The preference between salary increase and more vacation time

A study of employees in Swedish IT companies

Master of Business Administration

2014 August

Authors:
Henric Löfqvist, Abdulwahab Barbouti, Masood Tariq

Tutor:
Dr. Henrik Sällberg

Blekinge Institute of Technology
School of Management
371 79 Karlskrona
www.bth.se
Acknowledgements

The authors would like to take this time to give thanks to all involved in the completion of this thesis. A special thanks to the respondents of the survey and those who were interviewed, for without their contribution this thesis could never have been completed.

We would also like to take this opportunity to thank Dr. Henrik Sällberg for all the feedback and good advice during the course of completing this thesis.

Henric would like to thank his “sambo” and daughter for their kind understanding during the long nights/weekends spent studying.

Abdulwahab would like to thank his mother “Firdos” for her love and support through the years.

Masood would like to thank his wife, daughter and son, for their patience and support and to everyone who supported in this accomplishment.

Stockholm, Liège and Karlskrona – August 2014

/Henric, Abdulwahab and Masood
Abstract

In order to attract and retain skilled personnel companies must compete with other employers in terms of job content, salaries and other benefits. Two ways of compensating employees are an addition to the base salary or an addition to the employee’s amount of vacation days of the same monetary value as the base salary increase. Companies have limited resources, meaning that knowing if there are ways to attract certain employees more by offering an alternative to a base salary increase would be of interest. There is not much written on the preference of choosing vacation over money, but there are studies that have suggested that vacation would be a more valued option for some. In this study we build on this and add a deeper understanding on the preference in choosing between vacation and money.

This thesis looks at how companies could refine their compensation package they offer to new or already employed personnel given their budget restrictions in looking into an alternative to a base salary increase. For an employee this means being able to choose. This thesis answers the questions if there are any relationships between an employee’s intrinsic motivation, job category (“position”) and that of amount of working hours in choosing extra vacation time over a base salary increase.

Using a survey and interview data from Swedish IT companies this thesis finds no relation between an employee’s intrinsic motivation, job category or amount of working hours to the preference of choosing extra vacation over a base salary increase. However, this thesis finds a relation of age to the same preference, indicating that the older the employee the more likely he would be in choosing vacation over money. The implications are that companies could potentially increase their older employee retention rate by offering to interchange a base salary increase by an increase in the vacation days offered. Another implication is that in offering such an interchange neither the employee’s intrinsic motivation, the amount of hours worked or the job category of the employee are by themselves indicators that he or she would value vacation over money. Suggestions for further research to build upon this study are included at the end of the thesis.

Keywords: Intrinsic motivation, vacation, salary, personnel retention, IT employees
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1. Introduction

1.1. Background – employees and incentives

Today’s fast-changing economic climate with globalization and technological innovation puts pressure on companies to maintain their competitive edge (Burke and Ng, 2006), and one part of that edge is skilled employees. An employer wants to have motivated and happy employees performing at their best towards meeting the company’s objectives. That ideal is not easy to achieve as every person is different in that they have different needs, interest, goals and what motivates them. Also, from time to time an employee’s goals will conflict with those of the company’s objectives. In this section we’ll look at how incentives tie into the employee, starting with the employee’s importance for a company.

Companies invest in their employees in terms of ordinary monetary compensation such as salary, but also in training, responsibilities etc. making the cost of losing them high (Kyndt et al., 2009). An employee who quits takes with him experience, know-how, contact networks etc., so in this process there is a both a loss in the resource and a cost in replacing with a new employee. Demographically the working age in the western countries is increasing and older experienced workers are retiring, meaning that the pool of talent from which to recruit is shrinking (Burke and Ng, 2006). Employee retention is a term describing how well a company manages to keep their employees – as opposed to leaving the company. To have a high employee retention rate, an incentive system that can meet the employees’ needs and personal goals is needed. When implemented successfully employees are committed, effective and less likely to leave the company (Kyndt et al., 2009).

While keeping employees satisfied with their incentives and motivated to work, employers must also strive to align the employees’ performance with the company’s objectives. In doing this, we encounter the first agency problem, which is differing goals. A relationship such as employer/employee is called an agency relationship and agency theory deals with designing the optimal contract between principal (employers) and agent (employee) (Eisenhardt, 1989). The contract would contain incentives, offered by the principal to the agent.

Incentives, or rewards, are used by companies in order to motivate, attract and retain employees (Kaplan and Atkinson, 1998). Incentives can be monetary such as bonuses or salary increases, or they could be non-monetary such as a promotion or extra vacation days (Merchant, 2012). Incentives are also used to signal what areas of performance are important for the company and thus allowing employees to direct their efforts in that direction (Kaplan and Atkinson, 1998). Sometimes an employee needs rewards to overcome his natural aversion for some tasks that are in the company’s best interest but not necessarily the employee’s. Examples of such tasks are working overtime, travelling abroad and weekend jobs. Motivation for such tasks can for example be investing in the employee’s personal growth, monetary incentives and vacations (Bonner and Sprinkle, 2002). An example of this could be working long and hard to gain extra vacation time.

Today’s workforce is the most educated in history and this creates an environment where the workers now have higher salary expectations, higher expectations on partaking in organizational decision making as well as higher demands on the social working situation. Also, more employees are concerned about the work/family balance (Burke and Ng, 2006). Looking at Sweden specifically we find that according to Geert Hofstede’s cultural dimensions Sweden is a very feminine country, meaning that work/life balance is important and incentives such as flexible working hours would be
favoured. On the same scale Sweden also score high on indulgence, part of which means that Swedes put a high importance on leisure time (Geert Hofstede, 2014).

1.2. Problem discussion

There are several factors that influences whether an employee stays with his current employer. Kyndt et al. (2009) lists organisational commitment (norms and practices), personal commitment and compliance with reciprocal obligations and goes on by stating that there is a clear negative relationship between job satisfaction and employee retention. Put in other words, if the employee is not satisfied with his job he is more likely to leave. Walker (2001) identified seven factors that could enhance employee retention and among these are compensation and appreciation, a healthy work/leisure time balance and good communications.

Monetary incentives are often suggested as a means for motivating employees and increasing their performance (Bonner and Sprinkle, 2002), but using a monetary incentive is not without drawbacks. A problem stated by Tang et al., (2004) is that monetary incentives only have an indirect effect on employee retention and it is of influence when the job satisfaction is low and Bonner et al. (2000) finds for management accounting and laboratory experiments monetary incentives often does not improve performance. That paper also finds that a mix of monetary and non-monetary incentives is important. Another study (Salamin, 2000) finds that in a sample of 400 employees from a large Swiss financial institution, quantitative and qualitative results show that material rewards have no unilateral effect on motivation. Prendergast (2008) states that that when hiring an employee “there are many instances where the use of significant monetary incentives is likely to backfire … a useful line of research may be to consider sorting based on the preferences of potential employees.” Drawing on that, a-priori knowledge on potential employee preferences could lend the employer to suggest a better contract.

Examples of non-monetary incentives are development possibilities, promotion and extra vacation days (Merchant, 2012), but could also be such seemingly mundane acts such as a good job-pat on the back by a manager. Nakamura (2011) looks at vacations specifically as an incentive from a strictly theoretical standpoint. He shows that introducing a paid-vacation system tied to performance is effective in increasing the motivation of workers, thus increasing the company’s productivity. That paper concludes that a paid-vacation system is effective in companies where high-skilled workers are required for long working hours. Becchetti et al. (2012) confirms a link between a high intrinsic motivation and higher productivity in a non-profit sector and finds small evidence to support that more intrinsically motivated workers have a larger bank of holidays and unpaid overtime to collect. Building on Nakamura and Becchetti we can ask whether a monetary incentive can be replaced by some non-monetary incentive, for example if some increase in base salary could be replaced by an increase in the amount of permanent vacation days\(^1\) without any extra cost to the employer but to an increase in motivation for the employee.

1.3. Purpose

Given the reasoning mentioned in chapters 1.1 and 1.2 the purpose of this thesis is to add to the knowledge of incentive systems. Specifically if an increase in permanent vacation time can be used as

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\(^1\) This would necessitate some means of equating the two, and one such method could be for the employer to equate the opportunity cost of the vacation time to that of the base salary increase.
an alternative to an increase in base salary. Knowledge on this could help employers in designing better contracts with employees\(^2\) and increasing their retention rate.

