ARTICLE IN PRESS

European Management Journal xxx (2018) 1-13

FISEVIER

Contents lists available at ScienceDirect

European Management Journal

journal homepage: www.elsevier.com/locate/emj



Collective voice mechanisms, HRM practices and organizational performance in Italian manufacturing firms

Edoardo Della Torre

University of Bergamo, Department of Management, Economics and Quantitative Methods, Via dei Caniana 2, 24127, Bergamo, Italy

ARTICLE INFO

Article history:
Received 21 March 2018
Received in revised form
23 August 2018
Accepted 18 September 2018
Available online xxx

Keywords:
Employee voice
Union voice
Team voice
HR practices
Organizational performance
Labor productivity
Italy

ABSTRACT

The literature on employee voice has grown enormously over the past decades. However, the relationships between different employee voice mechanisms and organizational performance are far from being fully understood, and the existing research shows mixed evidence. Moreover, the HRM literature tends to concentrate on individual voice mechanisms (e.g. employee involvement) and to underestimate the role that collective voice may have in the HRM performance relationship. This paper aims to analyze how collective employee voice mechanisms (i.e. union voice and team voice) affect organizational productivity and how these relationships vary when voice mechanisms are adopted in combination with other HRM practices (i.e. variable pay, training, performance appraisals and multitasking). The analysis of a sample of 223 Italian manufacturing firms matched with an external database (AIDA) containing balance sheet information found that union voice is positively related to labor productivity, while team voice does not show any significant relationship with labor productivity. Moreover, both union and team voice have important moderation effects in the HRM-performance relationship. Union voice moderates positively the relationship between variable pay and performance and negatively the relationship between training and performance. Team voice positively moderates the relationship between training and performance. The implications of these findings are discussed.

© 2018 Elsevier Ltd. All rights reserved.

1. Introduction

The human resource management (HRM) and industrial relations (IR) literature on employee voice has grown enormously in recent decades. Given the broad scope of the concept and its importance in contemporary workplaces, researchers have focused their attention on a wide range of aspects connected with the phenomenon, including the evolution of its meaning (e.g., Dundon, Wilkinson, & Marchington, 2004; Wilkinson, Dundon, Donaghey, & Freeman, 2014); determinants, consequences, and trends of the different forms it can assume (e.g., Brewster, Brooks, Croucher, & G.Wood, 2007; Bryson, 2004; Bryson, Charlwood, & Forth, 2006; Kaufman, 2015; Willman, Gomez, & Bryson, 2009); its relationship with individual and organizational outcomes (e.g., Deery, Iverson, Buttigieg, & Zatzick, 2014; Freeman & Medoff, 1984; Kim, MacDuffie, & Pil, 2010; Pyman, Cooper, Teicher, & Holland, 2006; Royer, Waterhouse, Brown, & Festing, 2008); and the role of the institutional and organizational context in shaping voice systems and in influencing their effects in different countries (e.g., Godard, 2010; Ribarova, 2001; Marchington, 2015; Townsend, Wilkinson, & Burgess, 2013).

With regard to the relationship between employee voice and performance, at a theoretical level, both the HRM and the IR literature considers employee voice to be a key factor in the success of modern workplaces because of the better employee outcomes and higher organizational performance that it is supposed to generate. Empirically, the most recent development of this stream of research can be summarized in three broad trends. First, because of the declining role and power of unions in Western economies, a shift in the focus of analyses from collective and indirect to individual and direct mechanisms of employee voice is apparent (Barry & Wilkinson, 2016; Bryson, 2004; Kim et al., 2010; Pyman et al., 2006). Second, the emergence and success of the highperformance work system (HPWS) approach have fostered a tendency to analyze (direct) employee voice as a part of the wider HRM system and to pay much less attention to its role as a single practice (Combs, Liu, Hall, & Ketchen, 2006; Harley, 2014; Wood & Wall, 2007) or in combination with other single human resource (HR) practices (e.g., performance pay, training, etc.). Third, as a

E-mail address: edoardo.dellatorre@unibg.it.

https://doi.org/10.1016/j.emj.2018.09.001 0263-2373/© 2018 Elsevier Ltd. All rights reserved. consequence of the first two trends, researchers increasingly focus on the emergence of different mixes of employee voice mechanisms in the same workplaces and on their potential outcomes (e.g., Benson & Brown, 2010; Holland, Cooper, Pyman, & Teicher, 2012; Kim et al., 2010; Marchington, 2015; McCloskey & McDonnell, 2018; Wilkinson, Barry, Gomez, & Kaufman, 2018).

The aim of this paper is to analyze how collective employee voice mechanisms (i.e., union voice and team voice) affect organizational productivity and how these relationships vary when voice mechanisms are adopted in combination with other HRM practices (i.e., variable pay, training, performance appraisals, and multitasking). By examining a sample of 223 Italian manufacturing firms, this paper extends existing HRM and IR research on employee voice and performance in several ways. First, it accounts for the different impacts of distinct collective voice mechanisms (namely, team and union voice), thus offering new evidence on whether the general shift in the attention from indirect to direct voice mechanisms as key factors in organizational success is empirically founded. With regard to this, this paper also offers new evidence on the controversial role of unions for organizational performance (Doucouliagos, Freeman, Laroche, & Stanley, 2018). Second, given the growing interest in the emergence of mixed employee voice mechanisms at the workplace level (e.g., Wilkinson et al., 2018), it contributes to the understanding of their potential outcomes for organizational performance. Third, following the original formulations of the HPWS approach (Appelbaum, Bailey, Berg, & Kalleberg, 2000; Lawler, 1986; Appelbaum & Batt, 1994), it includes the neglected role of collective voice in the analysis of the relationships between HR practices and organizational performance (Brown & Warren, 2011; Harley, 2014; Wood & Wall, 2007). Indeed, as far as employee voice is part of managers' HR agenda (Dundon et al., 2004), evidence on the potential complementarities, synergies, or "deadly" combinations between collective voice mechanisms and other HRM practices is critical for advancing the HRM debate and allows researchers to provide managers with crucial strategic insights for designing effective HRM systems. Finally, given the predominance of Anglo-American research on the topic, this paper offers new evidence from an underexplored and institutionally intriguing research context, i.e., Italian manufacturing firms.

2. Theoretical background and hypotheses

2.1. Employee voice in the HRM and IR literature

Although the idea of employee voice as a workplace issue dates back to more than two centuries (see Kaufman, 2014, who identifies in Adam Smith's book *Wealth of Nations* the first appearance of the concept of employee voice), literature on this topic has developed massively since the exit-voice-loyalty theory developed by Hirschman (1970) and then adapted by Freeman and Medoff (1984) in their influential work on the effectiveness of collective voice. Since then, researchers have grounded the concept of voice on a variety of theoretical paradigms (see Budd, Gollan, & Wilkinson, 2010; Wilkinson & Fay, 2011; Wilkinson, Gollan, Marchington, & Lewin, 2010); therefore, the term has become an "elastic" one meaning different things to different actors (Wilkinson et al., 2014).

Employee voice can be broadly defined as "any formal mechanism by which workers can communicate their views to managements" (Bryson et al. 2006, p. 439) to "raise concerns, express and advance their interests, solve problems, and contribute to and participate in workplace decision making" (Pyman et al., 2006, p. 543). A more analytical conceptualization is offered by Dundon et al. (2004), who identify four forms that employee voice can

assume. "First, voice can be taken as an articulation of *individual dissatisfaction*. In this situation, its aim is to address a specific problem or issue with management, finding expression in a grievance procedure or speak-up programme. [...]. A second strand is the expression of *collective organization* where voice provides a countervailing source of power to management, through unionization and collective bargaining in particular. [...] Third, there is voice as a form of *contribution to management decision-making*. Here the purpose is concerned with improvements in work organization and efficiency more generally, perhaps through quality circles or team working. [...] Fourth, voice can be seen as a form of *mutuality*, with partnership seen as delivering long-term viability for the organization and its employees" (Dundon et al., 2004, p. 1152, emphases original).

The focus of this paper is on collective voice, especially on team voice (i.e., as a form of contribution to management decisionmaking in Dundon and colleagues' typology) and union voice (i.e., voice as the expression of collective organization). The reason for focusing on these two forms of employee voice is the lack of research on the impact that these mechanisms (individually, jointly, and in combination with other HR practices) may have on organizational performance. Indeed, it has been argued that practices related to employee participation in decisions that affect their work and the organization are often neglected in empirical research, especially by literature that adopts the so-called "highperformance work system approach" (Wood & Wall, 2007; Wood, van Veldhoven, Croon, & de Menezes, 2012). Moreover, HRM research tends to adopt single indexes to measure the adoption of HPWS. Although these indexes of HPWS often include some measures of direct voice, they are unable to account for the specific effect that such voice mechanisms have on the outcome analyzed (Harley, 2014). The review conducted by Wood and Wall (2007) on 27 articles studying the relationships between HRM practices and business performance shows a "marginalization" of the workforce involvement dimension: "Work enrichment and voice mechanism have not featured in the collections of practices used to measure HRM to the same extent as have the skill and motivational practices" (p. 1366).

