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Developing institutions : collective agreements in the Dutch IT industry

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1 Introduction

During 1997 and 1998 three collective agreements emerged in the Dutch Information Technology (IT) industry.¹ They seemed to come from nowhere, because collective agreements, especially in the Dutch IT software and services industry,² had been a rarity until then.³ Taking into consideration the fact that collective agreements have been around in the Netherlands since 1927 and that in 2003 85 percent of all employees in the Netherlands fell under the scope of a collective agreement (SZW 2004),⁴ the relative absence of collective agreements in the Dutch IT industry is quite conspicuous. Obviously this has something to do with the age of the sector, which is, compared to other industries, quite young. This, however, still does not explain why collective agreements have never become as popular in the Dutch IT industry as they have been in other industries. It also raises the question as to why a number of them suddenly did appear between 1997 and 1998. These basic questions underlying this study gain importance if one also takes the following facts into consideration:

- The IT industry is generally associated with highly skilled and highly trained employees who are expected to be more than capable of negotiating their own terms and conditions of employment;
- The legitimacy of collective agreements has been under discussion even before they were introduced in the Netherlands in 1927. Collective agreements are sometimes criticized as unwieldy and outdated institutions;
- Because the Dutch IT industry is a relatively young sector, it does not share the same historical background and traditions regarding industrial relations which have come to be associated with other industries such as the metal industry or the construction industry.

So the basic question of this study is: "Why are there collective agreements in the Dutch IT industry?"

¹ Information technology, in the Netherlands, is often referred to as Information and Communication Technology (ICT). Throughout this study however, the term Information Technology (IT) will be used. Despite the obvious relations between Information technology and communication technology, they are still different enough in nature to be identified as separate industries.

² See chapter three for an elaborate definition of the Dutch IT industry.

³ See chapters four and five for a detailed historical discussion of industrial relations in the Dutch IT industry.

⁴ See chapter two for a more elaborate discussion of the origin of the collective agreement in the Netherlands.

1.1 Problem Definition

This study aims at a detailed and distinguished case study of the developing governance regime for labour relations in general, and collective agreements in particular, in the Dutch IT industry. The first goal of the study is to map the emergence of collective bargaining in the Dutch IT industry (See table 1.1, 1); and the second goal is to understand and explain its emergence (See table 1.1, 4). In order to understand the position of the collective agreement in the Dutch IT industry it is also important to look at the socio-political context of the negotiation process (See table 1.1, 2), as well as analyse of the contents of the collective agreements in comparison to other types of arrangements (See table 1.1, 3).

Which actors have stimulated the emergence of collective agreements, and why? Why have some IT firms introduced collective agreements and others not? Is this a matter of union power and/or management preference? Finally, as the emergence of collective agreements in this sector is a relatively new phenomenon, the future developments that actors in this sector expect will be examined (See table 1.1, 5). Will the number of collective agreements continue to grow? And, is firm-level bargaining the end of the line, or is an industry wide collective agreement conceivable at some point in the future?

Table 1.1 Research questions

1	To what extent and in which particular ways do collective agreements emerge in the Dutch IT industry?
2	Which actors (firms, unions, employers' associations and others) are involved in this process? What are their opinions on (various types of) collective agreements? What role have they played in enabling (or hampering) the emergence of collective agreements in this industry? What are the reasons for their preferences and actions?
3	What are the contents of these collective agreements in terms of flexibility and individuality? How do the stipulations in these agreements compare to prevailing arrangements on similar topics in similar IT firms that lack a collective agreement?
4	How can the extent and nature of these collective agreements in the Dutch IT industry be accounted for?
5	What are the prospects for collective agreements in the Dutch IT industry?

This chapter will start by discussing the theoretical starting point of this study, which is based on the institutional theories provided by Douglass North and Jack Knight. North is an economist and uses institutions to explain the differences in economic performance between countries. Knight is a political scientist and uses institutions to

explain social conflict, which he understands as distributional conflicts over resources. Sections 1.2 and 1.3 discuss what institutions are, how they come about and how they change. Collective agreements, works council agreements, and individual employment contracts - the three major ways to regulate the terms and conditions of employment in the Netherlands - are all considered institutions in this study. This is so because they regulate the relation between two parties, the employer and the employees, and describe what both parties can expect from each other.