This thesis looks specifically at three factors that could influence this selection, and these are reflected in the research questions; intrinsic motivation, job category and total amount of hours worked on a weekly basis. There is a vast body of research on incentive system design\(^3\), but to the best of our knowledge there is no explicit study on preferences for these incentive system components with regards to the level of intrinsic motivation.

Knowledge on whether these factors affect the vacation/salary choice would prove valuable for companies as this would suggest a cost-efficient way to design a more optimal contract.

The research questions are presented below:

1 a. **How does the level of intrinsic motivation affect the preference between a permanent salary increase and its monetary equivalent of additional permanent vacation time?**

   1 b. **How does this preference differ between different job categories (“position”) in the company?**

2. **How does the amount of hours worked on average per week affect the preference between a permanent salary increase and its monetary equivalent of additional permanent vacation time?**

### 1.4. Structure

**Introduction**
The chapter provides the background, problem discussion and ends by stating the research questions and its purpose.

**Theory**
The chapter contains the theoretical framework this thesis is based on. The finding from the data gathered is analysed through this theoretical lens.

**Methodology**
The chapter explains how the data gathering is conducted, including the choices and considerations made throughout the conception and construction of this thesis.

**Results**
In the results chapter the results from the data gathered are presented without any interpretation.

**Discussion**
This chapter will relate the results to the theoretical framework the theory chapter.

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\(^2\) One of the authors have experience in picking vacation time over money and in passing telling this story sparked more discussions on what makes someone pick vacation over money. This was the first seed of this thesis.

\(^3\) In 1996 the Nobel Prize in economics was awarded to William Vickrey and James Mirrlees for their work in the field.
Conclusions
This chapter offers the conclusions reached during this thesis. It will also answer the research questions posed.

References

Appendices
The appendices are the survey and interview template.
2. Theory

2.1. Employee incentives

The purpose of an incentive, or a reward, should according to Merchant (2012) be to “provide the impetus for the alignment of the employee’s natural self-interests with the organization’s objectives”. In other words the organization’s objectives are assumed to differ from that of the employee and incentives act as guides to align the employee’s interests with that of the organization. The mentioned assumption ties into principal-agent theory, which is explained below.

Rosentiel (1975) and Weinert (1998) saw that incentives and rewards are partially responsible for motivating employees not only to perform well for his/her employer, but also to join the company and choose to stay working for it. Later, Merchant (2012) recognized three main control benefits of incentives as:

- **Informational.** They attract and direct the employees’ attention to the organizations’ focus area. If the organization is focusing on customer service, the employees’ attention is focused to that if incentive systems are tied to customer service success (Merchant and Stede, 2012).
- **Motivational.** They serve as the motivator for hard and good work. Some employees may need this “carrot” to carry out perceived boring tasks that are in the organization’s best interest. This control benefit is the main benefit in relation to this thesis.
- **Attraction and retention of personnel.** In order to attract and retain key personnel these systems can be designed to attract certain persons. For example, compensation packages with a high portion of performance-dependent above-average salary would tend to attract personnel confident on their own ability to perform well.

This thesis utilizes a model of human motivation and incentive systems. For any incentive to be motivational Merchant (2012) iterates that an incentive should be valued, large enough, timely, understandable, durable, reversible and cost efficient. Failure to meet any of the first four will thus counteract some of the intended motivational effect of the incentive. Failure to meet any of the last two is more closely tied to the company and its cost efficiency, with the exception of a reversed incentive, for example a retracted promotion whose consequences could be very costly for all parties.

What actually constitutes an incentive is in the Rosenstiel model regarded widely to include all monetary and non-monetary incentives the organization offers. Monetary incentives are common, but they are not the only ones (Rosenstiel, 1975). This thesis will focus on two specific incentives provided by the employer, namely permanent increase in base salary and a permanent increase in vacation time. Vacation is not money – you cannot pay your mortgage with a vacation day, but the employer can attribute a monetary cost to the vacation time, so in this regard they can both be considered monetary.

In short incentives are given by the company to motivate the employees to perform in the company’s best interest. The relationship that forms from this setup can be called a principal agent relationship.
2.1.1. Principal agent theory

The core of the principal agent problem simply lies in ensuring one party (agent) acts in the best interest of the other party (principal) and not his/hers own. Agency theory uses the metaphor of a contract to mirror the relationships of a principal and an agent who are engaged in cooperative behaviour, but have differing goals and differing attitudes toward risk (Eisenhardt, 1989). From the same source we come to the “heart” of principal-agent theory as being the trade-off between 1) the cost of measuring behaviour and 2) the cost of measuring outcomes and transferring risk to the agent (Eisenhardt, 1989).

There are various types of problems that arise in principal-agent relationships. These are problems in establishing a proper level of control, knowing if a contract is fulfilled, knowing if a prospective employee (agent) is the right one for the job as well as there being differences in risk preferences between the two parties. For this thesis, where an employer (principal) offers an employee (agent) an incentive there are two problems that deals directly with the different levels of information either party has. Moral hazard is the problem of the agent withholding information from the principal due to self-interest. This has an informational counter-part called information asymmetry, which is the probable scenario that the principal knows more about the agent regarding, for example, outlook for rewards (Stiglitz, 2002). In Figure 1 below a model of the principal-agent relationship is shown.

![Figure 1. The principal agent relationship](image)

To overcome information asymmetry conflicts Eisenhardt (1989) proposes that the time factor plays a role in mitigating this problem, as the longer the principal-agent relationship is held the more the actors are bound to know about each other. If the agency relation is repeated over time the agent can be induced to produce the result wanted by the principal (Sappington, 1991). In other words, a long agency relationship or a shorter agency relationship repeated numerous times can mitigate the information asymmetry because the principal and the agent “learn” about their relationship.

2.2. Types of motivation

There is no one definition on motivation but by taking the “helicopter view” on the different definitions we can see that they tend to have a few words in common: desire, want, wishes, aim, goals, needs and incentives (Tella et al., 2007). Two examples of definitions follows starting with Luthans (1998) as “a process that starts with a physiological deficiency or need that activates a behaviour or a drive that is aimed at a goal incentive” and the definition from Svenska Nationalencyklopedin as “[a]
The above definitions and others are related in that motivation is the result of some forces or factors that push individuals to perform and sustain this performance over the time.

Motivation in the context of work can be defined in terms of job satisfaction and organizational commitment (Bjorklund, 2007). Job satisfaction is defined by Locke (1976) as “a pleasurable or positive emotional state resulting from the appraisal of one’s job” and organizational commitment results from the employee’s perception of his job and the degree to which there is a good fit between the individual and the organisation (Ivancevich et al., 1997:86). Work motivation can thus be said to be a specific case of motivation which deals with the relationship between the individual and his work.

There are different types of motivation, and according to Ryan and Deci (2000a) the most basic distinction is between intrinsic motivation and extrinsic motivation. These are explained in separate chapters.

### 2.2.1. Intrinsic motivation

Intrinsic motivation is commonly defined as doing something for its own sake (Reiss, 2012). This is because intrinsic motivation captures the pleasure and inherent satisfaction derived from a specific activity (Deci, 1975). That is, an activity is undertaken for its novelty, challenge or aesthetic value for the individual rather than some separable outcome. This is the distinction used in the WEIMS (see chapter 3.2) which can be used as a metric for intrinsic motivation.

For a deeper explanation of intrinsic motivation we utilize a model by Lawler (1970), which is the definition used for this thesis. This definition expands Deci’s definition to include feedback and this is visualized in Figure 2 below. Lawler’s view on intrinsic motivation is that it is the degree to which an employee is motivated to perform well because the resulting good feelings and subjective rewards, such as self-esteem, competence, autonomy and personal growth.
Figure 2. Intrinsic motivation model.

In this model the $E \rightarrow P$ is the subjective probability that a person assigns to the likelihood he will perform ($P$) at a certain level, given the effort ($E$). The term intrinsic motivation is enclosed in the big brackets in Figure 2. $P \rightarrow O$ is the subjective probability that the performance will lead to a likeable outcome ($O$). This is multiplied by the valence ($V$), which is the degree of attraction or aversion felt by the person for the task at hand. This model tells us that the product of the probability that the effort that leads to the performance and the probability that this performance leads to the outcome will determine the level of intrinsic motivation. The term $E \rightarrow P$ is affected by self-esteem and previous experiences of similar situations, and the term $(P \rightarrow O) (V)$ is affected by the two factors: the person’s view on whether he acts on the world (internal) or the world acts on him (external) and feedback from learning. Lawler also notes that an employee will be intrinsically motivated to perform well provided there is feedback that also valued by the employee (Cammann and Lawler, 1973). In summary, this model dictates that a person will not (of his or hers free will) engage in an activity that will not lead to a successful outcome.

