From Central to Local Level:
A Case Study of Wage-Setting in the
Swedish Automotive Industry
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Abstract
A gap in previous literature exists which examines how centrally negotiated agreements are translated into local wage-setting within organisations. This report aims to fill this gap through the case study of wage-setting within 10 medium sized and 1 large sized organisations within the automotive industry in western Sweden. The organisations differentiated their wage-setting between blue and white collar employees and 6 systems were found in total, three for each group of employee. Through the analysis of the data with the help of Townley’s (1995) managing by numbers theory the systems are seen as representation of the relationship between the employer and employee. It was found that the organisations control the blue-collar workers to a greater extent with standardized systems in place and the absence of wage-discussion than white-collar employees. White-collar employees had pure performance-based pay systems in place and partook in wage setting through wage discussions thus supporting previous research that employees which have greater autonomy also had performance-based pay. This report only looks at the translation of the central wages locally, the perspective of the employees regarding the wage-systems are not included and is a suggestions for future research to look at further. Possible areas of future research include how communication between the central level organisations and local organisation works before and after a centrally negotiated agreement. It would also be of interest to see if the findings of this report would be seen if the study was done internationally.

Keywords: performance-based pay, individual pay, wage-systems, and wage-setting.

Background
The wage is a fundamental part of the employee-employer relationship as the relationship is based on this payment of a service from the employer which the employee is selling (Lundh, 2008). Historically in Sweden wage levels have been negotiated on a central level and are then implemented locally within organisations. The Swedish model for wage-setting has from the 1950s been characterized by centralised negotiations between LO (The Confederation of Trade Unions) and SAF (The Employers’ Confederation) (Brulin and Nilsson, 1997).

Collective agreements have characterized the Swedish model since its birth (Lundh, 2008) and today most employees are represented by some form of collective agreement (Nilsson and Ryberg, 2005). They set wage-levels in terms of minimum wages and percentage of wage increases to be implemented; they are time specific and applicable to a specific group of individuals (Lundh, 2008). Although there is still a great deal of centralisation in wage-setting an increase in decentralised wage-setting exists in today’s Swedish model (Lundh, 2008). The new Swedish Model now provides greater flexibility for permitting wages to be set in a more decentralised and adapted manner and is based on the industries in Sweden susceptible to international competition to ensure that Sweden is competitive internationally (Karlson et al., 2008). The industry reaching agreements first sets a norm for both the level of wage increases
and minimum wages which is seen as something which the labour market should follow (Karlson and Lindberg., 2008).

The system of having centrally negotiated agreements which affect wage-setting on a local level within organisations is based on the ideology of fairness, that employees get a fair wage for their work (Lundh, 2008). Negotiating centrally provides an industrial mark which is to be implemented within the organisations belonging to the industrial agreement (Lundh, 2008). Enforcing organisations to adhere to a specified wage-level increase however could inhibit the possibility of setting individualized wages. Sweden currently has some of the most compressed wages in the world (Lindgren, 2012) which means that the difference between individuals with the lowest wage and the highest wage are not too different. This suggests that rewarding individuals based on their performance is limited. Forslund (1994) found, similar to previous studies on the Swedish population, that local performance only has a small influence on wages. Thus performance based pay may be used within organisations in Sweden but if so it is used to a very low degree, this could be due to the centrally negotiated industrial mark placing a limit on how much wages can be increased each year. There is a polarity present within the Swedish system today central agreements remain the backbone of wage-setting however performance-based pay is a form of pay which is still desired by organisations within Sweden.

As Prendergast (1999) argues, performance-based pay are used by organisations in an attempt to affect the behaviour of the employees, their response to the incentives in place will affect both their own and organizational performance. Performance based pay has been found to be associated with wage inequality (Barth, Bratsberg, Haegeland, and Raau, 2006). Heyman (2012) however reviewed 20 studies regarding wage dispersion and its effects on performance and found that 14 out of these studies found that greater wage dispersion has a positive influence on performance. This positive influence however has a bell shape, thus too much dispersion between wages is associated with reduced performance (Heyman, 2012). Belfield and Marsden (2003) also found that organisations which used performance-based pay have larger wage inequality but that this did not have a negative effect upon organizational performance and if it did this was outshone by the positive influence of the performance-based pay structure.

A polarity exists within the two approaches to wage setting existent within the Swedish market today. The setting of a central industrial mark attempts to ensure a process which all parties involved are accepting of and a mark which then can be implemented within all organisations involves to ensure fair wages for labour is in place as well as reducing the risk for inflation. Performance-based pay on the other hand aims to increase the difference in wage levels purely based on performance, and without being able to reward fully based on performance of the individual the desired repercussions on organizational performance will not be seen. This polarity poses a difficulty for organisations working with the task to implement the industrial mark yet attempt to use the wage-setting process as a tool to increase organizational performance. This report will look at the translation of the industrial mark into a sample of medium (50-200 employees) sized organisations and one large organisation present within the automotive industry. Through a qualitative approach an understanding of how these organisations implement the industrial mark and deal with questions regarding performance-based pay for blue and white-collar workers will be investigated.

This approach will fill a gap present in the previous research within this area as no study has exclusively looked at how the industrial collective agreement is implemented in practice within organisations within the automotive industry. Furthermore research in this
area tends to take a qualitative approach allowing generalizations over populations however this inhibits us from gaining a deeper understanding of the multifariousness of the environment in which these organisations operate and the challenges they face. Through a qualitative approach this study will aim to open that black box and gain some comprehension for organisations work with wage-setting on a local level. This study will be looking at the industrial agreement in Sweden negotiated in 2011 valid until March 2013 and how a number of organisations within the Western region of Sweden in the automotive industry implement the directives and wage increases set out by the collective agreement within their respective organisations.

**Purpose**

The purpose of this study is to fill the void in research which exists between where the field of macroeconomics and human resources meet in the wage-setting system in Sweden today. This void can be seen in the little which is known about the translation of a collective agreement to local wage systems within organisations. The main purpose of this study is therefore to gain a better understanding of how local organisations translate a centrally negotiated collective agreement into the wage systems present within the organisation. In order to comprehend how the translation from central to local occurs an understanding of how wage setting works on a local level is necessary this is therefore part purpose number one. Part purpose number two is to understand how the relations between employer and employee are affected by the wage systems in place locally. This is necessary as the wage makes up the basis of the employee-employer relationship and as such the organisations approach to wage setting reflects the existent relationship between the employer and employee.

These purposes relate to the main research question and two sub research questions. The main research question for this study is; *how are centrally negotiated collective agreement translated to wage setting within organisations on a local level?* This will be done through studying the collective agreement between Teknikföretagen and the three trade unions; IF Metall, Union and Sveriges Ingenjörer which also sets the industrial mark in Sweden. This is further explained in the settings section of this report. The two sub-questions related to the sub-purposes are:

1. What characterizes wage systems on a local level?
2. How are the relationships between the employer and the employee affected by the wage systems present at the local level?

The answer to this first sub-question facilitates the opening of the current existent black box within this area of research, it allows an understanding for what is currently happening in practice within the organisations and will be answered within the results section. The answer to the second sub-question will be answered in the analysis section through the analysis of the data with Townley’s (1995) managing by numbers theory and previous research.

The study will look at organisations within the automotive industry within the Västra Götaland region of Sweden due to wages and circumstances varying both with the market considered and also the location within Sweden. Wage-levels and circumstances affecting wage-setting may differ depending on the market studied as differing factors will affect the market and how they operate thus influencing wage-setting thus in order to get a comprehensive understanding of a case of wage-setting one market was chosen for study. Furthermore Sweden is a fairly large country, at least within Europe, however the regions vary a lot depending on wage-levels as more jobs are located in the metropolis while significant
lower wage levels can be seen within the rural areas, thus the study was limited to one region of Sweden, this was Västra Götaland. More information about the layout of the study can be found in the methodology section.

**Previous Research**
This section will focus on research done on performance-based pay as a wage-system and how centrally wage-setting systems have been found to affect organisations.

**Wage Bargaining and Wage Systems**

The effect of national systems on organisations

Previous research regarding both wage bargaining and wage systems emphasize existent differences inherent in the industrial democracy institutions present within the labour market of various nations. Calmfors and Driffill (1988) discuss such differences and despite the age of the research are still quoted in many pieces of research on the topic today. They argue that bargaining coordination is a vital aspect and where this occurs in terms of the level is vital for the outcome of the wage negotiations. Russia for instance is characterized by a decentralised bargaining system (Vishnevskaia and Kulikov, 2010). Decentralisation means “the movement away from centralized wage determination towards a process that is more focused on workplaces or enterprises” (Dawkins, 1998, p.644). Vishnevskaia and Kulikov (2010) found that the wage-system in Russia is determined by social and not economic factors. This means that increases in wages are not associated with economic signals from neither of the three levels; country, sector or industry. Visnevskaia et al. (2010) reflect upon this as the systems main disadvantage. Individual organisations within Russia have a great deal of flexibility as they encounter no constraints when setting wages (Vishnevskaia et al, 2010). These are practical implications seen within Russia as an example of a system with a decentralized setting of wages, Dawkins (1998) however discusses in further detail the benefits and drawbacks of a decentralized system.

In Europe a centralized approach to bargaining is more common, the degrees of centralization do vary however (Boeri and Burda, 2009; Calmfors and Driffill, 1988). Boeri and Burda (2009) describe wage-setting in collective bargaining systems as occurring autonomously from local factors such as the productivity levels within the affected organisations and even market conditions affecting organisations. Hartog, Leuven and Teulings (2002a) who studied the bargaining system in the Netherlands found that central bargaining occurring at the industry level was correlated with higher wages, these results were supported by results found by Hartog, Pereira and Vieira (2002b) with Portuguese data and Stephan and Gerlack (2005) with German data. Stephan et al. (2005) also found that in addition to the higher wages for firms with central collective agreements a lower return on human capital (skills and abilities) existed as well.

Calmfors and Driffill (1988) mention Sweden as a nation which possesses one of the most centralized negotiation systems. Since 1988 however Sweden has seen the rise of the modern Swedish model in 1990 (Karlson and Lindberg, 2008) where the industrial agreement was also introduced which spans the entire sector of the Swedish market which is exposed to international competition (Elvander, 2002) this is explained in more detail in the settings section. The modern Swedish model does however allow wages to be adjusted according to industries, companies and individuals to a greater extent than earlier models (Lundh, 2008).
Wage-setting systems found within the organisations

Lansbury, Wright and Baird (2006) attempted to get an understanding of how wage-setting and wage-systems work on the organizational level through looking at four large car manufacturers in Australia. They found that agreements in place specified that employees were to have wage levels depend on employees’ occupational grade and all apart from Mitsubishi had a performance reward section to the wages also. Ford and Toyota had identified criteria against which employees were judged and GM had similar criteria against which employees were judged and rewarded but not monetarily. The trade unions in this sector were strong and coordination when bargaining between the organisations which affected the relationship between the organisations and the trade unions (Lansbury, Wright and Baird, 2006).

Forslund (1994) argues that Sweden possesses the most centralized labour market institutions within the OECD and found that at this time local performance only had a small influence on wage-setting in Sweden. However as discussed previously and in more detail in the settings section developments have occurred since this time and a new Swedish model is in place. The new Swedish model attempts to take greater consideration for more local factors affecting organisation and ensures that agreements are made in line with the economic forecasts. In 2011 only 6% employees within Sweden had their entire wage defined within a central agreement (Fransson, 2011).