In particular, the contribution of collective employee voice is often completely absent from the theoretical model adopted (for example, only 12 of the 27 studies reviewed by Wood and Wall (2007) considered IR variables), and a growing research focus on direct and individual voice mechanisms is apparent in most of the recent studies. However, as recently noted by Kaufman (2015) and Barry and Wilkinson (2016), this tendency (which is particularly dominant in organizational behavior research) risks to give rise to a very narrow and simplistic view of employee voice, which in turn may generate misleading conclusions about its effect on organizational performance (see also Townsend & Wilkinson, 2014 and Godard, 2014).

The scant attention paid to collective voice mechanisms can be attributed to two main factors. First, all advanced countries record declines in union density (Verma, Kochan, & Wood, 2002; Visser, 2006). In English-speaking countries, the decrease has been substantial and constant (for example, in the UK, the unionization rate declined from 49.7% in 1980 to 23.7% in 2016); even if it has been less marked, it has led to very low levels of unionization (10.3% in the US in 2016) (OECD, 2018). Because of this pattern, research from those countries (which dominates the debate) has shifted its attention to the emergent nonunion mechanisms of employee voice (Dobbins & Dundon, 2014; Kaufman & Taras, 2010; Willman, Bryson, Kretschmer, & Gomez, 2013, 2009). This view is reinforced by findings showing that union membership may have a negative impact on the employees' perception of their voice and on their satisfaction (e.g., Bryson, 2004; Benson & Brown, 2010). However,

not all countries recorded the same substantive trends in union density. In Italy, for example, the unionization rate decreased constantly in the 1980s and 1990s (it remained at 49.6% in 1980), whereas in recent years, it has stabilized at approximately 35%, which is a level same as that in the late 1990s (OECD, 2018). Moreover, research findings report that even in the Anglo-American countries, workers still demand more union voice in the workplace (Boxall, Haynes, & Freeman, 2007) and that the lower level of job satisfaction of unionized employees (compared to nonunionized) can be explained by contextual factors such as the absence of a company-level collective agreement, which determines worse working conditions (compared to workplaces with a local collective agreement) and higher levels of dissatisfaction and frustration among workers, thus prompting them to join a union (Laroche, 2017).

Second, HRM literature tends to consider trade unions as irrelevant and unnecessary (Guest, 1987) and typically treats them simply as an element of the organizational context that should be controlled for (e.g., Huselid, 1995; Guthrie, 2001; and Katou & Budhwar, 2010). Although direct employee voice is considered integral to HPWS, indirect and representative voice is not (Harley, 2014). However, the presence of collaborative relations between management and unions is theorized as an important factor in the success of the HPWS, not least because they give management greater guarantees concerning support from workers in the adoption of new practices (Appelbaum & Batt, 1994). The "pro-union" attitudes of the promoters of HPWS are indeed among the features that distinguish the HPWS approach from human relations theories (Godard & Delaney, 2000), and the presence of workplace collective bargaining and management—union joint committees mechanisms (i.e., union voice) are among the main forms of union formal involvement that managements can pursue. In this view, unions are potential agents of change; therefore, HPWS and union voice can coexist and have synergic effects (Wood, 1996; Verma, 2005; and; Machin & Wood, 2005).

Brewster et al. (2007) analyzed the trend of direct and indirect voice mechanisms in three European countries (Germany, Sweden, and the UK) and found no evidence of a general trend away from collective voice and toward individual voice mechanisms. The authors concluded that "the universalist US paradigm of HRM centering on the elimination of conventional collective voice mechanisms have only made limited headway in Western Europe; both collective bargaining and Work Councils remain key aspects of the industrial relations system in cooperative economies" (p. 1260). Overall, research shows that collective voice still plays an important role in contemporary organizations, thus suggesting that researchers should pay greater attention to their impact when analyzing the HRM systems (Barry & Wilkinson, 2016; Brown & Warren, 2011).

In the following section, specific hypotheses on the relationship between various mechanisms of collective employee voice, other HRM practices, and organizational performance are developed.

2.2. Collective voice mechanisms and productivity

In their survey of studies on performance management in unionized settings, Brown and Warren (2011) concluded that "While the literature does not converge as to whether unionized firms have positive or negative productivity impacts or whether high performance HRM practices are more or less effective in union versus non-union firms, it is clear that the effect of unionization on organizational performance is an important area to investigate [...] the current state of the literature suggests that the impacts of unions on high performance HRM practices and on organizational performance represents fertile ground for academic investigation"

(p. 104).

Overall, research findings have shown that union voice may have positive, as well as negative or neutral, effects on organizational performance (e.g., Addison, 2005; Black & Lynch, 2001; Bryson, Forth, & Laroche, 2011; Deery et al., 2014; Freeman & Medoff, 1984; Hirsch, 2007; Mitchell & Stone, 1992). A meta-analysis of studies analyzing the effects of unions on productivity found that the different results obtained in the studies were due to specification differences between them. When such differences are controlled for, unions and productivity are shown to be negatively associated in the UK and positively associated in the US (Doucouliagos & Laroche, 2003).

One of the most important methodological issues in literature on union voice is the measure of union voice adopted by studies. Indeed, it is guite common in that literature to use the simple presence of a union in the workplace or the unionization rate of the employees as the measure of union voice (e.g., Cooke, 1994; Black & Lynch, 2001; Bryson, 2004; Pyman et al., 2006; and; Holland et al., 2012). For example, Pyman et al. (2006) found that union voice, per se, is not related to the three positive employees' outcomes that they analyzed, i.e., the perceived managerial responsiveness to employees' needs, the perceived job control, and the ability to influence job rewards (Pyman et al., 2006). However, the authors recognize that such results may be related to the small number of employees who reported the presence of union-only voice mechanisms and to the limitations of the union measure adopted in the study (i.e., a dummy variable reporting the presence of a union at the workplace).

As argued by Freeman and Medoff (1984, p. 163), "unionism per se is neither a plus nor a minus to productivity. What matters is how unions and management interact at work places." In this vein, Newman, Cooper, Holland, Miao, and Teicher (2018) recently analyzed a sample of Chinese employees and found that employees' perceptions that unions have a constructive relationship with management and are able to act as an agent for their concerns positively influence their job performance by increasing their trust in management and job security. In other words, it is only when unions are actually able to have a voice, for example, when they are involved by the management in the solution of organizational problems or in the negotiation of working conditions that we can expect their effects on productivity to be positive. The simple presence of a union is not an indicator of the quality of employment relations in the workplace (Wilkinson et al., 2018).

Our measure captures the effectiveness of union voice through the presence and the extent (in terms of topics covered) of collective agreements, management—union joint committees, and negotiated welfare practices. Hence, we expect that firms that have invested more in such practices have better results in terms of productivity. In formal terms, we predict the following hypotheses:

H1. Union voice is positively related to labor productivity

With regard to direct voice mechanisms, HRM literature is mainly concerned with studying the effects of the adoption of autonomous and semiautonomous work teams on organizational performance. Autonomous work teams represent a collective voice mechanism related to the direct and substantive (i.e., not simply consultative) influence of the employees on the decisions that affect their everyday work activities (Kim et al., 2010). Following Kim et al. (2010), we conceptualized this type of voice mechanism as *team voice*.

At the theoretical level, the HPWS approach identifies employee involvement through the delegation of decision-making power and the increase in the workers' discretion concerning how they undertake their work as key factors for increasing the propensity of the employees to offer their discretionary effort to the organization,

which in turn increases organizational performance (McDuffie, 1995; Appelbaum et al., 2000). In contrast with the union voice literature, empirical findings on direct voice are quite consistent. Research findings are generally supportive of the positive effects of direct voice mechanisms, especially teamworking, on organizational performance (see Delarue, Van Hootegem, Procter, & Burridge, 2008 for a review). Banker, Field, Schroeder, and Sinha (1996) found that both quality and labor productivity increase with the formation of work teams. On the same lines, Batt (1999) showed that participation in self-managing teams increases selfreported service quality and sales per employee; Procter and Burridge (2008) found that the key factor for explaining the positive relationship between work teams and productivity is the degree of teams' decision-making autonomy. Kim et al. (2010) found that neither team voice nor worker representative voice bears a significant relationship with labor productivity when considered alone, but team voice significantly contributes to labor productivity when considered in conjunction with worker representative voice. This latter finding supports the need to jointly consider direct and indirect voice mechanisms when analyzing their relationship with organizational performance. Given the above discussion, we expect the following hypothesis to be supported by our empirical analysis:

H2. Team voice is positively related to labor productivity

In addition to the direct relationships between single voice mechanisms and organizational performance, a traditional issue in the employee voice debate concerns the potential substitution versus complementary effect of direct and union voice (e.g., Sako, 1998; Tailby, Richardson, Upchurch, Danford, & Stewart, 2007; Bryson et al., 2006; Gill, 2009; and; Kim et al., 2010). Because of the decline in unionization and the increase in the diffusion of high-involvement work practices, direct voice has been hypothesized to have a substitution effect for union voice. Specific empirical evidence concerning the possible effect of the replacement of union action by HRM has been provided by Machin and Wood (2005), who analyzed the relationship between the adoption of highperformance work practices and the unionization rates in British firms between 1980 and 1998. The results did not show any difference in attitudes toward high-performance work practices (and therefore direct employee involvement) between unionized and nonunionized firms.

