

# Pay Dispersion and Workforce Agility in Multinational Firms in Rivers State

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**Abstract:** *The goal of this paper is to ascertain the relationship between pay dispersion and Workforce Agility as well as the possible moderating influence of Organizational Polices on the relationship between both variables. Horizontal Pay Dispersion and Vertical Pay Dispersion were conceptualized as the facets of Pay Dispersion, while Adaptability, Cooperation, and Responsiveness were employed as the metrics for Workforce Agility assessment. Building upon this conceptual framework, three research inquiries were formulated. The study grounded itself in the Expectancy Theory as its theoretical foundation, emphasizing the significance of employees and their contributions as pivotal, distinctive, and valuable in enhancing the competitiveness and survival of the organization. Consequently, the paper concludes that pay dispersion represents a feasible and highly relevant approach for fostering and fortifying the adaptability processes of the organization. It also ensures continued cooperation and responsiveness in alignment with the dynamic and evolving nature of the environment, thereby playing a pivotal role in advancing organizational agility in the contemporary business landscape. The paper further recommends, based on empirical findings, that additional empirical investigations should be conducted to explore the correlation between pay dispersion and workforce agility. Most prior research has primarily focused on the relationship between pay dispersion and performance, leaving the effects of pay dispersion a subject of ongoing debate*

**Keywords:** *Pay Dispersion, Workforce Agility and Organizational Polity*

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## Introduction

Economic trough, supplier upheavals, global competition, changing customer(s) wishes as well as political instability have replaced business with permanent volatility (Tessarini & Saltorato, 2021).

The contemporary business landscape has placed heightened demands on companies, requiring them to provide goods and services more efficiently and flexibly than ever before (Dyer & Ericksen, 2005 as cited in Tessarini & Saltorato, 2011). Businesses are undergoing comprehensive transformations across various facets, ranging from leadership methodologies to financial processes. To thrive and remain competitive in this challenging and dynamic business environment, firms are embracing agility as a holistic enterprise strategy (Gartside et al., 2014 as cited in Tessarini & Saltorato, 2011).

The capacity to navigate an unpredictable, ever-changing business environment has been a prominent concern for several decades. Among the strategies devised to confront these challenges, the concept of workforce agility has emerged as the most prevalent and widely accepted (Sherehiy & Karwowski, 2014). According to Jackson and Johansson (2003), agility is not an end in itself but a vital means of sustaining competitiveness in a market characterized by constant uncertainty and change. Agility is commonly defined as the ability to gain a competitive edge, seize opportunities, and withstand threats arising from frequent and sometimes anticipated changes, achieved by swiftly reconfiguring resources, strategies, and personnel efficiently and effectively (Holbeche, 2018; Walter, 2020).

As noted by Jackson and Johansson (2003), agility is not an isolated goal but an essential tool for maintaining competitiveness in a market marked by uncertainty and change. Workforce agility is recognized as pivotal in building an agile organization (Sherehiy et al., 2014). According to Gartside et al. (2014), instead of relying solely on a select group of decision-makers at the top, agile workforces draw from their entire talent pool and deploy them flexibly as circumstances dictate. In an agile competitive environment, people's skills, knowledge, and experience are the primary differentiators between companies (Goldman et al., 1995). Hopp and Van (2004) posit that an agile workforce can support strategic objectives related to cost, time, quality, and variety. An agile workforce is viewed as a catalyst for increased productivity, profits, and market share, enabling businesses to thrive in a competitive market characterized by continuous and unforeseen changes and enhancing their prospects for survival in an increasingly volatile and global business environment.

A study conducted by Beatty in 2005 concluded that the integration of agile workforce management into an organization yields several benefits, including the ability to achieve targets through innovation, enhance strategic capabilities, and mitigate both fixed and contingent workforce-related structural costs. In summary, workforce agility emerges as a crucial strategy for navigating a constantly changing and unpredictable business environment.

However, for organizations to function effectively, the human factor is essential. Human beings constitute the primary source of organizational capacity and serve as promoters of agility (Holbeche, 2018; Munteau et al., 2020). Empirical research findings show that operational flexibility depends more on people than on technologies. As suggested by some, "operational flexibility is determined primarily by plant operators and the extent to which managers communicate with them."

Pay, as a motivator of human behavior, plays a vital role in determining the level of workforce agility. One critical aspect of pay structures is pay dispersion. Unfortunately, there is a dearth of empirical studies that directly relate pay dispersion to workforce agility. Pay dispersion, also known as spread, range, variation, or inequality, generally refers to differences in pay levels among individuals within (horizontal or lateral dispersion) and across (vertical dispersion) jobs or organizational levels. Pay dispersion research draws from various theoretical perspectives and encompasses multiple disciplines, examining outcomes at individual, team, organizational, industry, and societal levels.

