Emmett, S.A., Summers, S.L., and Wood, D.A. 2012. The effects of preventive and detective controls on employee performance and motivation. *Contemporary Accounting Research* 29, 432-452

- Cropanzano, R., and Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of management*, 31(6), 874-900.
- Danner, F. W., and Lonky, E. (1981). A cognitive-developmental approach to the effects of rewards on intrinsic motivation. *Child Development*, 52, 1043–1052.
- deCharms, R. (1968). *Personal causation: The internal affective determinants of behavior*. New York: Academic Press.
- Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18, 105–115.
- Deci, E. L., Betley, G., Kahle, J., Abrams, L., and Porac, J. (1981). When trying to win: competition and intrinsic motivation. *Personality and Social Psychology Bulletin*, 7, 79–83.
- Deci, E. L., and Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum Press.
- Deci, E. L., and Ryan, R. M. (1985b). The general causality orientations scale: self-determination in personality. *Journal of Research in Personality*, 19, 109–134.
- Deci, E. L., Koestner, R., and Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological bulletin*, 125(6), 627.
- Dembe, A., Erickson, J.B., Delbos, R.G., Banks, S.M. (2005). The impact of overtime and long work hours on occupational injuries and illnesses: New evidence from the United States, *Occupational Environment Medicine*, 62, 588–597.
- Donaldson, Les (1980) *Behavior Supervision*. Reading, MA: Addison-Wesley.
- Dur, R. (2009). Gift exchange in the workplace: Money or attention?. *Journal of the European Economic Association*, 7(2-3), 550-560.
- Dillman, D.A. 2000, *Mail and Internet Surveys: The Tailored Design Method*, Wiley, New York, NY
- Eisenberger, R., and Cameron, J. (1996). Detrimental effects of reward: Reality or myth?. *American psychologist*, 51(11), 1153.
- Eisenhardt, K. M. (1989). Agency theory: an assessment and review. *Academy of Management Review*, 14, 57–74.
- Ellingsen, Tore, and Magnus Johannesson (2008). “Pride and Prejudice: The Human Side of Incentive Theory.” *American Economic Review*, 98, 990–1008
- European Foundation for the Improvement of Living and Working Conditions (2007). *Fourth European Working Conditions Survey*. Dublin: European Foundation for the Improvement of Working and Living Conditions. Retrieved from <http://www.eurofound.eu.int>, January 22, 2007.
- Fisher, C. D. (1978). The effects of personal control, competence, and extrinsic reward systems on intrinsic motivation. *Organizational Behavior and Human Performance*, 21, 273–288.
- Frey, B. S., and Goette, L. (1999). Does pay motivate volunteers?. University of Zurich, Institute for Empirical Research in Economics.
- Frey, B. S., and Jegen, R. (2000). Motivation crowding theory: A survey of empirical evidence.
- Geurts, S.A.E. and Sonnentag, S. (2006). Recovery as an explanatory mechanism in de relation between acute stress reactions and chronic health impairment. *Scandinavian Journal of Work, Environment & Health*, 32(6), 482-492.

- Geurts, S.A.E., Taris, T.W., Kompier, M.A.J., Dijkers, J.S.E., Van Hooff, M.L.M., and Kinnunen, U.M.(2005). Work-home interaction from a work psychological perspective: Development and validation of a new questionnaire, the SWING. *Work & Stress*, 19(4), 319-339.
- Gibbons, R. (1998). Incentives in organizations (No. w6695). National Bureau of Economic Research.
- Gneezy, U., and Rustichini, A. (1998). Pay Enough-Or Don't Pay At All. Center for Economic Research, Tilburg University.
- Golden, Lonnie, and Morris Altman.(2008). "Why do people overtime work? Over-supply of hours of labor, labor market forces and adaptive preferences." *The long work hours culture: causes, consequences and choices*; Ronald Burke, Cary Cooper, eds : 61-83.
- Golden, L., and Gebreselassie, T. (2007). Which Workers Prefer to Exchange Income for a Change in Work Hours in the US? *Monthly Labor Review* , 130 (4), 18-37.
- Goodman, L. A. (1961). Snowball sampling. *The annals of mathematical statistics*, 148-170.
- Grant, A. M., Dutton, J. E., and Rosso, B. D. (2008). Giving commitment: Employee support programs and the prosocial sensemaking process. *Academy of Management Journal*, 51(5), 898-918.
- Hardr é P. L., and Miller, R. B. (2006). Toward a current, comprehensive, integrative, and flexible model of motivation for instructional design. *Performance Improvement Quarterly*, 19(3), 27-54.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Herpen, van M., Praag, van M., Cools, K. (2005). The effects of performance measurement and compensation on motivation: an empirical study. *The economist*, Vol. 153, pp. 303-329
- Herzberg, F. (1986). *One more time: How do you motivate employees*. New York: The Leader Manager, 433-448.
- Heyman, J., and Ariely, D. (2004). Effort for compensation a tale of two markets. *Psychological Science*, 15(11), 787-793.
- Higgins, J. M. (1994). *The management challenge*. 2nd ed. New York: Macmillan
- Horngren, C. T., Foster, G., and Datar, S. M. (2000). *Cost accounting: a managerial emphasis*(10th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Hurd, M. D. (1996). The effect of labor market rigidities on the labor force behavior of older workers. In: D. Wise (Ed.), *Advances in the economics of aging*, National Bureau of Economic Research Project Report series (pp. 11–58).
- Iwasaki, K., Sasaki, T., Oka, T. and Hisanaga, N. (1998). Effect of working hours on biological functions related to cardiovascular system among salesmen in a machinery manufacturing company. *Industrial Health*, 36, 361-367.
- Jacobs, J. A., and Gerson, K. (2001). Overworked individuals or overworked families? Explaining trends in work, leisure, and family time. *Work and occupations*, 28(1), 40-63.
- Jacobs, J.A. and Gerson, K. (2004). *The time divide: work, family, and gender inequality*. Harvard University Press, Cambridge, MA.
- Jensen, M. C., and Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.
- Jensen, M. C., and Meckling, W. H. (1994). Self-interest, altruism, incentives, and agency theory. *Journal of applied corporate finance*, 7(2), 40-45.
- Judd, C. M., and Park, B. (1993). Definition and assessment of accuracy in social stereotypes. *Psychological*

