Organizing for autonomy

A combined contingency and agency perspective

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Abstract

This article aims at explaining work autonomy using contingency theory and agency theory. While prior research relies on individual level data (sometimes across nations), the present analysis specifically aims at understanding work autonomy as a management decision at the organizational level. Data were collected among 670 private companies in the Netherlands using a survey. The companies represent a cross section of the Dutch economy. The data are analyzed using regression analysis. The factors derived from contingency theory and agency theory turn out to predict the use of work autonomy. More generally, they can be understood as internal and external fit factors and the agency problems associated with them. These contingency factors include task characteristics, organizational size, organizational governance, and external developments. Whereas work autonomy is often viewed as a matter of organizational design, much of the empirical work relied on individual level data. As a result, little is known about organizational factors related to the provision of autonomy of workers. For actors involved in organizational practices (e.g. managers and consultancy), the article offers a number of suggestions for managing autonomy. This article specifically focuses on the organizational level by examining data collected among companies.

Key words: Bureaucracy; Organizational Theory; Organization Design & Development; Survey Research; Work Autonomy
Introduction

Autonomy in the workplace has a central place in organization studies. Early writings about formal organizations rely on Weber’s work on bureaucracy, with its emphasis on hierarchical structure and centralized decision-making (Blau, 1958; Eisenstadt, 1959). Nevertheless, the benefits of centralization over decentralization is debated ever since (Billinger & Workiewicz, 2019; Martela, 2019). First, from the perspective of organization design, the hierarchical nature of organizations has been challenged. Classical accounts include the ideas of Barnard (1938) and Fayol (1949), which emphasized that strict hierarchies may not work under all conditions, an idea that is later widely adopted in the organizational literature, as well as sociological work focusing on the unintended consequences of too rigid hierarchies (Merton, 1940). From a different perspective, increasing attention was paid to the humanization of work in that period, which mainly aimed at the need to provide freedom to workers to improve the quality of work (Fairfield, 1974). Hence, from the start of organizational studies, the topic of work autonomy has been on the agenda of organizational researchers, for example in their effort to understand how new organizational forms relate to autonomy of workers.

However, despite its central place in the organizational literature, research into the topic of work autonomy remains shattered. Basically, there are three strands of literature that can be identified in which job autonomy is investigated. These strands of literature differ in their approach to work autonomy, the research questions they address and their theoretical explanations. By far the largest body of research views work autonomy as the independent variable in its research. In this body of research, two sub-fields can be distinguished. The first field consists of individual level studies focusing on the role that autonomy has in explaining individual motivation, job satisfaction and productivity. Theories, such as Self-Determination Theory (SDT) (1985) and the Job-Demands Resource (JDR) model (Demerouti, Bakker,
Nachreiner & Schaufeli, 2001) are well-known examples of this (Cassar & Meier, 2018). Work autonomy is also investigated at other levels of analysis, such as the team and the organization (Pinnington & Haslop, 1995). Of the latter sub-field many research falls under the heading of high-performance work systems (HPWSs). Work autonomy is regarded as one of the main parts of these systems (Posthuma, Campion, Masimova, & Campion, 2013), which are believed and found to be related to several performance dimensions of organization (Boxall & Macky, 2008).

While these two strands of literature yielded interesting and relevant insights into the individual, team and organizational level consequences of work autonomy, they remained silent with regard to an important issue, namely: under what conditions do employers choose to provide autonomy to workers. Given the favorable outcomes of work autonomy based on the aforementioned studies, there is little reason to argue why organizations would not grant autonomy to their workers. The argument would be that the contributions of work autonomy to the functioning of organizations is considerable and hence all organizations should aim to maximize their level of autonomy. However, this argument is too strong since all of these theories acknowledge that there are limits to the use of work autonomy, for example, because autonomy does not work for every worker (as it does not fit their personal needs and traits, for example because they have a high need for structure) or because it does not fit the organizational or national culture (Hirst, Budhwar, Cooper, West, Long, Chongyuan & Shipton, 2008; Erez, 2010; Posthuma, Campion, Masimova, & Campion, 2013; Koster & Gutauskaite, 2018). In both instances, the usefulness of applying work autonomy in organizations is undermined.

