

## **PAY DISPERSION AND WORKFORCE AGILITY OF MULTI-NATIONAL FIRMS**

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### **ABSTRACT**

*This study ascertain the relationship between pay dispersion and workforce agility using multi-national firms in south-south region of Nigeria. It was then recommended that, Organizations should on a consistent basis, assess their dispositions and the applicability of their pay structure within their various contexts. This would determines their effectiveness and also impacts on their responsiveness, adaptability and cooperation. Horizontal pay dispersion having the potential of influencing adaptability, responsiveness and cooperation should be the watchword of multinational firms. Organizational policies should be designed to offer the necessary learning support. Such policies should also focus on identifying and addressing the various loopholes in the functionality of the organization in line with enhancing its goals of effective responsiveness to environmental changes. Vertical pay dispersion being the major predictor of adaptability, should be prioritize by putting in all apparatus that would accelerate it application.*

**Keywords: Pay Dispersion, Work Force Agility, Vertical Pay, Horizontal Pay**

### **INTRODUCTION**

Currently, multinational corporations (MNCs) around the world are engaged in an dynamic environment where change is a key characteristic, rapid technological progress, globalization, turbulent business models, novel and emerging markets, ever-changing customer preferences, digitalization, market deregulation and fragmentation, economic uncertainties, changing demographics, and ongoing social and political turbulence are some of the daily challenges that most multinational corporations (MNCs) ranging, from domestic to foreign, are currently coping with (Zitkiene & Deksnys, 2018). Moreover, customers are no longer mere receivers of products, rather they play a crucial role in the production process (Yang & Liu, 2012). The inability to cope with these challenges has rendered most firms moribund (Sherehiy et al., 2007).

So far, various solutions such as reengineering, networking, virtual enterprises, modular corporations, high performing organizations, flexible manufacturing, and employee empowerment have been proposed, and that of "agility" as well (Sherehiy et al., 2007). The challenges mentioned above force organizations to follow those rules which make them more efficient and agile in order to survive. In order to compete in this current turbulent market environment effectively, organizations must be proactive and be able to anticipate change. To do so, organizational structures must embrace more levels of agility through response and flexibility. Experts in the industry require novel organizational solutions, tools, and techniques to deal with environmental alterations, identify new opportunities, and be more adapted to external forces. In other words, an agile organization demands agile organizational enablers, drivers, abilities, strategies, and practices (Deksnys, 2018). Nouri and Mousavi (2020) argued that with the advances in information technology and the changes in paradigms and production strategies, agility would be a potential opportunity to boost the productivity and profitability of industrial capital, partly replaced by the increasing financial dominance. Above all, agility would be a strategy that allows organizations to survive on a borderless battlefield (Carvalho et al., 2019; Holbeche, 2018; Storme et al., 2020).

Despite the acknowledgment that it is people who are the main source of agility and anticipators of change (Holbeche, 2018; Munteanu et al., 2020), studies relating the effects of pay structure to workforce agility has been lacking. Most studies on pay dispersion has only show relationship with performance, leaving a huge gap to be fill. Furthermore, empirically the direction of the relationship between pay dispersion and performance remains unclear, as studies on this topic have not reached

a definite consensus. For instance, studies using evidence from professional sports usually find either a negative or insignificant relationship between pay dispersion and performance, while studies focusing on executive compensation or firm level dispersion usually reach different conclusions (Braakman, 2008). Pfeffer (1995) notes that pay compression is effective in enhancing organizational performance by reducing interpersonal competition and enhancing cooperation, but only when work is interdependent. These arguments can be traced to earlier suggestions (e.g., Hicks, 1963) that the distribution of pay must be set against its impact on the social fabric of organizations. Sociological (e.g., Deutsch, 1985) and economic (e.g., Levine, 1991) works extend this line of reasoning. Deutsch (1985) argued that pay dispersion diminishes performance when work is interdependent by reducing cooperation among employees. He later noted that any movement toward compression in interdependent situations increases efficiency (Deutsch, 1988; cited in Levine, 1991).

Against this backdrop, this study shall empirically evaluate the association between pay dispersion based on individual level and workforce agility using multinational firms in the south-south region of Nigeria as the setting with pay system communication as the contextual factor in order to fill this gap.

### **Pay Dispersion**

Pay dispersion, has been the subject of investigation in the management literature. Pay dispersion is often defined as the amount of difference (inequality) in pay created by a firm's pay structure and is sometimes referred to as pay variation or pay differential. Shaw (2014) sees pay dispersion likewise known as pay variation, pay range, pay spread, or pay inequality as the difference in pay levels between individuals within and across jobs or organizational levels. Bloom and Michel (2009) define it as the amount of inequality in pay which is due to a firm's pay structure. Gupta et al. (2012) provide a shorter definition and define pay variation as the extent to which pay varies within a collective.