This model puts the intrinsic motivation in a larger perspective and relates it to rewards, which for this thesis is set to a permanent increase in base salary and a permanent increase in vacation days.

According to Ryan (2000) what enhances intrinsic motivation are action that conduce competence, such as feedback (reflected in the model), communication, autonomy and rewards. For an employer to enhance the intrinsic motivation for an employee action to take could include optimal challenges, positive feedback, and freedom from demeaning evaluations. It is very important to note that this only holds true for activities that the individual finds intrinsically interesting and this varies from individual to individual. Motivation for an activity not intrinsically interesting requires analysing the extrinsic motivation (Ryan and Deci, 2000a)

On a side note, the first recorded use of the term intrinsic motivation comes from an experiment with monkeys doing puzzles in which some monkeys did better when they were intrinsically motivated rather than provided with some external reward (Harlow, 1950).
2.2.2. Motivation for overtime

Working overtime implies that the hours actually worked exceed the contractual amount of hours, say per week. Overtime can be both on weekdays and over weekends and for the vast majority of workers overtime is remunerated at a different level than the standard, for example, hourly rate (Hart, 2004). A study by Beckers et al. (2004) on Dutch workers finds that the respondents in that study who worked overtime appeared to be motivated workers. Becchetti et al. (2012) finds that independent of wages of the employees, intrinsic motivation lead to higher amounts of overtime and Akehurst et al. (2009) shows that job satisfaction has a positive correlation to the company performing well.

Working overtime because you are motivated to do so (and are allowed to by the employer) is however only one of the reasons to actually work overtime. Table 1 below summarizes the 1998 British Workplace Employee Relations Survey and we find that “I enjoy my work” is found at the very bottom. That survey was taken by 2191 British companies by 28323 employees of varying positions within their company. The table is adapted from (Hart, 2004:1).

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>So that I can get all my work done</td>
<td>24.5</td>
</tr>
<tr>
<td>It’s required as part of my job</td>
<td>23.7</td>
</tr>
<tr>
<td>I need the money</td>
<td>20.0</td>
</tr>
<tr>
<td>I never work extra in any way</td>
<td>11.8</td>
</tr>
<tr>
<td>I don’t want to let down the people I work with</td>
<td>10.0</td>
</tr>
<tr>
<td>Some other reason</td>
<td>5.5</td>
</tr>
<tr>
<td>I enjoy my work</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Table 1. “Why do you work overtime?”

An intrinsically motivated worker could of course be working overtime due to other factors as well, such as needing the money. This leads us conclude that there are many reasons why someone is actually working overtime regardless of his or her intrinsic motivation.

2.3. Extrinsic incentives as motivation

Ryan (2000) states that the key reason people initially perform an activity that is not interesting for them is because the behaviours are prompted, modelled, or valued by significant others to whom they feel, or want to feel, attached or related to. Extrinsic motivation focuses on goal-driven reasons such as the relatedness just stated, rewards or benefits earned when performing an activity (Deci, 1975). The goal-driven reasons can be either monetary (like big salary increase) or non-monetary, like wanting praise for some activity.

Given that extrinsic motivation ties into rewards, an incentive can be considered as an extrinsic reward. According to agency theory, without any extrinsic motivation of any kind the effort expended by the agent should be minimal.
Extrinsic motivation can “overshadow” or undermine intrinsic motivation. If an agent pursues some activity for the enjoyment of the activity itself, by introducing an extrinsic motivation (for example money) to pursue the same activity then it will be harder to separate which motivation is the stronger (Kreps, 1997; Ryan and Deci, 2000b).

For this thesis two extrinsic incentives are in focus, and these are discussed in greater detail below.

2.3.1. Permanent salary increase as an extrinsic incentive

An employee’s base salary is at some interval, often annually, increased by some fraction. This increase on the base salary can count as an annuity and is a very common setup by organizations to reward their employees. This increase in base salary can only be regarded as a monetary reward when they are based on something other than just a standard increase given to all employees; when they are expected to be “earned” through performance or acquisition of skills that will improve performance in periods to come (Merchant and Stede, 2012).

The salary itself can be regarded as supporting the process of continuing development of both the organization and the employee, and the individual salary for an employee should be based on how qualified the work is, the employee’s performance and content of the work produced (Frick, 2004). Based on this an increase in base salary should support the employee’s development.

One paper by Fehr and Falk (2002) shows that a high base salary signals trust on the company’s behalf; effectively telling the employee that it trusts him or her to perform well without the use of any “carrot”.

An extensive meta-analysis of 92 quantitative studies spanning 120 years by Judge et al (2010) finds that there is a weak dependency between salary and job satisfaction (< 2 %). That study included over 15000 individuals and looked at 115 correlation coefficients and concludes that the level of job satisfaction remains relatively stable in all included studies, regardless of the change in mean pay level. This would indicate that permanent increases in base salary are a weak incentive (Judge et al., 2010). This view is confirmed by a Gallup report from 2011 which reports no difference in “job engagement” between its three annual income tariffs it utilizes, based on 2341 random American workers.

2.3.2. Permanent increase of vacation time as an extrinsic incentive

As mentioned in chapter 1.2 (problem discussion), Nakamura (2011) looks at vacations specifically as an incentive from a theoretical standpoint. By assuming that employers give more paid vacation to employees the more they produce above the bare minimum to get fired he assumes that employees that put a high weight to leisure will work harder to earn more paid vacation. By doing this, that paper shows that introducing a paid-vacation system related to performance effectively increase the motivation, and thus raising productivity. Nakamura concludes that a paid-vacation system is effective in companies where skilled workers are required to work long hours and puts forth a paid-vacation system as an alternative to a performance-based wage system. In doing this it addresses paid vacation as a competitive incentive system and is also aligned with Walker (2001) who in a walk-through of common “best-practices” by companies identifies that a healthy balance between professional and personal life is one of seven factors that can potentially enhance employee retention. As also mentioned in chapter 1, Becchetti (2012) finds weak evidence that nonetheless broaches this thesis’ topic in that more intrinsically motivated workers may have more vacation days.
and hours of unpaid overtime in their “time bank”. That paper base this on that intrinsically motivated workers to a higher extent “donates” their time and work instead of having leisure time.

In a report by WorldatWork and Mercer (2010) respondents representing a random selection of organizations 95 % of the respondents indicated base salary as being a part of their total reward\(^4\) and 59 % extra vacation time as part of their total reward. This highlights the importance of offering a mixture of incentives. Related to this, Baeten and Verwaeren (2012) mention being able to make a conscious choice between rewards as a component of a flexible incentive system would make the employee appreciate the reward more. The trades “fixed pay for extra vacation days” and “vacation days for extra cash” are presented as two possible trades. That same paper states that 86 % of the managers responding in the survey agree that the option to choose rewards will increase the company’s attractiveness and 65 % believe this flexibility will affect employee retention positively.

The organization can calculate what it would miss out on in terms of productivity (of which money is one part) and the employee can calculate the value by simply converting it into money. The authors of this thesis find no research on this, but states it here as a fair assumption. Given this a permanent increase in vacation time can be translated into monetary means by both parties in the principal agent relationship.

\(^4\) “Total rewards is a term that … describes the concept that several employment factors (such as compensation, benefits and work life amenities) can be strategically applied, in unison, to deliver desired employee attraction, motivation and retention” (WorldatWork and Mercer, 2010)
3. Methodology

In this chapter the research methods used for this thesis are presented and discussed. The purpose is to inform the reader how the authors have designed, performed, analysed and finally interpreted and presented the information.

We conducted an online survey in Sweden with employees working in the IT business in order to answer the research questions on how the intrinsic motivation affect an incentive preference and also if the amount of overtime and job category affects this same preference. The intention is for these results to be transferable into IT environments in Sweden. We also conducted a few interviews to provide some in-depth insights.

3.1. Selecting the respondents

All respondents were employed by different IT companies in Sweden of varying sizes, regions and age. Two of the authors are themselves employed by Swedish IT companies, so the entry point to the respondents were colleagues to the authors who were asked to pass the link to the survey along to persons they knew who also worked in an IT company in Sweden. This takes the form of a “chain letter” but allows for a quick spread of the survey.

The IT industry was chosen as environment partly because we wanted to target white-collar workers and partly because of the easier access for the authors to respondents.

An important note is that while the study was conducted in Sweden, not all respondents were Swedish natives – that is why the survey was designed in English.