In other words, it is not expected that organizations benefit from using work autonomy under all circumstances. Nevertheless, these studies focus on the way in which work autonomy interacts with individual, organizational and national characteristics and thus
does not aim at explaining the extent to which organizations make use of work autonomy.

Hence, this research does not address other drivers and barriers to the use of work autonomy.

To understand that, one has to look at theories in which work autonomy is the dependent variable rather than the independent variable. This brings us to the two other strands of literature in which work autonomy is examined, namely structural contingency theory and agency theory. To a large extent, these two theoretical perspectives supplement each other (Eisenhardt, 1985; 1989). Structural contingency theory provides the most general account regarding the use of work autonomy. The main idea underlying this theory is that organizations thrive if they achieve internal and external fit (e.g. organizations need to make sure that their internal structure is coherent and that the organizational structure matches the organizational environment) (Mintzberg, 1980; Stonebraker & Afifi, 2004). From this it follows that work autonomy varies across organizations depending on the internal and external factors affecting or determining the structure of organizations. The other strand of the literature in which the use of work autonomy is explained, has its roots in agency theory (Shapiro, 2005). Agency theory emphasizes the role of control and incentives in order to let organizations (and economic interactions in general) function. Following the basic premise of agency theory that the interests of workers and employees diverge organizations are hesitant to grant autonomy to workers. This reluctance lies in the lack of trust between the parties involved. Hence, the focus of agency theory on the provision of work autonomy is mainly in the question in the risks of granting work autonomy and the agency costs associated with it.

This is also where the two theoretical perspectives complement each other: whereas contingency theory provides a clear view with regard to which factors should be taken into account to construct a theory of work autonomy, agency theory provides some of the main theoretical explanations as well as an account of what the limits to the provision of autonomy are and under which conditions it may be granted in organizations.
The present analysis contributes to existing insights as follows. In several studies, work autonomy is investigated as a part of the general notion of high-performance work systems (Kalleberg, Marsden, Reynolds & Knoke, 2006; Posthuma, Campion, Masimova, & Campion, 2013). These authors rely on organizational level data but focus mainly on differences between public and private sector organizations, which refers to the sectoral level. Kaufmann & Miller (2011) also investigate HPWPs and aim at understanding the application of these practices by formulating a demand function. Their analyses also rely on organizational data but use spending data to test their expectations. Lorenz and Valeyre (2005) provide a cross national investigation of four different work systems. One of the dimensions they use to construct their systems is work autonomy. Their analyses, however, are based on individual level data and provide little insight into the organizational level factors explaining work autonomy. Finally, there are several studies explicitly focusing on work autonomy, again using cross-national comparative data at the individual level, which provides little information regarding organizational level explanations (Dobbin & Boychuk, 1999; Au & Cheung, 2004; Lopes, Calapez & Lopes, 2015). Thus, prior studies using organizational level data regard work autonomy as an integral part of the high-performance work system of organizations and the studies that do focus specifically on work autonomy do so by using information from employees. In the first case, it is both theoretically and empirically impossible to tease out the role of work autonomy and in the second case the inclusion of organizational level factors is difficult. This paper adds to that a specific focus on work autonomy and its organizational level determinants by analyzing data from 670 private organizations from the Netherlands.
Insights from contingency theory and agency theory

While much of the research that was referred to in the introduction relies either on individual or national level explanations and data for the use of work autonomy, the present analysis aims at understanding the application of work autonomy as an organizational decision (Pinnington & Haslop, 1995). As a result, neither individual nor national level explanations suffice to understand autonomy and organizational theories are applied to understand this decision. Instead, the theoretical framework is developed by applying to theories at the organizational level to explain work autonomy.

