VARIABLE PAY 2.0: TRANSFORMING THE POST-TRANSITIONAL CONTEXT IN WAREHOUSE LOGISTICS

Ilija Ćorić
MCI d.o.o., Bosnia and Herzegovina
E-mail: ilija.coric@mci.ba

Katija Vojvodić
University of Dubrovnik, Department of Economics and Business Economics, Croatia
E-mail: katija.vojvodic@unidu.hr

Received: June 27, 2018
Received revised: July 19, 2018
Accepted for publishing: July 22, 2018

Abstract

Considering the ever-increasing pressure on gross margins in the FMCG industry of post-transition economies, top management is more inclined to seek the alternative sources of competitive advantage. In particular, this refers to the area of supply chain management. The consolidation of large retail buyers and the consequent growth in their market share contributes to redirecting the focus on internal supply chains. In that context, the methodology for calculating variable pay is one of the mechanisms for achieving greater labour productivity and subsequent cost reduction. Based on the previous work on variable pay in warehouse operations and its major limitations, the present paper aims to further develop the concept of variable pay schemes of warehouse employees to increase their productivity. The paper employs a case study approach to examine warehouse operations in the distribution of FMCG products in the market of Bosnia and Herzegovina. A more precise classification of warehouse employees' work assignments has been enabled using a warehouse management system. Consequently, a considerably changed share of fixed and variable elements of salaries leads to increased productivity compared with the initial model of variable pay calculation system. Furthermore, applying advanced technology to supply chain provides a greater selection of mechanisms related to warehouse workers' productivity improvement. Importantly, it also results in increased motivation of top management to introduce variable pay schemes. To further the research a special emphasis should be put on the profitability analysis of developing and implementing a warehouse management system in warehouse operations.

Key words: warehouse logistics, variable pay schemes, warehouse management system, Bosnia and Herzegovina

1. INTRODUCTION

Nowadays, companies are managing diverse work forces, and pay systems must be designed to attract, retain and motivate employees (Scott et al., 2015). Contrary to traditional pay rules, organizations are increasingly adopting variable pay compensation systems to motivate employee performance (Chopra & Khurana, 2016), reward employees for the results that they achieve (Miceli & Heneman, 2000) and align better workforce costs with the resources available (Greene, 2012). Furthermore, Eriksson & Villeval (2008) emphasize that variable pay may also help firms to attract more productive employees. In that context, Yeh et al. (2009) stress that today performance-based pay systems are commonly implemented in workplaces as a business strategy to enhance workers' performance and reduce labour costs. This adaptation is mainly driven by changing business objectives and new forms of work organisation (Arrowsmith et al., 2010).

According to Grimshaw & Rubery (2010), variable pay schemes are used to reward individual or collective worker effort or performance through incentive-based payments. Furthermore, Zagelmeyer (2004) outlines that linking pay to individual performance is an important factor in order to provide incentives for firm employees. Similarly, Robbins et al. (2009) outline that "*a variable pay programme bases a portion of an employee's pay on some individual and/or organisational measure of performance*" (p. 178). The major question that arises is what performance measures should be used as a basis for variable pay. As argued by Redman & Wilkinson (2009), variable pay systems can include systems that have a direct relationship with output such as payment by results (p. 149). In that sense, pay increases are related to the achievement of agreed results defined as targets or outcomes (Armstrong, 2007).

In other words, variably pay systems place the emphasis on performance-related criteria instead of time- or seniority-based pay. Consequently, the proportion of pay that is 'at risk' is increased (Marginson et al., 2008). Likewise, Dohmen & Falk (2010) highlight that variable pay involves uncertainty and risk. Consequently, variable pay is sometimes referred to as "pay at risk" (Armstrong & Murlis, 2007; Armstrong & Chapman, 2011). In general, it is often emphasised that variable pay schemes should be designed to maximise benefits and minimise problems (Gerard, 2006). Moreover, Trif & Geary (2016) stress that the market function of variable pay schemes serves managers' aims not only in aiding them attract, retain and motivate suitably qualified employees, but also in helping them gain great control over labour costs.

Therefore, the above-mentioned approach to the introduction of variable pay calculation system is particularly interesting in the post-transition context. In addition to market transition, at the micro level of Bosnia and Herzegovina there is also the transition to the introduction of modern technologies within the supply chain. In that context, it is particularly important to observe different impacts of fixed and variable pay on warehouse worker productivity. The aforementioned impacts become even more significant in terms of differentiating the system that includes the use of a Warehouse Management System (WMS) compared to the earlier stage of the warehouse organization. The WMS enables a clearer categorization of warehouse workers in relation to the work activities they perform. It should be stressed that it was not possible earlier without a WMS.