Fransson (2011) studied the central collective agreement for the transport workers federation within Sweden as a case and looked at, among other questions, how the wage setting for employees, (affected by this agreement) worked in practice. They were also interested in what employers, trade union representatives and employees’ opinions were regarding the wage-setting model in place. The results found that only 14% of employees stated that they could increase their wages by working specifically with aspects which were identified as providing a wage-based reward. 27% said that they had the possibility of negotiating their wage with their boss individually and out of those who couldn’t 55% said that they didn’t want to negotiate their wages individually neither. The majority perceived that they could not get a higher wage if they chose to negotiate it individually and 17% thought they would in fact get a lower wage if they chose to do this (Fransson, 2011). Fransson (2011) also found that it was customary for the employer to define numerous criteria specifying good and bad performance within the various positions and that employees are assessed on these pre-defined criteria.

Alsterdal and Wallenberg (2010) looked at the Swedish public sector, more specifically at three cases of schools and presented their wage-setting systems. They found that the use of criteria in wage setting was adopted due to being a way in which to make wage-setting predictable for the employees and also because they could be used as a steering mechanism trying to influence certain behaviour. If the criteria are intended as a steering mechanism they identified that controlling of the systems becomes increasingly difficult unless it is very clear and explicit to what they are attempting to steer with the help of the criteria.

Alsterdal and Wallenberg (2010) studied three systems which all had difficulties. The first system was reviewed due to prior difficulties with its implementation; the new system was however never anchored in the daily operations and never became a living document. The second system also used criteria similar to the first example but they had managed to anchor these into the daily operations of the teachers work and went hand in hand with the school’s mission and goals. The third system adopted a more experimental technique where guidelines were used which was explained with the help of scenarios rather than criteria. The
representatives of the third example explained that this approach ensured that no employees were discriminated due to how they reflected upon their work within the appraisal talks as there is closer proximity to how the work is actually done within the organisations. Constant amendments to the scenarios used for explanations of the guidelines were necessary in order to ensure that these were up-to-date with work done at the school. Alsterdal et al.’s (2010) results found different approaches to wage-setting systems and argumentation for their use. They found that it appeared that the existence or inexistence of criteria was irrelevant, that they should be seen as a means to an end not the result in itself. The presence of the criteria is merely there to inspire and guide reflective discussions and can be especially helpful for inexperienced managers. They also raised awareness that when individual wages are to be implemented the role’s of the parties involved changes in that the trade unions no longer fight the battles for the employees but rather support the employees in fighting their own battles.

As such it is clear that there is no clear picture of how the central collective negotiations achieved in the modern Swedish model today affects local organisations. Research yielding various wage-systems has been found but a gap exists in that there is no rendition present in academic literature today regarding how results from collective agreements, such as wage increases, are implemented locally. The perspective of the representatives handling this process is missing from academic literature; this is a black box which must be opened.

**Individual Pay and Performance-Based Pay**

Individual pay Fransson (2011) defines as pay which the individual and/or the individual’s work tasks determine. Individual pay makes an assumption that the employer pays attention to how individual employees perform their work tasks, their ability and other relevant achievements and basis the pay of the individual upon this assessment but that this assessment is continuous (Fransson, 2011). Swabe (1989) relates this definition to the process of assessing the employee’s performance in that performance based pay is based on the employee’s appraisal or merit rating, thus there is a procedure and system associated with performance based pay. Performance based pay is thus a form of individual pay where the employee is rewarded based on their individual characteristics in their performance. It makes an assumption about the motivation of employees, that they will be motivated by a stronger link between effort put into the job which is defined in the system and the reward itself (Kessler and Purcell, 1992).

Performance based pay exist in two forms; merit based pay and incentive based pay (Boachie-Mensah and Dogbe, 2011) where merit based pay bases performance on the management’s assessment of an individual’s performance (Schuler, 1998). Incentive based pay on the other hand assesses performance against set criteria, these forms of performance based pay exist in various forms (Beardwell and Holden, 1995). Merit based pay exists in only one form and is used more frequently due to their ease of set-up and administration (Boachie-Mensah et al., 2011).

One factor linked to the effectiveness/success of a performance based pay system is which type of employee the system is applied to; managers or non-managers. Milkovich and Wigdor (1991) found that performance-based pay fares better on a group of non-manager employees due to their positions and responsibilities being more concrete and measurable. Barth et al. (2008) however found that organisations where employees have greater control over their work have significantly more performance based pay systems. Risher and Fay (2007) found that performance based pay could be more effective on manager due to their level of
autonomy. As such there is a disagreement within the literature over which employees would benefit the most from performance-based pay systems.

The setting of the criteria against which assessment will be made has continuously been a difficulty for managers but research suggests that if this were to be done collectively with the inclusion of employees a greater success rate would be seen (Coyle-Shapiro, Morrow, Richardson and Dunn, 2002; Beardwell and Holden, 1995). Barth et al. (2008) found that smaller organisations are not as likely to use performance based since due to their size it is easier for them to observe employee performance and set an appropriate wage level based upon this.

Performance-based pay is based on the assumption that there is a clear link between the performance of an employee and the monetary reward for this from the employer. Research has found however that if the link between performance and pay is weak, in the sense that the differences in amounts between a low and high performer are minimal, then employees may make the evaluation that the reward is not large enough for the potential gain to warrant amending behaviour and effort put into this (Wallace and Fay, 1998). A wage difference between the low and high performer should be between 3-4% according to academic research in order for an effect to be seen (Lawler, 1981 and Henderson, 1998). This suggests that when a system is centrally bargained and wage directives are sent to organisations it is imperative that they have the flexibility to create a significant difference between the reward for the lowest and highest performers or else the performance based pay system will fail. Thus performance based pay requires a degree of flexibility from the environment within which it exists in order to work but conversely it provides managers with more power and control (Kessler and Purcell, 1992) as they must be able to gain access to information about employee performance and have the right to assess employees against criteria. This power allocated to the manager in this system is necessary for the ability to monitor performance of employees in order to facilitate wage-setting based on these performances. Belfield et al. (2003) found that a correct combination of pay system and monitoring environment will yield increased organizational performance. This means that it is the ability for the organisation to monitor performance which should steer which pay system is implemented and if these match organizational performance will improve. Barth et al. (2008) found that performance based-pay is less common in highly unionized organisations or organisations which have central agreements and that this could be related to monitoring environment. They argue that the presence of a union could mean help with monitoring as they have an interest in monitoring the performance of their members also. They also found that performance-based pay will be more common not only when employees have more control over their work but when the organisation is exposed to product competition and/or have foreign ownership.

The academic research within the field of performance based pay is vast and has resulted in varying conclusions regarding the effectiveness of performance based pay. Some research finds that it affects job satisfaction (Ismail, Mohamed, Hamid, Sulaiman, Girardi and Abdullah, 2011) some research found that its implementation yields highly subjective results (O’Donnel, 1998). Performance based pay is as a wide field with highly diverse results found, a gap in the research does exist however in that the research does not consider the industrial settings in which wage-setting takes place. As described in the previous section Europe, for instance, is characterized by fairly central negotiations (to varying degrees between the countries of course) in comparison to the rest of the world. Such negotiations have a heavy influence on the wage-setting levels and process within organisations and it is vital that this is taken into consideration in research on performance-based pay systems as it is constructing a false reality presenting such a wage-system as occurring independently of the labour market.
Stephan and Gerlach (2005) stated that wage distribution is affected by a wide array of factors which differ between countries. Thus it is vital to attempt to gain an understanding of how performance-based pay works within the system of one country so as to see how the system present within the country affects the local wage-setting process and the existence of performance based pay.

**Theoretical Perspective**

**Managing by numbers**

Barbara Townley (1995) created a theory based on Foucauldian analyses of the area of accounting in which she analyses and describes the area of personnel management as a calculative practice. She focuses on the standardization of work and how numerical aspects can be attributed to such standardizations allowing the organisation of a field through the development of a grid or matrix. This she argues occurs in four stages which are depicted in figure 1 and described in more detail below.

![Figure 1 the Four Stages](image)

The first stage which leads to standardization is referred to as lexis. Lexis is the process by which a certain vocabulary is used which results in the labeling and identifying of specific aspects within the environment (Townley, 1995). It is the way in which individuals use their everyday language which identifies and separates entities or themes from one another, as such the world within which we live receives some form of order or classification through the vocabulary which we choose to use.

The second stage Townley (1995) refers to as taxonomy. Taxonomy she argues identifies a common denominator and in accordance with this denominator some order is established in a successive manner. Taxonomy identifies how relations between things or human beings function within the world that we live in based on the identified common denominator. Taxonomy is where standardization occurs, it takes the somewhat more organized world with various themes and concepts created by lexis and organizes this into an order based on one denominator.

Stage three can occur in one of two ways and refers to the order which taxonomy achieves. This order is achieved either through taxonomia which was described above or through mathesis. “Generally there are two systems of comparing – the development of an order through taxonomy (taxonomia), or the establishment of an order through measurement (mathesis)” (Townley, 1995, p.560). Mathesis Townley (1995) defines as a numerical order, basically the same as taxonomia but in quantitative form (p.561). Order exists through
systems and taxonomy and mathesis, she argues, makes up these systems such as systems for recording or classifying.

The fourth stage is the “provision of a descriptive or numerical grid or matrix which may then be finally translated into financial equivalents” (Townley, 1995, p. 563). Stage three through the application of taxonomy or mathesis or both providing an order management or governance of that order becomes possible as power can be enforced upon such systems. Grids or matrices Townley (1995) defines as “a configuration of knowledge which may be placed over a domain” (p.561) systems which stem from stage three become such grids and they can be applied within different fields. A performance appraisal system is for instance a matrix in which an employee is evaluated on various factors which yield a numerical figure; this figure is then placed within an administered matrix. Providing the order allows a matrix or grid to exists which can be utilized by management which has the benefit of simplifying for instance the organisation through diminishing existent individual differences and autocratically neglect existent differences which are not related to the identified common denominator which is the basis for the order/system and in turn the grid or matrix.

Townley (1995) argues that this theory is applicable to the field of personnel management due to the fact that one aspect of personnel management is concerned with implementing or controlling mechanisms within the organisation which permit the supervision and administration of individuals and that this work requires taxonomy and mathesis to be present. This theory is relevant for this study as at the local level the representatives of the organisations are either HR managers or possess a different title but is still responsible for HR based work within the organisation. These individuals administer the wages within the organisations and are as such involved in grids or matrices used to order the population within the organisation. Townley (1995) furthermore argues that this theory shows how personnel practices are used in order to “control from a distance through a process of translation and representation, purporting a form of governance and rationality” (p.569).

This theory is applicable to this study due to its perspective of how order and systems are created within organisations. It takes both a qualitative and quantitative approach which is the difficulty within wage-setting is that it is where both qualitative and quantitative concerns meet. Townley (1995) even goes on to describe how these processes function under HR processes which lie as the basis for wage setting. She indicates that personnel management’s use of these processes is used in such a manner as to gain control over the human resource and to make greater ease of governing this resource (Townley, 1995). This report presents a number of models used upon two groups of employees; white and blue collar which are exemplifications of management’s way in which to control and govern the human resource and their productivity. This will be further discusses in the data and analysis sections.

The Setting
Sweden is a nation characterized with a highly structured wage-setting system with multiple organisations involved and with much regarding wage-setting decided at the central level (Lundh, 2008). The Swedish model has seen 3 versions since its birth; the formation of the classical Swedish model in 1938, the interventionist Swedish model in 1970 and today’s Swedish model from 1990 onwards (Karlson et al., 2008).

The system of central wage negotiations began breaking down in 1980 and today’s Swedish model sees wage-setting occurring between the central and local levels where parameters for wage increases are set through collective agreements but the distribution
occurs locally (Lundh, 2008). The modern Swedish model allows wages to be adjusted according to industries, companies and individuals to a greater extent than earlier models (Lundh, 2008).