This chapter then continues to formulate three hypotheses, which are based on insights from sections 1.2 until 1.4, and may offer explanations for the presence of collective agreements in the Dutch IT industry. Having or not having a collective agreement, at least in the Dutch IT industry, is a matter of choice.

Finally, this chapter concludes with a discussion of the methodologies used in this study.

1.2 Institutions and Institutional Theory

The goal of this chapter is to formulate a number of hypotheses which offer theory embedded explanations for the presence or absence of collective agreements in the Dutch IT industry. The theoretical starting point will be institutional theory as defined by North and Knight. The basic assumption underlying this study is that actors (i.e. Dutch IT firms) make 'rational' choices within a given *institutional setting* that restricts their decisions.⁵ Before continuing to discuss whether the collective agreement or its alternatives can be regarded as institutions, it is first necessary to shed some light on institutions, institutional theory, and what it is able to explain. At this point it is important to understand that within traditional sociology, institutions have been identified with group survival and group complexity. Within economics, institutions have come to be associated with economic growth and efficiency, or the absence thereof.

In this study institutions are defined as: "shared concepts between humans in situations of repeated interaction that are prescriptions for behaviour that are enforced by external agency (rules) or by the individuals themselves (norms), or derive from strategies that individuals adopt within the accepted rules, norms and their expectations about how everybody else will behave" (Kay 2003, 3). According to contemporary institutional theory institutions are embedded in an institutional matrix. The institutional matrix consists of all institutional systems. An institutional system itself is a system of functionally interrelated institutions (Bush 1987, 1076).⁶ In order to bring systematization into the multitude of institutions, institutions are often categorized into three different levels: the constitutional level, the collective choice or

⁵ The concept of rationality will be explained later on.

⁶ In chapter two the institutional system, in which the collective agreement resides, will be discussed in greater detail.

policy decision level, and the operational level of individual actions.⁷ Because of the interrelatedness of institutions, there is no strict hierarchical division between the institutional levels.

Institutions are imperative for the social structuring of our lives; at least that is what sociologists like us to believe, such as for instance Durkheim,⁸ who even went as far as defining sociology as the *science of institutions*.⁹ In sociology institutions are commonly defined as webs of interrelated norms and rules (both formal and informal), governing social relationships. This so-called *governing of social relationships* implies that institutions can be considered as solutions (though on occasion far from optimal or efficient) to recurrent social problems. Institutions thus structure human behaviour. Saying that institutions are *solutions* though, immediately puts institutional theory into a functional context. It is, however, not a functional statement in the traditional sense, because the function of institutions is not ascribed afterwards by a theorist, but beforehand by those who created the institutions. Institutions are a product of intentional design.

Institutions are created for dealing with recurrent social problems. Recurrent social problems take place in situations where people are living together and where problems with coordinating the interactions between these people emerge. If interactions are repeated and the coordination problems of these interactions are not effectively dealt with by means of rules or agreements, these problems will recur. If people are unable to form such solutions when they are essential for the groups functioning and cohesion, these groups will find it very hard to live together or produce those goods that enable the society to continue.

An important factor in the discussion of why institutions perform such a significant social function is group size. As groups grow larger the probability of social problems tends to occur more frequently as there are more potential and complex interactions in larger groups.¹⁰ This latter point has also been noted in economics by some authors, notably North. North defines institutions in two ways. In North (1991a, 97), North defines institutions as "... the humanly devised constraints that structure political, economic and social interaction." In North (1991b, 3), North continues that institutions "...are the incentive structure of an economy and, therefore, fundamentally influence individual choices." These humanly devised constraints consist of formal and self imposed informal rules. A noteworthy observation made by North is that these constraints reduce uncertainty and create order. In the end institutions define the choice set and although North restricts this

⁷ With the introduction of international laws and regulations often influencing the constitutional level of individual states, it would make sense to introduce a fourth institutional level of international legislations.

⁸ Contemporary sociologists also value institutional analysis highly. See for example Brinton and Nee (1998) and Smelser and Swedberg (1994). Both volumes are characterized by their multidisciplinary approach, which incorporates both sociology and economics.

⁹ Emile Durkheim (1895) *Règles de la méthode sociologique*.

¹⁰ More on this when Mancur Olson's theory of collective action is discussed below.

set to economics by combining this choice set with the constraints coming from economic laws, this choice set can be defined as the set of contingent social actions.