This paper utilizes a case study approach to examine warehouse operations in the distribution of fast-moving consumer goods (FMCG) in the market of Bosnia and Herzegovina. Based on the previous work on variable pay in warehouse operations (Ćorić & Vojvodić, 2015) and its major limitations, the present paper aims to further develop the concept of variable pay schemes of warehouse employees to increase their productivity. To this end, the paper is organized as follows. Following the introduction, the second section looks at various issues associated with the implementation of variable pay schemes and WMS. The third section deals with a case study of variable pay schemes of warehouse employees and their impact on employees' performance. Finally, the paper closes with conclusions drawn from the paper.

2. INSIGHTS INTO VARIABLE PAY SCHEMES AND WAREHOUSE MANAGEMENT SYSTEM

2.1. Variable pay schemes

Nowadays, compensation practices are being increasingly implemented in response to changing circumstances (Madhani, 2012). According to Buchenroth (2006), a company's total compensation posture should reflect its business objectives and reward employees for their accomplishments. Regarding different stages of organizational life cycle, rebalancing fixed and variable pay in the compensation structure can help organizations design an optimal compensation strategy for building competitive advantage (Madhani, 2010a; Madhani, 2010b; Madhani, 2011). In that context, Burke & Hsieh (2006) emphasize that the choice between fixed and variable pay affects the firm's employee productivity, operating leverage, market risk, cost of capital, and cash flows. It is often stated that the best structures for variable pay are different for different people in the organisation (Gerard, 2006). In case of executives, managers and traders of financial institutions, extreme variably pay schemes have led to excessive risk-taking with short-term private benefits in the wake of the financial crisis (Winter, 2012).

As regards advantages of variable pay, Armstrong (2002, p. 19) outlines its ability to form partnership between employees and organization, to vary pay costs with performance, and to create the need for high levels of teamwork and collaboration. In addition to this, Madhani (2014) underlines that organization culture and compensation system design function as complementary elements in achieving the strategic goals of the organization. Likewise, Smilko & Van Neck (2004) point out variable compensation as a means of aligning employee behaviour with organizational goals. However, cultural differences in the workplace should not be overlooked in the context of variable pay schemes. In light of this, the effectiveness of variable pay is often linked to the company's own culture and work environment (Hill, 2001). Therefore, Brown (2002) argues that variable pay plans need to be tailored to the characteristics and culture of each country and organization.

As observed by Pouliakas (2010), the composition of an employee's remuneration package is an integral element of his/her overall working conditions.

Although variable pay system is associated with superior financial performance, its effect on behavioural and attitudinal change can also be observed (Cox, 2005). In addition to different reasons behind establishing variable pay plans, Singh (2007) emphasises improving employees' morale. Furthermore, performance pay is linked to positive job attitudes among private sector employees (Bryson et al., 2017). Further, schemes of variable pay are more likely to be introduced where new work practices are in place (Dell'Aringa et al., 2005). As regards managers' education, Damiani & Ricci (2014) confirmed that highly educated manages were more likely to use team and individual forms of variable pay schemes.

The performance evaluation-base for variable payments, variable pay calculation-base and goal setting for variable pay were found to significantly predict job performance (Wickramasinghe & Wickramasinghe, 2016). Dohmen & Falk (2011) confirm that output is higher in the variable-payment schemes compared to the fixed-payment scheme. As regards pay preferences and employee characteristics, Scott et al. (2015) found that older employees with more education and more dependents had a stronger preference for variable pay than did employees who were younger, less educated and had fewer dependents.

Risk aversion has been recognized as a major factor reducing preferences for variable pay plans (Kurtulus et al., 2011). Individual and group variable pay plans act differently on workers' pay satisfaction (Cloutier et al., 2013). As regards risk preferences, Kuhn & Yockey (2003) reveal that variable pay was preferred more often when incentives were based on individual rather than collective performance. In addition, Merriman & Deckop (2007) found that variable pay framed as a loss was associated with greater work effort and performance, and less deviant behaviour in the workplace. The effect of variable pay schemes on workplace absenteeism is also worth mentioning. In general, performance pay was negatively related to sickness absence rates and sick days (Dale-Olsen, 2012). Likewise, Pouliakas & Theodoropoulos (2012) revealed that establishments that tied a greater proportion of employees' earnings to variable pay schemes experienced lower absence rates.