In terms of the effectiveness of voice mechanisms, the perspectives that view direct and union voice as substitutes argue that having both types of voice mechanism is unnecessary for employee satisfaction and organizational performance and that direct voice may outperform union voice. On the other hand, the complementarity view argues that direct and union voice may have synergic effects, with direct voice providing employee voice mainly in relation to the work tasks and union voice providing employee voice in relation to organizational-level issues including working conditions and technological innovation (Kim et al., 2010).

Empirical findings on these competing views are mixed. Wilkinson et al. (2018) recently analyzed a large representative sample of Australian employers and employees and found that it is the simultaneous presence of direct and indirect forms of representative voice (i.e., unionization and nonunion committees), rather than the effect of each separately, to have the strongest positive effects on the perceived quality of workplace relationships. Pyman et al. (2006), on analyzing a representative sample of Australian employees, found that the employees' perceptions of their job control and their influence on job rewards, as well as the managerial responsiveness to their needs, were higher when a combination of voice mechanisms were in place than when having just one voice channel. Specifically, the combination of union and direct voice was one of the combinations that is most effective in

predicting the three outcomes. With regard to labor productivity, existing research also seems to support the complementary view (e.g., Black & Lynch, 2001; Cooke, 1994; Sako, 1998).

However, the overall picture is still not clear. For example, a recent case study on a UK subsidiary of a US multinational company found that multiple voice channels may have counter-productive effects, as they may generate confusion among workers, which, in turn, leads some voice channels to be neglected and others competing for attention (McCloskey & McDonnell, 2018). Moreover, Kim et al. (2010) analyzed relationships between the copresence of team and representative voice mechanisms and labor productivity in the world auto industry and found that the interaction terms between the two voice mechanisms were associated with lower labor productivity; specifically, the slope coefficients showed that team voice was associated with higher productivity only at the lowest levels of representative voice. According to the authors, these findings support the substitution thesis in the auto industry, and they also argue that the results may differ according to the institutional context. Because of the European tradition of industrial democracy, managers in these countries are more likely to accept representative voice mechanisms, and direct voice can complement their role (Kim et al., 2010). Consistent with this interpretation, and the research context of our analysis (i.e., Italian manufacturing firms), we expect that when the two mechanisms of employee voice are jointly adopted, their relationship with labor productivity is strong. In formal terms, we predict the following hypotheses:

H3. The interaction between union voice and team voice is positively related to labor productivity, so that labor productivity will be higher when both union and team voice are high.

2.3. Collective voice mechanisms as moderators in the HRM—performance relationship

Consistent with the complementary view depicted above is also the idea that employee voice mechanisms positively interact with the other HRM practices in influencing organizational performance. With regard to union voice, Addison (2005) surveyed studies undertaken in France and Germany on the influence of trade unions, work councils, and high-performance work practices on business performance and concluded that "the combination of innovative practices and worker representation can yield substantial productivity gains" (p. 447). In their seminal work on union voice, Freeman and Medoff (1984) argued that union voice is a means by which employees can suggest improvements in other working practices such as training and occupational health and safety, thus increasing the usefulness of their adoption (Holland, 2014). It has also been shown that unions can facilitate the adoption of high-performance work practices (Gill & Meyer, 2013). In their influential study, Black and Lynch (2001) found that "unionized plants that have adopted new workplace practices such as incentive-based compensation or greater employee participation in decision making have substantially higher productivity than similar nonunion plants or establishments with more traditional labor-management relations" (p.435).

Similarly, with regard to direct voice, Felstead, Gallie, Green, and Zhou (2010) showed, for example, that the qualities of both the training experience and the on-the-job learning are strongly associated with the extent and nature of employee involvement. It has also been noted that training enhances involvement programs because employees are better equipped to make decisions that participation programs empower them to make (Combs et al., 2006). Consistent with this view, providing scope for employee control is increasingly argued to be a necessary condition for

reversing skill underutilization and fostering HR development, thus also allowing the organization to meet its needs in terms of management of human capabilities (Boxall, 2013). Indeed, the lack of employees' autonomy and control on their jobs is often associated with situations of underutilization of skills, i.e., situations in which the employees' personal development "is restrained at a suboptimal plateau, creating job dissatisfaction and a higher propensity to quit" (Boxall, 2014, p. 7).

More broadly, Dundon et al. (2004), in their qualitative analysis on UK organizations, reported that managers largely consider voice to be a part of broader HR agenda; hence, voice mechanisms were adopted jointly with other HR practices, for example, training and induction. The theoretical argument for this approach resides in the expected additive effects of the practices (McDuffie, 1995), as well as in the synergic effect of adopting multiple practices (Combs et al., 2006; Huselid, 1995). Adopting this view, we can expect that both team and union voice mechanisms increase the return to the company of introducing other HRM practices.

- **H4.** Union voice moderates the relationship between HRM practices (training, appraisals, performance pay, and multitasking) and labor productivity: when union voice is high, the positive relationship between HRM practices and productivity is stronger than when union voice is low
- **H5.** Team voice moderates the relationship between HRM practices (training, appraisals, performance pay, and multitasking) and labor productivity: when team voice is high, the positive relationship between HRM practices and productivity is stronger than when team voice is low.

3. Research methods

3.1. Sample

The sample on which the analysis was conducted consisted of 223 manufacturing enterprises in the area of Milan and enrolled with the Lombardy Industrial Association (Associazione Industriale Lombarda, Assolombarda), the largest regional association of the General Confederation of Italian Industry (Confederazione Generale dell'Industria Italiana, Confindustria). Milan is one of the top-ranked OECD metropolitan regions and the first contributor to national GDP among the Italian cities, thus accounting for more than 10% (OECD, 2006).

The Research Department of Assolombarda carried out an annual survey on the characteristics of employment in its affiliated firms. The 2008 edition included some parts additional to the standard questionnaire. The standard part of the questionnaire comprises a section devoted to contractual and sociodemographic characteristics of the labor force (e.g., types of contract, gender, qualifications, and education); one section relative to time and absence from work, distinguishing among the causes of absence (e.g., sickness, accident, parental leave, strike action, and time off for trade union activities); and one section relative to the levels and composition of pay in absolute values (seniority, bargained and nonbargained PRP, merit pay, and other bonuses). The two additional parts concerned the work organization and HRM practices used (e.g., autonomous and semiautonomous teamwork, job rotation, multitasking, appraisal systems, and training) and the features of IR (e.g., workplace union structure, company-level agreement, and management-union joint committees).

The survey collected information on 311 manufacturing firms. Careful selection of the quality of the replies and matching with Analisi Informatizzata delle Aziende Italiane (AIDA) database to obtain data on labor productivity reduced the field of analysis to

223 firms. The distribution of firms by sector and size class showed that metalworking firms represented approximately 50% of the sample and those with fewer than 50 employees represented approximately 60%. The presence of a substantial proportion of firms with fewer than 50 employees was the strength of the sample, given that the large body of the literature on employees' voice and HRM practices focuses on large firms only.

3.2. Measures

Table 1 reports the operationalization and the descriptive statistics of the variables used in the analysis.

3.3. Dependent variable

Labor productivity. To increase the validity of our results, as a measure for organizational performance, we used an objective, third-party measure of firm productivity. Indeed, a large part of the literature on employee voice adopts subjective measures of productivity (e.g., Bryson et al., 2011; Procter & Burridge, 2008; Sako, 1998; Wood et al., 2012). Labor productivity is commonly defined as the ratio between a volume measure of output and a measure of labor input use (OECD, 2008). Our measure of labor productivity was obtained by dividing the total value added produced by the firm during the year (output) by the number of full-time equivalent employees in the same year (input). We considered the value added generated by the firm as a more reliable output measure than sales or revenues because it excludes several factors that are not directly controllable by the employees, for example, market demand (on the limits of considering sales as output when defining labor productivity; see also Datta, Guthrie, & Wright, 2005). The information about labor productivity was obtained from the balance sheet data provided by the AIDA database of Bureau Van Dijk, which is the Italian section of the AMADEUS database collecting information about more than 500,000 Italian companies. Matching between the two databases was performed through the value added tax (VAT) numbers of the companies that took part in the survey. Both the value added generated by the firm and the number of employees were drawn from the balance sheet data, thus reducing the risk of the presence of common method bias in the results.

