

FIRM WAGE ADJUSTMENT ACROSS POSITION DURING COVID-19 CRISIS

Azim Azhar^{1*}
Yong Chen Chen²

¹ Author: Azim Azhar: Faculty of Business & Economics, Universiti Malaya, Kuala Lumpur, Malaysia
(E-mail: 17028924@siswa.um.edu.my)

² Author: Yong Chen Chen: Faculty of Business & Economics, Universiti Malaya, Kuala Lumpur, Malaysia
(E-mail: ccyong@um.edu.my)

* Corresponding author

Article history

Received date : 7-5-2025
Revised date : 8-5-2025
Accepted date : 4-6-2025
Published date : 15-7-2025

To cite this document:

Azhar, A., & Yong, C. C. (2025). Firm wage adjustment across position during Covid-19 crisis. *Journal of Islamic, Social, Economics and Development (JISED)*, 10 (73), 922 - 946

Abstract: *The COVID-19 pandemic has disrupted the global economy, compelling firms to adapt and make crucial decisions for their business survival. Firms experienced unparalleled difficulties stemming from social distancing regulations, lockdowns, and travel restrictions that significantly affecting productivity, supply chains, and customer demand. In this uncertainty times, firms were compelled to make crucial decisions to ensure their business continuation, including adjustments to wages as part of their business strategic planning. This paper explores how firm's implements wage adjustments as a strategy for company continuation including the effects of wage reductions differ among various positions in Malaysia. This study offered insights into wage adjustments across positions based on data extracted from the National Job Portal, My Future Job. This study will extend the existing literature by providing evidence on how wage adjustment differs across firms. Findings of this study will fill an important gap in the existing literature by providing evidence and information on the wage adjustment implementation by firms in Malaysia across positions.*

Keywords: *Covid-19, wage adjustment, positions, wage cuts, crisis, pandemic*

Introduction

The early phases of the pandemic were marked by a rapid and significant economic downturn. Lockdowns and travel restrictions had a significant impact on businesses such as tourism, hospitality, and retail. Business saw a dramatic fall in sales, resulting in cash flow constraints and heightened concerns on financial sustainability. In responses, several firms implement various wage adjustment strategy to conserve cash flow. Government interventions also played a vital role in shaping wage adjustments, stimulus packages and unemployment benefits programmes offered some level of financial security to workers and potentially reducing the pressure on firms to implement drastic wage cuts during this time.

Covid-19 crisis has significantly impacted wage adjustments behaviours among firms, with firm's initially resorting freezes or cuts wages to cope with the economic realm. However, the long-term impact of the wage adjustments is remains uncertain. Adapting a strategic approach that prioritizes workers well-being and firm financial stability, can navigate firms to emerge stronger position in the post-pandemic phase of Covid-19. Therefore, common approach from firms in response to the unprecedented crisis are as per below:

Table 1 : Firm's Wage Response in Crisis

| No | Wage Respond | Details |
|----|------------------------------------|---|
| 1 | Cuts | Firms implemented to wage cuts as approach to stabilize the financial stability of firms. This strategy creates immediate financial relief, could leads to detrimental effects on employees productivity and morale. |
| 2 | Freeze | A common strategy by firms is implementing workers wage freezes. Firms intended to keep existing compensation structures while not incurring any additional new costs by postponing scheduled wage increases or cost-of-living adjustments. This technique provided some financial stability during a time in full of uncertainty. |
| 3 | Increase | Wage increase is another strategy by firms adopted to attract new workers to the firms. This strategy is adopted by firm that allow to run the business during pandemic in Malaysia. Government of Malaysia has listed the industry that fall into necessity and non-necessity that allows them to run the business as usual. Firms offers high increase during pandemic to attract new innovation and technology adaption to the business in order for firms to remain sales volume during this times. |
| 4 | Layoffs, Furlough and Retrenchment | Prolonged pandemic could leads to firms layoff and retrenchment, several firms imposed layoff and furloughs as a response to the prolonged pandemic to showed that businesses reserves are no longer able to cope with wages costs with the unprecedented economic performance. Furlough involved temporarily suspending employees without wage, while layoffs resulted in permanent job terminations. These strategy were often frequently implemented as a last option to decrease labour costs. |

Economic Performance during Economic Crises in Global Perspective

Crises has created a significant impact to economic performance in the whole world. The crisis's repercussions were notably evident in decreased trade and commodity prices, restricted access to credit, diminished demand in export sectors, and decelerated growth in many nations. An economic crisis is a situation in which a nation's economy experiences a sharp decline in aggregate production or real gross domestic product (GDP). The economic crisis has led to a decline in per capita real income, accompanied by a rise in unemployment and poverty levels. The World Bank (2021) reported a significant decline in the worldwide Gross Domestic Product (GDP) in 2020 because to the COVID-19 problem impacting global health.