The industrial agreement is part of the modern Swedish model and is unique in its context in that it covers Sweden’s complete competitive sector, bridges blue and white collar distinctions and has a new take on conflict resolution (Elvander, 2002). The industrial agreement was created in order to “promote industrial development, profitability and competitiveness” (Elvander, 2002) due to Sweden being a smaller country reliant upon exports and being competitive in relation to the remainder of the world the motivation was to ensure that the areas of the Swedish economy which handles this aspect is not discriminated against or disadvantaged in any way by the Swedish model (pilot interview, Teknikföretagen). It is this industrial agreement which also sets the industrial mark for wages, the mark for wage increase which the competitive section of the Swedish economy can accept. As they are first to negotiate many other industries follow the industrial mark or use the mark as a point of departure for their negotiations (pilot study, Teknikföretagen).

In order to comprehend this study a comprehension of how the Swedish system functions today in the case of setting the industrial mark is necessary. Figure 2 provides a visual description of how this process functions and is what this section will be based on. This model was defined by the researcher and stems from the pilot study for this study which investigated how the setting of the industrial mark occurs today and how the collective agreement functions. The information presented in the remainder of this settings section is data gathered from the pilot study.

![Figure 2 the Process of Setting the Industrial Mark](image)

The system of negotiating the industrial mark contains 3 different levels. The first level (1) is the most central and level 3 is the most local. At level 1 coordination occurs between the parties prior to the collective negotiations which occur at level 2 and at level 3 the results of the collective agreement are communicated to the organisations which implement the directives in cooperation with the local trade union clubs.
At level 1 the interplay between the most central organisations on the trade union side the national trade union confederations; LO, TCO and SACO and the confederation of Swedish Enterprise (Svenskt Näringsliv) and other employer organisations such as Almega occurs. Coordination on a number of points occurs such as discussions regarding the future of the economy and the economic health of the organisations in the coming year. As such it is clear that a time perspective is also present within figure 2, this time perspective is displayed for ease of comprehension in figure 3 below.

Coordination from the employer organisations side is mainly characterized by discussion regarding the situation for their membership organisations, which factors are currently affecting them and how is their economy looking for the coming year. This is in order to gain a good perception of what level they can accept for the industrial mark.

On the second level in figure 2 and phase 2 in figure 3 the negotiation of the collective agreement on the industrial level occurs. The negotiations take place between Teknikföretagen and the three trade unions; IF Metall, Unionen and Sveriges Ingenjörer. For the trade unions the trade union confederations are involved purely for support of the trade unions, of course in the collective agreement this year only TCO and SACO were involved supporting their trade unions. The negotiations have set parameters for deadlines and measures which should be undertaken if deadlines cannot be met in order to ensure that an agreement is reached on time and that all are aware of the consequences if this is not the case. The results from the collective industrial level negotiations are summarized in the explanation of the case.

Post-negotiations a percentage will exist upon which all parties have agreed that wages should be increased for the period which the agreement specifies, this is in the case of the negotiations between Teknikföretagen, Sveriges Ingenjörer, IF Metall and Unionen referred to as the industrial mark. Once the industrial mark is agreed upon it is communicated down to organisations in phase 3 in figure 3.
At level 3 the industrial mark is translated to individual wage increases in each workplace covered by the collective agreement. This is done by each organisation calculating the pot, by increasing all the wages within the organisation by the given percentage (the industrial mark). This pot can then be distributed either evenly across all employees with the same percentage or management can choose to differentiate between individuals who gets a higher percentage and who gets a lower percentage. At this level also the newly negotiated minimum wages are applied, the organisation ensures that their entrance wages are in accordance with the negotiated entrance wages. As such wage distribution at the local level has to occur within the frame provided by the collective agreement but can differ between organisations.

Teknikföretagen has a regional representative designated to support and answer questions raised by member organisations. Seminars are organized to permit discussions on how to implement directives from the collective agreement as well as on other issues. When employees dealing with the implementation of the collective agreement on wage questions have queries or difficulties it is this representative whom is contacted and supports the organisation in these difficulties.

This study will look at the recent collective agreement which reached between Teknikföretagen and respective unions in Sweden regarding wage levels for 2012 (Teknikföretagen, 2011), the industrial agreement. This was a very controversial agreement as negotiations were very close to breaking down on multiple occasions (Teknikföretagen, 02/12/2011). Finally an agreement was reached on the 12th of December 2011 which was active from the 1st of February 2012 until the 31st of March 2013 this agreement gave a 3% increase in wages for employees covered (around 300,000 employees) affecting around 3200 technology companies (Teknikföretagen, 2011).

The raise in wages up to 3% which in reality will mean a raise of 2.6% was controversial as it was seen as a relatively high raise due to the nature of the economy. Although we saw improvements in the economy in 2010 and beginning of 2011 Sweden has returned to levels seen in 2006-2007 (Teknikföretagen, Unknown). This agreement will hence forth be known as this year’s agreement as it although negotiated in 2011 affects wage for 2012 primarily.

Methodology
In order to answer the research questions detailed data from representatives responsible for translating the industrial mark and implementing it within the organisations was needed. As such this study will take a different methodological approach to that used by previous wage-bargaining research in order to provide some further in-depth understanding. A series of semi-structured interviews were thus held in order to allow the depth of data needed to be collected over an identified sample, as such no generalizations can be made but a case study analysis can be adopted to gain more in depth knowledge within the area. Through the study of numerous implementation processes of the collective agreement this study will show a variation of how implementation of a collective agreement can happen.

The sample
The size of organisation to be targeted for the study was chosen to be medium sized organisations. Medium sized organisations were identified as a relevant sized organisation to study as allowed a sample of multiple organisations with wage-systems in place which could be compared to one another. Smaller organisations may not have reached the level of having systems in place and larger organisations have significantly more employees and thus greater
complexity to their systems requiring a detail of analysis which may be more appropriate for a case study. The decision to target medium sized organisations was also made on the basis of convenience sampling as a great number of medium sized organisations are present in the Västra Götaland region of Sweden allowing for a larger sample for the study. By medium sized organisations with 50-200 employees are meant (European Commission, 2003).

The organisations’ membership to Teknikföretagen was imperative to their inclusion in the study as this meant that they were affected by the setting of the industrial mark and had to work within the parameters of the Swedish model with directives from the central negotiations. This is important for the understanding of the negotiation process, and how the agreement of 2011 was met on the local level. As such the method employed was non-probability purposive sampling as no statistical inferences had to be made from the data, rather the purpose of the study is to comprehend how the system works, opening up the black box if you will (Saunders, Lewis and Thornhill, 2009). A specification of location to limit the region to Västra Götaland, Sweden was also used due to extensive variances existing in wages between different areas of Sweden, rural vs. metropolis for instance.

The Participating Organisations

Size of Organisations
Medium sized organisations were identified as companies with 50-200 employees (European Commission, 2003).

One larger company with above 200 employees was also chosen for analysis in order to provide a basis for comparison to see if any differences in size existed. This organisation was selected through convenience sampling but fulfilled the restrictions of operating within the automotive industry and being located in the Västra Götaland region.

Contact
All contact with organisations and subsequent interviews were made in Swedish to allow the interviewees to speak more comfortably about the topic with terminology which they were used to. Due to this all data was translated from Swedish to English by the researcher with utmost care for ensuring that the quotes and data loose as little information as possible in the translation process. Individuals responsible for the implementation of the collective agreement within the organisation were contacted first via e-mail asking for an interview and explaining further about the study.

All medium sized organisations within the automotive industry members of Teknikföretagen in Västra Götaland, Sweden were contacted the purpose of the interview was stated clearly stated and no information was hidden from any contacts. A policy of open communication was adopted where at each stage of contact with the organisations the representatives were encourages to ask the researcher questions and raise concerns if they had any. The researcher identified herself as a student of Gothenburg University and described the master for which the study was being undertaken in this initial contact.

The anonymity of the organisation and the individual was assured both in the initial e-mail and in the subsequent telephone conversation. The preference if possible was always an in-person interview due to results from such interviews often carrying more detailed information and the ability of the researcher to inspire a vote of confidence in the interviewee. Due to the sensitive nature of the topic (wages) the researcher placed a great deal of importance of ensuring participating organisations anonymity and full disclosure of the topic of the report and how the data would be used. If an interview was not possible in person a telephone
interview was booked. The period when these interviews were done was when representatives were dealing with the implementation of the collective agreement and wage increases which is what makes the study relevant and ensures that the information was fresh in their minds during the interview but the problem was that many were extraordinarily busy with this so they could only do a telephone interview.

Those who declined the invitation to participate chose to do so due to restructuring of the organisation in one case but in all other cases it was due to the lack of time available from the interviewee due to the busy time period. Out of 14 possible organisations only 4 chose not to participate and one was no longer a viable candidate due to being sold. 10 medium sized organisations and 1 large organisation participated in the study, summarized in table 1 below, out of which 5 interviews were in-person and 6 were over the phone.

**Description of Organisations**

A wide range of organisations participated in terms of employee figures (see table 4). The dispersion of blue vs. white collar employees within the organisations varies. There is one outlier within the sample, organisations B; this company has no blue collar employees.

<table>
<thead>
<tr>
<th>Reference Name</th>
<th>No. of Employees</th>
<th>No. of Blue Collar Employees</th>
<th>No. of White Collar Employees</th>
<th>Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>134</td>
<td>106</td>
<td>28</td>
<td>Finnish based Organisation</td>
</tr>
<tr>
<td>B</td>
<td>77</td>
<td>-</td>
<td>77</td>
<td>USA based Organisation</td>
</tr>
<tr>
<td>C</td>
<td>150</td>
<td>100</td>
<td>50</td>
<td>-</td>
</tr>
<tr>
<td>D</td>
<td>53</td>
<td>26</td>
<td>27</td>
<td>-</td>
</tr>
<tr>
<td>E</td>
<td>170</td>
<td>130</td>
<td>40</td>
<td>-</td>
</tr>
<tr>
<td>F</td>
<td>170</td>
<td>100</td>
<td>70</td>
<td>2/3 owned by Swedish foundations and 1/3 on the stock market</td>
</tr>
<tr>
<td>H</td>
<td>15000</td>
<td>6500</td>
<td>8500</td>
<td>-</td>
</tr>
<tr>
<td>I</td>
<td>135</td>
<td>105</td>
<td>30</td>
<td>USA based Organisation</td>
</tr>
<tr>
<td>J</td>
<td>120</td>
<td>85</td>
<td>35</td>
<td>-</td>
</tr>
<tr>
<td>K</td>
<td>65</td>
<td>20</td>
<td>45</td>
<td>-</td>
</tr>
<tr>
<td>L</td>
<td>80</td>
<td>50</td>
<td>30</td>
<td>Swedish Equity Firm</td>
</tr>
</tbody>
</table>

Table 1 Properties of the Participating Organisations

**Semi-structured Interviews**

The semi-structured interview approach was taken in order to ensure that certain questions were answered. As however this study attempts to open the black box regarding how centrally negotiated agreements affect local organisations it was felt that to have a more conversational tone to the interview allowing and encouraging interviewees to speak openly and freely about how they work with such questions would be the best approach. A semi-structured interview allows the researcher to ask questions identified relevant to the research whilst allowing information which he/she could not have anticipated to be uncovered (Saunders et al., 2009).

**Ethical Considerations**

Wages could be considered a sensitive topic to discuss in order to ensure this was not an issue priority was placed on emphasizing the anonymity of the individual and company and
an open communication with the researcher was adopted. Participants were provided with cell phone number and e-mail of the researcher and were ensured they could ask any questions any time, also every interview started with a question regarding if they had any queries or concerns regarding the study. Most participants spoke freely about the topic in an explanatory nature and felt it was easy to do so due to the fact that they were working with the question of wage setting at the time that the interviews were taking place. This time aspect is what makes the study relevant; interviews were done whilst wage-negotiations with trade-unions and employees was undergoing or had just been completed which meant that the information was fresh in the mind of all interviewed and there was never a case of them not being able to provide an answer to a question.