3.4. Independent variables

A total of 16 independent variables were considered in the analysis (Table 2). They yielded detailed information about the use and intensity of employee voice mechanisms and HRM practices by the firms that took part in the survey. To make the analysis more fluid and interpretable and also to test the correspondence of the constructs underlying the behaviors of our sample with those present in the literature, the 16 independent variables were analyzed and reduced by means of principal component analysis (PCA). This methodology is often used in studies of this type (e.g., Huselid, 1995; Gooderham, Parry, & Ringdal, 2008; and; Katou & Budhwar, 2006). We decided to insert all the variables in a single PCA to reduce discretion in the construction of the bundles of practices to the minimum.

Table 2 shows the final results of PCA performed with the varimax rotation criterion. The PCA identified six factors, which together explained 67% of the variance of the 16 variables; this is coherent with the results obtained by similar studies (Gooderham et al., 2008; Katou & Budhwar, 2006), and the measure of sample adequacy was satisfactory (KMO = 0.701) (Hair, Anderson, Tatham, & Black, 1992). The confirmatory factor analysis (CFA) was conducted using AMOS 21 returned overall satisfactory fit statistics ($\chi^2/df = 2.05$; GFI = 0.91; RMSEA = 0.06; CFI = 0.88; and SRMR = 0.06).

Table 1 Variables and descriptive statistics.

Variables	Description and measures	Mean	Std. dev.
Controls			
Total employees	Number of employees	191	478.4
Part-time	% of part-time workers	5.5	7.4
Temporary	% of temporary workers	4.3	6.4
Managers	% of managerial workers	4.6	6.1
Blue collars	% of blue-collar workers	42.1	28.8
Graduates	% of graduate workers	15.3	15.8
Network	Partnership and other forms of cooperation with other firms $(0-10)$	3.3	2.7
Technology	Relevant technological innovation in the last 3 years (dummy)	1.4	0.5
Market	Degree of competitiveness of the market (1–5)	2.3	0.7
Dependent variable			
Labor Productivity	Value added per employee in 2008 (thousands of Euro)	96.4	98.2
Independent variables			
Welfare and W/L balance	Number of welfare and work life balance practices (introduced with union involvement-agreement) (0-9)	1.2	0.4
Company-level agreement	Number of topics covered by company-level bargaining $(0-9)$	1.2	1.8
Management-union joint committees	Number of topics discussed in the management—union joint committees $(0-4)$	0.1	0.4
Training hours per employee	Training hours per employee	6.8	11.7
External training	% of employees involved in training activities outside the firm	20.9	25.7
On-the-job training	% of employees involved in on-the-job training	6.0	16.2
Decentralization of decision-making	Presence and intensity of the use of the practices related to the delegation of responsibilities $(1-3)$	1.4	0.6
Autonomous teamwork	Presence and intensity of the use of autonomous teamwork $(1-3)$	1.3	0.7
Semiautonomous teamwork	Presence and intensity of the use of semiautonomous teamwork $(1-3)$	1.5	0.6
Multitasking	Presence and intensity of the use of multitasking $(1-3)$	1.8	0.7
Job rotation	Presence and intensity of the use of job rotation $(1-3)$	1.6	0.7
Training for multiskilling	Presence and intensity of the use of training for multitasking and job rotation $(1-3)$	1.5	0.6
Performance appraisal systems	Presence and intensity of the use of performance appraisal systems (1–3)	1.8	0.8
Potential appraisal systems	Presence and intensity of the use of potential appraisal systems $(1-3)$	1.5	0.7
Variable pay	% of variable performance-related pay on annual gross salary	3.1	4.3
Merit pay	% of fixed performance-related pay on annual gross salary	15.1	11.3

 Table 2

 Principal component factoring of independent variables. Method for extraction: Principal Component Analysis with Varimax rotation (Kaiser normalization).

Observed variables	COMPONENTS								
	1. TEAM VOICE	2. MULTITASKING	3. UNION VOICE	4. PERFORMANCE APPRAISAL	5. TRAINING	6. VARIABLE PAY			
Welfare and W/L balance			.587			.332			
Company-level agreement			.777						
Management-union joint committees			.861						
Training hours per employee					.709				
External training					.717				
On-the-job training					.758				
Decentralization of decision-making	.762								
Autonomous teamwork	.770								
Semiautonomous teamwork	.724								
Multitasking	.301	.750							
Job rotation		.839							
Training for multiskilling		.671							
Performance appraisal systems				.839					
Potential appraisal systems				.869					
Merit pay						560			
Variable pay						.800			
Cum. var. explained (after rotation) %	12.7	24.6	36.3	48.0	58.6	66.8			
Initial eigenvalues	3.6	1.9	1.6	1.4	1.2	1.0			

Factor loadings lower than 0.30 are not shown; factor loadings higher than 0.50 are shown in bold.

KMO test: 0.705.

 $Bartlett's \ test: \ Chi-square \ 280.8; \ p-value < .001.$

We performed a series of CFA to assess the discriminant validity of the measurement model. Results showed that the hypothesized six-factor model with the factors team voice, multitasking, union voice, performance appraisal, training, and variable pay fitted the data significantly better than all other alternative models such as the five-factor model, where union voice and team voice were combined into a single factor ($\chi^2/df = 3.34$; GFI = 0.84; RMSEA = 0.10; CFI = 0.727; $\Delta\chi^2 = 131.72$; and $\Delta df = 5$), and the one-factor model ($\chi^2/df = 4.83$; GFI = 0.77; RMSEA = 0.13; CFI = 0.48; $\Delta\chi^2 = 320.15$; and $\Delta df = 15$). Discriminant validity of the six factors was also analyzed by examining whether the square root

of the average variance extracted (AVE) for each construct was larger than its correlation with other factors (Gefen, Straub, & Boudreau, 2000); the results confirmed that the square root of AVE for each construct was significantly higher than the correlation between any pair of factors, thus confirming the discriminant validity of the six factors.

The first factor captured *team voice* mechanisms and included the use of autonomous or semiautonomous teams and delegation of decision-making power to the lower level of the organization. This measure is consistent with those often used in literature (e.g., Kim et al., 2010); according to Dundon et al. (2004), it is the typical

form of voice considered by the high-involvement/high-commitment literature. *Union voice* mechanisms were captured by the third factor and included the number of themes covered by workplace collective agreements and management—union joint committees and the number of welfare and work—life balance practices introduced with union agreements. As noted above, these measures allow one to overcome some important limitations of the existing literature that adopts the simple presence of a union in the workplace or the unionization rate of the employees as the measure of union voice (e.g., Black & Lynch, 2001; Bryson, 2004; Cooke, 1994; Holland et al., 2012; Pyman et al., 2006). The remaining factors captured other high-performance HRM practices, i.e., multitasking (factor 2), appraisal systems (factor 4), intensive training (factor 5), and variable performance-related pay (factor 6).

3.5. Control variables

Numerous variables were inserted to control for factors that may affect the relationship between voice, HRM practices, and labor productivity. On the basis of the approach used by previous studies, the controls concerned the characteristics of both employees and the firm (e.g., Black & Lynch, 2001; Cooke, 1994; Datta et al., 2005; Gooderham et al., 2008; Katou & Budhwar, 2010; Wood et al., 2012). With regard to the characteristics of employees, the following characteristics were considered: workforce composition by occupational group, percentage of graduates, and percentage of part-time and temporary workers. The controls with regard to the characteristics of firms were size, introduction of significant technological innovations in the past 3 years, the degree of competitiveness in the market where the firm operated, and the extent to which the firm was embedded in stable relational networks with other firms.

3.6. Analysis

The five hypotheses described in the first part of the paper were tested through hierarchical ordinary least squares (OLS) regression. For each independent variable, the values entered in the regression analysis are the standardized factor scores (z-scores) resulting from PCA. To check for the explanatory contribution of our independent variables, in the first step, we introduced control variables only. The independent variables concerning union voice, team voice, and HRM practices were added in the second step. We chose to insert voice variables and HRM variables jointly to exclude that the

potentially emerging significant relationships between voice mechanisms and labor productivity were spurious or overestimated because of the absence in the analysis of significant HRM practices (Ostroff & Bowen, 2000; Wright & Boswell, 2002). The interactions between union voice and HRM practices, between team voice and HRM practices, and between team and union voice were added in steps 3, 4, and 5, respectively. We examined the variance inflation factors (VIFs) to check the possible occurrence of multicollinearity in our analysis; all the multiplicative terms remained well below the accepted threshold of 10 (Belsley, Kuh, & Welsch, 1980).

4. Results

Correlation statistics among the variables included in the OLS analysis are presented in Table 3. The correlations show that union voice is positively and significantly related to labor productivity, whereas team voice is not. Concerning HRM practices, training and appraisals are significantly related to labor productivity, whereas variable pay and multitasking are not.