The concept of *incentive structures* is especially interesting as it relates institutions and institutional systems to economic outcomes. North (1991b, 8) states that economic growth is dependent on institutions that are able to lower the cost of transactions.¹¹ Incentive structures are the reflected opportunities provided by the institutional matrix. North (1994) gives an example of what he means by these reflected opportunities: "... if the institutional framework rewards piracy then piratical organizations will come into existence; and if the institutional framework rewards productive activities then organizations—firms—will come into existence to engage in productive activities."

In this study the collective agreement is regarded as an institution that is embedded in an institutional matrix defining the Dutch system of industrial relations. Figure 2.1 in chapter two gives a schematic presentation of the institutional matrix for the Netherlands and illustrates how actors, institutions, and legislation are related in this system. It would go too far to discuss the entire figure at this point as the Dutch system of industrial relations will be discussed in the next chapter, but it is at this point important to understand the following:

- Collective agreements and Works council agreements can be a part of individual agreements.
- Collective agreements are not contracts of employment, but rather a set of agreements on the terms and conditions of employment made by an employer or a body of employers with one or more unions. These agreements are imposed upon each individual contract of employment covered by the collective agreement;
- Collective agreements can only be imposed upon employers through extension of a collective agreement to an industry or industrial branch by the Minister for Social Affairs and Employment. When a collective agreement is extended to an industry, it is called an industry wide collective agreement;
- Employers' organizations and unions can also create an industry wide collective agreement without it being extended by the Minister for Social Affairs and Employment. These types of collective agreements cannot be imposed upon employers and are only accepted voluntarily;
- Like collective agreements, also works council agreements are not contracts of employment, but rather a set of agreements on the terms and conditions of employment made by an employer and its works council. In the Netherlands a works council's degree of involvement is limited by law. It is up to the employer to extend the level of participation of its works council beyond this minimum level of participation.

¹¹ Transaction costs are costs involved by bringing about a transaction, which do not include the costs of that which is bought or sold itself. Transaction costs can take many forms, such as e.g. the costs of looking for a buyer or seller, et cetera.

- Works council agreements cannot be imposed upon employers, nor can they be imposed upon employees. An employee can refuse to accept the terms and conditions of employment set in the works council agreement.
- If a contract of employment is neither based on a collective agreement nor works council agreement, it is based on an individual agreement between the employer and employee. The contract of employment contains the terms and conditions of employment without referring to a(n industry wide) collective agreement or a works council agreement.

Because of the absence of an extended industry wide collective agreement, employers in the Dutch IT industry have the choice to select by what means they wish to regulate the terms and conditions of employment for their employees. The same holds true for employees who do not fall under the scope of a collective agreement.

1.3 Origin and Change of Institutions

Describing the functions of institutions and the way they are embedded in society does not say anything about the origin and change of institutions. Institutions are often criticized for their rigorousness and their limited ability of adapting to general changes in society. Historically, collective agreements have had to deal with similar criticisms. Collective agreements for instance have generally been criticized because they restrict the freedom of employers to implement changes, which critics of collective agreements argue is required to be internationally competitive.¹² These criticisms have not dissipated over the years and can still be heard today. The rise of newly industrialized countries and the globalization of markets has changed the global economy and increased international competition.¹³ These changes call for adapting to a cheaper, more flexible system of production, which collective agreements prevent, or at least make difficult because of a multitude of regulations and because unions are unwilling to help bring these changes about.

Creating a more flexible production system, at least in terms of labour, is limited to two factors: price and quantity. Whilst there are a number of ways imaginable to manipulate these factors,¹⁴ these are usually restricted by laws and institutions, which limit the extent to which these flexibility measures can be executed. This often leads employers to perceive institutions such as the collective agreement as rigid and inefficient.

¹² In chapter two the position of the collective agreement in the Netherlands will be discussed in greater detail.

¹³ See for instance De Korte (2000), Steijn (2001), Tros (2000a), Van der Meer & Smit (2000), and Nagelkerke & Wilthagen (2000).

¹⁴ For instance by introducing a pay for performance system, or a merit based system. One can also think of hiring and firing personnel based on demand, without having laws penalizing the breaking of a contract of employment.