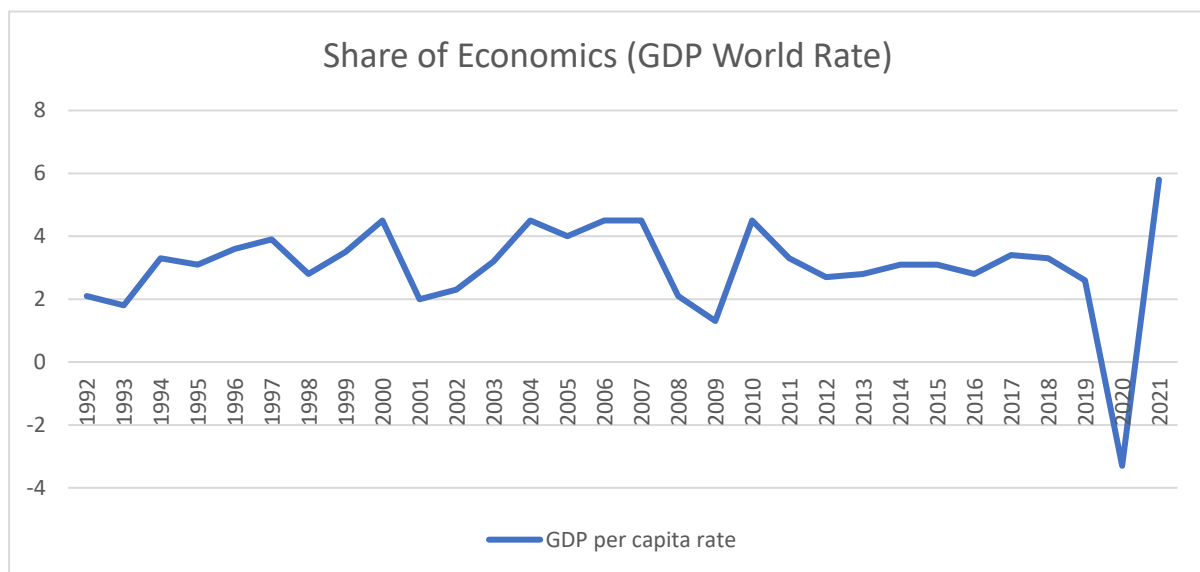


Figure 1 : Share of Economic (GDP World Rate)

Sources: World Bank

A recent pandemic has plunged most countries into recession by 2020, resulting in a decline in per capita GDP in the highest proportion of nations since 1870. As advanced economies shrink below 7%, the outlook for emerging markets and developing economies deteriorates as they battle their own domestic viral epidemics. These declines are expected to undo years of developmental advancements and push tens of millions of individuals to extreme poverty. Emerging market and developing economies are besieged by pressure on fragile health-care systems, a decline in trade and tourism, reduced remittances, constrained capital flows, and stringent financial conditions amidst escalating debt. Exporters of energy and industrial commodities are significantly affected.

The decline in the global GDP per capita rate is mostly attributed to low-income and emerging nations. The graph indicates that the global GDP rate saw a decline in 2020, marking the first negative growth in two decades. The primary factor contributing to this unfavourable rate is the economic inactivity prevalent in low-income nations. These nations experienced substantial differences, including restrictions on the supply and demand of natural resources during the COVID-19 pandemic in 2020. Simultaneously, emerging nations are encountering difficulties

in obtaining vaccinations, which has impeded the growth of their domestic economic activity. Business limits have emerged as a significant challenge for least developed and emerging nations in maintaining economic growth during this difficult era. The epidemic and its reaction have led to an unparalleled decline in oil consumption and a decrease in oil prices. There is a scarcity of metals and transportation-related commodities, like rubber and platinum utilized in vehicle components. Although global agricultural markets are adequately supplied, trade restrictions and supply chain interruptions may lead to food security challenges in certain regions.