Table 4 shows the results of the regression analysis of employee voice mechanisms, HRM practice, and labor productivity. Starting from union voice, Model 3 shows that when all the variables are included in the analysis, the variance explained by the model increases by 6% (change in adjusted R^2 from Model 1 through Model 3), which is consistent with findings of other studies in the field. In both Model 2 and Model 3, union voice shows a significant positive relationship with labor productivity (respectively at p < .05 and at p < .01). Hypothesis 1 is therefore supported by our analysis.

Some interesting findings emerge with regard to the moderating role of union voice in the relationship between HRM practices and productivity (Model 3). Specifically, the moderation effect of union voice is significant and positive for variable pay and (weakly) significant and negative for training. Following Aiken and West (1991), we plot the patterns of the interaction between union voice and variable pay in Fig. 1. The significance test for the slopes revealed that the slope for high union voice is significant (t = 2.70; p < .01), whereas the slope for low union voice is not (t = -1.25; p > .10). Fig. 2 reports the pattern of the interaction of union voice and training; the significance test revealed that the slope for low union voice is significant (t = 2.83; p < .01), whereas that for high union voice is not (t = -0.30; t > .10). Therefore, the results suggest that the effects of training on productivity are higher when union voice is low, whereas those of variable pay on productivity are

Table 3Correlations among variables inserted in the OLS regression.

		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1.	Labor Productivity										
2.	No. of employees	.107									
3.	Part-time	042	058								
4.	Temporary	.028	003	.187**							
5.	Managers	.242**	.046	094	.065						
6.	Blue-collars	277^{**}	191^{**}	.012	042	524^{**}					
7.	Graduates	.191**	.188**	182**	.004	.456**	613^{**}				
8.	Technology	003	.065	056	.248**	.062	002	.053			
9.	Network	.024	.406**	111	011	.179**	341 ^{**}	.297**	.178**		
10.	Market	155^{*}	027	.090	.073	120	014	112	023	.096	
11.	Team Voice	008	.066	011	091	004	059	.014	.117	.179**	.060
12.	Multitasking	048	.038	045	.141*	079	.079	039	.157*	.023	008
13.	Union Voice	.151*	.251**	084	022	.063	157^{*}	.143*	.109	.303**	024
14.	Appraisal	.136*	.266**	037	039	.221**	274^{**}	.352**	.059	.296**	.087
15.	Training	.194**	.013	011	.080	.161*	153*	.216**	.037	.084	077
16.	Variable pay	.104	.123	041	.012	.065	156^{*}	.052	.088	.179**	073

 $^{^{**}}$ Significant at the 0.01 level; * Significant at the 0.05 level (two tailed).

The six independent variables generated by PCA are uncorrelated to each other, and therefore, correlations among them are not included in the table.

 Table 4

 OLS regression analysis of employee voice on labor productivity.

	Model 1	Model 2	Model 3	Model 4	Model 5
Controls					
No. of employees	.10	.06	.02	.06	.06
Part-time	04	05	05	07	05
Temporary	.03	.04	.04	.04	.04
Managers	.12	.09	.11	.11	.09
Supervisors	06	12	12	12	12
Blue-collars	27**	27**	25**	28**	27**
Graduates	.00	04	06	06	05
Network	10	17*	18*	17*	16*
Technological innovation	01	04	01	02	03
Market competitiveness	14*	14*	14*	12†	14*
HRM practices					
PERFORMANCE APPRAISAL		.15*	.15†	.16*	.15*
VARIABLE PAY		.07	.08	.11	.07
MULTITASKING		03	.00	01	03
TRAINING		.18**	.15*	.14*	.18**
Voice Mechanisms					
UNION VOICE		.16*	.24**	.16*	.18*
TEAM VOICE		.03	.04	.02	.03
UNION VOICE * TEAM VOICE					05
Voice Mechanisms * HRM practices					
UNION VOICE * APPRAISAL			.13		
UNION VOICE * VARIABLE PAY			.22**		
UNION VOICE * MULTITASKING			.02		
UNION VOICE * TRAINING			− . 16†		
TEAM VOICE * APPRAISAL				06	
TEAM VOICE * VARIABLE PAY				07	
TEAM VOICE * MULTITASKING				.08	
TEAM VOICE * TRAINING				.19**	
Obs.	223	223	223	223	223
Adj. R2	.08	.12	.14	.15	.12
ΔF	3.02***	2.48*	2.47*	2.8*	0.6

Standardized Beta coefficients are shown in column. † significant at .10 level; * significant at .05 level; ** significant at .01 level; ** significant at .01 level;

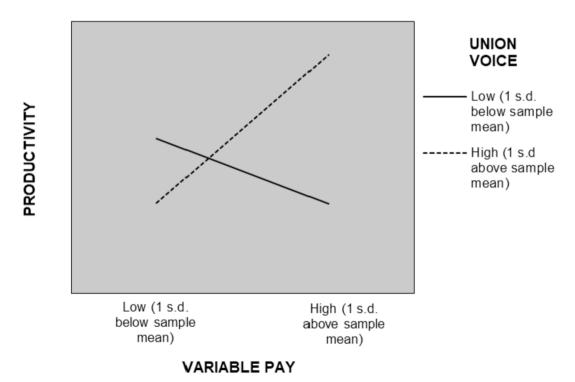


Fig. 1. Relationship between Variable Pay and Productivity for different levels of Union Voice.

higher when union voice is high. Considering that the other interaction terms did not show significant relationships, we conclude that hypothesis 4 is only supported in relation to variable

pay.

With regard to team voice, Table 4 shows that the explained variance increased by 7% from Model 1 (i.e., when only controls

Please cite this article in press as: Della Torre, E., Collective voice mechanisms, HRM practices and organizational performance in Italian manufacturing firms, European Management Journal (2018), https://doi.org/10.1016/j.emj.2018.09.001

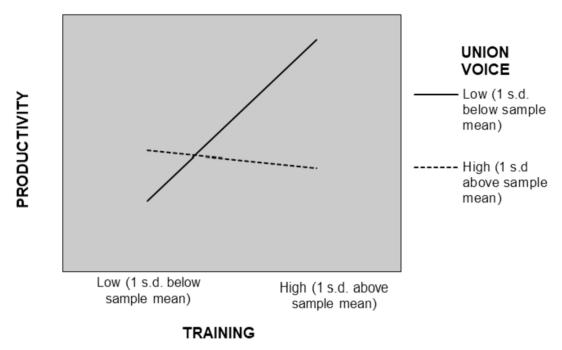


Fig. 2. Relationship between Training and Productivity for different levels of Union Voice.

variables were inserted) to Model 4 (when independent variables and interaction terms for team voice were also considered), which is slightly higher than that recorded for Model 3 (union voice). However, across all the models, team voice does not show any significant direct relationship with labor productivity. Hypothesis 2 is therefore not supported by our analysis. When the interactions with the HRM practices are considered (Model 4), a significant positive relationship emerges with regard to training. Fig. 3 shows the pattern of the interaction, and the significance test revealed that the slope for high team voice is significant (t = 3.83; p < .001), whereas that for low team voice is not (t = -0.06; p > .10). The effects of training are significantly higher when team voice mechanisms are also high. When team voice is low, the relationship between training and productivity is not significant. The other interaction terms are not significant. Hence, hypothesis 5 is supported only in relation to training.

Finally, Model 5 shows that the interaction term between union voice and team voice is not significant: hypothesis 3 is therefore not supported by our analysis.

5. Discussion and implications for research

The results described in the preceding section offer interesting evidence for the debate on employee voice. With regard to the direct relationship between collective voice mechanisms and organizational performance, the results show that union voice is positively associated with labor productivity, whereas team voice seems not to have any significant association with it. These findings support the view that voice mechanisms, on their own, are not enough to generate positive results in terms of performance. The same holds for the results of the nonsignificant interaction between union and team voice. Consistent with the results theorized by Freeman and Medoff (1984), if voice mechanisms are to have positive outcomes, they should be accompanied by a collaborative approach to employment relations because employees tend to reciprocate the managerial approach (Bryson et al., 2006; Holland, 2014). In this sense, the results on union voice may be explained by considering the extent of workplace collective agreements and management—union joint committees (i.e., our measure of union voice) as indicators of the cooperative approach adopted by the management (and unions), which in turn increase employees' trust in management and job performance (Newman et al., 2018). Team voice, as measured in this study (i.e., mainly referred to autonomy in performing work tasks) is not an indicator of the quality of the relationships between employees and management and can coexist, for example, with a "management by stress" approach (Parker & Slaughter, 1988) on the management side, i.e., with an increased pressure on the employee to be productive. Coherent with this view, Wood et al. (2012) found that high-involvement practices have negative effects on workers' well-being and suggested that this may be explained by the higher anxiety generated by a management approach that encourages employees to be proactive and flexible. In this sense, union voice may be considered superior to direct voice because employees feel that they can provide genuine input without management reprisals (Gill & Meyer, 2013). Other findings have also shown that employees perceive the introduction of teamworking by management to be driven by "the self-interested behaviours by managers in protecting their own jobs and seeking to develop their own careers" (Bacon & Blyton, 2005, p. 250). Future research could usefully address the role of management and unions' behavior and their approach to employment relations in explaining the different effects of voice mechanisms. Some research on this aspect of employee voice already exists (e.g., Bryson et al., 2006; Holland et al., 2012; Newman et al., 2018), but more knowledge is needed to advance understanding of the strategic role that employee voice may have in modern workplaces.