3.2. Research instrument

As research instrument for the quantitative part an online survey was chosen. We chose this because the studied questions has a quantitative quality and requires many answers in order to infer any results. A survey is useful when there is need to gather more data than would have been possible by interviews or observations and when there is a clear image of what data needs to be gathered (Winter, 1988). The data needed by this thesis meets those criteria.

Before designing the questions for the survey a few pre-survey interviews were conducted to give some a-priori data for designing the survey questions. The interview data thus collected was never used beyond the design of the survey questions. These interviews are not related to the interviews conducted using the survey as template. Table 3 below describes the different steps in the methodology in chronological order. Due to time constraints and access to the interviewees the survey had to be sent out before all interviews were conducted.

<table>
<thead>
<tr>
<th>Step</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pre-survey interviews</td>
<td>Interviews conducted prior and during the construction of the survey. Used for feedback on the survey only.</td>
</tr>
<tr>
<td>2. Interviews</td>
<td>Four interviews were conducted using the survey as a template to give depth to the questions asked.</td>
</tr>
<tr>
<td>3. Survey</td>
<td>An online survey sent to capture the quantitative data.</td>
</tr>
</tbody>
</table>
The independent variables are defined as the amount of intrinsic motivation and the amount of overtime worked each week. To measure intrinsic motivation the three statements from the WEIMS scale relating to intrinsic motivation was used (Tremblay et al., 2009), meaning that they use a 7-point Likert scale from “1 – Strongly disagree” to “7 – Strongly agree”.

Using the three statements from the WEIMS scale is done because the WEIMS scale is in itself grounded in Self-Determination Theory, in which motivation is made up by intrinsic and extrinsic motivation. The scale has proven its validity and reliability for use in organisational settings (Tremblay et al., 2009).

The three statements with the scale 1-7 are:

- Because I derive much pleasure from learning new things.
- For the satisfaction I experience from taking on interesting challenges.
- For the satisfaction I experience when I am successful at doing difficult tasks.

The amount of overtime is input as a continuous variable by the respondent. The dependent variable is the preference of vacation vs. money, and this is realized by an either/or question.

The standard items in this survey were taken as age, gender, existence of any reward system, hours worked weekly, attitude towards overtime and how long the respondent has worked in the company. This allows for cross-referencing with other studies, should this be warranted, which makes a study easier to use in meta-analysis studies (Abbott and McKinney, 2012) All questions in the survey were designed to be mandatory. The reason is that if a user should forget to answer one of the non-control questions it invalidates the whole response. The survey in its entirety is enclosed as an appendix, although in transcribed form.

3.3. Interviews

Quantitative data as captured by the survey offers no insights as to why someone answers the way he or she does. The justification for complementing the quantitative data with the qualitative interview data is that they complement each other. The survey approach gives breadth and the interview approach provides depth. The data from these interviews would allow for deeper analysis on any findings from the survey data.

Four interviews were conducted in order to provide some insights into the questions. The interviews were semi-structured (Yin, 2009) and used the survey as a template. The respondents were asked to answer each question and elaborate why. This interview data is not transferred into the quantitative data as the way the data is gathered differs.

The time frame did not allow for conducting more interviews, and the authors acknowledge that so few interviews (four) is not enough for a comprehensive interview data set but for this thesis’ scope it serves well to complement the survey data.

The interview template is enclosed as an appendix.

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This analysis made on similar data sets from different studies in order to combine these to test for statistical significance.
3.4. Collecting the quantitative data

The survey was designed using a free internet survey service provide which provided the basic tools needed to gather and extract the data. The link to the online survey was sent out via mail to the respondents. Using sending a link to the survey was used because of the central way data was gathered on the survey, meaning the rationale was easier data processing. The risk of double answers from one respondent is thus increased but is mitigated by being able to filter responses from the same IP address, but this was not needed.

Before sending the survey out it was tested to work using some common operating systems using some common web browsers. It was also tested to work on smart phones. This was done to ensure that no technical obstacles would prevent a respondent form taking the survey. The survey could be answered at any time during the data gathering phase of the thesis and was not password protected.

Finally the survey was tested on a few friends to make sure each question was understood correctly, both in terms of grammar and content. The rationale for using English, not Swedish, was that many of the initial respondents we knew did not have Swedish as their native language. Also the level of English language skill in Sweden we assumed high.

The respondents were selected to be employed by IT-companies. Sales personnel were excluded as respondents from the thesis. This was done as their compensation packages were assumed to contain a larger variable part than the other job categories used for this thesis.

When survey was sent, authors sent directly to the initial respondents with instructions on how and to whom to re-distribute it. The survey was sent to personnel working in both private and public sector.

The respondents were given two weeks to respond to the survey and given instructions to pass the link along with instructions to respond in one week. This means no deadline in terms of a date was set, but two weeks after the link was sent the online survey was locked and the data was extracted.

3.5. Validity and Reliability

According to (Abbott and McKinney, 2012) the two most important issues to address when evaluating a research design are reliability and validity. The authors have put much effort in making the study replicable.

3.5.1. Validity

Validity addresses that the study actually answers what it is supposed to answer (Abbott and McKinney, 2012). There are many facets of validity, and Yin (2009) iterates construct validity (the study actually measures what it claims), internal validity (the study’s systematic error or bias), external validity (can the study be generalized) and reliability (see below).

To be able to capture intrinsic motivation a proven scale (WEIMS) was used and the other measures we believe were best caught with interval and multiple-choice questions. The exception is the amount of work hours which we believe was best caught with having the respondent entering a numerical value. We thus believe that the survey measures what it intends, and thus for each question the construct validity is high.

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6 www.qualtrics.com
When designing the study great care was taken to designing the individual questions as well as the composition of questions, and we tried to balance getting enough data with overflowing the respondent with questions. We did this by continuously asking persons not involved with the study to explain the questions back to us and give us their impression of the survey as a whole. These are not the four interviews used in the study. Since we used an English survey in Sweden this was particularly important, to make sure the content of each questions was understood by not only the authors. We feel this ensures a high internal validity.

We believe all results from the respondents reflect the respondents’ true nature – meaning we believe they are “telling the truth”, and as we are confident the questions are clear this indicates a higher external validity. The job category “Other” eventually accounted for 20 % of the respondents, but we do not see this as an indication of non-IT-sector personnel answering the survey. The instructions sent with the survey were that only persons in the IT sector should answer and to the best of our knowledge this has been respected.

The results obtained can be generalized as an indication of Swedish IT environment but generalizations into other environments (manufacturing etc.) should be taken very cautiously. Given this we feel the external validity is high enough for generalization into IT environments in Sweden.

3.5.2. Reliability
Reliability can be said to address the extent to which a given measurement produces the same result each time it is used (Abbott and McKinney, 2012), meaning that it gives a measure of the consistency of a study. One aspect of this is repeatability, and to be able to repeat this study it is key that the data gathering is documented (Yin, 2009). To allow for a future repetition of this study, all de-limitations, the survey and all the statistical calculations can be found in the thesis as well as the interview template used for the interviews. It is worth stressing that this is not a longitudinal study, so any repetition of the survey in another point in time is not in the scope of this thesis but would be possible.

The authors have not tried to influence the respondents in any way and to ensure honest responses the questionnaire was anonymous. Abbot (2012) also points out that an online survey tends to make respondents more willing to answer sensitive questions, such as questions relating to income – but we chose not to ask this.

Another measure of reliability is the reliability of the data itself, and to address the internal reliability of the intrinsic motivation measurement we calculated the Cronbach Alpha (CA) on it. This is designed to measure the internal consistency between questions designed to measure the same item, in this case intrinsic motivation. A CA above 0.70 is assumed to be consistent, or respectable (Cambridge dictionary of statistics). CA varies between 0 and 1, and the closer to 1 it is the more consistent the data. The CA for the intrinsic motivation for this thesis is calculated to 0.935, which is highly consistent.

3.6. Analysis of data
The survey data was exported into SPSS where the quantitative analysis was conducted. First, data was coded and treated for missing data. A binary regression analysis was then conducted for the first research question using the preference of vacation/money as independent variable. For the second

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7 A software by IBM for statistical analysis
part of the first research question the independent variable was changed to the respondent’s job category in the company. For research question 2 the independent variable was again changed to amount of hours of overtime. Finally a cross-tabulation was conducted to detect any correlations of other variables.

Data is presented using graphs and tables as visual aid to better understand the results.
4. Results
The analysis of the data has been done primarily with SPSS, with the aid of Excel for some easier computations. This chapter aims at describing the data gathered in this thesis without interpreting them in any way.