The consent to the study was informed consent (Saunders et al., 2009) as all participants at the start of the interview were asked if they had any further questions for the researcher and if desired they were provided with more detailed information about the researcher, the program and the study.

**Trustworthiness**

In order to ensure that the data gathered was valid and reliable open-ended interview questions were asked only, to ensure that biases of the researcher did not affect the data gathered. The semi-structured interview was used in order to allow the interview to take in a conversational tone whilst still permitting the correct data to be gathered. Due to the exploratory nature of the study it was necessary to provide some element of flexibility to allow the interviewee to discuss what necessary and relevant for them and their organisation.

Where appropriate and possible the interviewee was asked if they could provide relevant documentation. This took the form of the steps in the blue collar wage system for organisations, documents explaining their philosophy from trade unions and the collective agreement and other material containing their standpoints on wage-setting and the economy from Teknikföretagen. This documentation was utilized in order to further understand the concepts studied and helped the interviewer to explain their points of view.

This triangulation approach of gaining information from parties external to the organisations yet still imposing some sort of effect on them, interviewing the organisations themselves and gaining access to documentation regarding wage-systems permits the researcher to gain the most reliable and valid information possible for this study.

**Analysis of Data**

All interviews were recorded and transcribed post-interview. These transcriptions were divided into the relevant themes for the research; wage-systems for blue collar worker, wage-systems for white collar workers, the implementation of the collective agreement and the distribution of the pot, the setting of entrance level wages and the organisations’ perception of the Swedish model today. A table was constructed to allow the researcher to see the overall image, this consisted briefly results within all themes of the interviews.

After these steps the researcher identified the 6 system in place within the organisations and began to clarify their description with the help of quotes from the transcriptions. The 6 systems were identified and an overall image was developed of what the wage-setting looked like within the sample. Based on these identifications of the systems quotes were gathered for in-depth knowledge about them and then Townley’s (1995) theory managing by numbers was identified as relevant for the analysis. Each system was scrutinized with the theoretical framework provided by Townley (1995) as well as the previous research existent on the topic.
Through the implementation of Townley’s theoretical framework and previous research answers to the research questions were found.

The representatives were contacted for follow-up questions when necessary and this data was then included in the data.

Results
This section will reveal how the translation of the central agreement to the local organisations wage-systems occurred in sample organisations. Findings will be presented on the various forms of wage systems which were found and how both individual wage setting and entrance wages were set in the parameters of such systems. This section will as such provide an answer to sub-research question one; what characterizes wage systems on a local level?

From Central Agreements to Individual Wage Increases

Blue Collar
The medium sized organisations interviewed in all but one of the cases had an existent wage system for blue collar workers; the reason as to why one company did not have a wage system for blue collar workers was due to that this organisation (B) does not have a blue collar group present within their organisation. The blue collar groups stand for the production of the products sold.

Translation through the Single System
The first system into which the central agreement was translated on a local level was the single system. The single system organisations have one single wage system based on a ladder formation, the amount of steps and specifications under each level varies among organisations and in some cases even among various functions within the blue collar group. The common factor here is that there is a mix of measurable objective criteria and soft subjective criteria within the levels but a clear wage is present for each level.

For single system organisations “softer” criteria such as perceived flexibility, social competence and use of time were perceived to be embedded within the various stages. Organisation C, one of the organisations using this system for their blue collar workers described this in the below quote when discussing softer criteria which employees are judged by.

“For you to do a good job with quality and all which that includes, then these steps comprises parts of this, and if you can’t do these parts (softer criteria) then you will not be moved up. You should be able to do a certain job within a time frame and with certain quality … naturally interpersonal skills and everything is also included of course. If you are difficult to work with we can’t move you up … there are many things which aren’t stated straight out but are included in the stages.” (Organisation C, Quote 1)

Thus these organisations have made the choice that harder and softer factors are inextricably interconnected and should not be separated as they are connected at each stage in the ladder. Figure 4 below is an example given by one of the organisations of roughly how their ladder system is structured; it has more specific details for each job.
There is a clear mix of “harder” criteria such as which machinery employees should master and to what level. This organisations identified as easier for them to measure, a more objective judgment of their performance and competence. There are also numerous “softer” criteria included which are more difficult for the managers to assess and poses a risk for a more subjective assessment of the employee, such as working for the efficiency of the organisation and flexibility which may be perceived differently by different managers. This risk is understood by many of the organisations but they highlight the combination of hard and soft factors as important in order to ensure that no wholly subjective assessment is made of the employees, in order to keep it as objective as possible.

Access was not provided for all the wage systems, for instance from organisation E who also use the single system, but those companies which provided access the amount of levels varied between 4-6 possible levels the individual could climb up in both the singular and dual system organisations. All organisations stated that these levels were based on the competence of the employees. They also mentioned that the first level was for those individuals who just came from an education with no previous experience as is exemplified in figure 4. Employees are evaluated again fairly soon after joining the organisation, this varied between 3 months as the earliest period for a re-evaluation to 6 months at which point depending on their progression they could move up a level and thereby receive a raise.

The closest manager makes the assessment whether or not employees should remain at a level or move up a level there is no negotiation between the two parties. This is done continuously throughout the year although the pot is only distributed once a year.

“Say you come in at level 3, then the job is specified, you should know this, this and this. … Then there is a manager who judges these elements who knows how it works ... There is a price for every level in the system.” (Organisation C, Quote 2)
Thus the managers are responsible for assessing a new recruit and placing them within the system but also with existing employees they are responsible for assessing when they should move up in the ladder. This assessment is made by the manager alone without any discussion with the employees. The trade unions are not involved in the movement of employees between levels of the ladder; they are only involved in the creation of the system.

Organisation I also use the single system and have a ladder in place in which employees are assessed. They argue that despite the existence of this system an individual wage exists for the employees as employees have the ability to influence their wage level by improving their knowledge and competence and moving up the stages in the ladder as defined by the organisation.

“There is a matrix, where if I can run X number of machines etc. (I get X amount of money), so this is how the ladder exists and when you’ve reached the next level of competence you move up in the wage ladder. ... On the blue-collar side this means that if you can perform at a higher level you will move higher up in the wage-ladder, there is no negotiation there (you are automatically moved up). ... In the wage-ladder it becomes individual based on their development within their work to become better.” (Organisation I, Quote 3)

Thus they state that an employee has the opportunity to influence their own wage by increasing their performance and as such it is to a certain level performance based pay. The higher levels within the ladder are identified as vulnerable due to high demand within the labour market and the inherent high cost in training employees to that level.

"If we have a specific competence which is highly vulnerable to competition then we may have to raise (wages) a little more. So we have an addition to the wage and this those employees get who are team leaders with us. So therefore this addition could be seen as the 5th stage in (our) wage-ladder. They are hard to get a hold of and expensive to educate.” (Organisation I, Quote 4)

Thus the ladder for the single system organisations is characterized by a detailed description of the competence which is needed for the job and comes from a job specification done by those who know the job and its requirements well and contains a mixture of soft and hard factors. An additional factor is taken into consideration at the higher stages and that is the positions vulnerability to competition at which point an additional raise in wage is seen. The managers assess employees into this system without the involvement of the neither employees nor trade union; trade unions only partake in the creation of the system.

**Translation through the Dual System**

The dual system organisations have a combination of a ladder system similar to that discussed in the single system section and a number of criteria based on “softer” criteria. In these organisations what was combined in the single system has been separated and is assessed separately in the dual system. The ladder system in this system is purely based on competence needed for the job, the amount of machines the employees needs to master, to which level they should be able to master them and the responsibilities which they have. Organisation K uses the dual system and they describe their division between the two systems as follows.

“On the blue collar side we have a wage system in which we classify each work task in a point system (ladder) and then we have what we call a competence
distribution system where you go in and assess 6 different factors; sense of responsibility, professional competence, productivity, versatility, commitment and independence. … The 6 factors plus what job, what position they (blue collar employees) have and education are also classified in a point systems.” (Organisation K, Quote 5)

As we can see from organisation K’s example described above the combination of the dual system allows points to be given to the employee not only based on the place he holds within the organisation but also his/her performance within the criteria. The system attempts to have a balance between both the individual’s role within the organisation as well as an individual aspect recognizing how the employee works and the benefits they bring to the organisation. The quote below from organisation K indicates how when the dual system is used a wage which has both a clear base in the work which is done and individual performance within that position is the basis for the wage received.

“On the blue collar side we have a wage system which regulates the wage so there as a base everyone has the same wages and then it depends on which department you end up in and which roles you have and how you perform individually, then the wage can develop accordingly.” (Organisation K, Quote 6)

Thus the dual system provides a possibility for the employee to influence their wage to a greater extent than in the single system as they are rewarded on multiple factors. It sees greater flexibility allowing multiple facets of an employee’s performance or work to be recognized.

Organisation F is another organisation using the dual system. Similarly to organisation K they use a point-based system in which the position they carry, their place on the ladder, gives a certain wage which then is built onto with blocks and these blocks in turn give points which correspond to a monetary value. The blocks include the education level, professional work experience, the amount of time you have worked within the organisation, commitment and work performance. This is further explained in the quote below.

“So the first assessment is your professional work experience in years and what you know and then you do this job evaluation in stage 2. Then you look at (for instance) assemblers and then you build on to this with different blocks then with points which becomes money. … What education you have when you start, you have a technical high school education so that gives you 100 points for example. Professional experience we can see on the CV, how many years you have been out working. Then we have a criteria we call period of employment which is 0 when you start and then it begins rolling in a certain rate. Then there is also 2 soft parts I would say and those are commitment and work performance where the boss assesses the co-worker on which level they lie in commitment and work performance.” (Organisation F, Quote 7)

The above quote is an explanation of how you would enter a newly recruited employee into the system. When you are newly recruited you get a basic pay which you get from being placed within the system through an assessment of your education, the job you are getting and you previous work experience. Those three elements construct the fixed pay then they use period of employment, commitment and work performance which are the individual aspects of the wage but a new recruit is only assessed into this individual wage between 3 to 6 months after their employment began. Organisation J has a similar layout to their dual system where they state that the individual aspect of blue-collar wages within their system makes up 20-
25% of their wage. They use a competence based system for the ladder also in which they take into account both main work tasks and versatility, work tasks which the employee can perform but does so rarely they separate these in order to ensure that no individual gets overcompensated.

“We evaluate the main field (the employee works in) in competence stages (ladder) and then in a falling scale we evaluate what you (the employee) doesn’t do frequently but have the knowledge and capability to do. We split these up so that no individual becomes overcompensated because otherwise it’s easy for those employees who are versatile to become over compensated and specialists fall behind.” (Organisation J, Quote 8)

Organisation J has 5 existent stages of the ladder and defines competence in the terms of to which level the individual knows the machine or process, this is similar to how competence is defined in figure 4. In difference from organisation I using the single system organisation J do not aim to educate or train their employees to the top level because at this level the employee is overqualified for the job. Organisation L state this ladder allows employees the opportunity to individually take control of their wage levels through improved performance yielding moving up the ladder.

“There is a matrix on which (I can see) can I run X amount of machines etc. so there the stages exist and when you have reached these (stages) you then climb up the wage ladder.” (Organisation L, Quote 9)

If this is the case however that employees can have an individual and thus performance based pay through improving performance as defined by the various stages then organisation J inhibits this opportunity through faltering in the support of employees to be able to reach the top levels. Therefore for organisation J once you reach a certain level it is a purely individual endeavor to reach the top level as support will not exist from the organisation.