Increased international competition has also affected traditional Taylor inspired modes of production and require a so-called post-Taylorist mode of production (De Korte 2000). The institutional matrix used in the Netherlands is attuned to a classical,¹⁵ Taylorist notion of work and income, which is based on fixed income, set working times, a transparent job description, authority, collective social securities, and life long employment. This classical mode of production clashes with today's demands for product differentiation and flexibility. This is especially apparent in companies that are driven by fast technological developments, a strong focus on knowledge, and fierce competition, such as IT and telecommunication companies. These types of companies need to be able to flexibly deploy their means of production, which are often employees and not machines (De Korte 2000).

De Korte's criticism, as well as the historical criticisms against the collective agreement, offer an empirical and theoretical challenge. It is challenging to determine empirically whether collective agreements do not fit in well with IT companies. Theoretically the challenge is to put forward ideas on how institutions are created, whether they are able to change, and if so, how they are able to do so. For this the insights of Knight and Olson will be added to those of North. Knight discusses the origin, functioning, and change of institutions as a product of differences in power.¹⁶ Mancur Olson discusses the problems of collective action and socially beneficial outcomes,¹⁷ that is, outcomes that will be beneficial to 'the greater good', outcomes which supersede the individual.

Knight defines institutions as networks of social conventions, norms, rules, and rights that form the basis of society. These networks structure social interactions in particular ways and provide information on how people are expected to act in given situations. Similar to North, Knight recognizes the structuring qualities of institutions. Institutions create the incentive structure for actors by determining which actions are more favourable in social and economic terms. These institutions need not be efficient though as they are an expression of the power relations in the society. Institutions reflect the conflicts over the allocation of resources between actors. The allocation of resources is inherently unequal because of differences in power. Power stems from distributional advantages, which is defined as the ability to affect by some means the alternatives available to a person or group. Distributional advantages are thus created by limiting the preferred strategic actions of others.

Knight explains the origin of institutions out of micro interactions between individuals or groups of individuals. This is a two stage process. Firstly, behavioural expectations need to stabilize into conventions, and secondly, these conventions again have to be generalized into institutions that hold for all members of a group or

¹⁵ De Korte (2000) uses a brief historical account of the origin of the collective agreement in the Netherlands. A more elaborate historical account of the Dutch system of industrial relations will be presented in chapter two of this study.

¹⁶ The discussion of Knight's theory of institutions and institutional change is based on Knight (1992).

¹⁷ The discussion of Mancur Olson's insights on collective action draws on Todd Sandler (1992), who has systemized Olson's (1965) *The Logic of Collective Action*.

society. Conventions *may* come about through repeated interactions, which can be regarded as coordination games. Conventions only tend to come about in those situations where there is a unique equilibrium. In the case of multiple equilibria matters tend to become more difficult and conventions may or may not come about. In the case of multiple equilibria that are valued differently by those involved, the chances of stable conventions coming about are even more improbable. The generalization of these conventions into institutions is a process of social recognition of strategic rules of action. Actors are confronted with the stabilized behavioural expectations and realize that compliance with them is their best response to the actions of others.

Knight regards institutional change as a very difficult process, which may only come about under certain conditions that involve changes in either the distributional consequences of institutions or relative bargaining power. Even if one of these conditions is fulfilled, the process of institutional change will be very difficult due to the problems involved in the process of collective action. Knight (1992, 147) writes that "it is a problem inherent in any attempt to alter existing institutional arrangements, and it explains why neither a preference for new institutions nor shifts in power may lead to immediate change through a decentralized process." Knight thereby implies that there is no ground for the belief that institutions are efficient for a collective. Institutions mainly represent the interests of those with more resource holding power. Only under rare conditions do institutions arise that are collectively efficient.

Olson has pioneered the exploration of the problems of collective action that Knight refers to as a major obstacle to institutional change. Collective action arises in situations where a problem creates costs and or benefits for more than one person, so that some coordination of efforts is required. Problems with collective action are typified by those situations in which the actions of the participants are interdependent. This situation looks remarkably like an interdependent strategic situation commonly found in game theory textbooks.¹⁸ Olson's main argument rests on the assumption that individual rationality is not sufficient for collective rationality. By this Olson means that there are differences with regard to the rationality of collective outcomes. Olson's *Logic of collective action* is mainly concerned with situations in which the pursuit of self-interest leads to sub-optimal outcomes. This does not tally with one of the core assumptions of neoclassical economics, which states that rational self interested actions lead to the best outcome for the whole group.