Pay dispersion naturally occur in all organizations as a consequence of the firm's pay structure. According to Milkovich et al. (2011), a firm's pay structure is influenced by several external factors such as economic pressures, laws, stakeholders and culture, as well as organizational factors such as strategy, human capital and human resource policies. The pay structure decides how pay and pay levels are set. This results in higher pay dispersion in some companies and low in others. For instance, one company might reward individual performance highly while another more or less rewards all employees with a general percentage in pay raise. The former company is more likely to have a higher pay dispersion compared to the latter. (Gupta et al., 2012) There are three kinds of pay dispersion (vertical, horizontal and overall), although a large amount of previous studies of pay dispersion have not recognized these differences but referred to whichever dimension studied as just pay dispersion. The dynamics and implications of vertical and horizontal pay dispersion can differ, it is therefore important to distinguish them. While vertical pay dispersion is more attributable to strategic organizational choices on pay in different levels, horizontal pay dispersion rather depends on individual characteristics. (Gupta et al., 2012) Vertical pay dispersion refers to the variation in pay between two hierarchical levels or across jobs within an organization. The levels can, but does not have to, be adjacent. The difference in pay between a financial analyst and a financial manager is an example of vertical pay dispersion. Horizontal pay dispersion refers to the variation in pay within a certain hierarchical level or job in an organization. In other words, it is the pay dispersion within an occupational group such as white-collar workers. The chosen group can be broadly or narrowly defined. Overall pay dispersion combines both the vertical and horizontal dimensions. (Siegel & Hambrick, 2005) A lot of studies have been made in the area of pay dispersion. While some look at one of the three dimensions (vertical, horizontal or overall), other research incorporate them all into a single study. Furthermore, these dimensions can be examined at different organizational levels and perspectives. For example, some studies look at vertical pay dispersion between two adjacent levels, such as the CEO (level 1) and the top management team (level 2)

(Main et al., 1993; Fredrickson et al., 2010), or similarly further down the hierarchy (Chen & Shum, 2010; Backes-Gellner & Pull, 2013). Others investigate broader effects like the pay dispersion ratio of CEO to average employee (Connelly et al., 2016), or horizontal pay dispersions within blue or white collar workers (Grund & Westergaard-Nielsen, 2008). As previously mentioned, it is important to differentiate between the three dimensions of pay dispersion since their implication cannot be applied uniformly. In addition, more recent research often combine the effect of pay dispersion with contextual factors such as ownership structure (Connelly et al., 2016; Sanchez-Marín & Baixauli-Soler, 2015) or technological intensiveness (Siegel & Hambrick, 2005). There is also a considerable amount of research on pay dispersion and performance outside the firm level outcome context. Sport is one of those areas that have been thoroughly examined. One main reason for this is that pay data in this field is more easily available in comparison to organizational data (Dole, 2015).

### **Workforce Agility**

The agility means the ability to quickly respond and adapt to volatile market environments. According to Karwowski (2014) agility includes different competitive criteria like speed, flexibility, innovation, adaptability, proactivity, quality, productivity, profitability, customization, and knowledge, which help to focus on products and services driven by customer instead of those driven by the company. Yusuf et al. (1999) proposed that agility is the successful application of competitive bases such as speed, flexibility, innovation, and quality by the means of the integration of reconfigurable resources and best practices of knowledge-rich environment to provide customer-driven products and services in a fast changing environment. An equally important attribute of agility is the effective response to change and uncertainty (Goldman et al., 1995; Kidd, 1994; Sharifi & Zhang, 2001).

In the past, it was believed that agility and responsiveness of flexibility strategy can be achieved through sophisticated technologies such as computer-integrated manufacturing (CIM) (Youndt et al., 1996). However, recent research findings showed that manufacturing flexibility depends much more on people than on technologies. Upton (1995) stated that although computer integration can provide important competitive advantages, results of his study showed that the operational flexibility is determined primarily by plant operators and the extent to which managers communicate with them. It was concluded that achievement of manufacturing flexibility, requires developing and maintaining a "highly skilled, technologically competent and adaptable workforce that can deal with non-routine and exceptional circumstances" (Youndt et al., 1996) The demands of agile manufacturing also led to a conclusion that agility cannot be achieved without leveraging of employee's knowledge and skills (Dove, 1993; Forsythe, 1997; Nagel & Dove, 1991; Plonka, 1997). It is widely believed that workforce agility may provide wide range of benefits such as quality improvement, better customer service, learning curve acceleration, economy of scope and depth (Herzenberg et al., 1998; Hopp & Van Oyen, 2004). Changes from traditional production approach to the agile one will place higher demands on the workforce in several domains of business. The domain of changes that require agile response has been documented by Dove (1993) and listed as installing improvements, adding additional process capabilities, responding to schedule changes, reconfiguration of processes to accommodate new products, and migration to new systems. Pinochet et al. (1996) showed that introduction of advanced manufacturing technologies and any computer-technology can have several specific effects on the workplace and workforce. Based on those findings, Gunasekaran (1999) suggested that AM will have different requirements of the workforce than traditional systems: (1) closer interdependence among activities, (2) different skill requirements, usually higher average skill levels, (3) more immediate and costly consequences of any malfunction, (4) output more sensitive to variations in human skill, knowledge and attitudes and to mental effort rather than physical effort, (5) continual change and development, (6) higher capital investment per employee, and (7) favor employees responsible for a particular product, part, or process (Pinochet et al., 1996). In a changing business environment, the agile workforce faces uncertainty and is expected to provide fast response to unexpected events (Plonka, 1997). An agile