The second part of organisation J’s dual system is similar to that of organisation F’s in that this also includes a multitude of factors which are assessed externally from the ladder system. These factors are productivity, work environment supplement, period employed with the organisation and if they work as an instructor internally or externally or can do external work for e.g. clients. The difference with organisation J is however that they break down the productivity factor into three further parts

“Productivity includes work rate, use of work time, quality and responsibility and when you bake these (four factors) together you get a matrix where you can calculate how much it (the wage increase) will be. These are fixed points and each point has a compensation value.” (Organisation J, Quote 10)

Therefore productivity is clearly defined in what it attempts to measure and yields definite wage increases in terms of figures for organisation J. Organisation J in difference from organisation I also state that they have an ambition to remove the compensation for period worked within the organisation as they are trying to depart from this form of thinking but it is difficult. The use of instructor compensation is to have a clear definition of who is in charge of instruction of new recruits otherwise discussions tend to arise around this topic that it is in no one’s job specification.

It is thus clear that for the dual system a ladder is present for all organisations as are factors which are independently assessed on the side. All levels within the ladder are attached to
monetary values as are the points which employees receive for performance on the individual factors. Both organisations K and F use a combination of hard and soft factors which are independent from the ladder system such as commitment, all used the hard factor performance as an independent factor but organisation J had a very clear break down of what this word means and how to assess it within their organisation. Organisations J and F differed from organisation K in that they had independent factors which did not include a scale assessment if they were to be rewarded they got a fixed value such as supplement for being an instructor or for the amount of time worked within the organisation which are just implemented directly on the employees without any assessment necessary.

An interesting result was that three of the dual system organisations (A and F) which did not presently have flexibility within their criteria for individual assessment are looking to revise their systems during the coming year to become more up-to-date and to include flexibility as a criteria. Organisation F is one of these organisations and they state the following about re-doing their wage system for the blue collar side.

“We see that this model is something which we have to amend because a wage system never lives long; you have to amend them constantly as the operations change as well as the conditions in the departments. Now it is very much that we must be flexible, you should preferably know many different things and many different roles and that we don’t feel that we have in our wage system. We have to make sure that we can continue working with rewarding those who learn different things and are motivated and think that it is fun etc. and that you have a good work performance also.” (Organisation F, Quote 11)

Organisations perceive the dual wage-system as a system under need of constant attention and occasionally amendments to ensure the organisation is rewarding the behaviour they aim to reward. Although the same basic system is in place in terms of a competence ladder and separate independent factors uncertainty and change is directed towards the presence of the independent factors and how these should be handled within the system today.

*Translation through the Business Negotiation System*

One organisation (D) diverged from the other organisations which had both blue and white collar employees present within the organisation. This organisation had fewer employees (52) out of which a rough half-half split existed between white and blue collar employers. As such they felt that they did not need a clear system in place, such as a ladder system. Rather they implemented a system which is highly individualized, each employee sat down with their line manager and negotiated their wages.

This system varies greatly from the other two blue collar systems in place which are characterized by no negotiation or discussion between the line manager and the employee whatsoever where as this system is completely reliant on the employee themselves negotiating their wages. Naturally this is not characterized by complete freedom as the collective agreement still provides a frame by how much a wage can increase in the form of the industrial mark. However clearly different strengths and strategies are needed for the different blue collar systems in place. Within this system the employee looses the trade union as the agency negotiating aspects of their employment such as wages, to having to do this section themselves and instead being supported by the trade union.

Organisation D was the only organisations which did not have a local trade union club for IF Metall representing their blue collar employees and this could be a reason as to why wage-setting for these employees took such a different form. However this could
provide an insight into how organisations start off with wage setting for the blue collar employees that these are much more independent than they become later when a system is superimposed on them.

**White Collar**
The group white collar workers were quickly a group which the interviewees identified as difficult and an exception within the organisation due to their small size in relation to the blue collar group.

“That we have individual wage setting is due to that we don’t have any mass of people. We are 28 white collar employees; we don’t really have a reason for creating a wage system” (Organisation A, Quote 13)

As can be seen by table 1 in the methodology section, the group of white collar employees is significantly less in comparison with the group of blue collar employees of course varying among the different companies but roughly making up 1/3 of the total number of employees. Allocating the pot to white collar workers was described as a more complex process compared to blue collar workers. As a group white collar workers have more varied work tasks thus making it more difficult to generalize them in order to be able to create a wage system.

*Translation through Criteria in Appraisal talks*
All medium sized organisations quote the appraisal talk as venue within a discussion on which wage-setting for white-collar employees occurs. The appraisal talk is identified as the venue through which the translation of the collective agreement to the local level occurs for white-collar employees.

This system found for wage-setting among the white-collar employees within the organisations interviewed was used by one of the organisations only, organisation F. This system, although the organisation did not want to refer to it as a system as such, saw the identification of a number of criteria against which employees are assessed. This system is somewhat similar to the individual criteria part of the dual system for blue collar workers apart from that the assessment of criteria occurs during the appraisal talk between individual employees and their boss and no ladder system is present.

Organisation F mentions criteria which they use for assessment which are similar to those criteria found present for blue-collar employees within the dual system. The criteria which they use to assess white-collar employees against are: skill within your profession, work performance, commitment, responsibility, teamwork, creativity and flexibility.

“On the white collar side there are no models in that way, there it is more of an individual wage setting but that means that we still look at criteria but not with an excel sheet with fixed kroner and ores but we look at criteria which we want to base wages on.” (Organisation F, Quote 14)

Thus we see that their definition of a model or system is something which has more firm guidelines in place such as a grid with corresponding numerical values. However they use these criteria for all white-collar employees and only assess performance or characteristics of employees surrounding these. Therefore for the purpose of this study this approach is seen as a system, it is still an identified manner by the management in which to judge or assess all white collar employees, this is further discussed within the analysis section. The line managers in the organisation evaluate their employees in accordance with criteria and the
definitions of these criteria which they are provided with and bring these ratings back to HR who ensures that all bosses rate their employees similarly.

“It’s a little more of individual wage-setting but this means that we still look at criteria but not in an excel sheet with fixed kroner and ores but we look at criteria which we want to set wages according to and these are; professional skills, results, commitment, responsibility, cooperation, creativity and flexibility. … We have some support under each criteria. Every boss gets to look a little bit; yes this is satisfactory maybe or dissatisfactory or very good or excellent. You have to think a little about your co-workers; how do I grade this person?” (Organisation F, Quote 15)

Thus we see that organisation F have identified a number of criteria against which all white-collar employees are assessed. The managers are provided with a four point scale from unsatisfactory to excellent which they assign to the employees within each criteria.

They take into consideration the differences in interpretation which could be present as a multitude of managers use these criteria. In order to ensure that all employees are assessed equally HR takes a mediating role ensuring that all managers have the same comprehension or definition of the various criteria and assess their employees similarly.

“The manager gives me the input and I sit with the whole wage-setting (for the entire company) and then I look that the managers make similar assessments because that is what could be difficult when you have different managers. Some are really strict or expect a lot and some think that everyone is really good in their group so that you get a consensus on how you look at your co-workers from these criteria. Then I give a suggestion based on the pot how we could distribute the pot and then I talk to the managers again to ensure that they feel that this structure or distribution feel fair based on what they’ve said.” (Organisation F, Quote 16)

Thus it is the HR manager’s responsibility to come with a suggestion of wage increases for all employees but uses the evaluation she receives as a basis for this work. Placing a monetary value on each employee is based on the pot and how large the pot is that year as well as guarantee levels. The HR manager discusses her perspective on this process in the quote below.

“When I (the HR manager) gets these assessments it gives me an overview of where the key employees are who develop the business and who maybe take initiative and push the organization more and develop more that we don’t want to lose. Then we look at what is happening outside of the organisation? How do the market wages look like? Things may be happening in the market which means that we have to secure, we may notice that there is a shortage in engineers then we have to make sure that our engineers don’t leave us due to us paying them too little.” (Organisation F, Quote 17)

Thus it is clear that this organisation uses identified criteria against which employees are assessed by their managers for which they use the appraisal talk as a basis but also their observations of the employee throughout the year. However it is not merely these criteria which affect the wage-setting, the HR manager also has the role of ensuring that the overall wages of the organisation are at what they feel to be at the correct or acceptable level. As such
there is an individual aspect to this form of wage setting but a structural approach is also present.

*Translation through Key Performance Objectives in Appraisal Talks*

The second approach to wage setting for white collar workers was to base the assessment on the achievement of business goals or key performance objectives set for employees the previous year. Again this assessment takes place within an appraisal talk at which point the goals or performance objectives for the foregone year are reviewed and new goals are set for the forth-coming year. Organisations B, E and H used this approach to wage setting for white-collar employees. Organisations B and H are the two organisations with the largest amount of white-collar employees within this sample, organisation E has no distinction within this elements (table 1). The representative described their approach to white-collar wage setting as follows.

"On the white-collar side its different, there the managers set (wages), based on discussions and goal setting for the individual. It’s a little more subjective assessment perhaps of what the individual has performed. Then as a base there is a little which competence and education they have also.”  
(Organisation E, Quote 18)

As such a discussion takes place within which the goals are set for the individual; these goals are for organisation E individual for each employee. They recognize that the assessment which also occurs within these discussions (appraisal talks) end up being more subjective in comparison to their blue-collar system.

Like organisation E organisation B have an appraisal talk which is based on the key performance objectives set out at the appraisal talk the foregone year which are then rated and then lie as the basis for wage setting.

“You go through the goals you got in the beginning of the year, the KPOs – key performance objectives. Then you use these for the basis of the wage setting, we have to get there because then you have it on paper then this is the basis for the wage discussion so first we have the development talk and then the wage discussion so that you have something to motivate with … When you do performance reviews, blatantly said we rate employees so there is some form of grading system and then you get a max value of 4 … We sit in dialogues constantly (me and the managers) and then I summarize (how the pot is distributed) and the CEO and I go through it.” (Organisation B, Quote 19)

Thus organisation B uses their KPOs as the base for their wage-setting system for their white-collar employees. These KPOs are individual for each employees and are set in a discussion between the manager and employee. Performance in accordance with these KPOs are discussed in the appraisal talk and post appraisal talk the manager makes an assessment and places a number on the performance in a grading system. These numbers gives an overall picture of the organisation and performance against KPOs and the CEO and HR manager then sit down and place wage increase amounts on each individual. Whilst doing this they also take into consideration if any group or individual has a disproportionate wage to the rest of the organisation, if they are particularly low then they will receive more significant wage increases.

The large company H described their white collar wage system as a complex performance rating system. Their ambition is have purely performance based pay within the organisation.
All occupations are ranked within a system containing a letter for each level. Each level has a wage frame. During a yearly merit-review the line managers do a performance review where they assess to what extent their employees have completed their goals set out during the last year and if so how they did it. Based on this performance they are given a rating from 1 (underperform) to 5 (top achiever) which is handed to the department handling wages, after which the manager gets a suggestion of a frame for each employee’s wage increase based on current wage and where this fits in with the others in their department and the organisation as a whole, as well as their performance and the pot that year. The way the goals are identified is described in the quote below.