Dispersed pay structures are argued to offer several benefits, including providing incentives for higher employee effort, attracting a higher caliber of the workforce, and reducing attrition of high-performing employees who may seek better opportunities elsewhere. These arguments assume that pay dispersion occurs for legitimate reasons and that highly valued human capital warrants higher pay than less valued human capital. Pay dispersion can enhance workforce performance when accompanied by formal individual incentive systems. Individual incentives have consistently been linked to higher individual performance levels. However, individual incentives may not be effective without corresponding perceptible pay differentials among employees. Meaningful pay differentiations, such as highly dispersed pay levels, are argued to motivate individuals to strive for higher pay. Research has shown that performance tends to improve as the spread of pay increases, as does safety in certain contexts, such as automobile racing. Organizational justice arguments support the benefits of pay dispersion resulting from the use of individual incentives. This connection between individual incentives and pay dispersion has implications for improved workforce performance and potential negative reactions such as reduced effort, retaliation, skepticism, and sabotage.

The influence of pay systems on workers is a central issue in personnel economics, with relative wages often playing a key role. However, there is no clear theoretical consensus on the relationship between pay dispersion and organizational performance. While some theories, like the tournament model, suggest that a more differentiated pay structure stimulates worker effort, others argue that pay compression, i.e., lower dispersion, can enhance productivity by improving labor relations or preventing rent-seeking activities. Work interdependence is a crucial factor in the effectiveness of pay compression, with greater interdependence being associated with more favorable outcomes.

Despite the growing empirical literature analyzing the relationship between pay dispersion and organizational outcomes, the precise effects of pay dispersion on performance remain unclear, with both positive and negative effects suggested. Notably, most studies on pay dispersion or pay compression have focused on organizational performance and have not explored its relation to workforce agility, creating a significant gap in the research. Given the importance of workforce agility in organizations and the significant role of pay structures in the lives of individuals in business organizations, it is essential to investigate the relationship between pay dispersion and workforce agility to fill this gap in our understanding. Based on this, this present paper explored the effects of pay dispersion based on individual level on workforce agility.

### **Statement of the Problem**

Currently, organizations around the world are engaged in a dynamic environment where change is a key characteristic, rapid technological progress, globalization, turbulent business models. In today's rapidly evolving business landscape, organizations, whether domestic or foreign, grapple with a multitude of daily challenges. These challenges encompass novel and emerging markets, ever-changing customer preferences, digitalization, market deregulation, fragmentation, economic uncertainties, shifting demographics, and ongoing social and political turbulence (Zitkiene & Deksnys, 2018). Notably, customers have evolved beyond being passive recipients of products; they now actively participate in the production process (Yang & Liu, 2012). Organizations that fail to effectively address these challenges often find themselves stagnating or struggling to survive (Sherehiy et al., 2007).

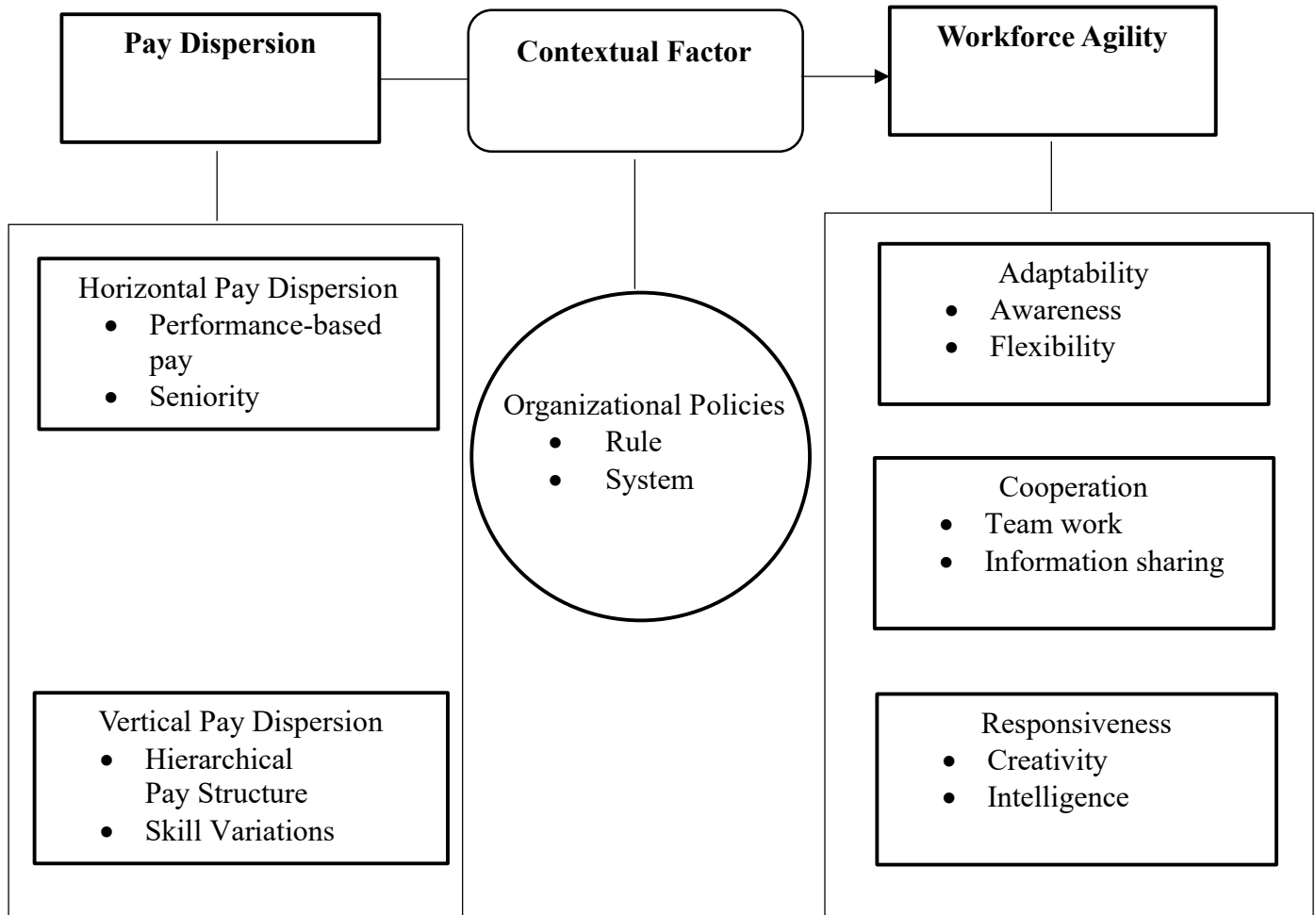
Various solutions have been proposed to confront these complex challenges, including reengineering, networking, virtual enterprises, modular corporations, high-performing organizations, flexible manufacturing, and employee empowerment, among others (Sherehiy et al., 2007). Among these solutions, the concept of "agility" has gained significant prominence. The volatile market environment necessitates that organizations adhere to rules that enhance their efficiency and adaptability. To thrive in this turbulent landscape, organizations must proactively anticipate and respond to changes. Achieving this requires organizational structures to incorporate greater levels of agility, characterized by responsiveness and flexibility. Industry experts recognize the need for innovative organizational solutions, tools, and techniques to navigate environmental shifts, identify emerging opportunities, and effectively respond to external influences. In essence, an agile organization demands agile enablers, drivers, abilities, strategies, and practices (Deksnys, 2018).