workforce is also expected to effectively take part in any collaborative environment (Forsythe, 1997), whether it cross-functional project team, collaborative ventures with other companies, or a virtual organization (Van Oyen et al., 2001). The employed workforce in an AM environment utilizes flexible technologies and infrastructure that supports change and requires higher cognitive demands. In order to provide suggestions concerning improvements in controls and equipment, the operator has to be familiar with the equipment technology. This in turn will require acquisition of new knowledge, accelerated learning, and JIT delivery of training (Plonka, 1997). The information, communication, and mobile technologies from one hand will support and enhance the workforce ability for speedy action and operational flexibility (Goldman and Nagel, 1993; Yusuf et al., 1999), but from other it also increases the cognitive demands and the time pressure. Based on the review of the demands of agile and lean manufacturing, Plonka (1997) determined some important attributes of agile workforce: (1) attitude toward learning and self-development; (2) problem-solving ability; (3) being comfortable with change, new ideas, and new technologies; (4) the ability to generate innovative ideas, and (5) accepting new responsibilities. Gunasekaran (1999) defined the agile workforce characteristics as follows: IT-skilled workers, knowledge in team working, negotiation, advanced manufacturing strategies, technologies, empowered employees, multifunctional workforce, multi-lingual workforce, and self-directed teams. Based on the review of the organizational agility literature, Brey et al. (2002) determined initial indicators of the workforce agility, such as responsiveness to external change, benchmark for skill assessment, speed of skill development, speed of adaptation to new work environments, speed of information access, speed of IT change, use of mobile technologies, workplace independence, mobile information access, collaborative technologies, virtual team, knowledge sharing, and employee empowerment. Dyer and Shafer (2003) stated that achievement of organizational agility requires three main types of behavior in workforce: proactive, adaptive and generative. Proactive behavior consists of two aspects: initiate and improvise. Proactive initiative means active search for opportunities to contribute to organizational success and take the lead in pursuing those opportunities that appear promising. Proactive improvisation requires devising and implementing new and creative approaches to pursuing opportunities and dealing with threats. Adaptive behaviors require assumption of multiple roles to perform in different capacities across levels, and projects often simultaneously move from one role to another very quickly. The employees have to simultaneously learn in multiple competencies areas and educate by actively sharing of information and knowledge.

### **Equity Theory (Fairness Approaches)**

In contrast to tournament theory, fairness approaches argue that organizations benefit from keeping pay dispersion at low levels. In short, the theory argues that if people perceive themselves to be unfairly compensated in comparison to others, their efforts will decrease. Previous researchers that argue for lower pay dispersion have addressed the phenomenon with different names. Equity theory, relative deprivation, distributional justice, and other theories that address fairness and cohesiveness can be grouped under the name of fairness approaches. (Grund & Westergaard-Nielsen, 2008) Due to their similarities, focus is on equity theory below. According to equity theory, employees compare their inputs (e.g. abilities, experience and effort) and their outcomes (e.g. pay, benefits and promotion) with others. The value of the inputs and outcomes are subjectively decided by the one who makes the comparison. For instance, one employee might value high education more than work experience, and believe that education should render higher outcomes. Such comparisons can be made with whoever a worker perceive as a peer, for example colleagues at the same or other levels, workers at a competing firm, or even oneself at a previous time. (Adams 1963, 1965) If the comparison is perceived as unfair, e.g. underpaid, the employee will experience discomfort which might negatively affect the social relations at the workplace (Adams 1963, 1965). Since large pay dispersions increase the differences in outcomes, the risk increases of perceiving pay as unfair. Thus, large pay dispersions might decrease morale and lead to counterproductive activities which impair firm performance (Akerlof & Yellen 1988, 1990; Milgrom 1988; Milgrom & Roberts 1990).