¹⁸ Elster (1986, 6-9) discerns three types of interdependency in strategic situations. The first type of interdependency is that in a strategic situation the rewards of each depend on the rewards of all. Rewards are also dependent on the choices everyone makes. This is the second interdependency. The third interdependency relates to choices in the sense that in a strategic situation the choices of each depend on the choices of all. It is most notably this third interdependency, which characterizes game theory.

Problems of collective action leading to suboptimal outcomes arise only in those situations in which goods are public and or markets are not competitive. Olson mentions several factors why collective action may not come about or is suboptimal. One factor is *group size*. As group size increases, individual contributions are limited. This causes actual provision levels to decline as the group grows. An explanation for this is that an individual may think that his share of the gain of collective contribution is so small that he refrains from making a contribution to the public good. A second possible explanatory factor is *group asymmetry*. Individuals in groups may have different tastes and abilities. This is mostly the case in heterogeneous groups. Here the individuals and collectives are confronted by an exploitation problem, where the 'rich' carry the burden of the 'poor'.

Whether or not public goods are provided depends on the notion of privilege. A privileged group is a group in which the benefits of collective action for all the individuals of that group exceed the costs of not having access to the public good, even if these costs are solely borne by that individual or coalition. If benefits decline when the size of the group increases, then the likelihood of contribution depends on whether the costs decrease or remain static, as the decrease in costs may offset the decline in benefits. Olson stresses the importance of institutions for the sharing of the costs of providing for public goods, since if costs were shared through institutions, individual costs would indeed decrease with an increase in group size.

Olson addresses two ways of overcoming problems of collective action. The first one is that private benefits should be tied up with the provision of collective goods. Olson calls this *selective incentive*. Selective incentives can be both social sanctions and social rewards. They are restricted to smaller groups however. A second approach, which is more effective on a societal level, is the design of institutional structures. Olson writes that large groups can foster cooperation by organizing themselves in a federal structure with small subgroups. This, however, may affect collective benefits, as interactions over the entire collective may be limited. But institutions can be designed to create an underlying game structure that promotes cooperation instead of defection.

The theoretical insights of North, Knight, and Olson have been brought together here to demonstrate that though this criticism may be true, modern institutional theory is able to connect micro interactions to macro outcomes,¹⁹ is able to explain why not all institutions are efficient, what their relevance is to societies, and why institutions are difficult to change.

¹⁹ Classical institutional theory is often associated with Adam Smith who considered all institutions to be efficient. Ronald Coase (1937), however, radically changed this belief by introducing the concept of transaction costs. Transaction costs have a big impact on economic outcomes, and are always present and significant. In a world of zero transaction costs, institutions would not matter (Yeager 1999, 33).

1.4 Explaining the Emergence of Collective Agreements in the Dutch IT Industry

At the end of section 1.2 the collective agreement was set against the works council agreement and the individual contract of employment, to explain that the research question of this study is based on the empirical state that companies in the Dutch IT industry are free to choose a way to regulate the terms and conditions with their employees. In the Dutch IT industry no extended industry wide collective agreement exists. This enables IT companies to employ either a works council agreement, a collective agreement, a combination of the previous two, or to simply choose to arrange the terms and conditions of employment on an individual basis by means of a contract of employment solely.

In order to formulate hypotheses that have empirical relevance, factors and conditions need to be addressed that influence the potential choices of Dutch IT companies. The hypotheses thus will reflect just how *free* actors really are in their choices. It is important to identify the decision making power of individual companies in the Netherlands. In the Dutch system of industrial and labour relations, decision making power resides on three levels. Shifts in decision making power between these levels are usually identified as processes of centralization or decentralization. The highest level of decision making power resides on the macro level, which is defined by the government, as well as two government advising bodies, the Social and Economic Counsel (Sociaal Economische Raad, SER) and the Foundation of Labour (Stichting van de Arbeid, STAR).²⁰ The second, meso level is defined by the employers' and employees' organizations. The micro level itself can be subdivided into the company level and the level of individuals.

Centralization and decentralization can be understood as shifts in decision making power from one hierarchical level to another.²¹ For instance, from the government to local authorities. In the case of centralization power is shifted from a lower to a higher hierarchical level and in the case of decentralization from a higher to a lower hierarchical level. Processes of centralization and decentralization can occur between various levels: from the individual level to a company wide level, and vice versa, and from a company level to an industry level and vice versa. Special forms of decentralization are sometimes referred to as *flexibilization* or *individualization*. Flexibilization can take place at different levels and implies that actors at a lower hierarchical level are given options instead of rules. Individualization, which takes place at the level of the individual, is a special case of flexibilization where options are given to individuals directly, instead of to a group of individuals.