- review*, 100(1), 109.
- Judge, T. A., Livingston, B. A., and Hurst, C. (2012). Do nice guys—and gals—really finish last? The joint effects of sex and agreeableness on income. *Journal of personality and social psychology*, 102(2), 390.
- Kerr, S. (1975). On the folly of rewarding A, while hoping for B. *Academy of Management journal*, 18(4), 769-783.
- Kodz, J., Davis, S., Lain, D., Strebler, M., Rick, J., Bates, P., Cummings, J., Meager, N., Anxo, D., Gineste, S., Trinczek, R. and Pamer, S. (2003). Working Long Hours: a Review of the Evidence: Volume 1 – Main Report, DTI Employment Relations Research Series ERRS16, 2003.
- Kohn, A. (1993). Why incentive plans cannot work.
- Kompier, M.A.J. (2003). Job design and well-being. In: Schrabracq MJ, Winnubst JAM, Cooper CL, ed. *The Handbook of Work and Health Psychology* (pp. 429-454). Chichester: John Wiley & Sons.
- Kube, S., Mar échal, M. A., and Puppe, C. (2012). The currency of reciprocity: Gift exchange in the workplace. *The American Economic Review*, 1644-1662.
- Kuhn, P., and Lozano, F. (2005). The expanding workweek? understanding trends in long work hours among US men, 1979-2004 (No. w11895). National Bureau of Economic Research.
- Lee, S. (2004). Working-hour gaps. In: *Working time and workers' preferences in industrialized countries*, Messinger JC (Ed.), 29-59, Routledge, London and New York.
- Lepper, M. R., and Greene, D. (1975). Turning play into work: effects of adult surveillance and extrinsic rewards on children's intrinsic motivation. *Journal of Personality and Social Psychology*, 31, 479-486.
- Locke, E. A., and Latham, G. P. (2004). What should we do about motivation theory? Six recommendations for the twenty-first century. *Academy of Management Review*, 29(3), 388-403.
- McCann, D. (2005). Working time laws: A global perspective. Findings from the ILO's Conditions of Work and Employment Database. Geneva: International Labour Organization
- McGarty, C., Yzerbyt, V. Y., and Spears, R. (2002). Social, cultural and cognitive factors in stereotype formation. *Stereotypes as explanations: The formation of meaningful beliefs about social groups*, 1-15.
- Merchant, K.A. 1982. The control function of management. *Sloan Management Review* (Summer 1982), 43-55.
- Moynihan, D. P., and Pandey, S. K. (2007). Finding workable levers over work motivation comparing job satisfaction, job involvement, and organizational commitment. *Administration & Society*, 39(7), 803-832.
- Pinder, C. C. (1998). *Motivation in work organizations*. Upper Saddle River, NJ.
- Presser, H. B. (2003, June). Embracing complexity: work schedules and family life in a 24/7 economy. In *Conference on Workforce/Workplace Mismatch: Work, Family Health and Well-Being* (pp. 16-8).
- Rhoades, L., and Eisenberger, R. (2002). Perceived organizational support: a review of the literature. *Journal of applied psychology*, 87(4), 698.
- Ryan, R. M. (1982). Control and information in the intrapersonal sphere: an extension of cognitive evaluation theory. *Journal of Personality and Social Psychology*, 43, 450-461.
- Ryan, R. M., and Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology*, 25(1), 54-67.
- Salant, P. and Dillman, D.A. 1994, *How to Conduct Your Own Survey*, John Wiley and Sons, New York, NY.
- Skinner, B. F. (1953). *Science and human behavior*. Simon and Schuster.
- Smith, W. E. (1975). The effect of anticipated vs. unanticipated social reward on subsequent intrinsic motivation.