“Goals are set which cascade down from the management; if it’s finance then it’s the finance management team which interpret the goals and then send this down in the organisation. You can make some more personal and some more department specific goals and that is the goal-setting process which you closest manager goes through with you and how well you have followed up on it. If for instance you have followed up all your goals but left a broken department, you have walked over corpses and exhausted people then this should be assessed too. Then you set a 5 point grading scale and get a value on the people.” (Organisation H, Quote 20)

Organisations B, E and H all use goals set for individual employees as the basis upon which they judge performance, performance is achieving these goals and doing it in an approved way. The performance is assessed into a numerical scale which gives an overview of all employees and wage increases are then given from a central discussion over what the wage increases should look like that specific year. Here structural changes are taken into account if specific departments have performed better than others, and if departments or employees are lying at a lower level than the rest of the organisation in their wages. These wage increases are given from a central level as the assessments of the individuals have to be translated into actual monetary increases which are related to the size of the pot. The organisations (B, E and H) all stated that they must keep to the industrial mark given by the central negotiations and thus the pot gives the frame for wage increases.

Translating through Business Agreements
The third manner in which white collar wages are set is based on a business agreement which is made within the yearly wage discussion between the two negotiating parties; the representative of the employer (often the closest manager) and the employee. This approach is seen as a pure negotiation where the relationship between the employer and employee is seen as a business agreement where one is buying the service from another for a certain price as is described by organisation K below.

“As I see it, it becomes and individual negotiation and an individual assessment which you make. In the end it is a business agreement which you make, someone is selling their service and someone is buying that service.” (Organisation K, Quote 21)

Organisations C, I, K and J use this system and they mention that they use the collective agreement as a base for wage setting in this respect.

“We follow the (central) agreement, we then set a budget on the white-collar side, and if it’s 2.8% we set 2.8% and distribute these. We don’t distribute 2.8% directly to every employee … but it’s rare that anyone gets under 2.8% … some wage gliding therefore occurs. … This (the wage system for white collar
employees) can be referred to as a wage negotiation. We follow the (central) agreement which is already negotiated. Then there can be employees who feel that this (their wage increase) is way too bad, that it is too low in comparison to the market and we take this into consideration so in some cases we do make adjustments and some cases we don’t.” (Organisation J, Quote 22)

Organisation J, as such show that they use the collective agreement as a base for wage increases within the organisation. They implement the industrial mark and from it get a pot which is distributed although differences between percentages between employees exist resulting in wage gliding as more is distributed than exists in the pot. They state that a wage negotiation discussion occurring yearly is the venue for the wage negotiation but after wages are negotiated between the employee and their manager. However after these discussions take place the financial manager will go through the overall wage levels and distributions within the organisation and will deem whether any individuals lie too low. They explain this in the quote below.

“We look at the departments; what they need and how it (the wage distribution) looks … we don’t measure performance that is defined in more detail on the blue-collar side it’s (the wage negotiation discussion) more a discussion about everything within the department. … We look at if anyone has performed well, if the recently employed are performing well, and then there are those white-collar workers which we are careful to keep … certain employees are sensitive to us and then we have to pay (higher wages).” (Organisation J, Quote 23)

As such for organisation J the basis for their wage-setting system is a wage negotiation taking place individually between the manager and employee but there is also a more central view on the group which attempts to ensure fair wages across the group.

Organisation J as such use negotiated industrial mark in the collective agreement as a basis for their wage setting each year. Organisation K use the equivalent approach and state that they use this agreement as a framework guiding their wage increases, they express this in the quote below.

“… and for the white-collar employees it becomes and individual negotiation with the manager then in accordance with a frame. You have to have a frame where you have (included) what it costs this year (industrial mark) etc.” (Organisation K, Quote 24)

Organisation I state that they also use this system of individual negotiations between the manager and the employee. These also take place for them in yearly wage-negotiation discussions. However they emphasize that competition for a specific competence and performance also plays a role in the wage which the employee receives; this was mentioned by organisation J in a previous quotes as well.

“Yes performance and competition also (are used for white-collar and blue-collar). If we have a specific competence which is in high demand we may have to raise a little more.” (Organisation I, Quote 25)

This focus of being flexible in wage setting and taking into account the competence which exists within the organisation and the need to keep that competence within the organisation is as such a necessary function of wage-setting for these organisations. A constant eye needs to be kept on the labour market to ensure the correct wage levels exist within the organisation.
and to know which competence within the organisation is at high demand within the labour market. As such strategic wage increases are used to ensure that these individuals remain within the organisation. Organisation A discuss the difficulty to handle this for the white-collar side as there, they state, they are much more dependent on getting the right individuals with the right competence for each position. Due to the small size of the white collar groups and their ability to impact the organisation recruiting and keeping the right individuals is crucial as the performance of the organisation can be greatly impacted by events within this area. Please see quote below for how organisation A in part voiced these concerns.

"On the white-collar side we are one person per position here. We don’t see any point in creating a wage system since it’s such a complex task. A wage system should stand up to the organisations individual expectations and on the white-collar side we are much more dependent on getting in the right person in that we have one person per position.”" (Organisation A, Quote 26)

Organisations using this wage-setting method argue that no system is in place and that wage-setting occurs between the employee and their manager. However they state that this is not where the final figure is decided upon rather these figures are presented to the individual in charge of the wages (HR manager, finance manager etc) who then looks at the overall dispersion of wages within the organisation. At this stage they state that other factors such as performance of the employee, in how high demand and short supply the competence is on the labour market and how vital they are for the organisation also come into play at this stage. Here they may choose to raise entire groups or departments higher than other groups in the organisation as they feel that an unfair distribution exists. Often this focus of raising certain groups or individuals is focused on new recruits who are often at a lower level.

Thus the use negotiations between employer and employee as a method for wage setting results in a highly individualized process. The organisations using this method stated that the reason for its use was that they had very few white collar employees and they are a very varied group resulting in difficulties implementing a system upon this group.

“‘My understanding is that essentially you make a business deal so then it’s difficult to make a wage system for the white collar employees.”’ (Organisation C, Quote 27)

“‘We don’t have any criteria on the white-collar side because we think that it would be very difficult to measure and we are really too few.”’ (Organisation J, Quote 28)

The above two quotes are examples of the approach which the organisations had to white-collar wage-systems resulting in their preferred approach of business agreements. The nature of a business deal is individual and different between each manager and employee thus this approach does not allow a system to be implemented and the group is highly varied and too few making the use of for instance a criteria system difficult.

Involvement of Trade Unions and Attitude to Central Agreement

There is a great difference between the involvement of the trade unions between the blue-collar trade union (IF Metall) and the two white-collar trade unions (Sveriges Ingenjörer and Unionen). More involvement was seen if a club was present within the organisation. All but one organisation had a trade union club (IF Metall) present for their blue-collar employees, only organisation D who motivated that their absent in the organisation was due to the low numbers of blue-collars within the organisation (table 1).
Only the large organisation H had trade union clubs present for their white-collar employees, organisation B also mentioned a close regular contact with Unionen despite their absence as a club.

"Sveriges Ingenjörer are unfortunately not active at all. We have invited them multiple times but they don’t want to come, refrain they say. We handle it on a local level. Unionen is very active we have contact at least once a months to every second week just in order to update one another.” (Organisation B, Quote 29)

All other organisations mentioned that they had a good relation with their trade union contacts but there was much less contact with those representing the white-collar employees on wage-setting matters than for IF Metall representing the blue-collar employees. Organisation K express this in the quote below.

"For the white collar side it’s Unionen but they are not on site at the organisation and are not very involved.” (Organisation K, Quote 30)

For the organisations participating in this study a typical response for the dichotomy of trade union contact between blue and white collar groups was voiced by organisation J in the quote below.

“No contact with trade unions on the white-collar side because we don’t have a club there. We made redundancies in 2008 and then we had contact with them but otherwise it is very seldom. On the blue-collar side we have contact with them basically constantly.” (Organisation J, Quote 31)

As such IF Metall are in constant communication with the organisations but Unionen and Sveriges Ingenjörer are only involved in special circumstances, apart from organisations B and H who have more frequent and comprehensive communication with them.

The organisations response to how they felt about the presence of a centrally negotiated agreement which they had to follow and in general the layout of the system at this central level was in general positive across the board. Organisations B and J mentioned that they thought that there would be shambles if the system was not present. Organisation J mention this in the quote below.

“I think it’s good, I think it would be impossible otherwise it would be shambles. I think that it is good that there is an agreement to lean against for us as employers and for employees too … yes I think so (that it’s easy to implement).” (Organisation J, Quote 32)

Organisation L mention that they feel that one of the positives of the agreement is not only that it provides some order and guidance but also that it is already negotiated when the organisations get it and therefore easy to implement as the trade unions have already agreed to it. Organisation F find this also to be a benefit of the centrally negotiated system as they discuss in the quote below.

"... better that it is set this way because in some way it becomes less discussions when we negotiate wages because everyone knows where we stand, what the parties have agreed to.” (Organisation F, Quote 33)
Organisation L also mention that they do not find the agreement to be inflexible currently, for them they find it important to be able to adjust certain groups and individuals who they feel have a too low wage currently. They feel that this is a necessary aspect to have, the agreement cannot become more rigid but currently it has the flexibility that they as an organisation require.

“When you change job your wage is often increased and then it’s the case that those who remain in the organisation are disadvantaged because they never get those big raises. That flexibility I feel is very important to have because I don’t want to have it that it is a very controlled agreement but that you have guidelines and that has been the case the past few years and I think that that is good.” (Organisation L, Quote 34)

Organisation F however do find some inflexibility with the system in terms of the guaranteed wage-increase sums, this is explained further in their quote below.

“It can be good that it (collective agreement) doesn’t control too much. That this should be the pot and that this should be what everyone guarantees. Then of course there are more possibilities that we use our money in our way opens up opportunities for us to set more fair wages ... I think from the employeside that it is understood how we want it, we don’t want as many guaranteelevels in these agreements but rather that it is up to the organisation divide the money this year.” (Organisation F, Quote 35)

Thus organisation L is satisfied with the flexibility present and emphasizes that further controls and restrictions from the agreement placed on the organisations would not be desired. Organisation F are also pleased with the level of controls currently in place but focus on guarantee levels that if changes were to be made it is these that the organisation find difficult or negative impeding further flexibility for organisations to set wages in the way in which they desire. Organisation H bring this argument of the guarantee levels further. They have a philosophy of pure performance based pay to be operational within their organisation and the presence of these guarantee levels, especially in an inequal way, poses problems for their philosophy and system in place.

Organisation H expressed that their philosophy of only using performance based pay their philosophy is somewhat limited in its implementation due restrictions existing from the collective agreement on how wages are set.

“The problem is that it undermines our pay for performance philosophy somewhat as there are many rules and guidelines from the central collective agreement. For example Unionen has negotiated that they should have at least 395sek as a minimum mark-up and if we then have an underperformer who has not done a good enough job who is a member of Unionen they should then get 0sek according to our philosophy but the collective agreement states that they should get an additional 395sek for being member of that union. With Sveriges Ingenjörer there is no such minimum mark-up and there we can set 0sek which I personally find strange. I do realize that it is an important part to negotiate together but it places restrictions on how we can work philosophically.” (Organisation H, Quote 36)

Organisation J also found some difficulties with the system in that they found it difficult to explain to white-collar employees that the industrial mark yields a pot, not everyone is
guaranteed that percentage in wage increase. As such the overwhelming response regarding the system is that it is positive to have it in place but some difficulties do exist with working with it.

Table 2 below provides a summary of how employees can affect their wages within the various systems and what the various systems place emphasis on and rewards.