Contingency theory provides some of the core assumptions regarding the structure of organizations. Its main argument rests on fit assumptions: organizations need to be aligned with their external and internal environment. These environments vary, for example with regard to their complexity and uncertainty, which explains why organizational structures vary (Helms, 2000). Agency theory also focuses on the design of organizations. The basic assumptions of agency theory are: (1) that principals hire agents to perform tasks (within the context of organizations, the principals are representatives of the organization and workers are the agents), (2) that the information between agents and principals is asymmetric (agents have more information about the performance of their jobs than principals), and (3) that the interests of principals and agents diverge (principals prefer more effort for less money than the agents). Based on the agency framework, it is expected that principals try to device mechanisms intended to solve agency problems. Whereas contingency theory and agency theory differ in many respects, they overlap as they both assume that decisions made by bounded rational actors, that information is asymmetrically distributed, and organizations strive for efficiency (Eisenhardt, 1989). Combining these two theoretical perspectives helps to understand why organizations choose to apply autonomy or not.
Tasks characteristics

Regarding the internal fit of the organizations, the tasks that are being performed are among the main contingency factors. The basic idea here is that the way in which workers are governed depends on the kind of tasks they perform. Based on consideration derived from agency theory regarding how organizations deal with information asymmetry (Eisenhardt, 1985), three characteristics of these types of tasks are linked with work autonomy, namely how strongly the work rests on the knowledge-intensity of the work, whether the knowledge is firm-specific, and the length of the relationship between principals and agents.

The knowledge-intensity of the work emphasizes the crucial role of information in the production of goods and services. The development in the direction of a knowledge economy (Powell & Snellman, 2004) underscores the importance of knowledge and information in organizations. The extent to which information is needed has consequences for the way in which people are managed and the extent to which they can be controlled by formal monitoring systems. One of the main characteristics of knowledge-intensity is that it relies on workers having more local knowledge than their supervisors. In terms of the agency problem, the information-asymmetry among principals and agents is larger compared to a work situation in which less knowledge is needed. In that sense, it may be expected that organizations would invest more strongly in monitoring these workers. However, in practice, there are additional mechanisms at work, lowering the need for monitoring them directly.

Knowledge-intensity also relates to professionalism and education. As a result, the behavior of these workers is bound to professional rules and socialization (Trede, Macklin & Bridges, 2012), which lower the need to monitor these workers. What is more, to make ultimate use of their knowledge, organizations need to give them a level of autonomy to solve problems independently.
Another characteristic of the kind of tasks that workers perform within an organization refers to the extent to which the knowledge that is needed specific to the organization or is of a general nature. Knowledge that is firm-specific is only applicable in that organization and of no use in other organizations (Becker, 1964). It is developed within the boundaries of a single organization through learning (Argote & Miron-Spektor, 2011) and is among the unique resources that organizations have to gain a competitive edge (Barney, 1991). From an agency perspective, knowledge-specificity provides a strong incentive for worker to perform in accordance with the goals of the organization. Here the basic argument is that investing in firm-specific knowledge (both from the side of the work as well as by the organization) creates interdependence between the worker and the organization. The worker has fewer external opportunities by investments in firm-specific knowledge. And, for organizations, an investment in the firm-specific knowledge of the workers, imply the risk of losing that knowledge once a worker moves to another organization and bearing a cost to re-invest in the knowledge of a new worker. Since the dependence between them is stronger, the agency problem decreases in size as goals of the principal and the agent become aligned; they both have an incentive to work for their mutual goal as there are costs associated with ending their relationship. This, in turn, paves the way for increasing the autonomy for the worker.

Finally, the extent to which organizations are able to overcome agency problems, depends on the length of the relationship between the principal and the agent. Based on social exchange and game-theoretic considerations (Raub, 2017), the agency problem is reduced if principals and agents interact over a longer period of time (Shapiro, 2005). The basic mechanisms at work here are learning and control that contribute to the cooperation between principals and agents. Through past interactions, the principal gather information about the reliability of the worker and if there are future interactions, it is possible to provide positive and negative sanctions. Hence, if there is a long-term relationship between the principal and
the agent, agency problems are lower and thus there is more room for providing work autonomy.