- Dissertation, Cornell University.
- Sparks, K., Cooper, C., Fried, Y., and Shirom, A. (1997). The Effects of Hours of Work on Health a Meta-Analytic Review. *Journal of Occupational and Organizational Psychology*, 70, 391–408.
- Steers, R. M., and Sanchez-Runde, C. 2001. Culture, motivation, and work behavior. In M. Gannon & K. Newman (Eds.), *Handbook of cross-cultural management*: 190–215. London: Blackwell
- Stone, D. N., and Ziebart, D. A. (1995). A model of financial incentive effects in decision making. *Organizational Behavior and Human Decision Processes*, 61, 250–261
- Titmuss, R. M., Oakley, A., Ashton, J., and Sindall, C. (1998). The gift relationship: From human blood to social policy. *Health Promotion International*, 13, 174-175.
- Uehata, T. (1991). Long working hours and occupational stress-related cardiovascular attacks among middle-aged workers in Japan. *Journal of human ergology*, 20(2), 147-153.
- Van der Hulst, M. (2003). Long workhours and health [review]. *Scandinavian Journal of Work, Environment & Health*, 29(3), 171-188.
- Van Herpen, M., Van Praag, M., and Cools, K. (2005). The effects of performance measurement and compensation on motivation: An empirical study. *De Economist*, 153(3), 303-329.
- Van Hooff, M., and Van den Bossche, S. (2007). Afwijkende werktijden. Deelresultaten van de Nationale Enquete Arbeidsomstandigheden en de TNO Arbeidssituatie Survey. [Unusual worktimes. Results from the National Survey of Work Environment and the TNO Work Situation Survey]. Hoofddorp: TNO Quality of Life.
- Vohs, K. D., Mead, N. L., and Goode, M. R. (2006). The psychological consequences of money. *science*, 314(5802), 1154-1156.
- Vroom, V. (1964). *Work and motivation*. New York, NY: John Wiley
- Wagner, R., and Harter, J. K. (2006). 12: The elements of great managing (Vol. 978, No. 1-59992). Gallup Press.
- Yamada, T., T. Yamada, C. C. Chen, and W. Zeng. (2013). "Overtime work and Adverse Effects on Health." *J Glob Econ* 2, no. 106
- Zanella, B. (1998). *Verdrängung von Reziprozität durch Anreizverträge*. Mimeo. Institute for Empirical Economic Research. University of Zurich
- Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary educational psychology*, 25(1), 82-91.
- Zuckerman, M., Porac, J., Lathin, D., Smith, R., and Deci, E. L. (1978). On the importance of self-determination for intrinsically motivated behavior. *Personality and Social Psychology Bulletin*, 4, 443–446.

Appendix

Appendix1-List of rewards

Table 1. Examples of positive and negative rewards

Positive rewards	Negative rewards (punishments)
Autonomy	Interference in job from superiors
Power	Loss of job
Opportunities to participate in decision making	Zero salary increase
Salary increases	Assignment to unimportant tasks
Bonuses	Chastisement (public or private)
Stock options	No promotion
Restricted stock	Job evaluation
Praise	Demotion
Recognition	Public humiliation
Promotions	
Titles	
Reserved parking places	
Club memberships	
Job security	
Vacation trips	
Participation in development programs	
Time off	

Source: Merchant (1998)

Appendix2-Questionnaire

This survey is key part of my Master research thesis at the Erasmus University of Rotterdam, on the topic of working overtime in corporate environment. I will highly appreciate it if you could support by completing the questions set out in the survey. It will take around five minutes to complete. Your input will be anonymous and kept confidentially.

Please note: the term 'overtime' in this survey has been defined as the time spent on work related activities outside the hours specified in one's employment contract , paid or unpaid, working in the office or working from home.

Q1 what is your gender?

- Female (1)
- Male (2)

Q2 what is your age?

- Under 24 (1)
- 25-34 (2)
- 35-54 (3)
- 55+ (4)

Q3 what is your highest education level?

- Equal or below high school (1)
- Bachelor (2)
- Master (3)
- Equal or above PhD (4)

Q4 How many years have you been employed at your current organization? (To the nearest year)

Q5 How many hours per week are defined in your current contract?