2.2. Warehouse management system

A WMS is widely considered to be a key part of the supply chain. This software control system "*primarily aims to control the movement and storage of materials within a warehouse and process the associated transactions*" (Palevich, 2012, p. 27). As stressed by Coyle et al. (2013), it improves product movement and storage operations through efficient management of information and completion of distribution tasks. Furthermore, the WMS can improve speed, increase profitability and accuracy, and facilitate a reverse logistics function (Soyka et al., 2013). It also increases accurate and on-time deliveries, reduces costs and improves profits (Mulcahy & Sydow, 2008).

According to Greeff & Ghoshal (2004), a WMS "*optimizes all the resources in the warehouse by automating the materials handling process and providing productivity tools to ensure that businesses stay competitive, allow cost cutting, increase productivity, fulfil orders accurately and efficiently, and improve customer service*" (p. 239). Apart from the aforementioned advantages, the benefits of WMS

also include reduced inventory, reduced labour costs, increased storage capacity, and improved inventory accuracy (Wilson et al., 2013). In addition to these benefits, Emmett (2005) emphasizes traceability, improved productivity levels, and better management reporting. However, one key element of an efficient WMS is to impart a feeling of trust and security regarding the management and control system (Hompel & Schmidt, 2007).

On the other hand, one of the greatest challenges to introducing a WMS is convincing the management team that one is necessary in today's fast moving environment (Richards, 2011). This is especially true for post-transition environments such as the market of Bosnia and Herzegovina, where every major change to existing working conditions is treated very critically. Since such systems require a huge financial investment in equipment and software, the question is raised of their justification in relatively small, post-transition markets. Due to their size and relatively limited number of end consumers, these markets are often condemned to technological lag in modern logistics and distribution chains.

It can be noted that more related research is still needed to gain deeper knowledge about variably pay schemes, in particular in a technological environment. The next chapter deals with the introduction of a new variable pay calculation system in the context of implementation of a WMS.

3. CASE STUDY

As in the previous paper (Ćorić & Vojvodić, 2015), this research is also conducted on a case study referring to distribution practice of FMCG industry products on the market of Bosnia and Herzegovina, where the process of a variable pay calculation system was first introduced in 2013. Following the analysis of shortages and initial limitations, the stated calculation model additionally enriches the process, while modern technological solutions of warehouse operations is used at the same time to enable a more transparent calculation process and simpler monitoring of changes. The first part of the case study describes a WMS as the given technical solution for warehouse operation, which notably changes the initial situation in the process of a variable pay calculation system. The second part presents the new calculation model so that a comparative analysis of the previous and the new model is conducted.

3.1. Baseline situation (what is new since 2015)

One of the key shortages of the previous research is the fact that there were several categories of operational activities performed by warehouse workers (entry of goods, sorting of goods in a warehouse, maintenance, return of goods, inventory check counting and the similar), which were supporting activities to the total number of commissioned items. As such, it was not possible to quantify them so that they were by default left to a subjective evaluation of immediate superiors. Introduction of WMS in warehouse operations in the middle of 2017 changed the situation. Following work activities in chain (entry of goods, replacement of goods, commissioning of goods,

and control of goods, then inventory check counting and return of goods) has made all processes measurable and they can be indexed by weight and/or by average duration. Cleaning of warehouse and all other activities related to maintenance of certain installations, chambers, shelves/racks and the similar are not in the category of measurability in WMS.

In order to keep the variable calculation as simple as possible, the methodology of introduction of a variable pay calculation system did not apply indexed weighting factors of individual activities performed by warehouse workers nor put them into payment ratios, but followed categorisation of individual warehouse workers depending on activities they were dealing with. Individual groups of employees are defined as follows.

Table 1. Definition of warehouse workers categories

Number	Category of employee	Description of activities
1.	Warehouse manager/ Deputy warehouse manager	Organisation of the process of work in a warehouse, independent performance of activities to control inventory counting, entry of goods and control checking of sell-out goods
2.	Forklift driver	Responsible to replace the goods from the entrance zone to the so-called stock zone, and from the stock zone to the so-called picking zone
3.	Returns administrator	Responsible to process the goods from return in cooperation with the Administration office
4.	Commissionaire (picker)	Deals with commissioning and goods supply

Source: Authors' definition

In accordance with the above stated definition of work activities, the warehouse manager takes an independent role when it comes to control of incoming and outgoing goods, given that WMS has enabled significant increase of efficacy in the previous operational intensive activities such as, for example, control of shelf life of certain items in the warehouse. The consequence of this is "release" of other employees from these activities and their unhindered focusing on measurable elements of a variable pay. Therefore, the analysis of a variable pay calculation by means of WMS can reduce the analysis of the calculation for employees in the fourth category and/or for those employees that deal with commissioning of goods in a warehouse.