These theoretical considerations lead to a number of predictions concerning the relationships between tasks characteristics and the level of work autonomy that organizations provide. The following hypotheses are formulated:

**Hypothesis 1.** There is a positive relationship between work autonomy and the share of permanent workers.

**Hypothesis 2.** There is a positive relationship between work autonomy the share of highly educated workers.

**Hypothesis 3.** There is a positive relationship between work autonomy and the firm-specificity of tasks.

**Organizational size**

Research into organizational size as a contingency factor usually follows a well-known argument that dates back to Blau (1970) (Bluedorn, 1993). According to this argument, the larger organizations are, the more their structure becomes formalized and centralized. Hence, it is likely that larger organizations tend to provide less work autonomy. Empirically, this is also found (Lopes, Calapez & Lopes, 2015). Agency theory offers a theoretical justification for this finding. Considering that agency problems increase as organizations are larger, it is expected that formal monitoring is applied more extensively in larger organizations. Along with that, work autonomy will be lower. These theoretical insights leads to the following
hypothesis about the relationship between organizational size and the provision of work autonomy by organizations.

*Hypothesis 4. There is a negative relationship between work autonomy and the size of the organization.*

**Organizational governance**

The principal-agent structure not only applies to relations within the organizations, but also transcends organizational boundaries. Organizations differ regarding the level of leeway they have themselves to formulate their own policies and make their own decisions. Organizations can fully be independent, but they can also be part of a larger company, meaning that there is a certain level of dependence on another organization (Stock, Greis & Dibner, 1996; Delany, 2000). In the latter case, an agency problem arises between the parent organization and the subsidiary site. From an agency perspective, the expectation is that parent organizations will try to exercise control over subsidiaries (Gong, 2003; Kim, Prescott, Kim & Kim, 2005). As a consequence, the subsidiary site will have less room for instilling autonomy within the organization. These theoretical considerations are summarized in the following hypothesis:

*Hypothesis 5. There is a negative relationship between work autonomy and the dependence on other organizations.*

**External fit: organizational environment**

Whereas the organizational environment and the theoretical idea of external fit have been part of the contingency literature from its outset, there is not one specific conceptualization
available of what the organizational environment is (Baum & Rowley, 2002). Research takes
different positions with regard to how to view the external environment. Here, a middle
position is taken between two extremes. These extremes range from very general conceptions
of the organizational environment to more specific ones. General approaches picture the
organizational environment in terms of complexity, dynamics, and so forth. This is for
example how transaction cost economics (Williamson, 1981) explains the way in which
organizations are governed. On the other end of the continuum, there are specific approaches
that focus on the impact of a single environmental dimension, such as technological change
or the aging of employees (Stone & Deadrick, 2015). The middle position, chosen here, is
that organizations face multiple challenges, which may be phrased in terms of complexity,
but can also have an impact due to other demands they put on organizations, as well as
providing opportunities in the near future. To capture this, the environment is regarded as a
number of forces that organizational actors may be confronted with.

Among the main phenomena that organizations face are developments with regard to
digitalization and robotization, internationalization, flexibilization, and population aging.
Digitalization and robotization reflect technological innovations impacting organizations
through digitalization of the workplace and the rise of the robots (Frey & Osborne, 2013;
Brynjolfsson & McAfee, 2014). While the first development mainly concerns communication
structures and flows of information, robotization changes work processes by introducing
intelligent machines. Internationalization reflects processes increasing the cross-national
interdependence among individuals, organizations and nations (De Beer & Koster, 2009). To
a large extent these processes are driven by international trade and can hence mainly be
regarded as one of the economic trends that organizations face. Population ageing is a macro
level trend (Lutz, Sanderson & Scherbov, 2008) that has consequences for labor markets and
organizations. Flexibilization reflects the shift towards all kinds of temporary work and more
recently the number of self-employed workers increased (Pfeffer & Baron, 1988; Hatfield, 2015).