The history of economic crises demonstrates that slow economic activity significantly impacts the labour market worldwide, particularly in emerging and least developed nations. Economic crises exert an unparalleled global influence, and the latest crisis has redirected the focus of the public and businesses towards changes in the economic cycle. Extensive research indicates that salary adjustment positively correlates with workers buying power, firm performance and increases in product prices. Companies have a more significant role in the economy and in most economic frameworks. Companies adopt many strategies to address economic downturns, including adjustments to base pay and bonuses for both permanent and temporary staff. The success of enterprises is constrained by a specific output volume and market share, which restricts the potential for pay increases.

According to Latham (2009) asserts that SMEs are the most adversely impacted victims of a prolonged economic crisis. Small and medium-sized enterprises may experience disproportionate adverse effects from economic downturns due to constrained financial resources and raw materials, resulting in diminished human resource capability.

In the year 1998, throughout the Asian Financial Crisis. Small and medium-sized enterprises are impacted financially due to deficiencies in bank financing and the purchasing power of consumers (Ozar et al., 2008). The Organization for Economic Cooperation and Development (OECD 2009) reports a substantial decline in demand for products and services, accompanied by stricter lending conditions for SMEs globally. The effects and ramifications of economic crises have been extensively examined globally. According to Pohlig (2021) asserts that economic crises have detrimental effects on the labour market. He stated that bankruptcies, diminished firm sales, restricted job opportunities, and halted internal career progression had resulted in increased unemployment during crises. Conversely, several companies are implementing labour cost reduction by decreasing staff salaries. From 1991 to 2001, Japan had the Heisei Recession, which resulted in a rise in the jobless rate. The Heisei Recession has elevated the jobless rate to 4.7 percent in the country (Chuma, 2002). The labour market may mitigate the immediate adverse effects of crises on occupational mobility and wage reductions. Employees in the impacted organizations are likely to see income reductions, including basic salaries that fall below minimum wage standards.

Problem Statement

Over the last few years, the Malaysian economy has experienced a tremendous economic downturn in every economic sectors. Economic activities in Malaysia were affected worst by unprecedented Covid-19 pandemic in 2020. Systemic failure of labor supply and demand has

led the country's recorded highest unemployment rate in more than 25 years in 2020. The health crisis in Malaysia has led the economy and labor market system continuously experiencing uneven recovery (Department of Statistics Malaysia (DOSM), 2021). This crisis situation has impacted a large pool of workers in many industries especially service industries where they are not allowed to operate during Movement Control Order. Essential services such as the financial industry and food industry are allowed to operate during Movement Control Order (MCO) in Malaysia. However, service industries such as barber shop, tourism and other service industry are not allowed to operate during MCO and led to disturbance in Malaysia labor market. When an economic downturn occurs, all workers are affected including local and foreign experts. According to DOSM (2021), the unemployment rate in Mac 2020 escalated to 4.9% recorded as the highest rate for 32 years ago. Wages adjustment and layoff are the main issues faced by employees during crises. Wage adjustment issues continue to rise after few wage subsidies given to firms from the government. In the year 2020, Malaysia labor recorded a low wage entry among degree graduates. According to DOSM (2021) a decrease in monthly income has been recorded among newly entry of degree graduates where majority has only received RM1000 to RM1500 as compared to be higher in 2019. This shocking figure has raised a question to many economists in identifying the root cause of this issue.

In addition, Khazanah Research Institute (2021) states that wage for newly entry among bachelor degree graduates has decreased from RM1,900 – RM2,100 to RM1,500 – RM 1900 in the year 2019 and 2020 respectively. In labor force participation, Malaysia recorded a low Labor Force Participation Rate (LFPR) during MCO Phase 3 as LFPR for June 2021 recorded 68.3% as compare to May 2021 is 68.5%. This rate showed that implementation of total lockdown in the whole Malaysia and Enhanced Movement Control Order (EMCO) in Klang Valley has tremendously reduced the numbers of labor participation compare to other series of MCO in Malaysia for the year 2020. In the year 2022, Malaysia government has announced an endemic on health crises COVID-19 outbreak in Malaysia. Recovery phase of Malaysia has recorded unbalanced wages of entrances for newly hiring workers. According to DOSM (2022) low job security and low wage of entrants including reduction of working hours remain unresolved during the recovery phase in Malaysia. Newly hiring workers are vulnerable towards wage adjustment including lower than minimum wage set up by the government as they have low job opportunity in the market.