Noun and Mousavi (2020) have argued that with advancements in information technology and shifts in paradigms and production strategies, agility presents an opportunity to enhance the productivity and profitability of industrial capital, particularly in the face of growing financial dominance. Above all, agility emerges as a vital strategy for organizations to not only survive but also thrive in a borderless and highly competitive business arena (Carvaiho et al., 2019; Holbeche, 2018; Storme et al., 2020).

Despite the recognition that people are the primary drivers of agility and agents of change (Holbeche, 2018; Munteanu et al., 2020), research exploring the relationship between pay structure and workforce agility has been notably lacking. Most studies on pay dispersion have primarily focused on its association with performance, leaving a significant gap in our understanding..

Against this backdrop, this paper shall empirically evaluate the effects of pay dispersion based on individual level on workforce agility with organizational policies as the contextual factor in order to fill this gap.

### Conceptual Framework



**Figure 1.:** Conceptual Framework of Pay Dispersion and Workforce Agility

**Sources:** Dimension of pay dispersion adopted from Axelsson (2017) Bloom (1999), while measure adopted from Breu et al., (2001) Roberts and Dowling (2002) and Tamtam and Tourahi (2020)

The aim of this paper is centered on assessing the nature of the relationship between pay dispersion and workforce agility. Specifically, the paper sought to:

- i. Examine the relationship between vertical pay dispersion and workforce agility
- ii. Ascertain the relationship between horizontal pay dispersion and workforce agility

The following research questions are posed as a guide and framework for addressing the concerns of the study.

- i. What is the relationship between vertical pay dispersion and workforce agility?
- ii. What is the relationship between horizontal pay dispersion and workforce agility?
- iii. How do organizational policies moderate the relationship between pay dispersion and workforce agility?

## **Literature Review**

### **Theoretical Foundation**

#### **Expectancy Theory**

In contrast, Expectancy Theory, as proposed by Vroom in 1964, offers a different perspective. It suggests that pay differences serve as motivating factors for employees if they meet certain criteria: (a) employees value specific outcomes, such as higher pay (referred to as "valence"), (b) employees believe that increased effort will result in improved performance (referred to as "expectancy"), and (c) employees perceive a direct link between higher performance and desired outcomes, like increased pay (referred to as "instrumentality"). While early conceptualizations of Expectancy Theory argued that these three motivating factors interacted multiplicatively (Vroom, 1964), meta-analytic evidence suggests that each of these factors primarily influences motivation individually (Van Eerde & Thierry, 1996).

According to Expectancy Theory (Vroom, 1964), if employees desire a particular outcome, such as higher pay, believe that they can attain the required performance levels, and are confident that their performance will lead to the desired outcome, they will be motivated to perform (Gupta et al., 2012). In this theory, pay dispersion becomes motivating when several conditions are met: (1) employees place value on specific outcomes, such as higher pay (valence), (2) employees hold the belief that increased effort will result in improved performance (expectancy or E-P), and (3) employees perceive a connection between higher performance and increased outcomes, such as pay (instrumentality or P-O) (Vroom, 1964; Downes & Choi, 2014).