3.2. Introducing a variable pay calculation system (why we expect the new system to be better)

Previous version of a variable pay calculation system was led by the idea that each employee must "earn" his/her variable part of salary, and that this part of salary is connected to his working efficiency. As opposed to that, each worker also has his

guaranteed fixed part of salary. This part of salary presents certain compensation for other working activities that are not directly measurable, but are in the service of final commissioning of goods towards the customers (cleaning, control counting, entry of goods and the similar). With the assumption that the above listed activities present common interest of the entire organisation, and that all employees would be equally motivated to perform them, the fixed part of salary is defined as the part of salary equal for all employees.

Practical experience has taught us that the stated assumption has not endured the time test, given that each employee was motivated to "transfer" the responsibilities related to those additional, immeasurable activities to other employees in order to have more time to work on the statistics of the variable part of salary, whereas the notion of the fixed part of salary has eventually turned into the notion of the "flaw falling from the sky". Consequently, warehouse was not tidy; there were delays at the entry ramps, tardiness in taking the goods from the so-called stock zone to the picking zone and the similar so that in general lower level of collegiality was perceived between some employees and their superiors.

For all these reasons, the new variable pay calculation system "puts a fence" from the very start against additional activities like the type of entry of goods, control inventory counting, shifting the goods to the picking zone and the similar in the manner that separate groups of employees were defined for such activities that will be fully paid in fixed amount, with subjective monitoring of relevant norms by immediate superiors. These subjective norms are not in the focus of this paper, but could be the subject of some future research. Starting from the definitions stated in the Table 1, such structure of variable calculation of pay for warehouse workers is defined in the following table.

Table 2. Structure of warehouse workers considering the model of a variable pay calculation system

Employees	Fixed part of pay	Variable part of pay	Activity
Head of warehouse operations	100%		Entry of goods, inventory counting etc.
Deputy head of warehouse operations	100%		Entry of goods, inventory counting etc.
Warehouse worker 1	100%		Forklift driver
Warehouse worker 2	100%		Forklift driver
Warehouse worker 3	100%		Returns administrator
Warehouse worker 4		100%	order picking
Warehouse worker 5		100%	order picking

Warehouse worker 6		100%	order picking
Warehouse worker 7		100%	order picking
Warehouse worker 8		100%	order picking
Warehouse worker 9		100%	order picking
Warehouse worker 10		100%	order picking
Warehouse worker 11		100%	order picking
Warehouse worker 12		100%	order picking
Warehouse worker 13		100%	order picking
Warehouse worker 14		100%	order picking
Warehouse worker 15		100%	order picking

Source: Authors' calculations

Following the above structure, the new model of a variable pay calculation system focuses on the remaining 12 workers given that warehouse managers were not considered in the previous model so that 3 workers were given special assignments and 100% fixed part of salary is applied to them.

After reorganisation of working activities, we have perceived that 12 workers in total take part in commissioning of goods only and they are responsible only for this working activity, compared to previous 15 workers who performed all working activities in a warehouse. Table 3 shows results of the new division of labour.

Table 3. Variable calculation of pay for warehouse workers

Employees	Number of items	Fixed part of pay	Variable part of pay (number of items*0.05 EUR)	Total pay	Comment
Head of warehouse operations	---				Entry of goods, inventory counting etc.
Deputy head of warehouse operations	---				Entry of goods, inventory counting etc.
Warehouse worker 1		450		450	Forklift driver
Warehouse worker 2		450		450	Forklift driver

Warehouse worker 3		450		450	Returns administrator
Warehouse worker 4	9.432		472	472	order picking
Warehouse worker 5	7.747		387	387	order picking
Warehouse worker 6	3.429		171	171	order picking
Warehouse worker 7	9.868		493	493	order picking
Warehouse worker 8	8.360		418	418	order picking
Warehouse worker 9	6.213		311	311	order picking
Warehouse worker 10	4.271		214	214	order picking
Warehouse worker 11	5.523		276	276	order picking
Warehouse worker 12	6.824		341	341	order picking
Warehouse worker 13	10.692		535	535	order picking
Warehouse worker 14	9.622		481	481	order picking
Warehouse worker 15	9.881		494	494	order picking
Total	91.865	1.350	4.593	5.943	

Source: Authors' calculations

Compared to the model described in the previous paper, it is possible to notice that warehouse managers take over a great number of working activities such as entry of goods, control inventory counting, control of outgoing goods and the similar. It is justified to ask why it is stated that it was not possible to apply this system a couple of years before when the previous calculation model was developed. The reason lies in development and adaptation of WMS system that enables higher work efficiency in many situations, for example listing the shelf life of all products that eliminates manual counting of products and the similar.