It has also been argued that the potential positive effects of employee voice on performance are not open-ended, in the sense that at a certain point, the marginal costs of increasing the adoption of voice mechanisms start to exceed the marginal gains that it generates (Kaufman, 2015). The relationship between voice and productivity could therefore be viewed as nonlinear, with an inverted U-shaped form. At some point, collective voice raises costs (e.g., in terms of time spent on participation and the enhanced ability and power of the employees to obtain better wages and

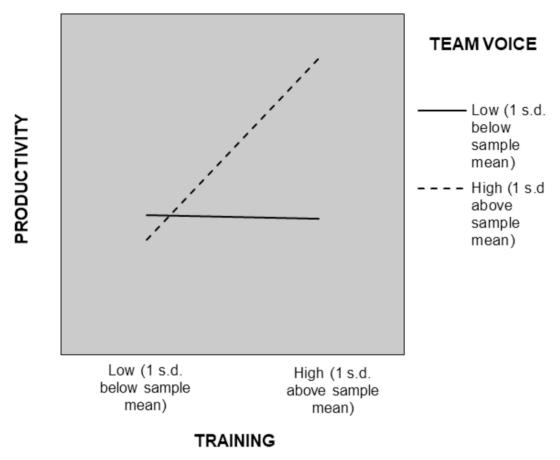


Fig. 3. Relationship between Training and Productivity for different levels of Team Voice.

working conditions due to their proactive contribution to the solution of organization problems), thereby reducing organizational productivity. This potential effect was tested for our sample for both union and team voice, and the nonlinear relationship with labor productivity was not found to be significant for the two mechanisms (results are available from the authors upon request). Moreover, contrary to other research (Kim et al., 2010), our results also exclude the presence of a substitution effect of direct voice for union voice in terms of organizational performance. Concerning the interaction between collective voice mechanisms and highperformance HRM practices, our findings show that union voice positively moderates the relationship between variable pay and performance. It is also interesting to note that variable pay has no direct relationships with labor productivity; it is only in the presence of a high level of union voice that performance-related pay becomes significantly and positively associated with productivity. In the presence of structured and participatory IR at the company level, it is highly likely that variable pay schemes are negotiated collectively (Brown & Warren, 2011). This is particularly the case in Italian manufacturing industry, where the presence of unions is historically high and IR systems at the company level are highly structured (though voluntary). In this context, variable pay for nonmanagerial employees is typically negotiated by union representatives. According to Checchi (2002), who analyzed a sample of enterprises in northern Italy, variable pay is present in 66% of firms that have formally stipulated a collective company-level agreement compared with 19% of firms without a formal company-level agreement. An important feature of this system derives from the fact that company-level bargaining establishes variable pay by linking pay mainly to the organization's performance; hence, variable pay assumes the form of collective bonuses at the company level, whereas individual incentives are uncommon, especially for workers with nonmanagerial roles. Such collective policies have better effects in terms of workforce behavior because they convey a greater sense of fairness than individual ones and because they prevent mechanisms that damage social relationships among colleagues (Pfeffer, 2007).

Studies in the HRM field generally treat IR variables simply as controls (e.g., Huselid, 1995; Guthrie, 2001; and; Wood et al., 2012). Our results show that union voice is a key variable in explaining the pay—productivity relationship. They therefore suggest that future HRM research should more closely consider the role of the IR system at the company level in explaining the HRM—performance relationship. Moreover, because our results are partially explainable by the characteristics of the Italian institutional context, a promising line of inquiry is comparative analysis of how different voice mechanisms interact with HRM practices in influencing organizational performance according to the different institutional contexts in which they are embedded.

Another important finding of our analysis is that team and union voice mechanisms have opposite moderation effects when training is considered. The association between training practices and organizational performance is stronger when team voice is high and when union voice is low. With regard to the effects of team voice, the results confirm the existence of the synergies (Delery, 1998; Huselid, 1995) between training and employee involvement suggested by existing theoretical and empirical literature (e.g., Combs et al., 2006; Felstead et al., 2010; and; Boxall, 2013). Providing employee with the opportunity to participate in decisions related to their tasks increases the return to investing in

training activities because employees use the skills and knowledge acquired through training to improve the effectiveness of their work activities. With regard to union voice, the results may be explained by the fact that union and managers have different agendas in terms of training activities, with the unions mainly concerned with increasing the employability of the employees (e.g., through the development of general skills) and the extension of training activities to disadvantaged occupational groups (e.g., older workers) and managers being more concerned with the professional development of core employees through the acquisition of firm-specific skills (Heyes, 2007). More research is needed to gain better understanding of how training and union voice interact with each other, but our results seem to suggest that unions and managers are still not able to negotiate effective collective agreements when training is the subject of the negotiations.

6. Limitations and implications for policy and practice

There are several limitations to our analysis. First, the data were cross-sectional. Although this may be considered as a severe limitation, the general paucity of data on Italian firms and the peculiar characteristics of the Italian context make the findings of this study useful even if we cannot make assertions concerning causality in the relationships found. Second, another limitation concerns our measure for team voice, which as discussed above was unable to capture the quality of this voice mechanism, i.e., the managerial logic behind it. Nevertheless, by measuring the intensity (i.e., the share of employees involved) of the adoption of autonomous teams. semiautonomous teams, and decentralized decision-making power, we were able to overcome the limitations of other studies that simply use the presence of teams as an indicator of team voice. Third, the measures of employee voice that we adopted were unable to capture the full range of voice mechanisms that may be introduced at the workplace level. For example, nonunion representative voice mechanisms are often considered as the most important emerging forms of collective employee voice (e.g., Laroche & Salesina, 2017; Pyman et al., 2006; Wilkinson et al., 2014). However, in the Italian context, and particularly in the manufacturing industry where industrial relations are highly structured, these new mechanisms are largely absent and representative voice typically assumes the form of union voice.

Despite these limitations, the findings of this study have important implications for policy and practices. First, from the managerial perspective, the findings suggest that strategies based on the adoption of employee involvement practices (such as team voice) with the aim of reducing employees' need for unions, and in turn to reduce union voice, may result in very poor outcomes in terms of organizational performance. Notwithstanding the widespread trend toward the individualization of the employment relationships worldwide, in contexts where the IR system is highly structured and has a strong cultural tradition, unions are a key player for company effectiveness. Thus, not only managers but also policy-makers should (continue to) consider the involvement of unions as a crucial step of the decision-making processes at different levels.

With regard to this, results of the interactions between collective voice mechanisms and training are highly relevant. On the one hand, the positive interaction between team voice and training suggests managers to pay close attention to the increasingly convergent literature that affirms the existence of such synergies. Investing in training activities without giving team autonomy to the employees may result in lower returns to training investments in terms of employee productivity. On the other hand, as discussed above, the unexpected negative effect of union voice in the relationship between investments in training and productivity can be

explained by the different priorities that managers and unions have in terms of training needs, which then result in the negotiation of ineffective agreements. It has also been noted that training, in Italy, is a relatively new terrain of negotiation for unions. Although this may represent an opportunity for trade union organizations to extend their area of influence, union representatives themselves need to acquire new skills to effectively perform this new role, and this may take time (Della Torre, Di Palma, & Solari, 2012), More broadly, as noted by Stuart (2007), the transition from a traditional demand-centered approach to policies (e.g., employment protection) to a new one centered on supply (e.g., protection of employment skills) implies for unions the transition from a vision focused on defending jobs to a more individualistic vision focused on the protection and development of the employee and of his/her skills and abilities. In the absence of such strategic changes, the only option for unions with regard to training is to adopt a "the more, the better" strategy, which, however, may result in ineffective agreements for both the employee and the organization. These results also suggest policy-makers and bilateral bodies at the national level to invest more resources for the evaluation of training programs jointly implemented by unions and management.

Finally, our results suggest managers, unions, and policy-makers to devote more attention to emerging forms of representative employee voice. Indeed, as far as team and union voice in combination was found unable to increase their individual contribution to organizational performance, existing research suggests the combination of union and nonunion representative voice can be highly beneficial in terms of quality of employment relations and company performance and that nonunion representative voice may also allow union voice to become even more effective (Wilkinson et al., 2018). However, nonunion representative voice is almost absent in Italian firms. Thus, if the potential contribution of collective voice mechanisms has to be fully exploited, a kind of "modernization" in the mindset of the socio-economic actors (managers, unions, and policy makers) with regard to voice mechanisms is required. Clearly, as voice effects are highly context dependent (as suggested in this study), their effects in Italian firms need to be carefully monitored and analyzed, but this seems to be one of the more promising lines of development for employee voice in the workplaces.