Consequently, larger rewards, such as higher pay, lead to increased motivation through heightened valence, and a stronger link between performance and pay leads to enhanced motivation through heightened instrumentality (Downes & Choi, 2014). Gupta et al. (2012) highlight four implicit considerations within the Expectancy Theory framework: It is not pay dispersion in isolation but performance-contingent pay dispersion that promotes high performance. Expectancy Theory is based on perceptions, implying that the P-O connection is more likely to be observed when differences in pay are substantial. Larger performance-based dispersion leads to a stronger P-O expectancy, which, in turn, enhances motivation to achieve higher performance. P-O expectancy tends to be higher for horizontal pay dispersion compared to vertical pay dispersion. This is because pay dispersion among employees in the same job is more likely due to differences in performance than among individuals in different job roles at various hierarchical levels. Performance-based variations are also more likely to increase valence, as a significant pay increase holds greater valence than a smaller one.

Expectancy Theory can be applied to explain other behaviors, such as promotions. The valence of pay can vary based on the pay difference associated with a promotion (characterized by high vertical dispersion) and the overall motivation to attain it. Promotion often holds a high positive valence for many employees, provided they believe performance is achievable (high E-P expectancy) and that promotion is linked to performance (high P-O expectancy).

Expectancy theory has two major implications for pay dispersion and they are:

- i. That larger rewards will result in greater motivation effect through increased valence and



- ii. That closer relationships between pay and performance will result in greater motivation through increased instrumentality (Lawler, 1990).

## **Conceptual Review**

### **Pay Dispersion**

The concept of pay dispersion has been a focal point of investigation in the field of management literature. Pay dispersion, often referred to as pay variation, pay range, pay spread, or pay inequality, is essentially the measure of the disparity in compensation resulting from a firm's pay structure (Shaw, 2014). It encompasses the differences in pay levels among individuals both within and across various job positions or organizational levels.

A compressed pay distribution, in contrast, typically features fewer distinct pay levels compared to a dispersed one (Bloom, 1999). The distinguishing factor between dispersed and compressed pay distributions lies in the extent of pay disparity they exhibit. Additionally, two distinct dimensions of pay dispersion are recognized: horizontal pay dispersion and vertical pay dispersion. Horizontal pay dispersion, as outlined by Shaw (2015), becomes evident when employees performing similar job roles receive differing pay rates. In essence, if individuals at the same job level or with comparable job responsibilities are compensated significantly differently, it signifies a high degree of horizontal pay dispersion. Conversely, vertical pay dispersion refers to the variation in compensation across different hierarchical levels within the organization. Pay dispersion can be understood as the degree of inequality in pay levels between jobs at the same level or rank (horizontal dispersion) or between jobs at different levels or ranks (vertical dispersion) within an organization.

### **Vertical Pay Dispersion**

As per Shaw's (2014) explanation, vertical dispersion pertains to the distribution of pay levels across different organizational ranks. In essence, vertical pay dispersion is considered high when there exists a substantial pay gap between various job levels within the organization. Vertical pay dispersion emerges as a result of differences in skill and/or responsibilities or due to variations in labor markets for specific job roles (Gupta, Conroy & Delery, 2012; Brown, Sturman & Simmering, 2003). Bloom and Michel (2002) propose that a certain degree of vertical pay dispersion is necessary to attract, retain, and incentivize high-performing employees. However, it's important to note that such dispersion can also lead to perceived unfairness among lower-level employees (Pfeffer & Langton, 1993; Bloom, 1999).

Drawing from equity theory (Adams, 1965; Walster, Berscheid & Walster, 1973; Homans, 1974), individuals assess fairness by comparing the inputs they contribute to their outcomes. However, employees' perceptions of fairness are significantly influenced by differences in outcomes rather than inputs (Cowherd & Levine, 1992).

### **Horizontal Pay Dispersion**

According to Downes and Choi (2014), horizontal pay dispersion refers to the extent of pay variation among employees who hold the same job or occupy the same hierarchical level within an organization. Siegel and Hambrick (2005) assert that two primary factors contribute to

horizontal dispersion: differences in how employees are perceived to contribute value to the organization, leading to varying compensation, and pay structures that reward individual sub-unit performance rather than collective group performance. However, research has indicated a negative impact on perceptual performance, particularly when the use of incentives was limited. In the second study, which focused on the concrete pipe industry, the analysis also explored the influence of horizontal dispersion on workforce performance, although different measures were employed (such as labor hours per ton, lost-time accidents, and perceptual performance). Moderators in this context included both the utilization of incentives and the degree of work interdependence. The findings revealed that when pay dispersion was high and incentives were scarce, there was a decrease in performance, as evidenced by metrics like labor hours per ton and lost-time accidents (with no significant impact on perceptual performance). The role of incentives was further accentuated when work interdependence was taken into account.

Additionally, Kepes et al. (2009) conducted a study examining the effects of horizontal dispersion on workforce productivity (measured by accident frequency ratio and out-of-service percentage) and organizational performance (assessed through operating ratio and return on equity). Their analysis also considered pay basis (distinguishing between performance-based and politically-based pay) as a potential moderator, which can be seen as a form of incentive.