The hypotheses mentioned below will predominantly operate on the level of the individual firm, or employees, and not take into account higher levels of decision making. This study claims that IT companies are relatively free in choosing the type

²⁰ See chapter two for a more detailed account of these latter two organizations.

²¹ The definitions of the processes of centralization and decentralization draw on Tros (2000a, 25-32).

of arrangement they prefer to regulate their terms and conditions of employment. None of the institutions in question have undergone serious changes throughout the historic scope of this study, these institutions are meaningful to the actors selecting them. Having alternatives available may even tone down potential forces that could bring about institutional change. De Korte's critique of the collective agreement mentioned above, if correct, thus may induce actors to choose less rigorous alternatives to the collective agreement instead of bringing about institutional change. Moreover, as shall be demonstrated in chapter two, the contents of works council agreements, collective agreements, and contracts of employment, are not fully determined by law. Actors working with these institutions have a certain degree of freedom with regard to what they agree upon. In this sense the institutions that are studied here are less rigorous than most institutions. In this study it is thus not institutional change *per se*, but rather institutional *selection* that needs to be accounted for.

1.4.1 Hypothesis 1: The Limited Choice Set Hypothesis

Path dependency often refers to a sequence of events whereby later events depend on earlier events. Path dependency is a process, which constrains future choice sets. To put this in the words of North (1990, 98-99): "At every step along the way there are choices – political and economic – that provide...real alternatives. Path dependence is a way to narrow the choice set conceptually and link decision-making through time. It is not a story of inevitability in which the past neatly predicts the future." Note that in North's definition of path dependency, the word 'constrains' is used, rather than 'determines'. Path dependency in North's definition does not exclude the possibility of institutional change, or the creation of institutions. The choice set, however, is restricted and not infinite.

Though path dependency is commonly used to explain the difficulty of institutional change, it can also be used to explain why employers and employees in this case may not prefer an alternative institution to regulate the terms and conditions of employment. Factors within companies that contribute to this path dependency effect are amongst others the corporate culture and the background and history of the firm, but they may also include exogenous factors such as the dominance of the system of industrial relations in which the company operates. These factors may limit the choice set to those choices that appear most natural, recognizable, familiar, and attractive. This is especially the case when a certain institution poses no serious problems and actors are 'satisfied' with it. Herbert Simon (1961) introduced the term *satisficing* to describe that actors have no intention in gathering additional information about alternatives. Simon states that people are by nature 'bounded' in their rationality. This is so because they have no perfect foresight, nor do they possess the computational skills required for such an endeavour. Moreover the information required for rational behaviour is usually asymmetrically distributed. In order to cut decision costs (the time it costs to make a decision), a solution is chosen that is good enough.

Emphasizing the power of corporate culture in this respect is important. As culture is everything non-material which is passed on from generation to generation. Kreps (1990) defines corporate culture as a set of collective templates for action. Corporate cultures can, according to Kreps, be an efficient supplement to traditional monitoring and enforcement mechanisms for organizations. Especially when the organization cannot readily specify appropriate behaviour for all contingencies. North, though somewhat later in his career, understood the power of culture. Yet instead of using it to explain possible efficiencies, North used it to explain the existence of inefficient institutions. Denzau and North (1994) elaborate on the topic of ideology and corporate culture.²² Ideologies and mental models are formed from common experiences, which in turn influence the efficiency of institutions. So mental models and ideologies can explain inefficient institutions. Cognitive processes create path-dependence in ideas and ideologies, and then in institutions. This is a circular process though, since institutions again influence choice by limiting available choices to individuals. North and Denzau (1994) conclude that: "Ideas matter and the way by which ideas evolve and are communicated is the key to developing useful theory which will expand our understanding of the performance of societies both at a moment of time and over time."

Reasons for not choosing or establishing a different institution may thus be that the costs of gathering additional information are too high, or alternatives may bring about uncertainties, or introduce risks. In the case of firms, the use of a particular institution may be part of a particular corporate culture. Propositions 1.1 and 1.2 summarize the above.

- 1.1 If a dominant majority of employees within the company is familiar and 'satisfied' with a certain type of institution that directly or indirectly regulates the terms and conditions of employment and gives preference to this type of regulation, they will choose this institution over other institutions if they have the choice.
- 1.2 If employers are accustomed to working with a certain type of institution that directly or indirectly regulates the terms and conditions of employment for their employees and they are satisfied with this type of regulation, they will choose this institution over other institutions if they have the choice.