7. Conclusion

The aim of this paper was to contribute to the advancement of the debate on employee voice and performance by analyzing how collective employee voice mechanisms (i.e., union voice and team voice) affect organizational productivity and how these relationships vary when voice mechanisms are adopted in combination with other HRM practices. Despite the debate on union decline and the (supposed) superiority of direct voice, union voice was found to be positively related to labor productivity, whereas team voice did not show any significant relationship with organizational performance. Interestingly, collective voice mechanisms were also found to moderate the relationship between some high-performance HRM practices and productivity, such as variable pay and training. Specifically, the positive relationship between variable pay and productivity is significant only at the high level of union voice, whereas the positive relationship of training is stronger when team voice is high and when union voice is low. Overall, these results confirm the need to adopt research frameworks that are able to integrate different theoretical perspectives when analyzing the role of employee voice in contemporary workplaces (Townsend & Wilkinson, 2014; Barry & Wilkinson, 2016; and Kaufman, 2015). Focusing only on direct (and individual) voice mechanisms means, at best, having a partial representation of the contribution that

employee voice can make to organizational performance.

References

- Addison, J. T. (2005). The determinants of firm performance: Unions, work councils, and employee involvement/high-performance work practices. *Scottish Journal of Political Economy*, *52*(3), 406–450.
- Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Newbury Park: Sage.
- Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. (2000). Manufacturing advantage. Why high performance work systems pay off. New York: Cornell University Press.
- Appelbaum, E., & Batt, R. (1994). *The new american workplace*. New York: Cornell University Press.
- Bacon, N., & Blyton, P. (2005). Worker responses to teamworking: Exploring employee attributions of managerial motives. *International Journal of Human Resource Management*, 16(2), 238–255.
- Banker, R. D., Field, J. M., Schroeder, R. G., & Sinha, K. K. (1996). Impact of work teams on manufacturing performance: A longitudinal field study. *Academy of Management Journal*, 39, 867–890.
- Barry, M., & Wilkinson, A. (2016). Pro-social or pro-management? A critique of the conception of employee voice as a pro-social behaviour within organizational behaviour. *British Journal of Industrial Relations*, 54(2), 261–284.
- Batt, R. (1999). Work organization, technology, and performance in customer service and sales. *Industrial and Labor Relations Review*, 52, 539–564.
- Belsley, D. A., Kuh, E., & Welsch, R. E. (1980). Regression diagnostics: Identifying influential data and sources of collinearity. New York: Wiley.
- Benson, J., & Brown, M. (2010). Employee voice: Does union membership matter? Human Resource Management Journal, 20(1), 80–99.
- Black, S. E., & Lynch, L. M. (2001). How to compete: The impact of workplace practices and information technology on productivity. *Review of Economics and Statistics*, 83(3), 434–445.
- Boxall, P. (2013). Mutuality in the management of human resources: Assessing the quality of alignment in employment relationships. *Human Resource Manage*ment Journal, 23(1), 3–17.
- Boxall, P. (2014). The future of employment relations from the perspective of human resource management. *Journal of Industrial Relations*, *56*(4), 578–593.
- Boxall, P., Haynes, P., & Freeman, R. B. (2007). Conclusion: What workers say in the Anglo-American world. In R. B. Freeamn, P. Boxall, & P. Haynes (Eds.), What workers say. Employee voice in the Anglo-American workplace. New York: Cornell University Press.
- Brewster, C., Brooks, M., Croucher, R., & Wood, G. (2007). Collective and individual voice: Convergence in Europe? *International Journal of Human Resource Management*, 18(7), 1246–1262.
- Brown, T. C., & Warren, A. M. (2011). Performance management in unionized setting. Human Resource Management Review, 21(2), 96–106.
- Bryson, A. (2004). Managerial responsiveness to union and nonunion worker voice in Britain. *Industrial Relations*, 43(1), 213–241.
- Bryson, A., Charlwood, A., & Forth, J. (2006). Worker voice, managerial response and labour productivity: An empirical investigation. *Industrial Relations Journal*, 37(5), 438–455.
- Bryson, A., Forth, J., & Laroche, P. (2011). Evolution or revolution? The impact of unions on workplace performance in Britain and France. *European Journal of Industrial Relations*, 17(2), 171–187.
- Budd, J., Gollan, P., & Wilkinson, A. (2010). New approaches to employee voice and participation. *Human Relations*, 63(3), 1–8.
- Checchi, D. (2002). La contrattazione decentrata in Lombardia: Gli accordi di salario variabile. In D. Checchi, P. Perulli, I. Regalia, M. Regini, & E. Reyneri (Eds.), *Lavoro e sindacato in Lombardia. Contributi per interpretare il cambiamento*. Milan: Franco Angeli.
- Combs, J., Liu, Y., Hall, A., & Ketchen, D. (2006). How much do high-performance work practices matter? A meta-analysis of their effects on organizational performance. *Personnel Psychology*, 59(3), 501–528.
- Cooke, W. N. (1994). Employee participation programs, group-based incentives, and company performance. *Industrial and Labor Relations Review*, 47(4), 594–609.
- Datta, D. K., Guthrie, J. P., & Wright, P. M. (2005). Human resource management and labour productivity: Does industry matter? *Academy of Management Journal*, 48(1), 135–145.
- Deery, S. J., Iverson, R. D., Buttigieg, D. M., & Zatzick, C. D. (2014). Can union voice make a difference? The effect of union citizenship behavior on employee absence. *Human Resource Management*, 53(2), 211–228.
- Delarue, A., Van Hootegem, G., Procter, S., & Burridge, M. (2008). Teamworking and organizational performance: A review of survey-based research. *International Journal of Management Reviews*, 10(2), 127–148.
- Delery, J. E. (1998). Issues of fit in strategic human resource management: Implications for Research. *Human Resource Management Review*, 8(3), 289–309.
- Della Torre, E., Di Palma, S., & Solari, L. (2012). Governance e bilateralità nel sistema italiano di formazione continua: Il caso del settore metalmeccanico. *Polis. Ricerche e studi su società e politica in Italia, 26*(1), 31–65.
- Dobbins, T., & Dundon, T. (2014). Non-union employee representation. In Wilkinson, Dundon, Donaghey, & Freeman (Eds.), *Handbook of research on employee voice*. Cheltenham: Edward Elgar.
- Doucouliagos, H., Freeman, R. B., Laroche, P., & Stanley, T. D. (2018). How credible is trade union research? Forty years of evidence on the monopoly–voice tradeoff. *ILR Review*, 71(2), 287–305.