### **Workforce Agility**

Agility is the capacity to swiftly respond and adjust to dynamic market environments. As outlined by Karwowski (2014), agility encompasses various competitive criteria such as speed, flexibility, innovation, adaptability, proactivity, quality, productivity, profitability, customization, and knowledge. These criteria prioritize products and services driven by customer needs rather than those dictated solely by the company's internal processes. According to Gunasekaran (1999), the characteristics of workforce agility include IT proficiency among employees, expertise in teamwork and negotiation, familiarity with advanced manufacturing strategies and technologies, empowerment of employees, the versatility of a multi-functional workforce, proficiency in multiple languages, and the ability to operate within self-directed teams.

Breu et al. (2002) identify indicators of workforce agility that encompass responsiveness to external changes, the ability to benchmark and assess skills, rapid skill development, swift adaptation to new work environments, prompt access to information, agility in adopting IT changes, utilization of mobile technologies, independence in the workplace, mobile information access, proficiency in collaborative technologies and virtual teamwork, active knowledge sharing, and employee empowerment.

Furthermore, Dyer and Shafer (2003) emphasize that achieving workforce agility entails three primary types of behavior: proactive, adaptive, and generative. Proactive behavior consists of two key aspects: initiation and improvisation. Initiatory proactivity involves actively seeking opportunities to contribute to organizational success and taking the lead in pursuing promising opportunities. Proactive improvisation necessitates the creation and implementation of novel, creative approaches to pursuing opportunities and addressing threats. Adaptive behaviors require employees to assume multiple roles, often concurrently, across different levels and



projects. They must swiftly transition from one role to another, necessitating the simultaneous acquisition of competencies in multiple areas and active sharing of information and knowledge.

**Adaptability:** Adaptability refers to the extent to which an employee or organization possesses the capacity to modify their behavior, structures, and systems in response to environmental changes, as stated by Denison (1990). It involves translating the demands of the business environment into actionable strategies. Organizations, as open systems, operate within complex and uncertain environments. To thrive and remain profitable, organizations must continuously adapt to varying levels of environmental uncertainty. The level of environmental uncertainty serves as a critical factor influencing organizational structure and internal behaviors, as highlighted by Daft (1998). Achieving an appropriate alignment between internal structures and the external environment is essential for organizational success. In a world marked by ever-evolving global competition, technological advancements, and shifting markets, many firms have witnessed their competitive advantages erode. The heightened environmental uncertainty, often termed hyper-competition, has engendered a state of perpetual disequilibrium and change, not only in fast-paced, high-tech industries but across various sectors (Aveni in Daft, 1998).

Responsiveness, on the other hand, pertains to the process of deriving general insights or understanding from market information. It encompasses the managerial assumptions and mental models that shape managers' orientations toward priorities, their approach to problem formulation, the spectrum of solutions they consider, and the criteria they employ for decision-making (Moorman, 1995). Responsiveness can also be viewed as a firm's inclination to take action based on market-generated information (Hult et al., 2005). Within the context of the market information process, Kohli and Jaworski (1990) equate responsiveness with the utilization of market intelligence within the organization. This encompasses two key activities: response design (employing market intelligence to devise plans) and response implementation (using market intelligence to execute those plans) (Kohli & Jaworski, 1990). Kohli and Jaworski (1990) further identify several tangible forms of responsiveness, including selecting target markets, designing and offering products and services tailored to current and anticipated customer needs, and managing the production, distribution, and promotion of products in a manner that elicits favorable responses from end customers (Kohli & Jaworski, 1990).

Cooperation involves a process of openness and willingness to collaborate with significant others. While in the most general sense, every employment relationship entails cooperation, as the parties involved are participating in that relationship (Naharuddin & Sadegi, 2013), this perspective may not fully capture the harmonious collaborative aspect often central to the concept of cooperation. Moreover, the concept of cooperation is surprisingly complex, giving rise to various, at times conflicting, interpretations of its meaning and how it should be fostered within the employment relationship.

Cooperation means workers participation in decision making participatory or cooperative practices in an enterprise to achieve organizational goals and meet employees need (Heron, Macdonald & Vandenabeele, 1997). The authors argue that the cooperation can take various forms, such as information sharing, direct or indirect consultation, and financial participation.

Collective bargaining is also a form and a vehicle for workplace cooperation. Developing more cooperative working relations in the enterprise can contribute to increased efficiency, productivity and competitiveness of the enterprise, better enterprise industrial relations, an improved working environment, increased job satisfaction and effectiveness. More effective decision-making within the enterprise and more equitable sharing of enterprise profits by workers that will motivate employers are employees, there reducing boredom and turnover intentions (Heron, Macdonald & Vandenaheele, 1997).