4.1. Data statistics and data adjustments for analysis
Survey data was collected from 66 respondents, wherein 1 response lacks data on intrinsic motivation making it 65 complete responses. The incomplete response was removed completely from the data, and we can only attribute that the online survey accepted this incomplete answer as a bug in the tool used. The survey is enclosed as an appendix. We know from the start that all respondents live in Sweden.

A descriptive look on the data gathered we see that for the data set as a whole 41 out of 65 (63.1 %) chose the option of extra monthly salary increase. The mean value of the intrinsic motivation is 5.7 (scale 1-7), so the intrinsic motivation is high in the data set. At 38.5 % the majority of the respondents classify themselves as "software designers" and when it comes to how many hours per week the respondents work on average there are small differences in the group at a mean of approximately 43 hours/week. In the data set close to half (45 %) have worked more than five years at their present company, 85 % are males and 58 % are in the age group “30-39”. A helicopter view on the data set gives the "mean respondent" as a 30-something male software designer with a high inner drive (intrinsic motivation).

Two questions are excluded from the analysis altogether and these are “Do you take overtime hours when your employer offers it” and “Are there any reward systems in your company”. Both have been removed from the analysis due to ambiguities in how they were phrased, and this was a finding form the interviews we conducted (see section 3.5).

The intrinsic motivation data gathered was found to be negatively skewed, meaning it had a skewness value of -1.718. Data below -1 is negatively skewed and above 1 positively skewed. This is shown in Figure 3 below where the distribution curve has been overlaid, and is shown to be clearly not normally distributed.
In order to conduct analysis on the intrinsic motivation data the skewness needs to be addressed. This is done by reflecting and recalculating the data using a common logarithm transformation (Log10) so each data point’s relative place is kept. This gives an acceptable skewness of 0.385, and the analysis is carried out using this transformation. The new distribution can be seen in Figure 4 below.

Figure 3. Skewed intrinsic motivation data.
4.2. Reliability of measurements

The survey contained three questions measuring intrinsic motivation. These three questions thus all measure the same construct and to verify that in the data set as a whole these three questions actually measure the same thing the Cronbach alpha value was calculated to 0.935, which indicates that they do measure the intended construct, in this case intrinsic motivation.

4.3. Binary logistic regression

To analyze the first (1a) and second research question we utilize a binary logistic regression as the dependent variable (preference vacation/money) is dichotomous and the independent variable is not. Regression analysis is used to identify the relationship between the dependent variable and one or more independent variables, and the binary logistic regression is a special case where the dependent variable is either one of only two states.

When doing a regression analysis it is important that the independent variables are not systematically related. If they are, it can be difficult to separate the effect each individual independent variable has on the dependent variable. This is called multicollinearity.

We test the independent variables for multicollinearity using the Spearman correlation, which will give us a value that will range from -1 to +1. Here -1 means that the variables are perfectly negatively related (the independent variables are always at their different extreme ends), whereas +1 means the variables are perfectly correlated. A result of 0 indicates that there is no linear relationship between the variables. There is no exact threshold value, but a Spearman coefficient exceeding 0.2 - 0.3 could be taken as an indication that multicollinearity may exist between the independent variables.

Testing the intrinsic motivation and total hours worked each week for multicollinearity gives a Spearman coefficient of 0.078, which would indicate that there is no problem with multicollinearity.
between these independent variables. In this analysis the transformed intrinsic motivation data is used.

For research question 1a the analysis on the 65 respondents shows no significant preference for either vacation or money depending on the intrinsic motivation. The result is not statistically significant at all, giving a level of significance of 0.665, a value that should be less than 0.05 in order to be significant at the 95% level. See output below in Table 3.

The preference money/vacation is the dependent variable, and the intrinsic motivation and the total amount of hours worked are independent variables. The intercept value (B) is a coefficient for the independent variable with a direction and a magnitude. It should be interpreted as an increase of the independent variable of 1 will increase or decrease (depending on sign) the natural logarithm of the odds of taking vacation with the value of B. It is positive for the intrinsic motivation, meaning it has a positive effect on the dependent variable (vacation/money). Multiplying the B value with 100 gives a fair approximation in percent, meaning that for intrinsic motivation said odds of selecting vacation increases with 47.5% per increase of 1 of the intrinsic motivation. But, the low significance makes this observation moot.

Table 3. Intercept and significance of independent variables in the binary logistic analysis.

<table>
<thead>
<tr>
<th>Property</th>
<th>B (Intercept)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrinsic Motivation (transformed)</td>
<td>0.475</td>
<td>0.665</td>
</tr>
<tr>
<td>Avg. hours worked each week</td>
<td>-0.072</td>
<td>0.208</td>
</tr>
</tbody>
</table>

For research question 2 (see Table 3), looking at the amount of hours worked, the results are more significant than for intrinsic motivation but still not significant at 0.208. The intercept is negative, but just as for intrinsic motivation this is of no practical use. Total weekly hours worked is 43 and 49 minutes (“44 hours”) for the vacation preference and approximately 41 hours and 55 minutes (“42 hours”) for the base salary preference. The mean for the whole data set is 43 hours 6 minutes (“43 hours”).

The explanation for these results can be seen when calculating the mean values of the independent variables used, which is visualized in Figure 5 and Figure 6 below. It can be readily seen that the mean values of the preferences differ by only 0.0149 on a 7-point scale for the intrinsic motivation (non-transformed data) and by approximately 2 hours for the average working week.
4.4. Cross-tabulation and regression analysis of company position data

Research question 1b was analyzed using cross tabulation of data, giving the result as seen in Table 4 below. First a reclassification into job categories was done in which the positions ”Software designer” and ”IT Engineer” were reclassified as ”Engineer”. The positions ”Project manager/System manager” and ”Line manager” was reclassified as ”Manager” and ”Other position” was kept but relabeled to ”Other”. This gave three new classes, or job categories, for the analysis. The rationale for this was to get a more substantial amount of data into each class as some contained very few data points (respondents). This gives the distribution of the positions as can be seen in Table 4 below.
Table 4. Cross tabulation of company job categories.

<table>
<thead>
<tr>
<th>Job category</th>
<th>No. of respondents</th>
<th>Salary preference</th>
<th>Vacation preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineer</td>
<td>40 (61.5 %)</td>
<td>70.0 %</td>
<td>30.0 %</td>
</tr>
<tr>
<td>Manager</td>
<td>12 (18.5 %)</td>
<td>67.3 %</td>
<td>33.3 %</td>
</tr>
<tr>
<td>Other</td>
<td>13 (20.0 %)</td>
<td>38.5 %</td>
<td>61.5 %</td>
</tr>
</tbody>
</table>

In the total data set 63 % of respondents chose the salary preference. In order to analyze this data we use a binary logistic regression analysis with the independent variable of the recoded job category in the company transformed into dummy variables as the independent variable is categorical. The categorical independent variable for job category has three options (Engineer, Manager and Other), and the dummy variables will be compared to the “Other”.

The results yield that no category has any statistically significant result (significance > 0.05). The significance values are presented below in Table 5 the intercepts are also presented in the table, but their relevance is moot.

Table 5. Significance levels in the regressions analysis compared to job category “Other”.

<table>
<thead>
<tr>
<th>Job category</th>
<th>Intercept</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineer</td>
<td>-1.32</td>
<td>0.05</td>
</tr>
<tr>
<td>Manager</td>
<td>-1.16</td>
<td>0.16</td>
</tr>
</tbody>
</table>

4.5. Analysis of demographic data

A general cross tabulation of all control variables was conducted to detect any trends, albeit outside of the research questions. These results will not be pursued unless statistically significant, but will be presented as there may be value to these findings outside of the specific research questions in this thesis.

4.5.1. Age to preference

For age we perform a binary logistic regression, and find a statistically significant correlation (0.002) of age towards preference for choosing vacation instead of salary increase, and the probabilities can be seen in Table 6 and Figure 7 below. The data shows a preference for vacation increasing with age.
Table 6. Percentage of preference with regards to age group.

<table>
<thead>
<tr>
<th>Age</th>
<th>No. of respondents</th>
<th>Salary preference</th>
<th>Vacation preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-29</td>
<td>12 (18.5 %)</td>
<td>83.3 %</td>
<td>16.7 %</td>
</tr>
<tr>
<td>30-39</td>
<td>38 (58.5 %)</td>
<td>71.7 %</td>
<td>28.9 %</td>
</tr>
<tr>
<td>40-49</td>
<td>12 (18.5 %)</td>
<td>33.3 %</td>
<td>66.7 %</td>
</tr>
<tr>
<td>50-59</td>
<td>3 (4.6 %)</td>
<td>0 %</td>
<td>100.0 %</td>
</tr>
<tr>
<td>65+</td>
<td>0</td>
<td>No respondents</td>
<td>No respondents</td>
</tr>
</tbody>
</table>

Figure 7. Plot of probabilities for vacation preference.