It should be mentioned that the groups of workers Forklift Driver and Returns Administrator also have their statistics within WMS system and/or they are measurable by other parameters (e.g., number of processed items to be returned, number of items replaced from the stock zone to the picking zone, number of items replaced from the entrance ramp to the stock zone and the similar). Their salary calculation could also be variable to a certain extent, which can be the subject of

another research. Given the particular focus on the problem to research variable pay system for warehouse workers, that aspect is neglected here, so that the above stated groups of workers receive a pay calculated per fixed criteria which is dependent on the subjective assessment of the superior.

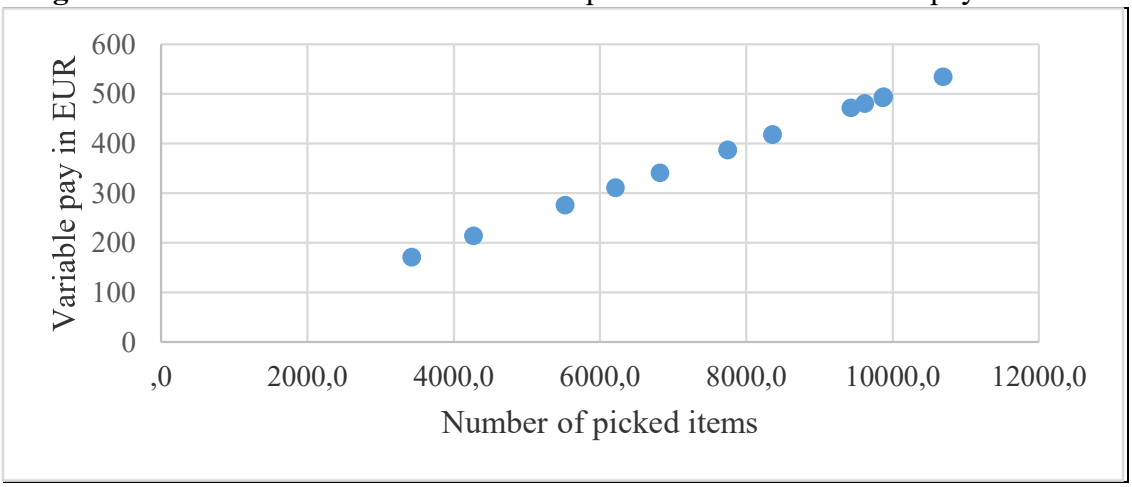
It is necessary to mention that variable part of calculation is now led only by the statistics of commissioning items so that this part is calculated by the formula:

Number of commissioned items * 0.05 €

Disadvantage of the calculation method applied in the previous work lies in the fact that it is different to commission 3 items than, say, 30 boxes of a certain item, given that the later requires more physical effort and time so that the efficiency of the very process is lower by default. Analysis of the method of work applied by warehouse workers has brought us to the conclusion that this model is notably simpler, so that there is no need to waste time to constantly make daily calculations, which used to take significant part of a working day time. In addition, it has been proved that in the case the workers commission orders with expected lower quantities in items, they end up commissioning those with higher quantities also, given that they are the only orders remained in the system of preparation for commissioning. Therefore, empirical observation has resulted in a simplified model stated here, which brings a stronger discipline among the workers.

It can be observed that the simplified model has led to strong discipline and focus on performance, as employees are less engaged in "daily calculations" of their earnings. Such a positive link with increased productivity is illustrated in the following diagram.

Diagram 1. Correlation between number of picked items and variable pay



Source: Authors' calculation

As can be seen in the applied model, average total net salary amounts to 396 €, maximum salary is 535 €, while the minimum salary amounts to 171 €, which gives the total variation range of 364 €, which presents a huge motivating factor to workers when it comes to their higher effectiveness. Further analysis of the research results obtained in the above indicated method proved that workers achieving significantly

lower efficiency are often faced with the situations of the so-called clean processing and/or situations in which all received orders have already been processed by other workers. This clearly indicates insufficient number of items that are to be processed by the existing number of workers i.e., it can be concluded that it could be possible to reduce the number of workers keeping the same quality of service related to timely deliveries to customers.