Employees' cooperation in the organization is seen through information sharing. Information sharing is the regular and systematic provision, by management to workers, of accurate and comprehensive information on a range of personnel, financial, production, developmental and organizational matters. Information sharing which is a form of cooperation and a pro-social behaviour exhibited by employee, serves as a prerequisite for other forms of workplace cooperation. Actually, one message always rings true that a lack of cooperation between employees and between employees and managers negatively impact employee productivity. People tend to feel inspired to perform at their best when there is a positive attitude in the workplace. If an employee is consistently uncooperative, those employees' conflicts will drain the manager's time, upset other employees, and result in an antagonistic relationship between manager and employee which is not conducive to higher production levels. The bottom line is, cooperation had a direct bearing on productivity, so proper training and rules for managers and employee with regards to employee interaction and cooperation is imperative.

In the most generic use of the term 'cooperation, every employment relationship involves cooperation to the extent that the parties are participating in that relationship. But we find this unhelpful because it does not recognize the sense of working together harmoniously that many consider central to the meaning of cooperation (Naharuddin & Sadegi, 2011). Moreover, the concept of cooperation is (perhaps surprisingly) complex, leading to may, often compete. Perspectives on what cooperation means and how it can or should be advances within the employment relationship. In the context of such diversity, we adopt a broad definition and then turn a systematic exploration of different and then turn to a systematic exploration of different meanings, manifestations, causes, and consequences within its boundaries.

Perspectives on cooperation differ on the range of issues that should be included in cooperative efforts. If the employment relationship is seen through a lens of irreconcilable conflict, then it is assumed that no issues should be subject to cooperation. Another possibility is that only a narrow range of issues should be subject to cooperation. This could imply that cooperation would be seen as appropriate only at certain levels of the enterprise-for example, within a functional level where productivity is determined but not at a strategic level where larger decisions are made. Others believe that cooperation should involve a broad range of issues, or that cooperation should involve whatever particular parties find to be in their mutual self-interest. This might point toward cooperation occurring at multiple levels of an organization (Naharuddin & Sadegi, 2013).

### **Pay Dispersion and Workforce Agility**

Pay dispersion enhances workforce performance when formal individual incentive systems are in place. The consistent association between financial incentives and individual performance levels underscores the effectiveness of these systems. However, the efficacy of individual incentives relies on the presence of noticeable pay differences among employees. The challenges posed by a certain degree of earnings disparity within a work group become more pronounced as the level of interaction among group members increases. In participative organizations, compression of pay fosters cohesiveness, cultivates an atmosphere of trust and confidence, and amplifies the likelihood of adherence to group norms. Therefore, the implicit key to the success of pay compression lies in the degree of work interdependence. These theoretical propositions received empirical support in Bloom's (1999) study, which reported a negative correlation between pay dispersion and performance within a sample of professional baseball teams. This context, characterized by presumed high levels of work interdependence, maintained relative constancy across organizations.

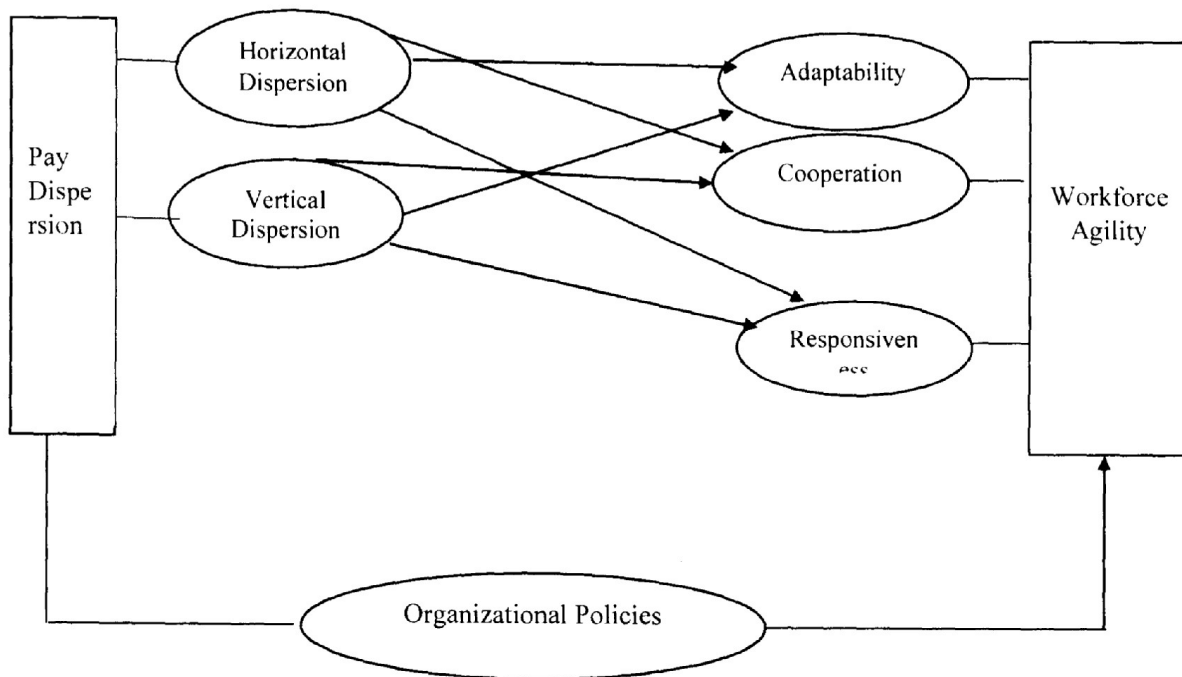
Rycx and Volral (2009) conducted research on the impact of wage dispersion on firm productivity across various working environments. Specifically, their study examined the interaction between wage dispersion and two factors: the skills of the workforce, using a more refined indicator than the conventional white-collar vs. blue-collar worker distinction, and the uncertainty of the firm's economic environment—an aspect that, to their knowledge, had not been empirically explored before. Utilizing detailed data for Belgium, their findings revealed a curvilinear relationship between wage dispersion (conditional) and firm productivity. This outcome suggests that up to a certain level of wage dispersion, the incentive effects akin to "tournaments" predominate, while beyond that threshold, considerations related to "fairness" take precedence. The study also indicated that the strength of this relationship is more pronounced for highly skilled workers and in more stable work environments. This observation may be attributed to the higher monitoring costs and production-effort elasticity associated with highly skilled workers, as well as the fact that in environments marked by heightened uncertainty, workers exert less control over the relationship between their efforts and output, associating greater uncertainty with fairness concerns.