<table>
<thead>
<tr>
<th>Ability to Influence</th>
<th>Single System</th>
<th>Double System</th>
<th>Criteria based</th>
<th>Business Goal Based</th>
<th>Business Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Accepting existing levels</td>
<td>Accept levels and focus work on criteria set</td>
<td>Strong in Negotiations</td>
<td>Accept and focus on criteria negotiate well</td>
<td>Perform to goals set</td>
</tr>
<tr>
<td></td>
<td>Functional Flexibility</td>
<td>Functional Flexibility and Softer Values</td>
<td>Role within organisation</td>
<td>Features of how the individual works</td>
<td>Productivity</td>
</tr>
<tr>
<td>System Used For</td>
<td>Blue Collar</td>
<td>Blue Collar</td>
<td>Blue Collar</td>
<td>White Collar</td>
<td>White Collar</td>
</tr>
</tbody>
</table>

Table 2 - Summary of characteristics of the 5 systems

This table will be discussed in further detail within the analysis section.

**Analysis and Discussion**

The results show that the way collective agreements are translated to individual workers differ between blue-collar workers and white-collar workers. However, there were also differences within respective group, namely three different systems present for each respective group. In this section the different systems will be analyzed and compared according to how these systems are set up with the use of Townley’s (1995) Managing by Numbers theory discussed within the theory section previously. They will also be compared in terms of how they reflect the relationship between employer and employee. An overview of the 6 systems found within the results section can be seen in figure 5 below.
Thus this section will provide an answer to sub-research question two; how are the relationships between the employer and the employee affected by the wage systems present at the local level

Blue Collar Wage Systems

The Single System

The single system is the simplest form of translation mechanism. It is based on a ladder based system in which both soft and hard factors were included and related to one another, an example is seen in figure 4. The stages are identified and separated loosely based on competence levels perceived within the blue-collar group. According to Townley (1995) this can be regarded as the lexis stage. The manner in which the competencies were spoken of or referred to within the organisation would affect their distinction from one another to form some order or hierarchy for the competencies needed in the workplace. The requirements for competencies from the organisation and existent competencies within the blue-collar employee group would both affect how the various levels of competence were separated. The staging (ranking) of competencies is done through the mapping of the workforce in terms of their job descriptions, responsibilities and through looking at what pressures the organisations placed upon the employees and the organisations requirements for competencies. Thus the way in which competencies were referred to within the blue-collar group resulted in a perception of distinctions between certain competency levels. An example of the lexis used can be seen in quote 1 where organisation C refers to the stages “naturally interpersonal skills and everything is also included of course”. The language used indicates the representatives perception that there is no reason to separate soft and hard factors.

In the lexis stage no specific distinction was made between hard and soft factors, these were referred to as being inter-connected with one another. This continued on to the taxonomy stage where the common denominator for the various stages did not differentiate between hard and soft factors, but rather stages of competencies among blue-collar groups. Some soft factors were, however, directly related to certain hard factors justifying their inclusion within the steps. Organisation C demonstrate this in quote 1 mentioned within the data section “you should be able to do a certain job within a time frame and with certain quality … naturally interpersonal
skills and everything is also included of course”. Thus, the hard and soft factors are in this case regarded as interconnected and dependent on each other at the various levels. They are not discussed as being separate from one another within the lexis stage nor are they separated by the common denominator within the taxonomia stage.

From the employers point of view the outcome of the wage system is a sense of order. Order is developed for the single system through taxonomia where qualitatively the various competencies are ranked according to the employers’ preferences. Organisation C chose to rank their competencies in terms of increasing difficulty on one or a few machines, this is exemplified in figure 4. Organisation I on the other hand chose to rank their competencies based on the amount of machinery the individual employee knows (quote 3). This is what Townley (1995) refers to as mathesis: a numerical order, basically the same as taxonomia but in quantitative form (p.561). Employees are not assessed and “graded” by identifying a number with their performance in this system. Instead the line manager makes an assessment of their competence and which level they fit and whether or not they should move up in the system.

The use of a single system therefore achieves control and governance of the employees through placing them within an order or grid existent in the form of the ladder system described through the assessment made by the line manager. The possibility of the employee to influence their wage within this system is limited. The only way employees can affect their wage level is to accept taking on and learn new work tasks that allow them to be assessed as competent on a higher level (see table 2). Thus, employees must conform to perform and increase their competence in accordance with the definitions of the stages set out in the system. Organisations using this system highlighted that employees were aware of the system in place and have access to the documents defining the stages of competence.

The organisations argued that they use performance based pay within this system based on a definition of performance as increasing competence, however the employer is not only rewarding this performance they are rewarding a form of functional flexibility which they desire from their employees. The term performance based pay is as such an ambiguous term as it is not solely what the employer is using. Furthermore the element of time within this system sees that it takes a long period of time for employees to “perform” in the sense of increasing their competence, therefore underlying in this system is that employees are rewarded for staying with the organisation and developing their competence and workload. This poses a danger for the effectiveness of the single system as a performance based pay system. Wallace and Fay (1998) found that there must be a clear link between performance and pay for it to have the desired effect upon performance. The time lag existent within this system is significant in that the system requires a big commitment from the employees to improve their competence but they will not get rewarded for improvements in competence until this has reached the threshold of the next level and they can move up. Furthermore there are only few levels present within the system which means that the employee has a very limited number of times that they can affect their wage themselves. Thus the organisations state that they are using this system as a form of performance based pay. However they are rewarding functional flexibility, which they desire, and the lag in time between performance and pay and the significant effort which must be produced by the employee to gain competence to the level where it will have an impact on their wage as well as the limited amount of times which they can affect their wage raises doubts whether this system is indeed efficient as a performance based pay system in reality and whether the organisations truly use it as a performance based pay system.
Employees are placed into this single system through the line manager's assessment of the individual. The presence of employee voice for this system thus exists through employees’ membership within the trade unions who participate in the creation of the wage system once it is implemented and in the inspection of the distribution of the industrial mark on a yearly basis. There is therefore no direct communication between the employee and employer on wage setting and the relationship between the two is as such mediated by the trade union. Thus, the single system allows little room for autonomy from the part of the employee. The only way they can influence or control their wage level is conforming to the system in place and ensuring that they increase their competence in terms of the organisations definitions of these concepts (table 2). The blue-collar group in this system is standardized, a top-down approach is present, which signifies an autocratic relationship between the employer and employee. The voice of the individual employee is not taken into account in the setting of wages and there is little room for individuals to influence their wages due to the time aspect of the system and the limited number of stages for them to increase their wage. The wage setting system signifies that their input is only valued in terms of production of the goods sold by the organisation and not within a more creative setting for the development of the organisation.

**The Dual System**
The dual system has many similarities to the single system as the fixed aspect of the pay stems from the ladder based system in the dual system. This ladder is similar to the ladder existent within the single system as both systems use ladders which are based on competence of the employees.

The dual system differs from the single system in that a clear separation of hard and soft factors has been made. There are no soft factors included within the competence ladder, but soft factors are included in the form of criteria, which are assessed in conjunction with the ladder. The criteria can however consist of both hard and soft factors in a mix depending on the organisations. Organisation K for example use the criteria sense of responsibility, professional competence, productivity, versatility, commitment and independence which is a mix of hard (e.g. professional competence) and soft (e.g. commitment). Organisation J however only have hard factors external to the system such as performance and a supplement for being an instructor but don’t have any soft factors within the ladder neither so no soft factors are included in their dual system.

For this system it is therefore clear that during the lexis stage a separation of hard and soft factors for the assessment of individuals has been made. An identification of various competencies similar to that described for the single system is done with the exception that soft factors are not viewed as being connected with competencies. Organisations also separated other hard factors from the ladder such as the years worked within the organisation, professional competence and productivity. Thus, at the lexis stage two different forms of assessment are beginning to be separated, competence from other factors.

Stage two consisting of taxonomy sees the stages of the ladder formed in order to create an order within the system. The external factors were already identified in stage 1, lexis, but here in taxonomy they are further defined creating order in what they encompass and what they assess. Taxonomy creates order within the ladder system through the identification of the various stages based on the separation of various competence levels. This process of taxonomia qualitatively defines the various sections of this wage system, however mathesis also plays a role.
Organisation K differs from the other dual system organisations as their ladder system is built up of work tasks alone which are assessed with points which correspond to a monetary value. Organisation K therefore doesn’t focus on the competence of the employees but during their lexis and taxonomy phases they identified the various work tasks and ordered these. Mathesis then came into play in how each works task is given a point in rating which then corresponds to a monetary figure.

For the other dual system organisations mathesis occurs only in the ascribing of a rating for individual employees upon the factors or criteria external to the ladder system. For all organisations this is done by ascribing a point system to each criteria and this point system is linked to a grid with monetary values for each point. For organisation F for instance each education is linked with a certain amount of points and the employee is then given a certain amount of points based on their education which then relates to a monetary value (quote 7). Organisation K exemplifies this in quote 5 where they state that all their factors have point systems. This is the process of mathesis, ascribing numerical value in the form of points which creates order, here it does so by providing a scale for each factor. The line managers ascribe the points to the employee. 

In the dual system the individual employee has a greater deal of control in comparison to the single system. The blue-collar employee can affect their wage level within a broader spectrum of ways as they can for instance in the case of Organisation K gain points within commitment and performance if for instance their versatility is not so high, this allows for a more individual wage setting in this sense. However, the criteria and ladder system are both pre-defined by the organisation and the employee is still assessed by the line manager, without a formal discussion between the line manager and the employee. The employee here however has a greater variety of ways in which he or she can conform to the specifications made by the organisation to affect their wage. It can be argued however that the largest aspect of their wage depends on which stage in the ladder they are located on and thus compliance to and flourishing within this aspect of the system may have the greatest impact upon the wage and may therefore be the greater focus of the employee. This ladder system poses the same problems as the single system in that if employees have the majority of their wages set by this system there is a time lag between their performance and reward and it take a lot of effort to reach a high enough performance tp reap a reward. Some greater flexibility for the employee in which direction he or she determines to focus their development is existent however in comparison to the single system due to the presence of the external factors.

The relationship between the employer and employee for organisations implementing the dual system can therefore be seen to still be characterized by autocratic control from the organisation but with a greater flexibility present for the employee. The employer recognizes that the employee can contribute to the organisation in more than one way and as such has set up a system to reflect this. As such there is a greater deal of value being placed on employees as a varied group of individuals with varying tasks which permit performance in a varying number of ways, a greater complexity is seen within the line of work for the blue-collar employee and this is recognized and chosen to be rewarded by the organisation. Many organisations using this system however mentioned the difficulty of setting wages and having a good wage system which rewards the correct things. This could be due to their desire to have criteria which can be measured in an objective way, which mathesis can be applied to. It could be that the organisations have developed their dual systems with the thought that their criteria may also include other behaviours but find it difficult to measure these through the process of mathesis. Organisation J mentioned a desire to change their system due to its current complexity as it has many factors which have to be measured into the system. They stated that
the reason for this is that they are continuously finding a new criteria which should be included and then have to find a way to measure this. The problem here is that order through taxonomy permits for the inclusion of other factors also which may be semi-related but mathesis poses a problem as this imposes a very strict order on the factors in which clear definitions are required linked to a clear point system. Thus with mathesis it is not possible to have factors which are somewhat relevant as they need to either be graded and placed within the system or excluded, a more absolute approach than taxonomy. This is the difficulty behind having a system which is standardized and corresponds to figures, only certain behaviours can be rewarded and the organisation then must be clear on which behaviours these should be and how they should be measured.

As Coyle-Shapiro et al. (2002) and Bearwell et all. (1995) state the inclusion of employees in the setting of criteria greater success can be seen in their influence on performance. This could be done by organisations with dual-systems as some are looking for ways to improve the system. This would permit employees to take part in the identification of the criteria which means a more individualized approach is in place. Employees can voice their opinion to affect the process in a way that factors are chosen which they find relevant to their work and can perform accordingly.