Q6 Please indicate which statement applies to you:

- I never work overtime (1) **If you select this one, please directly go to question Q10**
- I work overtime occasionally (2)
- I work overtime regularly (3)
- I work overtime seasonally (4)

Q7 Please indicate which scenario applies to you in most cases:

- I work over time because I enjoy working itself. (1)
- I work over time for advancement of career opportunities in future. (2)
- I work over time because my job requires (e.g. assignments/projects that require extra hours due to the urgency) (3)
- I work over time due to constant high workload which could not be completed within regular working hours (4)
- I work over time in order to receive compensation for extra hours spent in the office (5)
- Other (6)

Q8 On average, how many hours a week do you work overtime?

Q9 Please select the compensation type you have experienced for working overtime in most cases.

- No compensation (1)
- Monetary compensation (2)
- Overtime converted into holidays/leave (3)
- Gift (e.g. dinner, flowers, coupon, etc.) (4)
- Other non-monetary compensation types (e.g. praises, recognitions, promotional opportunities) (5)

Q10 Please put yourself into different scenarios where you receive different levels of compensation for working overtime. Please indicate, under each scenario, how your perspective on the following elements will be affected. Please indicate your level of agreement or disagreement from 1 to 9 (e.g. 1=strongly disagree, 2=disagree, 3=moderately disagree, 4=mildly disagree, 5=neutral, ...to 9=strongly agree)

	I feel motivated to do overtime work	Doing extra work is fine to me	I feel pleasant during overtime work	This organization deserves my loyalty	I have obligation to finish tasks	Collective goals are more important than my personal preference
A. If you do not receive any compensation						
B. If you receive monetary compensation						
C. If you receive extra holiday/leave as compensation						

D. If you receive gift compensation (e.g.dinner,flower,coupon,etc)						
E. If you receive other non-monetary compensation types (e.g. recognition, promotional opportunities)						

Q11 If you have any extra comment, please write it down.

Appendix3-Paired-samples results

		N	Correlation	Sig.
Pair 1	nocompensation & monetary	70	.468	.000
Pair 2	nocompensation & holiday	70	.269	.002
Pair 3	nocompensation & gift	70	.636	.000
Pair 4	nocompensation & other non-monetary	70	.255	.003
Pair 5	monetary & holiday	70	.650	.000
Pair 6	monetary & gift	70	.551	.000
Pair 7	monetary & other non-monetary	70	.448	.000
Pair 8	holiday & gift	70	.188	.032
Pair 9	holiday & other non-monetary	70	.595	.000
Pair 10	gift & other non-monetary	70	.257	.003

Appendix4-Result of motivation

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	59.307	17	3.489	1.941	.039 ^a
	Residual	80.898	45	1.798		
	Total	140.205	62			

a. Predictors: (Constant), otherreason, extracompensation, gCOM, highschool, never, oCOM, cannotfinish, mCOM, female, opportunities, hCOM, occasionally, bachelor, enjoy, PHD, under24, seasonally, age35_54

b. Dependent Variable:motivation6

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.650 ^a	.423	.205	1.34080

a. Predictors: (Constant), otherreason, extracompensation, gCOM, highschool, never, oCOM, cannotfinish, mCOM, female, opportunities, hCOM, occasionally, bachelor, enjoy, PHD, under24, seasonally, age35_54

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	5.222	.319		16.366	.000		
Monetary Com	2.046	.399	.479	5.128	.000	.597	1.676
HolidayCom	1.276	.351	.312	3.636	.000	.706	1.416
GiftCom	1.859	1.313	.155	1.416	.160	.434	2.306
OtherCom	1.326	.363	.311	3.654	.000	.721	1.387
Female	-.105	.256	-.034	-.409	.684	.740	1.351
Under24	.665	.325	.194	2.045	.043	.577	1.734
Age35_54	-.259	.656	-.047	-.395	.694	.371	2.695
Highschool	1.189	.632	.169	1.883	.062	.645	1.551
Bachelor	-.892	.301	-.283	-2.962	.004	.571	1.750
PHD	-.925	.567	-.151	-1.633	.105	.610	1.639
Regularly	-.689	.470	-.125	-1.465	.146	.721	1.387
Occasionally	-.468	.256	-.158	-1.824	.071	.693	1.444
Seasonally	-.727	.785	-.103	-.926	.356	.418	2.393
Enjoy	.395	.397	.093	.996	.322	.603	1.660
Opportunities	.435	.323	.111	1.347	.181	.773	1.293
Cannotfinish	.067	.349	.016	.191	.849	.777	1.287
Extracompensation	1.247	.918	.104	1.358	.177	.886	1.128
Job Requires	-1.149	.551	-.164	-2.084	.039	.846	1.181

a. Dependent Variable: motivation6