Such developmental scenario is expected, given that the working organisation has developed a significant level of specialisation of workers from the groups of Forklift drivers and Returns administrator. Along with previously mentioned redefinition of job activities performed by Warehouse manager, the introduction of WMS system has certainly contributed the increase of the work productivity level, which should be the subject of further detailed research.

4. CONCLUSION

To sum up, a number of drawbacks identified in the previous paper have been eliminated. First, by applying the modified formula, a new model of a variable pay calculation system has been developed. In comparison to the initial model created in 2015, the new one is simplified and easily understandable. Consequently, a considerably changed share of fixed and variable elements of salaries leads to increased productivity compared with the initial model of variable pay calculation system. Furthermore, applying advanced technology to supply chain provides a greater selection of mechanisms related to warehouse workers' productivity improvement. In that context, a Warehouse Management System gives enormous benefits, such as improved stock control, traceability, improved productivity levels, and better management reporting (Emmett, 2005). Importantly, it also results in increased motivation of top management to introduce variable pay schemes.

In addition, the categorisation of individual warehouse workers has been determined. This categorisation has solved the issue of other work activities (e.g., cleaning warehouses, control inventory, loading and unloading of goods etc.) that were previously neglected or avoided, and which resulted in increased number of errors in order picking. As stressed by Richards (2011), the role of warehouse employees in the supply chain needs to be recognized and understood. In light of this, the warehouse workers' categorisation has enhanced the satisfaction level due to the clean and orderly warehouse appearance as well as the overall work discipline. Based on the subjective point of view, in terms of forklift drivers and returns administrator work specialisation has improved their work efficiency.

Consequently, the aforementioned activities of warehouse workers made the job description of the head of the warehouse operations much easier. This way he can devote to other important activities within the warehouse such as more frequent inventory counting that reduces shortages at the annual level. Another step has been made with regard to technical equipment. Within a WMS system, each warehouse employee uses the Palm handheld tool for commissioning, which makes warehouse statistics accurate and understandable. In addition, there is no need for the head of the

warehouse operations to be involved in disputable situations (or subjective evaluations, etc.) and act as an arbitrator.

Finally, the paper contributes to the existing body of literature on variable pay schemes and WMS by providing useful insight into the market of Bosnia and Herzegovina as an example of post-transition environment. The findings presented in the paper have important practical implications and may be useful to warehouse managers as well as various other subjects faced with designing pay and reward structures. As emphasized earlier, there is a need for more research on variable pay schemes in the field of warehouse operations. To further the research a special emphasis should be put on the profitability analysis of developing and implementing a warehouse management system in warehouse operations. The assumed correlation between the development of WMS and higher operational efficiency of employees in warehouses could also be the subject of a separate research. In addition, other issues that deserve future examination include risk preferences, job satisfaction, employees' motivation and pay satisfaction.

5. REFERENCES

Armstrong, M. (2002). *Employee Reward*, 3rd edition, London: Cromwell Press

Armstrong, M. (2007). *A Handbook of Employee Reward Management and Practice*, 2nd edition, London: Kogan Page Limited

Armstrong, M. & Murlis, H. (2007). *Reward Management: A Handbook of Remuneration Strategy and Practice*, Revised 5th edition, London: Kogan Page Limited

Armstrong, M. & Chapman, A. (2011). *The Reward Management Toolkit: A Step-By-Step Guide to Designing and Delivering Pay and Benefits*, London: Kogan Page Limited

Arrowsmith, J., Nicholaisen, H., Bechter, B. & Nonell, R. (2010). The management of variable pay in European banking, *The International Journal of Human Resource Management*, 21(15), p. 2716-2740.

Brown, D. (2002). Bonus and Variable Pay: Lessons from the U.K., *Compensation & Benefits Review*, 34(6), p. 24-30.

Bryson, A., Forth, J. & Stokes, L. (2017). How much performance pay is there in the public sector and what are its effects?, *Human Resource Management Journal*, Special Issue: Employer Engagement, 27(4), p. 581-597.

Buchenroth, P. (2006). Driving Performance: Making Pay Work for the Organization, *Compensation & Benefits Review*, 38(3), p. 30-35.