The hypothesis takes into consideration the background of a company, its culture and history, and exogenous factors, which can limit a company's choice set. Whatever the choice actors at

²² North (1992, 1993a, 1993b) was dissatisfied with his earlier, neoclassical, treatment of human behaviour. He was sure that, although the neoclassical assumptions about human behaviour are the right tool in such situations where low-cost transacting exists, these assumptions were not able to explain ideologies and the institutions based on them. In order to find those answers, North turned to cognitive psychology. He admitted that by doing so, he was opening up the black box of rationality - a complex and still very incomplete part of science.

one point made, it is a long term choice and will only be re-evaluated if one of the previously mentioned factors changes considerably.

1.4.2 Hypothesis 2: The Efficiency Hypothesis

The conclusion from section 1.3 was that institutions can never be fully efficient and will always lead to transaction costs. This does not imply that different institutions generate the same (amount of) transaction costs in similar conditions. The general idea behind the efficiency hypothesis is that actors, i.e. employers, seek to reduce transaction costs of the institutions they are working with. Not using a collective agreement implies, at least in theory, that a company has to negotiate with each and every individual over the terms and conditions of employment. This may be very costly, especially in those cases where companies employ a lot of people. Harmonization, a process whereby various existing regulations within a company are centralized into one general regulation, of these various regulations in the company may thus be a goal in itself as it brings about a reduction in the total transaction costs involved in individual and collective bargaining.

Whilst different companies may wish to harmonize their individual regulations, their ulterior goals may be quite opposite. One company may use harmonization in order to offer tailor-made terms and conditions of employment. This is quite paradoxical as the employer wants to create tailor-made solutions by reducing individual solutions. It is however easier to offer individual arrangements from a common platform. Other companies' arguments for harmonization may be less ambiguous as they simply want a single solution that allows them to negotiate with a single party.

The efficiency thesis predicts that companies seek to reduce transaction costs involved in processes of collective and individual bargaining. Depending on their own estimations of the costs involved, companies will choose to negotiate over the terms and conditions of employment with either individuals, the works council, or the unions. If such alternatives do not exist, existing institutions will be changed, given that the group with the greatest bargaining power seeks to maximize efficiency, is strong enough to bring about these changes, and is able to come up with a more efficient alternative.

1.4.3 Hypothesis 3: The Anachronism Thesis

According to the notion of post-Taylorism described in section 1.3, collective agreements may very well be an anachronism, something out of harmony with the time. Post-Taylorism suggests that the employee is 'empowered' within this new system of production. The negotiation powers of the employee are greater in this new system of production than they used to be and he can focus on his individual demands, rather than those of the collective. Empowerment of the employee may very well be one of the factors Knight recognizes as being able to shift the balance in power towards the individual employee, and thus, bring about institutional change, or in this case the selection of an alternative institution. Individual empowerment may

reduce the power of trade unions that reflect and defend the power and interests of the collective employees. Traditionally, union power stemmed from the capacity to raise a strike fund which enabled the threat of a strike. With an increase in the individual bargaining power of employees, they may opt to cancel their union membership, or not become members at all, which then will reduce the relative strength of unions. Firstly, because less contributions are made to the strike fund, and secondly, the overall number of employees willing to strike will diminish. In the Netherlands strikes are relatively uncommon historically and the power of the unions is usually measured through the degree of representation.²³ This holds particularly for industries lacking an industry wide collective agreement, where representation is measured per company and where numbers may vary to a greater extent. Reduced union power may indirectly affect the choice for regulating the terms and conditions of employment through a collective agreement. Collective agreements typically represent the terms and conditions of employment for employees as a collective. Empowered employees may not wish to regulate their terms and conditions of employment through a collective agreement.

In terms of bargaining power, which it is assumed every actor seeks to maximize, the employer may think it is in his interest to negotiate individually with each employee, or to opt for a works council agreement, where he negotiates with the works council on a few terms and conditions of employment, rather than with the unions on all terms and conditions of employment.

3.1 Employees seek to increase to maximize their bargaining power. If an employee's bargaining power is increased through the level of education he has received, or by some other means, in such a way that enables him to individually negotiate over the terms and conditions of employment, he will prefer to negotiate individually rather than in a collective via a union. The same holds vice versa. If their individual bargaining power is limited, they will seek the help of the unions.