- Doucouliagos, C., & Laroche, P. (2003). What do unions do to productivity? A metaanalysis. *Industrial Relations*, 42(4), 650–691.
- Dundon, T., Wilkinson, A., & Marchington, M. (2004). The meanings and purpose of employee voice. *International Journal of Human Resource Management*, 15(6), 1318–1334.
- Felstead, A., Gallie, D., Green, F., & Zhou, Y. (2010). Employee involvement, the quality of training and the learning environment: An individual-level analysis. *International Journal of Human Resource Management*, 21(10), 1667–1688.
- Freeman, R. B., & Medoff, J. L. (1984). What do unions do? New York: Basic Books. Gefen, D., Straub, D., & Boudreau, M. (2000). Structural equation modelling and regression: Guidelines for research practice. Communications of the Association for Information Systems, 4(7), 1–77.
- Gill, C. (2009). Union impact on the effective adoption of high performance work practices. *Human Resource Management Review*, 19(1), 39–50.
- Gill, C., & Meyer, D. (2013). Union presence, employee relations and high performance work practices. *Personnel Review*, 42(5), 508–528.
- Godard, J. (2010). What is best for workers? The implications of workplace and human resource management practices revisited. *Industrial Relations*, 49(3), 466–488
- Godard, J. (2014). The psychologisation of employment relations? *Human Resource Management Journal*, *24*(1), 1–18.
- Godard, J., & Delaney, J. (2000). Reflections on the "high performance" Paradigm's implications for industrial relations as a field. *Industrial and Labor Relations Review*, 53(3), 482–502.
- Gooderham, P., Parry, E., & Ringdal, K. (2008). The impact of bundles of strategic human resource management practices on the performance of European firms. *International Journal of Human Resource Management*, 19(11), 2041–2056.
- Guest, D. (1987). Human resoruce management and industrial relations. *Journal of Management Studies*, 24(5), 503–521.
- Guthrie, J. P. (2001). High involvement work practices, turnover and productivity: Evidence from New Zealand. *Academy of Management Journal*, 44(1), 180–190.
- Hair, J. F. J., Anderson, R. E., Tatham, R. L., & Black, W. C. (1992). In *Multivariate data* analysis (3rd ed.). New York: Macmillan.
- Harley, B. (2014). High performance work systems and employee voice. In Wilkinson, Dundon, Donaghey, & Freeman (Eds.), Handbook of research on employee voice. Cheltenham: Edward Elgar.
- Heyes, J. (2007). Training, social dialogue and collective bargaining in western Europe. *Economic and Industrial Democracy*, 28(2), 239–258.
- Hirsch, B. T. (2007). What do unions do for economic performance? In Bennet, & Kaufman (Eds.), *What do unions do? A twenty-year perspective*. New Brunswick: Transaction Publishers.
- Hirschman, A. O. (1970). In Exit, voice, and loyalty. Cambridge: Harvard University Press.
- Holland, P. (2014). Employers and voice. In Dundon Wilkinson, Donaghey, & Freeman (Eds.), *Handbook of research on employee voice*. Cheltenham: Edward Elgar.
- Holland, P., Cooper, B. K., Pyman, A., & Teicher, J. (2012). Trust in management: The role of employee voice arrangements and perceived managerial opposition to unions. *Human Resource Management Journal*, 22(4), 377–391.
- Huselid, M. A. (1995). The impact of human resource management on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38(3), 635–672.
- Katou, A. A., & Budhwar, P. S. (2006). Human resource management systems and organizational performance: A test of mediating model in the Greek manufacturing context. *International Journal of Human Resource Management*, 17(7), 1223–1253.
- Katou, A. A., & Budhwar, P. S. (2010). Casual relationship between HRM policies and organizational performance: Evidence from the Greek manufacturing sector. *European Management Journal*, *28*(1), 25–39.
- Kaufman, B. E. (2014). Employee voice before Hirschman: Its early history, conceptualization, and practice. In Wilkinson, Dundon, Donaghey, & Freeman (Eds.), Handbook of research on employee voice. Cheltenham: Edward Elgar.
- Kaufman, B. E. (2015). Theorising determinants of employee voice: An integrative model across disciplines and levels of analysis. *Human Resource Management Journal*, 25(1), 19–40.
- Kaufman, B. E., & Taras, D. (2010). NonUnion employee representation. In A. Wilkinson, P. Gollan, M. Marchington, & D. Lewin (Eds.), The Oxford handbook of participation in organizations. Oxford: Oxford University Press.
- Kim, J., MacDuffie, J. P., & Pil, F. K. (2010). Employee voice and organizational performance: Team vs. representative influence. Human Relations, 63(3), 371–394.
- Laroche, P. (2017). Union membership and job satisfaction: Initial evidence from French linked employer—employee data. *Human Resource Management Journal*, 27(4), 648–668.
- Laroche, P., & Salesina, M. (2017). The effects of union and nonunion forms of employee representation on high-performance work systems: New evidence from French microdata. *Human Resource Management*, 56(1), 173–189.
- Lawler, E. E. (1986). High involvement management. San Francisco: Jossey-Bass.
- Machin, S., & Wood, S. (2005). Human resource management as a substitute for trade unions in British workplaces. *Industrial and Labor Relations Review*, 58(2), 201–218.
- Marchington, M. (2015). Analysing the forces shaping employee involvement and participation (EIP) at organisation level in liberal market economies (LMEs). *Human Resource Management Journal*, 25(1), 1–18.
- McCloskey, C., & McDonnell, A. (2018). Channels of employee voice: Complementary or competing for space? *Industrial Relations Journal*, 49(2), 174–193.

- McDuffie, J. P. (1995). Human resource bundles and manufacturing performance: Organizational logic and flexible production systems in the world auto industry. *Industrial and Labor Relations Review*, 48(2), 197–221.
- Mitchell, M. W., & Stone, J. A. (1992). Union effects on productivity: Evidence form western U.S. Sawmills. *Industrial and Labor Relations Review*, 46(1), 135–145.
- Newman, A., Cooper, B., Holland, P., Miao, Q., & Teicher, J. (2018). How do industrial relations climate and union instrumentality enhance employee performance? The mediating effects of perceived job security and trust in management. Human Resource Management, 1–10.
- OECD. (2006). Territorial review. Milan, Italy, Paris: OECD Publishing.
- OECD. (2008). *Labor productivity indicators*. Geneve: OECD Publications.
- OECD. (2018). Trade union density, organization for economic co-operation and development. https://stats.oecd.org/.
- Ostroff, C., & Bowen, D. E. (2000). Moving HR to a higher level: HR practices and organizational effectiveness. In K. J. Klein, & S. W. J. Koslowski (Eds.), Multilevel theory, research, and methods in organizations. San Francisco: Jossey-Bass/Wiley.
- Parker, M., & Slaughter, J. (1988). Management by stress. *Technology Review*, 91(7), 36–44.
- Pfeffer, J. (2007). Human resource from an organizational behaviour perspective: Some paradoxes explained. *Journal of Economic Perspectives*, 21(4), 115–134.
- Procter, S., & Burridge, M. (2008). Teamworking and performance: The extent and intensity of teamworking in the 1998 UK workplace employee relations survey (WERS98). *International Journal of Human Resource Management*, 19(1), 153–168.
- Pyman, A., Cooper, B., Teicher, J., & Holland, O. (2006). A comparison of the effectiveness of employee voice arrangements in Australia. *Industrial Relations Journal*, 37(5), 543–559.
- Ribarova, E. (2001). Information and consultation arrangements: Results from a transnational study. *Transfer*, 17(2), 299–237.
- Royer, S., Waterhouse, J. M., Brown, K. A., & Festing, M. (2008). Employee voice and strategic competitive advantage in international modern public corporations: An economic perspective. *European Management Journal*, 26(4), 234–246.
- Sako, M. (1998). The nature and impact of employee "voice" in the European car components industry. *Human Resource Management Journal*, 8(2), 5–13.
- Stuart, M. (2007). Introduction: The industrial relations of learning and training: A new consensus or a new politics? European Journal of Industrial Relations, 3(3), 269–280.
- Tailby, S., Richardson, M., Upchurch, M., Danford, A., & Stewart, P. (2007). Partner-ship with and without trade unions in the UK financial services: Filling or fuelling the representation gap? *Industrial Relations Journal*, 38(3), 210–228.
- Townsend, K., & Wilkinson, A. (2014). Guest editors' note: Time to reconnect the silos? Similarities and differences in employment relations and human

- resources. Human Resource Management, 53(2), 203-210.
- Townsend, K., Wilkinson, A., & Burgess, J. (2013). Is enterprise bargaining still a better way of working? *Journal of Industrial Relations*, 55(1), 100–117.
- Verma, A. (2005). What do unions do to the workplace? Union effects on management and HRM policies. Journal of Labor Research, 26(3), 415–449.
- Verma, A., Kochan, T. A., & Wood, S. J. (2002). Union decline and prospects for revival: Editors' introduction. *British Journal of Industrial Relations*, 40(3), 373–384.
- Visser, J. (2006). Union membership statistics in 24 countries. *Monthly Labor Review*, 129(1), 38–49.
- Wilkinson, A., Barry, M., Gomez, R., & Kaufman, B. (2018). Taking the pulse at work: An employment relations scorecard for Australia. *Journal of Industrial Relations*, 60(2), 145–175.
- Wilkinson, A., Dundon, T., Donaghey, J., & Freeman, R. B. (2014). Employee voice: Charting new terrain. In Wilkinson, Dundon, Donaghey, & Freeman (Eds.), Handbook of research on employee voice. Cheltenham: Edward Elgar.
- Wilkinson, A., & Fay, C. (2011). New times for employee voice? *Human Resource Management*, 50(1), 65–74.
- Wilkinson, A., Gollan, P., Marchington, M., & Lewin, D. (2010). Conceptualising employee participation in organisations. In A. Wilkinson, P. Gollan, M. Marchington, & D. Lewin (Eds.), The Oxford handbook of participation in organizations. Oxford: Oxford University Press.
- Willman, P., Bryson, A., Kretschmer, T., & Gomez, R. (2013). The comparative advantage of non-union voice in Britain, 1980-2004. *Industrial Relations*, 52(S1), 194–220
- Willman, P., Gomez, R., & Bryson, A. (2009). Voice in the Workplace; why is it there, where do we find it and where is it going? In W. Brown, A. Bryson, J. Forth, & K. Whitfield (Eds.), *The evolution of the modern workplace*. Cambridge University Press.
- Wood, S. (1996). High commitment management and unionization in UK. *International Journal of Human Resource Management*, 7(1), 41–58.
- Wood, S., van Veldhoven, M., Croon, M., & de Menezes, L. M. (2012). Enriched job design, high involvement management and organizational performance: The mediating roles of job satisfaction and well-being. *Human Relations*, 65(4), 419–444
- Wood, S., & Wall, T. (2007). Work Enrichment and employee voice in human resource Management-Performance Studies. *International Journal of Human Resource Management*, 18(7), 1335–1372.
- Wright, P. M., & Boswell, W. R. (2002). Desegregating HRM: A review and synthesis of micro and macro human resource management research. *Journal of Management*, 28(3), 247–276.