The figure above shows the probability of selecting vacation over money (given this thesis’ dichotomous question) increasing with age groups.
### 4.5.2. Gender to preference

There is a strong over-representation of male respondents in the data with 84.6%. The female percentage is 13.8% with a 1.5% percent of “rather not disclose”. Knowing this the result is displayed in Table 7 below.

Table 7. Percentage of preference with regards to gender.

<table>
<thead>
<tr>
<th>Gender</th>
<th>No of respondents</th>
<th>Salary preference</th>
<th>Vacation preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>55 (84.6 %)</td>
<td>65.5 %</td>
<td>34.5 %</td>
</tr>
<tr>
<td>Female</td>
<td>9 (13.8 %)</td>
<td>55.6 %</td>
<td>44.4 %</td>
</tr>
<tr>
<td>Rather not disclose</td>
<td>1 (1.5 %)</td>
<td>0 %</td>
<td>100 %</td>
</tr>
</tbody>
</table>

A binary logistic analysis also confirms this skew data in a significance of 0.242 and invalidating any correlation for this data.

### 4.5.3. Time at company to preference

A binary logistic regression shows no significant correlation at 0.119 for time at company to the preference. The percentage spread is displayed in Table 8 below.

Table 8. Percentage of preference with regards to time at company.

<table>
<thead>
<tr>
<th>Time at company</th>
<th>No. of respondents</th>
<th>Salary preference</th>
<th>Vacation preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 6 Months</td>
<td>4 (6.2 %)</td>
<td>75.0 %</td>
<td>25.0 %</td>
</tr>
<tr>
<td>6 Months – 1 Year</td>
<td>4 (6.2 %)</td>
<td>100.0 %</td>
<td>0.0 %</td>
</tr>
<tr>
<td>1 – 2 Years</td>
<td>10 (15.4 %)</td>
<td>70.0 %</td>
<td>30.0 %</td>
</tr>
<tr>
<td>3 – 5 Years</td>
<td>18 (27.7 %)</td>
<td>61.1 %</td>
<td>38.9 %</td>
</tr>
<tr>
<td>&gt; 5 Years</td>
<td>29 (44.6 %)</td>
<td>55.2 %</td>
<td>44.8 %</td>
</tr>
</tbody>
</table>

### 4.6. Interview data

Four interviews were conducted with the survey as template and the respondents were asked to elaborate on the answers they provided. This data will only serve to complementing the survey data, so no closer analysis will be done on them apart from the insights in the elaborations made by the interviewees. These will be presented in the results chapter along with the survey results.

From the interviews it became clear that the questions “Do you take overtime hours when your employer offers it?” and “Are there any reward systems in your company” were formulated ambiguously. The former in using the word “offers” as this is seldom the case, and it gives the question the wrong connotation. The latter question is removed as “reward system” is too broad a term, and there was no explanation or definition of our intended use of “reward system” included in the survey.
The four interviews have the following characteristics: Three are of the age group 30-39, three are male, three would choose salary and all have approximately 40 hour working weeks. The interview data is not analyzed in any quantifiable manner as they are so few (four) as to make up any reliable data set, rather they are used as elaborations on the research questions.

For the first research question one of the respondents (who chose vacation) broach the dichotomous nature of the question in saying he would prefer a solution of being off on Fridays at 80 % of his current salary.

Given the statistically significant result of age to preference, we see that in the interviews three out of four would prefer the money option but the age spread in the interviewees is small. One places in the 18-29 interval (chose money) and the other three in the 30-39 interval. This is line with the survey.
5. Discussion
This chapter will relate the results to the theoretical framework. Each research question will be addressed in turn as well as the age-to-preference relation found. The chapter will end in a more general discussion on the obtained results.

5.1. Research questions
The results for the all the research questions are, for this data set, inconclusive. The first question’s first part on how the level of intrinsic motivation affects the preference between a permanent salary increase and its monetary equivalent of additional permanent vacation time shows a statistically insignificant result. The same holds true for the second part of the first research question, relating to the respondent’s job category in the company in relation to the aforementioned preference of vacation or money. There is no statistically significant preference between the job categories.

The second research question is related to the amount of hours worked on a weekly basis in relation to the above stated preference between vacation and money. There is no statistically significant result for this question either, and the reason is given when looking at the mean values of the amount of hours worked.

Understanding the reason for the inconclusiveness for the question on intrinsic motivation and the amount of hours worked, we see from the mean values that both preference categories had very similar means (see chapter 4, Figure 5 and Figure 6). This means that the respondents who prefer vacation have approximately the same intrinsic motivation and amount of hours worked as the respondent who prefer money. In short, all the respondents worked approximately the same amount of hours each week and they had very similar levels of intrinsic motivation.

Each research question is discussed in greater detail below.

5.1.1. Intrinsic motivation to preference
In this thesis the respondents have on average a high intrinsic motivation at 5.7 out of 7.0, meaning that the average respondent draws pleasure and finds inherent satisfaction in the activities he or she performs at work (Deci, 1975). This can be compared to a study by Eskildsen et. al. (2004) which measures the Swedish intrinsic work motivation at just above 60 on a 100-point scale, lending weight to that the measured intrinsic motivation is indeed high among this thesis’ respondents. The result in this thesis shows that there is no significant relationship in the preference of choosing either an increase in the base salary or an increase in the amount of vacation days in relation to the intrinsic motivation. Given the high average in intrinsic motivation in the data this means that among employees with a high intrinsic motivation there is no statistically significant relationship in the preference in choosing money or vacation.

In the agency relationship the average respondent in this study is thus highly intrinsically motivated. From an agency theory perspective this means that in a set of homogeneously highly intrinsically motivated employees, this metric alone does not help to bridge the information asymmetry so other metrics need to be taken into account to know how to best design a contract. Since this discussion is based on two extrinsic incentives, there is a critique that should be mentioned and it is the “crowding out” effect. This is that the effect of an extrinsic incentive will undermine the intrinsic motivation (Frey and Jegen, 2001). According to this effect it would be hard to distinguish whether it is the actual intrinsic motivation or the extrinsic motivation caused by the incentive that is being
observed or measured. While we recognize this effect, this thesis does not address it. Instead this thesis uses the model of intrinsic motivation by Lawler in which the reward comes from the person himself.

In the Lawler model, as described in the theory chapter, intrinsic motivation is connected to rewards as the outcome of the model and Ryan (2000) states that the intrinsic motivation in a person is enhanced by feedback, communication, autonomy and rewards. An employee that can choose for himself what reward (in this study a dichotomous choice of vacation or money) would suit him best will in such a situation be given a certain level of selection autonomy for his reward, which signals trust from the employer. Baeten and Verwaeren (2012) states that a conscious choice between rewards as a component of a flexible incentive system would make the employee appreciate the reward more. In this way we can say that the choice itself, rather than a tangible reward, would feedback positively into the Lawler model, but we cannot say anything about the selection preference among those with a high intrinsic motivation.

In choosing between money and vacation the employee is given the choice of an extrinsic incentive. Being extrinsically motivated, by pursuing some extrinsic incentive, is doing an activity to gain rewards or benefits (Deci, 1975). In this thesis the average respondent has a high intrinsic motivation, so it is this highly intrinsically motivated person who is confronted with the dichotomous choice of vacation or money as extrinsic incentives, so we need to look how either choice fits this person. In the literature we find two reports with corresponding views in that “job engagement” and “job satisfaction” correlates only weakly. These reports are a large meta-analysis (Judge et al., 2010) and a Gallup report from 2011. In taking “job engagement” and “job satisfaction” as metrics of how motivated an employee would be in performing his job. Related to this Tang et al., (2004) confirms this view in that monetary incentives is only of influence when job satisfaction is low. This all connects to employee retention as the correlation is strong that job satisfaction adversely affects company employee retention (Kyndt et al., 2009). For this thesis all this indicates that the choice of an increase in salary would have little effect on the intrinsic motivation as seen in Lawler model. Adding the results from this thesis to this, we can add no new knowledge on the effect of a permanent increase in base salary instead of more permanent vacation time.