Lee et al. (2008) conducted a study on horizontal pay dispersion among top managers and found that it led to an increase in firm performance. Other studies have examined pay dispersion across managers as well. For instance, Main et al. (1993) investigated vertical pay dispersion between the top management team (TMT) and the CEO for the period from 1980 to 1984. Their research revealed a positive relationship between pay dispersion and firm performance, as well as shareholder returns, although the latter was not statistically significant. Similarly, Sanchez-Mann and Baixauli-Soler (2015) explored vertical pay dispersion among director managers and non-director managers in Spanish firms from 2004 to 2012. Their findings supported a positive association between pay dispersion and firm performance.

From a Swedish perspective, Heyman (2005) and Hibbs and Locking (2000) examined the impact of pay dispersion on the performance of Swedish firms. Heyman (2005) used matched employee-employer survey data for 560 Swedish firms spanning from 1991 to 1995 and analyzed various pay dispersion measures, such as the pay dispersion between CEO pay and all other managers

(ranging from directors to lower-level decision-makers). The results aligned with tournament theory, revealing a positive effect of pay dispersion on firm performance. However, Heyman's study produced mixed results regarding other tournament hypotheses. While it indicated that pay increased from the bottom to the top of the hierarchy in Swedish firms, there was no evidence of the existence of a convex pay structure, thereby refuting one tournament hypothesis. Furthermore, the hypothesis suggesting that a higher number of managers (i.e., tournament participants) would positively influence pay dispersion was also not supported. Conversely, the findings did support the tournament hypothesis that firms operating in more unstable environments tend to exhibit higher pay dispersion.

#### Operational Framework of Pay Dispersion and Workforce Agility



**Fig.:** *Operational framework of Pay Dispersion and Workforce Agility*

**Source:** *Dimension of pay dispersion adopted from Axeisson (2017) Bloom (1999), while measure adopted from Breu et al., (2001) Roberts and Dowling (2002) and Tamtam and Tourahi (2020)*

#### Horizontal Pay Dispersion and Workforce Agility

With Horizontal pay dispersion, as discussed by Downes and Choi (2014), refers to the extent of pay differentiation among employees within a specific job or hierarchical level. Siegel and Hambrick (2005) argue that two primary factors influence horizontal dispersion: varying perceptions of an employee's value to the organization may result in differing compensation, and pay structures that reward individual or sub-unit performance over group performance.

A study conducted by Shaw et al. (2002) conducted two experiments to delve into the impact of horizontal dispersion on workforce performance within the motor carrier industry. They examined factors such as accident frequency ratio, out-of-service percentage, and perceptual performance, with the use of incentives as a moderator. The results revealed a strong negative correlation between pay dispersion and accident frequency ratio and out-of-service percentage (indicating better performance) when individual incentives were high, while the correlation was positive when incentives were low (indicating worse performance).

However, despite various studies exploring pay dispersion's influence on performance, there is a notable absence of research linking horizontal pay dispersion to workforce agility. In light of this gap, this study formulated the following hypotheses:

H01: There is no significant correlation between horizontal pay dispersion and adaptability.

H02: There is no significant association between horizontal pay dispersion and responsiveness.

H03: There is no significant correlation between horizontal pay dispersion and cooperation.

Turning to vertical pay dispersion, as defined by Shaw (2014), it pertains to the distribution of pay across different organizational echelons. In essence, vertical pay dispersion is high when there exists a considerable pay gap between various job levels within the organization. Downes and Choi (2014) describe it as a "between-job construct" that generally reflects the slope of the pay structure within a firm, meaning that steeper pay structures exhibit higher vertical dispersion compared to flatter (more compressed) structures.

Vertical pay dispersion can be attributed to variations in skills and responsibilities, as well as differences in labor markets for specific jobs (Gupta, Conroy & Delery, 2012; Brown, Sturman & Simmering, 2003). Bloom and Michel (2002) propose that a certain degree of vertical pay dispersion is necessary to attract, retain, and motivate high-performing employees. However, vertical pay dispersion can also lead to perceived unfairness among lower-level employees (Pfeffer & Langton, 1993; Bloom, 1999).