Similarly, Levine (1991) draws the conclusion that reduced pay dispersion can increase employee cohesiveness, which in turn increases productivity

Equity theory posits that individuals calculate a ratio of their own inputs (e.g., effort, skill) to their own outputs (e.g., pay), and then compare those ratios to referent others (i.e., individuals whom they perceive should have comparable input/output ratios). If the comparison is perceived as unfair, e.g. underpaid, the employee will experience discomfort which might negatively affect the social relations at the workplace (Adams 1963, 1965). Since large pay dispersions increase the differences in outcomes, the risk increases of perceiving pay as unfair. Thus, large pay dispersions might decrease morale and lead to counterproductive activities which impair firm performance (Akerlof & Yellen 1988, 1990; Milgrom 1988; Milgrom & Roberts 1990). Similarly, Levine (1991) draws the conclusion that reduced pay dispersion can increase employee cohesiveness, which in turn increases productivity. According to Adams (1963, 1965), employees who experience unfairness, can compensate by cognitively altering their perceptions or actually changing the inputs/outcomes over time for themselves or others. The former could for example be in the form of an employee finding a way to cognitively justify his or other's input/outcome ratio to himself. The latter, in an organizational context, could mean that the employee compensates by decreasing his input (work effort). Other consequences could be that employees change their comparison person(s) or alternatively leave the company (Pritchard, 1969). Milgrom and Roberts (1990) present another argument for keeping pay dispersion at low levels. Using agency theory, they argue that employees act in self-interest and work to influence decisions regarding wealth distributions to their own benefits. Furthermore, if work output is difficult to measure, the employees will exaggerate and frame their contribution in a beneficial way. To avoid these harmful activities under such circumstances, Milgrom and Roberts (1990) suggests lower pay dispersion.

## **CONCLUSION(S)**

The purpose of this study was to provide useful insight to the future prospects of pay dispersion if the success of multinational firms are seen as propellers of a nation economy. Based on the findings of this study; vertical pay dispersion have the potential of influencing adaptability of the workforce. This is as the results show a positive as well as significant relationship between vertical pay dispersion and adaptability. This is very instructive to firm's management that, a unit increase in vertical pay dispersion has potential to improve adaptability even without considering the effects of other exogenous variables. Vertical pay dispersion have the potential of influencing responsiveness of the workforce. This is as the results show a positive as well as significant relationship between vertical pay dispersion and responsiveness. This is very instructive to firm's management that, a unit increase in vertical pay dispersion has potential to improve responsiveness even without considering the effects of other exogenous variables. Vertical pay dispersion have the potential of influencing cooperation of the workforce. This is as the results show a positive as well as significant relationship between vertical pay dispersion and cooperation. This is very instructive to firm's management that, a unit increase in vertical pay dispersion has potential to improve responsiveness even without considering the effects of other exogenous variables.

Horizontal pay dispersion have the potential of influencing adaptability, responsiveness and cooperation of the workforce. This is as the results show a positive as well as significant relationship between horizontal pay dispersion, adaptability, responsiveness and cooperation. This implies that through horizontal pay dispersion an organization can achieve adaptability, responsiveness and cooperation among the various workforce.

There is correlation between compensation policies and the various measures of the criterion variable (adaptability, responsiveness and cooperation). Compensation policies can elucidate 44.7% of variation in adaptability, 58.9% in responsiveness and 80.8% in cooperation. This is a sign of a positive association between the variables. This is very instructive to multinational firms in Nigeria that, a unit rise in compensation policies has potential to improve adaptability, responsiveness and cooperation, however, with consideration of the effects of other exogenous variables.

Organizational policies mediate the association between each dimensions of the study predictor variables (vertical pay dispersion, horizontal pay dispersion and compensation policies) and each measures of the criterion variables (adaptability, responsiveness and cooperation).

### **RECOMMENDATIONS**

Based on these conclusions, it was recommended that;

1. Organizations should on a consistent basis, assess their dispositions and the applicability of their pay structure within their various contexts. The applicability of such would determines their effectiveness and also impacts on their responsiveness, adaptability and cooperation.
2. Horizontal pay dispersion having the potential of influencing adaptability, responsiveness and cooperation should be the watchword of multinational firms.
3. Organizational policies should be designed to offer the necessary learning support. Such policies should also focus on identifying and addressing the various loopholes in the functionality of the organization in line with enhancing its goals of effective responsiveness to environmental changes.
4. Vertical pay dispersion being the major predictor of adaptability, should be prioritize by putting in all apparatus that would accelerate it application.
5. Organizational structures should emphasize on vertical pay dispersion, by incorporating it in the process of organizing and planning for a more effective stance towards highly volatile and unpredictable business environments
6. A unit rise in compensation policies has potential to improve adaptability, responsiveness and cooperation, therefore, organizations as a matter of fact should encourage the practice of pay policies.

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