Looking at what we know of vacation as an extrinsic incentive there is not much to draw on, but Becchetti (2012) has found weak link to higher intrinsic motivation and more hours in their “time bank”. There is also a theoretical model by Nakamura (2012) which proposes that highly motivated and skilled workers would benefit from more vacation days. Looking at what little we know of this aspect and the inconclusive results from this study we can add no specific knowledge on the effect of more permanent vacation time instead of a permanent increase in base salary.

We end the discussion on intrinsic motivation by mentioning that for this study the choice was strictly dichotomous, leaving no third option of a mixture of the two choices. This is highlighted by one of the interviewees who states “I would highly value being off on Fridays, thus extending each weekend, at 80 % of present salary”, saying in effect that the choice is not as dichotomous as the question is posed in this thesis.

### 5.1.2. Job category to preference

In this thesis company position was reduced to the job categories “Engineer”, “Manager” and “Other”. While in reality these classes are very broad and not mutually exclusive (an engineer can be a manager) in the survey a respondent could select only one option of the job positions offered in the survey, which was then reclassified to job categories. The intention was to be able to distinguish
a trend between these classes and the preference of an increase in the base salary or an increase in
the amount of vacation days. In the data almost two thirds (61.5 %) are classified as engineers and
the remaining third are about as many managers as others.

Looking at the data we find no statistical evidence that these job categories should prefer either an
increase in the base salary or an increase in the amount of vacation days given such a dichotomous
choice.

Looking at the category “Manager” (in this thesis also project managers), those employees are in
some area entrusted by their companies with additional responsibilities. Additional responsibility
also means (or should mean) additional pay. We can lend support for this from a report on line
managers from 2013 by the Swedish Confederation of Professional Associations (SACO) the
“manager salary premium” is estimated to approximately 30 % (SACO, 2013). According to this a
line manager’s salary should be 30 % higher than his subordinates. An article on overtime by the
monthly Swedish magazine Chef from 2012 states that Swedish managers works on average 13
hours unpaid overtime each month (Chef, 2012). With higher salary and much overtime you could
argue a priori to this thesis that more vacation would be preferable, but this thesis does not support
this. A contrary a priori argument would be that managers do not have time for vacation, or do not
feel the need for more vacation so would pick the salary option. In chapter 5.3 there is a more
general discussion on income levels.

This non-finding of the job category to preference has little impact, but would indicate that looking
broadly at what the employee can be classified as it does not tell us what he or she would be more
likely to prefer given this choice.

5.1.3. Total work hours to preference

According to Swedish law the ordinary weekly working hours may not exceed 40 hours, excluding
overtime and other exceptions. Based on this there would be value in seeing if there is any
difference in the preference of either an increase in the base salary or an increase in the amount of
vacation days based on the total amount of hours worked each week. The survey asked this in two
steps as first how much the employee is contracted to work each week and then how many overtime
hours they work on average each week. Looking at the data we have found that for either choice the
amount of total hours worked weekly differ very little (approximately two hours), meaning that there
is a very small spread in the data.

An interesting observation is that relative the Swedish norm of 40 hour work week, the mean total
working hours in this thesis is approximately 43 hours. This indicates that there is more to do than
can be covered in a standard week, which could speak in favour of more vacation to rest – or it
could indicate that, given the high intrinsic motivation in the thesis, and that work is so enjoyable
that the employees do not feel they need more vacation time.

We have seen that the respondents in this thesis are in general highly intrinsically motivated and
work more than 40 hours each week on average. Beckers et al. (2004) and Becchetti et al. (2012)
reports that intrinsically motivated workers tend to have more overtime hours which is in line with

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8 “Chef” translates into “Manager”, so it is no culinary magazine.

what we see in this study, so we can add to the evidence of this link. However, we find no statistical
evidence in the data for this thesis that an employee’s amount of weekly working hours should make
him prefer either an increase in the base salary or an increase in the amount of vacation days - given
such a dichotomous choice.

This non-finding has little impact, but would indicate that for employees with a total amount of
working hours slightly above the Swedish “norm” of 40 weekly working hours it cannot be said
what he or she would prefer given the choice in question.

5.2. Age to preference

Looking at what separates younger employees from older employees is a bit vague without being
more specific on what “younger” and “older” means. This study has shown a trend of preferring an
increase in the total amount of vacation days over an increase in base salary in a situation of this
being a dichotomous choice. From the data we can say that the scale tips in favour of vacation in the
class “40-49 years old”. For sake of discussion “older” will thus refer to persons over 40 years,
which may not be considered “older” in other circumstances.

Other than age, older employees differs in a number of areas which all could be part in the
explanation of the vacation/money preference. Dividing into two categories as personal life and
professional life we can look at what major changes could influence. Looking at the employee's
professional life over time, the older an employee is, the more likely it is that this employee has
greater responsibilities or managerial responsibilities. This adds to the base salary (manager
premium, see chapter 5.1.2) and so could lessen the attraction of more money. The statement that
increasing age correlates to management positions is confirmed by a report from 2009 by the
Swedish Association of Local Authorities and Regions which confirms a strong link between age
and management positions (SKL, 2009). Apart from taking on additional responsibilities or roles
with age there is also the normal base salary increase, which at its lower end can be said to
compensate for inflation. If the employee’s household has a shared economy then the attraction of
more money could be even further subdued. Depending on work place it is also not an uncommon
practice in Sweden that the amount of paid vacation days increases with age (Swedish Agency for
Government Employers, “Förmåner och villkor”) which would then affect a choice between money
and vacation.

Looking at an employee’s personal life, as a person gets older statistically he or she is more likely to
have children, and eventually grandchildren. As an example of this we can look at the amount of
women with no children, and see as the older the woman the less likely she is to have born no child
(Martinez et al., 2012:p15). Such a shift could be part in an explanation as to why older employees
could value vacation time more, simply in order to be able to spend more time with family.

Incentives have control benefits, and these are iterated by Merchant (2012) as informational,
motivational and an aid in attracting and retaining personnel. He continues by stating that they
should be valued, large enough, timely, understandable, durable, reversible, and cost efficient. Based
on this, knowing that there an increased likelihood that an older employee could value extra vacation
instead of money this finding could help companies tailor their compensation packages.

Looking at this result through agency theory, the result alleviates the information asymmetry in that
the principle has a piece of a-priori information on the likelihood of said preference. From the
principal’s viewpoint the likelihood that the agent, depending on age, would prefer extra vacation
over money can be taken into account in constructing the contract. From agency theory we can also
say that by choosing vacation, the employee increases his leisure and is not time spent increasing the expected return to the organization (Ross, 1973) – which is a factor that should be taken into account when designing a contract.

5.3. General discussion

The research questions in this study all showed statistically insignificant results. This result of these “non-findings” can be summarized as indicating that neither a high intrinsic motivation, job category nor the amount of total working hours correlates to any preference between choosing vacation or money. The only statistically significant finding in this thesis is that of age to the preference, which is discussed in more detail in chapter 5.2. However, that most results are statistically insignificant does not mean that the results are meaningless, as prior to this thesis we did not know anything – and now we know there are statistically insignificant results in this area.

The essence of this thesis is between a dichotomous choice of additional vacation or an increase in salary. In reality such a choice would be influenced by a vast array of factors. Below we will discuss factors concerning vacation and salary both.

Some countries have more paid national holidays than others, and there are countries that have both more and less paid vacation days than Sweden (Ray et al., 2013). In Sweden the amount of national holidays are 12 and are regulated by law\textsuperscript{10} so this thesis should be read with this in mind. In relation to this, an interesting observation was made during one of the interviews when the respondent explained that “I prefer monthly salary increase because in our institution we have quite a lot of vacation.” This may highlight yet another of the factors this study does not take into account and that is the amount of vacation offered by the employer each year as a “base package”. A worker with a Swedish standard of 25 days of vacation a year could have a different preference, all other parameters held constant, than another Swedish employee who for example enjoys a generous vacation package of 40 days. We must also recognize that employees in certain organizations may have very little to no desire to pick more vacation. An example could be the Swedish defence force in which officers can easily end up with several weeks in the “time bank” (excluding their ordinary vacation time) due to military exercises that they would be forced by the union to collect (Försvarsförbundet, 2012).