Burke, L. A. & Hsieh, C. (2006). Optimizing fixed and variable compensation costs for employee productivity, *International Journal of Productivity and Performance Management*, 55(2), p. 155-162.

Chopra, S. & Khurana, S. (2016). Impact of variable pay on performance: an empirical study, *Management & Change*, 20(1-2), p. 29-67.

Cloutier, J., Morin, D. & Renaud, S. (2013). How does variable pay relate to pay satisfaction among Canadian workers?, *International Journal of Manpower*, 34(5), p. 465-485.

Cox, A. (2005). The outcomes of variable pay systems: tales of multiple costs and unforeseen consequences, *The International Journal of Human Resource Management*, 16(8), p. 1475-1497.

Coyle, J. J., Langley, C. J., Novack, R. A. & Gibson, B. (2013). *Supply Chain Management: A Logistics Perspective*, Stamford: South-Western Cengage Learning

Ćorić, I. & Vojvodić, K. (2015.). Variable pay: a case study in warehouse logistics, *15th International Scientific Conference Business Logistics in Modern Management*, Segetlija, Z., Mesarić, J., Dujak, D., Karić, M., Potočan, V., Rosi, B., Jereb, B., Trauzettel, V., Cyplik, P. (Eds.) Faculty of Economics in Osijek, Osijek, 15 October 2015, p. 189-200.

Dale Olsen, H. (2012). Sickness absence, performance pay and teams, *International Journal of Manpower*, 33(3), p. 284-300.

Damiani, M. & Ricci, A. (2014). Managers' education and the choice of different variable pay schemes: Evidence from Italian firms, *European Management Journal*, 32(6), p. 891-902.

Dell'Aringa, C., Ghinetti, P. & Lucifora, C. (2005). High performance work systems, industrial relations and pay policies in Europe, *Rivista Internazionale di Scienze Sociali*, 113(2), p. 215-240.

Dohmen, T. & Falk, A. (2010). You get what you pay for: incentives and selection in the education system, *The Economic Journal*, 120(546), p. F256-F271.

Dohmen, T. & Falk, A. (2011). Performance Pay and Multidimensional Sorting: Productivity, Preferences, and Gender, *The American Economic Review*, 101(2), p. 556-590.

Emmett, S. (2005). *Excellence in Warehouse Management: How to Minimise Costs and Maximise Value*, Chichester: John Wiley & Sons Ltd

Eriksson, T. & Villeval, M. C. (2008). Performance-pay, sorting and social motivation, *Journal of Economic Behavior & Organization*, 68(2), p. 412-421.

Gerard, P. (2006). *Performance and Reward: Managing Executive Pay to Deliver Shareholder Value*, Leicester: Troubadour Publishing

Greeff, G. & Ghoshal, R. (2004). *Practical E-Manufacturing and Supply Chain Management*, Oxford: Newnes

Greene, R. J. (2012). Variable Compensation: Good Fit to Turbulent Environments, *Compensation & Benefits Review*, 44(6), p. 308-314.

Grimshaw, D. & Rubery, J. (2010). *Pay and working time: Shifting contours of the employment relationship*. In Colling, T. and Terry, M. (Eds.). *Industrial Relations: Theory and Practice*. 3rd edition, Chichester: Wiley-Blackwell, pp. 349-377.

Hill, B. (2001). *Assessing Variable Pay Readiness*. In Fay, C. H. (Ed.). *The Executive Handbook on Compensation: Linking Strategic Rewards to Business Performance*. New York: The Free Press, pp. 127-137.

Hompel, M. & Schmidt, T. (2007). *Warehouse Management: Automation and Organisation of Warehouse and Order Picking Systems*, Berlin: Springer-Verlag

Kuhn, K. M. & Yockey, M. D. (2003). Variable pay as a risky choice: Determinants of the relative attractiveness of incentive plans, *Organizational Behavior and Human Decision Processes*, 90(2), p. 323-341.

Kurtulus, F. A., Kruse, D. & Blasi, J. (2011). *Worker Attitudes Toward Employee Ownership, Profit Sharing and Variable Pay*. In DeVaro, J. (Ed.). *Advances in the Economic Analysis of Participatory and Labor-Managed Firms* (Volume 12). Emerald Group Publishing Limited, pp.143-168.

Madhani, P. M. (2010a). Realigning Fixed and Variable Pay in Sales Organizations: An Organizational Life Cycle Approach, *Compensation & Benefits Review*, 42(6), p. 488-498.