Research conducted by Mahy, Rycx, and Volral (2009) investigated the impact of wage dispersion on firm productivity across various working environments. Their study explored the interaction between workforce skills and the level of uncertainty in the firm's economic environment, utilizing detailed data for Belgium. The findings revealed a hump-shaped relationship between conditional wage dispersion and firm productivity. This suggests that up to a certain threshold of wage dispersion, the incentive effects related to "tournaments" dominate, whereas beyond that threshold, considerations of "fairness" take precedence. The results also indicated that this relationship was stronger for highly skilled workers and in more stable environments.

Lee et al. (2008) focused on horizontal pay dispersion within top managers and observed an increase in firm performance. Other studies have examined pay dispersion across managers, such as Main et al. (1993), who explored vertical pay dispersion between the top management team (TMT) and the CEO during the years 1980-1984. Their research unveiled a positive correlation between pay dispersion and firm performance, as well as shareholder returns, albeit the latter

was not statistically significant. Similar findings regarding firm performance were reported by Sanchez-Mann and Baixauli-Soler (2015), who investigated vertical pay dispersion among director managers and non-director managers in Spanish firms from 2004 to 2012.

Taking a Swedish perspective, Heyman (2005) and Hibbs and Locking (2000) delved into the effect of pay dispersion on the performance of Swedish firms. Heyman (2005) conducted an analysis using matched employee-employer survey data for 560 Swedish firms spanning the years 1991 to 1995. This study examined the impact of overall pay dispersion on corporate performance, employing various pay dispersion measures, including the dispersion between CEO pay and all other managers, ranging from directors to lower-level decision-makers. The results aligned with tournament theory, indicating a positive effect of pay dispersion on firm performance. However, Heyman's study generated mixed results regarding other tournament hypotheses. While it suggested that pay increased from the bottom to the top of the hierarchy in Swedish firms, there was no evidence of an existing convex pay structure, thereby refuting one tournament hypothesis. On the other hand, the findings supported the tournament hypothesis that firms operating in more unstable environments tended to exhibit higher pay dispersion. Breu et al. (2002) identified initial attributes of workforce agility that were used to develop a questionnaire. These attributes were categorized into five higher-level categories: intelligence, competencies, collaboration, culture, and information systems. Their research emphasized the importance of speed in developing new skills, responsiveness to changes in customer needs and market conditions, and speed in acquiring the skills needed for business process change as key elements of workforce agility.

### **Gap in the Literature**

It is evident that a significant portion of research on the aforementioned variables has been conducted outside of Nigeria. The limited studies conducted within Nigeria face challenges in terms of generalizability due to the prevailing cultural and religious influences. This underscores the fact that Africa, including Nigeria, lags in development partly due to the lack of locally relevant literature. If this continued reliance on foreign studies persists, it raises concerns about the prospects of our nation and people in the future. Based on the empirical findings reviewed, there is a pressing need for further research on the relationship between pay dispersion and workforce agility. While numerous studies have explored the link between pay dispersion and performance, the effects of pay dispersion remain a subject of ongoing debate.

### **CONCLUSION AND RECOMMENDATIONS**

Drawing from the literature review and personal perspectives, this study arrives at the following conclusions:

Pay dispersion encompasses the degree of variation in pay within a collective and can be categorized into horizontal and vertical dispersion. Both types exhibit hump-shaped and U-shaped relationships, indicating that tournament effects tend to dominate over fairness considerations up to a certain threshold of dispersion. Beyond that point, fairness considerations become more significant. The dynamics of these relationships differ for horizontal and vertical pay dispersion, with factors like incentives, interdependence, pay competitiveness, managerial size, and economic environment influencing their impact.



Pay dispersion is conducive to enhancing workforce performance, particularly when formal individual incentive systems are in place. The consistent correlation between financial incentives and individual performance highlights the importance of perceptible pay differentials among employees. Meaningful pay differentiation, reflected in highly dispersed pay levels, is crucial to motivating individuals to strive for higher pay. Extensive research on individual-level tournament compensation supports the idea that performance improves as pay dispersion increases. However, the effectiveness of pay dispersion in motivating performance is closely tied to the presence of individual incentives.

### **Recommendations**

In light of the empirical findings, it is recommended that further research should be conducted to explore the relationship between pay dispersion and workforce agility, particularly within the context of multinational firms in the oil industry, such as those operating in Rivers State, Nigeria. Given that existing studies have predominantly focused on the relationship between pay dispersion and performance, investigating its implications for workforce agility could provide valuable insights into this important area.

Addressing the ongoing debate surrounding the effects of pay dispersion on various organizational outcomes should also be a priority for future research endeavors. This will contribute to a more comprehensive understanding of the dynamics at play and inform evidence-based decision-making.

Fostering a culture of research and knowledge generation within Nigeria, particularly in areas of relevance to the local context, is essential for the nation's development and its ability to address future challenges effectively.

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