While the extent to which organizations are affected by these trends differs, and some trends will be more visible in one organization than another, it is hard to tell them apart completely. As was already suggested in the discussion of trends, they all relate to the broader (economic, technological, social, political, and demographic) trends that organizations may be confronted with. Furthermore, they are interconnected: for example, the rise of self-employed workers is made possible by digitalization of the workforce, policy choices, as well as global competition (Rubery, 2015). Hence, instead of viewing these trends as isolated event, it makes more sense to put them under the same rubric, namely trends or developments that organization may face in the near future. These theoretical considerations are summarized in the following hypothesis.

*Hypothesis 6. There is a positive relationship between work autonomy and developments in the external environment.*

The theoretical consideration outlined above, show that there is considerable overlap between the predictions based on contingency theory and those derived from agency theory and that the two can complements each other. To a certain extent, contingency offers the factors to look at in understanding the application of work autonomy and agency theory provides deeper insights into the underlying mechanisms explaining why these factors matter.
Data and method

Data

The hypotheses are tested with data from the Innovative HRM Survey (Koster, Korte, Van de Goorbergh & Bloem, 2017). This survey generated information about a random sample of private firms in the Netherlands. These Dutch organizations may provide valuable insights, as it is known from international comparative studies that worker in the Netherlands report above average levels of autonomy, along with countries such as Sweden, Finland, Norway, and Denmark (Koster, 2011). Focusing on organizations in a country where the provision of autonomy is more common, may also shed some more light on the factor facilitating it. The data were gathered as part of a larger project focusing on several aspects of organizational innovation. The survey was developed by a team consisting of academic researchers and consultants in the field of organizational collaboration and innovation. The survey aimed at collecting data about organizational innovation, human resource practices and policies, as well as several background characteristics of organizations. Kantar Public collected the data using their panel with private organizations (NIPObase Business). In total, the responses of 670 organizations could be included in the analyses. The organizations in this sample vary in size and operate in different economic sectors and represent a cross section of the Dutch economy.

Measures

Work autonomy is a composite measure with items indicating whether people in the organizations have freedom of choice over four aspects of their work, namely “their working time”; “location of work”; “ways of working”; and “extra hours”. These items are in line with the ones investigated by Breaugh (1985), which provides a standard measure of work autonomy, but also extents it by including whether people have leeway in where they work
and number of hours they work. A major difference with the existing measure is that the level of autonomy is not rated by the individual job holder, but by a representative of the organization. Respondents are asked to indicate to what extent this applies to their own organization. The items are measured on a 5-point scale. Of these 4 measures of work autonomy, freedom to choose their location of work is the least popular among organizations (mean = 2.94), while freedom in the ways of working is most often applied by organizations (mean = 3.73). To assess whether the items measure a similar dimension, the correlations between them are calculated. The correlation coefficients range from 0.55 to 0.75, indicating that they are positively and significantly related to each other. A principal component analysis was performed which shows that the items load on 1 dimension. The scale is constructed by adding the scores on these items and dividing it by 4. The Cronbach’s alpha of this scale is 0.88.

**Independent variables**

The variable highly educated was measured with a 5-point scale indicating to what extent the organization consists of highly educated employees. Knowledge-specificity indicates on a 5-point scale to what extent the organization needs to apply knowledge that is specific to that particular organization (for example in terms of knowledge about the technology used in the organization). The variable permanent employees is measured by asking respondents to indicate to what extent the organization consists of employees with a permanent contract (measured on a 5-point scale). Organizational size is measured by asking respondents to indicate the number of employees that the organization has. The variable subsidiary site and has the value of 1 if the organization is owned by another organization and 0 if the organizations is independent. The variable developments expected is a composition of several items asking respondents to indicate whether they expect that the organization will
experience the following issues in the near future: employee ageing, flexibilization, internationalization, robotization, and digitalization. The items are measured on a 5-point scale. An investigation of the correlation coefficients and a principal component analysis shows that these items belong to a single dimension. The Cronbach’s alpha for this scale is 0.75.