Madhani, P. M. (2010b). Rebalancing Fixed and Variable Pay in a Sales Organization: A Business Cycle Perspective, *Compensation & Benefits Review*, 42(3), p. 179-189.

Madhani, P. M. (2011). Restructuring Fixed and Variable Pay in Sales Organizations: A Product Life Cycle Approach, *Compensation & Benefits Review*, 43(4), p. 245-258.

Madhani, P. M. (2012). Managing Sales Force Compensation: A Life Cycle Perspective, *Compensation & Benefits Review*, 44(6), p. 315-326.

Madhani, P. M. (2014). Aligning Compensation Systems With Organization Culture, *Compensation & Benefits Review*, 46(2), p. 103-115.

Marginson, P., Arrowsmith, J. & Gray, M. (2008). Undermining or reframing collective bargaining? Variable pay in two sectors compared, *Human Resource Management Journal*, 18(4), p. 327-346.

Merriman, K. K. & Deckop, J. R. (2007). Loss aversion and variable pay: a motivational perspective, *The International Journal of Human Resource Management*, 18(6), p. 1026-1041.

Miceli, M. P. & Heneman, R. L. (2000). Contextual Determinants of Variable Pay Plan Design: A Proposed Research Framework, *Human Resource Management Review*, 10(3), p. 289-305.

Mulcahy, D. E. & Joachim Sydow (2008). *A Supply Chain Logistics Program for Warehouse Management*, Boca Raton: CRC Press

Palevich, R. (2012). *Lean Sustainable Supply Chain: How to Create a Green Infrastructure with Lean Technologies*, New Jersey: Pearson Education

Pouliakas, K. (2010). Pay Enough, Don't Pay Too Much or Don't Pay at All? The Impact of Bonus Intensity on Job Satisfaction, *Kyklos*, 63(4), p. 597-626.

Pouliakas, K. & Theodoropoulos, N. (2012). *The Effect of Variable Pay Schemes on Workplace Absenteeism*. In Polachek, S. W. and Tatsiramos, K. (Eds.). *Research in Labor Economics* (Volume 36). Emerald Group Publishing Limited, pp.109-157.

Redman, T. & Wilkinson, A. (2009). *Contemporary Human Resource Management: Text and Cases*, 3rd edition, Essex: Pearson Education Limited

Richards, G. (2011). *Warehouse Management: A complete guide to improving efficiency and minimizing costs in the modern warehouse*, London: Kogan Page Limited

Robbins, S. P., Judge, T. A., Odendaal, A. & Roodt, G. (2009). *Organisational Behaviour: Global and Southern African Perspectives*, 2nd edition, Cape Town: Pearson Education South Africa

Scott, D., Brown, M., Shields, J., Long, R. J., Antoni, C. H., Beck-Krala, E. J., Lucia-Casademunt, A. M. & Perkins, S. J. (2015). A Global Study of Pay Preferences and Employee Characteristics, *Compensation & Benefits Review*, 47(2), p. 60-70.

Singh, B. D. (2007). *Compensation and Reward Management*, New Delhi: Excel Books

Smilko, J. & Van Neck, K. (2004). Rewarding Excellence through Variable Pay, *Benefits Quarterly*, 20(3), p. 21-25.

Soyka, P. A., Hill, A. V. & Palevich, R. (2013). *Building Sustainability Into Your Organization (Collection)*, New Jersey: Pearson Education

Trif, A. & Geary, J. (2016). The purpose of variable pay schemes and trade unions, *Employee Relations*, 38(2), p. 182-199.

Wickramasinghe, V. & Wickramasinghe, G. L. D. (2016). Variable pay and job performance of shop-floor workers in lean production, *Journal of Manufacturing Technology Management*, 27(2), p.287-311.

Wilson, R., Hill, A. V. & Glazer, H. (2013). *Tools and Tactics for Operations Managers (Collection)*, New Jersey: Pearson Education

Winter, J. (2012). *Corporate governance going astray: executive remuneration built to fail*. In Thomas, R. S. and Hill, J. G. (Eds.). *Research Handbook on Executive Pay*. Cheltenham: Edward Elgar, pp. 199-218.

Yeh, W.-Y., Cheng, Y. & Chen, C. J. (2009). Social patterns of pay systems and their associations with psychosocial job characteristics and burnout among paid employees in Taiwan, *Social Science & Medicine*, 68(8), p. 1407-1415.

Zagelmeyer, S. (2004). *Governance Structures and the Employment Relationship: Determinants of Employer Demand for Collective Bargaining in Britain*, Bern: Peter Lang