The Negotiation System

This system sees a complete departure in its approach to wage setting for blue-collar workers from the past two systems discussed. This approach conversely does not aim to identify an order, grid or system which can be implemented upon the group of blue-collar employees rather it aims to handle them individually, there is therefore the lack of a system present. This allows pure use of employer voice and the trade union does not play a role here, rather they take a supportive function for the employee. The organisation although adhering to the collective agreement which restricts them and forces the employer to stay within a certain range for wage increases they freely set the wages based on individual discussions with employees.

Only one organisation used the negotiation system for their blue-collar workers and they stated that this was due to the low number of blue-collar employees in the organisation. Thus it could be deduced that due to the low number of employees the time and cost of putting in place a wage system was found to be unnecessary as it did not outweigh the time and cost of using individual negotiations.

Within this model the lexis, taxonomy and mathesis are integrated in the individual negotiations. The difference is that here no order is attempted to be placed upon the group of blue-collar employees as a whole rather an order is ascertained for each individual to comprehend their position, contribution, responsibilities etc. within their position. The theory of managing by numbers as such functions as such occurs within the individual discussions only.

This system indicates that employee voice exists to a high extent within the organisation, employees have the ability to make themselves heard and influence their working environment. This indicates that the relationship between the employee and employer is characterized as democratic and reciprocal due to its basis within discussions and negotiations between the two parties. Input and reflections of the nature of the relationship exists from both parties allowing the relationship between the two to be shaped by the parties involved and as such can be individualized and vary to a great deal between employees. It could be discriminatory to some individuals however if they do not have strong negotiation skills.
Barth et al. (2008) found that local bargaining, which is this system, could act as a profit-sharing function and therefore this wage-system would not be an example of performance-based pay but rather profit sharing. This would stand up to the results as there is no discussion of performance but a pure business negotiation.

**White-Collar Employees’ Wage Systems**

**Criteria Based System**

The lexis phase as with previous systems is concerned with identifying the aspects important for the organisation to reward. Within this system it begins to identify a number of criteria which the organisation finds vital to reward in order to impact organizational performance similar to how the external criteria in the dual system are identified.

The taxonomy stage sees a clearer definition of the criteria where exactly what the criteria should reward is more explicitly defined. This sees the development of a system in which specific aspects of the employees’ work are identified as more important than others for the contribution to organizational performance. Some behaviours are identified as worthy of reward and others are omitted. Such definitions are made by management and as such the control lies with them regarding what will be rewarded and more specifically what form of behaviour within this criteria will be rewarded. However as we saw with criteria in the dual system Coyle-Shapiro et al. (2002) found data suggesting that employee involvement in the selection of criteria has a better impact on productivity. For this system in difference from the criteria in the dual system the employee is given some influence regarding their assessment on their performance through the discussion of their performance within an appraisal talk.

The mathesis however occurs post appraisal where the managers make an assessment of the performance of the individual and places a numerical value on their performance within criteria. This assessment is however then reviewed between the HR manager and managers for instance in organisation F. The degree of control which the individual employee has is thus existent to a certain level due to their ability to discuss their performance with their manager allowing an arena for influence. The assessment of this however is made purely by the manager external of this discussion and therefore the control in the long run lies strongly with the manager. The involvement of the third party, the HR manager, for organisation F removes further control from the employee to be able to influence their wages. This is due to the aim of the discussion between HR and the manager is on a more central level, to ensure all are assessed according to the same criteria and that a good overall picture of increases in wages are dispersed among the employees. Mathesis therefore occurs twice in this system, whilst assessing the individual employee and also when combining all assessment to see the order present. As such less focus is placed on the individual and more focus is placed on the wage levels for white-collars as a whole.

An inherent discord exists in this approach however; organisations mention that this group of employees, the white-collars, is highly diverse and thus difficult to impose a system on yet they draw up a list of criteria which are to be relevant for all employees in this group and into which they should be assessed through the process of taxonomy and mathesis. This suggests that the employers although viewing the white-collar group as diverse aim to find similarities for the group which eases their governance. Previous research suggests however that due to the nature of the variance and autonomy of the white-collar employees a performance based pay system would be ideal (Barth et al., 2008). Belfield et al. (2003) found that a match between monitoring environment and pay system means a positive influence on
organizational performance. The monitoring environment in this situation appears to be fairly straightforward, of course more data is needed from the employees’ perspective to determine this but the organisation (F) isn’t making complaints. The organisation therefore appears to be able to monitor the environment of the employees thus being able to judge their performance which means that using performance-based pay is the correct pay system to use in this situation, this however only if managers can assess the criteria in place. If there is difficulty inherent in the criteria getting employees involved in the identification of criteria to assess may be the best way forward (Coyle-Shapiro et al., 2002).

**Key Performance Objectives Based System**

This system bases wage setting upon performance on specific goals stated the previous year for the individual, these goals are derived from the organizational goals. For this system the lexis stage discussed by Townley (1995) would occur at the central level when organizational goals are formulated. The lexis would occur at this stage as here identification of important areas for the organisation to work on for performance occurs; a direction for the organisation is identified. Through taxonomia these goal/s are transferred to individual goals for the employees. Taxonomia operates through creating an order by breaking down the organizational goals into sub-goals for departments which are then developed into goals for the individual employees. Taxonomia here works in correlation with the organizational structure as well as the organizational goals in order to develop this order. The identification of a common denominator in taxonomia for this system would be the identification of the aspects of the organisation goals which are relevant for the individual employee and can be fulfilled by his/her role within the organisation. As such taxonomia defines the individual key performance objectives also known as individual goals.

Mathesis for this system occurs only within one of the two organisations using this system for their group of white-collar workers, the large organisation. This organisation identified four levels in which employee performance would fall on how and if they completed the goals set for them.

The control of the employee within this system is greater than that for the criteria-based system. This is due to the involvement of the employee in the setting of the individual goals or key performance objectives (KPOs) as these are set within the appraisal talk for the coming year at which point the performance on the KPOs for the foregone year is also assessed. The employee is thus involved within, and has a voice in both the setting of the system under which they are to be assessed later and during the discussion of their performance on the prior goals before the manager assess their performance. The employee thus within this system has the ability to influence the system in which they are assessed as well as the discussion prior to their assessment but in a limited manner as the goals or KPOs are still derived from organizational and department goals and therefore there is a certain frame in which the individual goals are allowed to fall. This approach suggests that the organisation want this group of employees to have an influence on their and the organisations goals, they welcome feedback and greater level of adoption of the goals in a flexible manner, to adopt the organisations goals in a way which works for the individual employee. This approach therefore has a greater ability to be adjusted to the individual employee than the criteria based system as an adoption process is present for each employee and there is a discussion between management and the individual which facilitate the organisations interests to be represented yet in a manner which the individual can achieve and agrees with. However the employee is still unable to control the assessment itself as this is undertaken by the manager alone as with the criteria system discussed previously.
**Negotiation Based System**

The majority of the organisations stated that this was their chosen wage-system for their white-collar employees which in fact is the absence of a system as all negotiations are on an individual level. Employees have the strongest ability to influence their wages within this system if they have strong negotiation skills, they cannot influence it based on their performance within their work and therefore this is no performance-base pay system rather it is a system of profit-sharing. The profit-sharing is however limited by the frame of the industrial mark in how much is allowed to be distributed.

Townley’s (1995) theoretical framework works the same here as it does within the negotiation based system for the blue-collar employees as it is the exact same system; lexis, taxonomia and mathesis all occur within the individual wage negotiations. The same analysis is applicable for this system as for the negotiation based system for blue-collar employees as it is the same system so please see previous analysis.

**Conclusion**

This study has found that there are, within this sample, 6 systems which the sample organisations use for the translation of the central agreement. A clear division in how blue and white-collar are treated in terms of wage-setting was seen. Three systems were found for blue-collar employees; single system, dual system and the business negotiation system. Three systems were also found for the white-collar employees; criteria based system, business goals based system and negotiation based system. This answers sub-research question number one, what characterizes wage systems on a local level.

Through the analysis of these wage systems with Townley’s (1995) theoretical framework and previous research a clear rift in the relationship between employer and blue and white-collar employees as reflected by the wage setting systems. Blue-collar employees have no opportunity in the single or double systems to influence their wages through dialogue with their employer as they are assessed into the systems which are developed together with the trade unions by their line managers. They are able to influence their wage levels somewhat more within the dual system than within the single system. The presence of competence ladders however as the main part of their wage for both systems sees an unclear link between performance and reward and therefore could undermine it as a form of performance-based pay. The presence of a time lag between performance and reward and length to reach up the levels means that functional flexibility and loyalty to the organisation could be what employees are perceiving that they are being rewarded for and not productivity.

The white-collar employees have been allowed more influence over their wage setting in that both the criteria and business goal based systems saw assessment preceded by an appraisal talk. The business goal based system was saw a greater opportunity for the employee to influence the system and their assessment. Both these systems for the white-collar employee were performance-based pay. The business negotiation system existed for both blue and white-collar worker and there was no different treatment between the two groups for this model. Therefore sub-research question number two has been answered, the relationships between the employer and employees are affected by the wage systems in that they guide how the two relate to one another and the degree of input between them. For blue-collar the trade-unions stand as a mediating body between the employer and employee within the wage systems and for white-collar employees there is more of a direct and constant
relationship between the two. The results have also found that lexis, taxonomy and mathesis (Townley, 1995) are three processes which occur within all of the wage-systems and aid in the translation of central to local wage-setting.

The results of this study find additional support for Barth et al. (2008) results in that this study found that autonomous employees, in this case the white-collar employees are the autonomous employees, and that these have performance-based pay. The results were also in coherence with those of Booth and Frank (1999) in that in the presence of trade unions and collective agreements performance-based pay still exists within this sample.

This study has given a rendition of how the central industrial agreement in Sweden is translated to the local level. Evidence for the polarization problem existent within the Swedish market has been seen. The centrally negotiated system has placed limitations on wage increases which can be handed out and organisations implementing a performance-based pay philosophy find that the central system today limits their implementation of the performance-based pay system today as they would like to have larger wage differences between the low and high performing employees.

A number of limitations are associated with this study. This study is only a case study and therefore the findings cannot be generalized, it merely provides us an insight into how the translation from central to local occurs. Furthermore only the representatives responsible for the wage-setting were involved, the perspectives or trade union clubs and employees are thus missing. This would be an excellent area for future research, to find how the employees perceive the translation from central to local level and their opinions regarding the Swedish model today. Further interesting areas of research would be to investigate in further detail the communication between the central level organisations and the local level organisations in their communication both prior to central negotiations and after during the implementation phase. It would also be of interest to see if the results from this study would be replicated if a study was conducted in another country with a central negotiation system also as well as if the wage-systems would differ if in a country with decentralized wage-setting.

References


Appendix

A - Interview Guide

Below is the interview guide translated from Swedish to English which the researcher used in the interviews. Despite the numerical order of the questions they were not asked in this order for all interviews due to the semi-structured nature of the interviews. Organisations did not receive a copy of this guide prior to the interview but it was given to them after the interview upon request. The answers to some questions are not discussed in this study as they were found to be irrelevant for the focus of the study but can be made available upon request to the researcher.

1. Describe;
   a. The company
   b. Your position/history within the company

2. How do you set entrance wages when you recruit today?
   a. Do you feel that it is easy or difficult and how so?
   b. Does the trade union play any role in this?
   c. Do you feel pressure to set wages at a certain level? From whom/what if so?

3. Do you use individual wage setting (PBP)?
   a. If so why?
   b. What do you base it on?
   c. How do you set the individual wage?
      i. The process?
      ii. When did you develop this system and why did you chose to implement a system?

4. How, from you perception, do you feel that your relationship with the trade union is today?
   a. Do you follow the industrial mark when you set wages?

5. Do you find it easy or difficult to find the competence you demand?