3.2 Employers seek to increase their bargaining power and will favour individual negotiations with employees over collective negotiations with unions.

According to the anachronism hypothesis the collective agreements present in the Dutch IT industry represent the interests of an outdated bargaining power and as such are anachronisms. These collective agreements will disappear and be replaced by agreements that express the interest of the dominant bargaining power.

²³ Rojer (2002, 69) uses Eurostat data to indicate that in the Netherlands the lost number of labour days per 1,000 employees between 1974 and 1994 was 5. Germany, who had the second lowest number of lost days, had 9. The United Kingdom had 51, Finland 187, Spain 365, and Italy had lost 565 days on average.

1.5 Methodology and Outline of this Study

Industrial relations in the Dutch IT industry have, until this study, not been studied extensively in the Netherlands.²⁴ One can wonder why this has been the case. Though the IT industry is relatively young compared to other industries, it has been around for more than half a century now, so the age of the industry does not seem a very good excuse.

When people are referring to the Dutch IT industry, they are often referring to a young and dynamic industry that is host to highly skilled and trained employees who work with cutting edge technology. In this study one of the goals is to refine this image, to give a more detailed account of the many stereotypical assumptions that are associated with the (Dutch) IT industry. Because there is very little written about industrial relations in the Dutch IT industry, this study has a strong focus gathering empirical information.

In order to obtain all the information relevant to this study and required to answer the main research question about the presence of collective agreements in the Dutch IT industry, a number of methods have been used. Though each chapter will give a more detailed account of the methodologies used, a brief account will be given here.

Chapter two explains the development of the Dutch model of industrial relations, and gives an account of the Dutch legal system in order to present an image of how industrial relations in the Netherlands have been shaped throughout history. This is necessary because, in order to understand the unique position of the IT industry in the Netherlands in terms of its model of industrial relations, the context should be presented as well. A historical account of the Dutch system of industrial relations is not enough to give a proper account of what is and what is not possible within this system in the Netherlands. Things are thought to be different in the Dutch IT industry and therefore there must be some freedom residing in the institutional system.

Chapters three through six are about the Dutch IT industry as well as the actors that are relevant to a system of industrial relations. In the Netherlands these are: employers, employers' associations, employees, works councils and trade unions. Each chapter uses different methodologies to obtain information. Chapter three introduces the Dutch IT industry by giving both an historical and statistical account. The historical part is predominantly based on articles and interviews with experts. The definition of the IT industry and its statistical description stem predominantly from the Dutch statistical services, the Central Bureau for Statistics (CBS).

²⁴ A few studies exist, which give a brief description of industrial relations in the Dutch IT industry. See for instance Smit 1995; Tijdens, et al. 2000; Van Liempt and Van Uffelen, 2000; Van Liempt 2002a; Leisink 2002; and Van Velzen 2004. Internationally the image is similar and only a few studies can be found, such as for instance Boes and Baukowitz (2002) who study workers' participation in the German IT industry, and Kahmann (2003), who studied possible constraints from the growing IT industry on trade union action.

Though the most important actors in the Dutch system of industrial relations have already been introduced in chapter two, in chapter four they are examined more closely in terms of their presence and actions in the Dutch IT industry. This chapter draws heavily on various articles in IT magazines and interviews with representatives of employers' associations and unions.

In what may be considered the core of this study, chapter five, ten case studies are presented of companies that use, or do not use a collective agreement. For each of these cases a detailed account is given of the type of company, their history, and how they came to use a collective agreement, or why they have never started to use one. These cases are based on IT magazine articles, publications provided by the various companies, and interviews with both representatives of the works council and the human resources departments of these companies. Also every relevant union was consulted in each case.

The Dutch IT industry itself has been discussed in chapter three, its system of industrial relations in chapter four, and the employers in chapter five. This leaves room for one final actor in chapter six: the employee. In order to obtain up to date information on a large scale, an Internet survey was used, which asked employees about a number of relevant indicators for this study, such as the type of regulation that covered their terms and conditions of employment, whether they are members of a union, et cetera.

Finally, in chapter seven, all of the empirical results are brought together and used to answer the questions this study has and see if the theory embedded hypotheses have any relevance in explaining the presence of collective agreements in the Dutch IT industry.