**Control variable**

The variable economic sector indicates the sector in which the organization operates. This variable serves as a control variable, to account for the possibility that levels of autonomy can vary across sectors (e.g. Kashefi, 2011). The main reason for adding economic sector as a control variable is that it provides a general indication of the work environment in which organizations decide to offer autonomy to workers.

Table 1 summarizes the descriptive statistics (means, standard deviation and percentages) of the variables included in the analysis. As table 1 shows, there is considerable variation in the organizations included in the sample; they are from different economic sectors and differ in size. With regard to the last organizational characteristic, it is worth noting that the majority of organizations is a small company. This reflects the actual situation and hence overcomes the problem mentioned in other studies that a lot of the information comes from larger organizations (Cardon & Stevens, 2004; Koster, 2020). Furthermore, it is noteworthy that the knowledge-specificity among these organizations may be considered high, with an average of 3.67 on a five-point scale. Finally, table 1 confirms that the companies in this sample belong to an economy in which work autonomy is common; the mean level is 3.46 on a five-point scale.
Table 1. Descriptive statistics

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<tr>
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<th>Min/Max</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Percentage</th>
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</thead>
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<td>Work autonomy</td>
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<td>3.46</td>
<td>1.15</td>
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<td>Highly educated</td>
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<td>2.94</td>
<td>1.58</td>
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<td>10-49</td>
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<td></td>
<td>7.50</td>
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<tr>
<td>50-99</td>
<td>0/1</td>
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<td></td>
<td>2.00</td>
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<tr>
<td>100-249</td>
<td>0/1</td>
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<td>250 or more</td>
<td>0/1</td>
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<td></td>
<td>1.20</td>
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<tr>
<td>Subsidiary site</td>
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<td>Developments expected</td>
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<td>Construction</td>
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<td>Other services</td>
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<td>Financial institutions</td>
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<td>2.10</td>
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Source: Innovative HRM Survey
n = 670 firms
Method

The hypotheses are testing by means of an ordinary least squares regression analysis. One model is calculated which includes the control variables and the variables testing the theoretical predictions.

Results

The results of the regression analysis are presented in table 2. The first set of variables investigated in the regression model relate to the internal fit and agency problems of organizations. All three variables indicating the types of tasks being performed in the organization are positively related to the extent to which organizations provide work autonomy. The more an organization employs permanent workers (hypothesis 1), the more highly educated workers the organization employs (hypothesis 2) and the more these workers perform tasks requiring firm-specific knowledge (hypothesis 3), the more work autonomy the organizations provides to workers. The other organizational contingency factor, organizational size, is negatively associated with work autonomy. The larger the organization, the less work autonomy it provides, which is in accordance with hypothesis 4.

With regard to the governance of organizations, the analysis shows that subsidiary sites provide less work autonomy, as expected in hypothesis 5. Finally, with regard to the external fit, the results show that there is a positive association between the extent to which organizations face developments in the near future and the level of autonomy that the organization applies. The stronger the influence of the external environment, the more work autonomy the organization chooses to provide to their workers (hypothesis 6). Together with the control variable the model explains 16 percent of the variance in work autonomy. Based on these results, it is concluded that all 6 hypotheses find empirical support, showing that these factors can be regarded to explain part of the autonomy granted by organizations.
Looking at the p-values, it can be argued that in work autonomy is in particular related to the educational level of the workforce (b = 0.15; p < 0.01); organizational size (b = -0.11; p < 0.01), and external developments (b = 0.18; p < 0.01).