The average earned income 2012 in Sweden for everyone ages 20-64 was 287 892 SEK (Statistiska centralbyrån, 2014), which is approximately 24 000 SEK/month before income tax. In this thesis we gathered no data on the respondent’s income or financial situation, but we know the respondents are all white-collar workers in IT so by filtering for “data specialists” and “data technicians and data operators” we arrive at a monthly salary at 37 100 SEK/month before income tax. If we choose to filter for an education level that is deliberately low for an IT job which is at least “half a year of university studies in IT, no degree” we get a monthly salary of 32 800 SEK/month before income tax. Given these values, we can expect the respondents in this thesis to earn more money than the average Swede and this could affect their choice. The concept of habit forming, introduced by Duesenberry (1949), implies that individuals get accustomed to a certain standard of living in that as earning go up so does the cost of their life style. Using this logic an employee should pick the salary option in order to pay for, and increase, his standard of living. On the other hand someone earning above-average could be said to for just that reason ought to pick the vacation option.

In agency theory agents value their leisure time, which can be regarded as the opposite of time spent increasing the expected return to the organization (Ross, 1973). From an agency perspective what we see in this thesis when we consider the statistically insignificant results is that there is no apparent will from the agent’s side to always increase their leisure time – which by this logic then increase the expected return to the organization. For the age-to-preference finding we can use this logic to say that older employees (see section 5.2 for definition) in this sense are more likely to decrease the expected return to the organization. The last statement should be read with care as it excludes any factor but the likelihood to choose extra vacation instead of a salary increase, such as overtime and experience.

Hofstede’s cultural dimensions for Sweden state that Swedes puts value on leisure time, favours flexible schedules and a healthy life/work balance (Geert Hofstede, 2014). It might be expected when looking from those cultural dimensions’ point of view that Swedes would favour the vacation choice to a higher extent, but apart from the age-to-preference finding this is not the case in this thesis. This can in part be addressed by the fact that while all respondents in this thesis live in Sweden, not all of them are Swedes. Also, Hofstede’s dimensions for Sweden mentions leisure time, which is not the same as vacation time.

We have seen that the intrinsic motivation is high among the respondents in this thesis, and as explained in chapter 2.2.1 this means doing something for its own inherent sake and not for some external reward. This thesis target white-collar workers, but Nakamura (2011) proposes vacation as an option to more money for blue-collar workers which would be a partial explanation for the statistically insignificant results. This thesis adds indirectly to Nakamura’s work in reporting that for white-collar workers the vacation/money trade may work for older workers.
6. Conclusions
This thesis set out to investigate the preference for a dichotomous choice of an addition to base salary and its monetary equivalent of paid vacation time. In this chapter the most important conclusions drawn are discussed. The strengths and de-limitations concerning the thesis are also discussed and the chapter ends with some suggestions that can build on this thesis.

6.1. Conclusions drawn
The data shows that 63% of the employees prefer an extra monthly salary increase over extra vacation time of a similar monetary value. The intrinsic motivation measured in this study (mean 5.7 of 7.0) among IT employees from different companies in Sweden is overall high. Looking at research question one there is no statistically significant preference among employees with high intrinsic motivation for either money or extra vacation time. This inconclusiveness dictates that we cannot determine whether intrinsic motivation alone is a reliable metric in predicting employee’s choice of money or extra vacation time when designing the employees’ compensation package in his/hers contract. When looking at this from an agency theory perspective, we can say that in a set of homogeneously highly intrinsically motivated employees, this factor alone does not help in bridging the information asymmetry. Therefore, other factors need to be taken into account when designing an optimal contract.

The second part of research question one looks at the employee’s job category in the company. There is no statistically significant relationship between the job category of the employee and his/her preference for extra vacation time or increase in monthly salary (of the same monetary value). This means that job category alone cannot be said to be a reliable metric in whether an employee have any money/vacation preference.

Research question two looks at the total amount of hours worked and the vacation/money preference. The employees studied in this thesis worked approximately the same amount of hours per week, so no significant distinction can be seen regarding their preference. Thus the answer to research question two is inconclusive. From the data we cannot see any statistically significant preference, but we can state that in a group with homogenous amount of working hours we see no statistically significant preference in the vacation/money choice.

In summary we can say that neither intrinsic motivation, job category nor the total amount of hours worked show any statistically significant relationship to the preference in the choice between money and vacation.

When looking at the control variables one statistically significant relationship was found in the age of the respondents. The data shows that the older respondent the greater the likelihood of choosing extra vacation over money. This indicates that when designing compensation packages in the employee’s contract, offering extra vacation to older employees could be a beneficial practice.

6.2. Strengths and limitations
By mixing both the qualitative and quantitative approach we have tried to strengthen the validity of this study. We have tried to strengthen the survey itself by having it reviewed before sending it out by people other than the authors. In order to get some depth aside from the survey we have conducted four face-to-face interviews, which give the study an extra strength in the more in-depth comments we have been able to integrate.
An important limitation of this research is that it is based on data obtained and analysed from 65 survey respondents and few (four) interviews with employees working in the field of IT in different companies including both the private and the public sector in Sweden. For this reason, this thesis may not be perceived as a generalization for the preference between vacation and money of all people working in IT field in Sweden – or worldwide. However, the authors believe that the result obtained can be used as an indicator in designing an efficient system that can attract, reward, and retain skilled workers.

Another limitation is that due to the time and scope of this study there are factors that are not taken into account which could possibly offer alternative explanations. Examples of such factors are, but are not limited to employee’s nationality, base salary, family situation, etc.

6.3. Suggestions for further research

In this thesis we find that the older respondent the greater the likelihood of choosing extra vacation over money. Explanations as to why are not addressed in this study, but examples of reasons could possibly be a greater level of financial stability reached in time, a will to spend more time with their family, being a consultant or not, size of the company, company culture etc. It would be of interest to conduct a similar research that takes into account or investigates factors as to why age would matter in this regard.

Another suggestion would be to try to recreate the results of this thesis in another country or another field (construction, medical, military etc.) as this thesis does not account for any other country than Sweden or field other than the IT industry.
References


Sveriges Akademikers Centralorganisation, 2013, Chefens lön 2013, Stockholm


Sveriges Kommuner och Landsting, 2011, "Chefer i kommuner och landsting", Stockholm


Appendix A – Survey

The following is a transcript, not the actual layout used on the web page used for the survey. All text is identical.

1. How old are you?
   - 18 – 29
   - 30 – 39
   - 40 – 49
   - 50 – 75

2. What is your gender?
   - Male
   - Female
   - I would rather not disclose

3. How many hours are you required to work each week?
   - \(< \text{NUMERIC USER INPUT} >\)

3b. On average, how many hours overtime do you work each week?
   - \(< \text{NUMERIC USER INPUT} >\)

4. Do you take overtime hours when your employer offers it?
   - Yes, because I want to
   - Yes, because I feel I need to
   - No, because I don’t want to
   - No, because I don’t feel I need to

5. Which of the following best describes your position here?
   - Software designer
   - IT Engineer
   - Project manager/system manager
   - Line manager
   - Other position

6. Why do you do your work?
   - Because I derive much pleasure from learning new things
     i. \(< \text{SCALE 1 – 7} >\)
- For the satisfaction I experience from taking on new challenges
  i. < SCALE 1 – 7 >
- For the satisfaction I experience when I am successful at doing difficult tasks.
  i. < SCALE 1 – 7 >

7. How long have you worked at (company)?
   - Less than 6 months
   - 6 Months – 1 year
   - 1 – 2 Years
   - 3 – 5 Years
   - More than 5 years

8. Are there any reward systems in your company?
   - Yes
   - No

9. Consider you are offered an incentive in the form of a choice that either you have to choose
a permanent monthly salary increase or its monetary equivalent of a permanent vacation time
increase (an addition in yearly vacation), what would you choose?
   - Monthly salary increase
   - Permanent increase in vacation time
Appendix B – Interview template

The following is an “interview guide” used only by the authors when conducting the interviews to be able to guide the interviews in line with the thesis.

- Introduction / Purpose
- How old is the respondent?
- How many hours are the respondent required to work each week?
  - On average, how many hours overtime does he/she work each week?
- Does he/she take overtime hours when offered?
  - Comments? Elaborations?
- What is the respondent’s position in the company?
- Why does he/she do his work? (Use WEIMS scale to get a metric)
  - Comments? Elaborations?
- How long have the respondent worked at the company?
- Are there any reward systems in his/her company?
  - Elaborations on the systems?
- Use this phrasing and ask him/her to elaborate the answer: “Consider you are offered an incentive in the form of a choice that either you have to choose a permanent monthly salary increase or its monetary equivalent of a permanent vacation time increase (an addition in yearly vacation), what would you choose?”
  - Monthly salary increase
  - Permanent increase in vacation time
- General thoughts/Comments?
- Thanks!