<table>
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<th>Table 2. Regression analysis of work autonomy</th>
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<td><strong>b</strong></td>
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<td>Firm-specific knowledge</td>
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<td>Developments expected</td>
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<td>Sector (ref = Industry and production)</td>
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<td>Retail – food</td>
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<td>Retail – nonfood</td>
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<td>Other services</td>
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<td>Adjusted R squared</td>
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Source: Innovative HRM Survey
N = 670 firms

**Discussion and conclusion**

This article provides an organizational-level analysis of why organizations decide to grant autonomy to their workers. By combining arguments from contingency theory and agency
theory, it turned out that is possible to select relevant factors and explain them. The overall conclusion is that the decision to provide work autonomy depends on several organizational-related factors concerning the internal and external fit seeking behavior of organizations along with the agency problems they face and try to manage. The article’s theoretical contribution lies in the combination of theoretical expectations derived from contingency theory and agency models to explain work autonomy. This turns about to be plausible as it stands the empirical test. The article’s empirical contribution mainly concerns its focus on the organizational level as an addition to the studies focus on the individual level. As the results show, there is merit in focusing on these organizational level factors and explanations.

Theoretically, this leads to a model which help to decide which factors a likely to be related to work autonomy, namely contingency factors, with an emphasis on internal and external fit, and agency theory provide the explanation why these factors facilitate or hinder the use of work autonomy by organizations. Hence, this study provides a stepping-stone to integrate these theories even further. While agency theory is often regarded as producing models in which the context of agency relations are ignored (Shapiro, 2005), the present analysis shows how the internal and external context of organizations may be integrated in such models.

The analysis should be interpreted with the following limitations in mind. First, it is important to note that the data are cross-sectional. In itself this does not reduce the insights related to the explanation of the application of work autonomy across organizations. It does, however, mean a restriction in terms of causality, which is always the case in using such data. With the data at hand, it can simply not be excluded that (some of the) relationships (also) run the other way around. For example, organizations providing work autonomy, may also provide permanent contracts more often and the more work autonomy an organization offers, the less possibilities there are to grow. This implies, that we cannot speak about the outcomes in terms of causes of work autonomy. Nevertheless, even if this is the case, also if the arrows
go from work autonomy in the other direction, it is still possible to interpret them in terms of contingency theory and agency theory. A second limitation of this study concerns its empirical setting. The data were collected among private organizations in the Dutch economy.

Given that there are cultural and institutional differences that explain cross national variation in the use of work autonomy (e.g. Dobbin & Boychuk, 1999), one should be careful with generalizing the outcome to other countries. For the moment, it cannot be excluded that the strength of the relationship will depend on location. Finally, some of the measures used in this study can be improved upon. Some variables are measured with reliable scale, but there are also some single items measures, which may be less reliable than these scales. These three limitations are also a step in the direction of future research. Further disentangling the causes of work autonomy would either require longitudinal or experimental data. Using longitudinal data allows to assess whether a change in one of the determinants of work autonomy actually results in changes in work autonomy. Additionally, experimental data could be gathered to see whether the presence or absence of an experimental condition changes the willingness of organizational decision makers to provide work autonomy. The issue of having single country data can be dealt with by having organizational level data from more countries. There are not many comparative data sets that include information of organizations, but the European Company Survey (ECS) is a notable exception. These data may also be used to further delve into interactions between the country and the organizational level. Finally, future research is needed to assess whether more extensive measures improve the model investigated in this article.

To close this article, several practical implications can be derived from the analysis. The first is that those involved in designing organizations (or supporting organizations through consultancy) are advised to think in terms of internal and external fit. Across the
analysis, it was found that this was the main thread to understand the use of work autonomy. For these practitioners it is therefore worthwhile to develop means to scan organizational needs and developments. For example, they may be advised to grant more work autonomy if processes become more knowledge intense and balance work autonomy with the labor contracts they offer. At the same time, if larger organizations have an interest in granting work autonomy, for example if they see it as a means to enhance the well-being and productivity of workers, they are advised to think about adapting their workforce. The second practical advice is related to agency problems in organizations. As the analysis shows, the provision of work autonomy can be seen as a trust problem between principals and agents. Hence, organizations that are in need of work autonomy, should ask the question which conditions should be met to deal with that trust problem. For example, it may be necessary to device extra controls or incentives. However, it should not be forgotten that informal mechanisms and interactions are also a strong influencer of trust in the workplace. Hence, the creation of collaborative and supportive means of governance can also be a means of enhancing work autonomy.
References