Firms tend to reduce the wage of newly hiring workers and current workers during economic crisis due to lack of firm internal financial stability. According to Lai, Saridakis, Blackburn & Johnstone, (2015) smaller firms implement wage cut during financial crisis in order to survive their business. Firms tend to offer low wage to newly hiring workers due to external factors during the crisis such as low purchasing power and uncertain product demand, supply chain disruption which has affect the firm's business performance. According to DOSM (2021) analysis of Consumer Price Index 2020, purchasing power of Malaysians household consumption recorded 83.3 per cent which a decline of 16.7 per cent over a decade. According to Sahin et al. (2011) the factors that caused small US firms to suffer the most during the recession were economic uncertainty, poor sales due to decreased on consumer demand, and limited credit availability. These external factors have slowed the recovery of small businesses both during and after the crisis.

Furthermore, wages of newly hiring workers are easily adjusted when compared to job-stayers. According to Grigsby, Hurst, and Yildirmaz (2020) brief new hire wages are more easily adjusted than incumbent worker wages. According to Pissarides (2009) new hire wages are allocative for employment decisions. Therefore, wages for new hires are simply less rigid, and it is easier to reduce wages for new hires in a recession than it is to reduce wages for a comparable incumbent worker in the same job. Gertler et al. (2016) demonstrate that procyclical match quality can explain much of the cyclical quality of new hire wages.

The significance of position variables suggests that specific job positions commanded different salaries during COVID-19. Certain skill set and knowledge are highly influenced to the salary offered among newly hiring workers. This reflects job evaluation practices, where skills, responsibility, and market demand for the position continue to influence pay even during economic turbulence (Milkovich, Newman & Gerhart, 2018). The position level advertised reflects the firms internal valuation of labour. High-skilled and managerial roles represent a firm's core operational capacity. These positions require significant firm-specific knowledge that make them more critical to protect with stable and attractive wage offers, thus granting them an 'insider' status within the firm's hierarchy (Becker, 1964). The required qualification for a position determines the specific segment of the labour supply a firm is targeting. Certain roles required general qualifications and potential glut of candidates during the crisis would increase the firm's wage adjustment power. However, for positions demanding specialized and high-demand skills, pool of qualified workers remains small and leads firms to maintain or even increase wage offers to attract necessary talent (Becker, 1964).

Literature Review

Firms have developed various methodologies for adjusting labour demand and wages in managing the business continuity during COVID-19 crisis. The COVID-19 health issue has evolved into a global economic disaster, jeopardising the health, jobs, and wages of millions of people worldwide. Many countries' strict containment measures undertaken in the first half of 2020 to flatten the growth in contagion put a significant restriction on most economic and social activity. The drop-in total hours worked and participation has disrupted economic activities in the country. Securing a rapid and durable recovery, as well as establishing a more resilient and inclusive labour market, remain significant problems throughout the COVID-19 crisis.

COVID-19 crisis and the impact to the global labour market

Crises has given a huge impact to labour market system in the whole world. According to Shafi, Liu & Ren (2020) identified that COVID-19 crises has resulted a tremendous increase in unemployment numbers in many countries. Low job opportunity and wages adjustment has become one of the best measurements used by businesses in order to sustain their business during pandemic. Firms in the size of Small Medium Enterprise (SME) are preferred to use labour cost reduction strategy by reducing the salary of employees. Labour cost reduction has been implemented by many firms to ensure continuity of businesses without stopping any labour force from the firms (Fabiani et. al; 2015).

Globally, labour market in the world have affected during recent economic crises due to pandemic COVID-19 health crisis. Job losses among developed and developing countries are

still exists after government of the countries offered various job retention scheme. According to International Labour Organization (ILO) (2021) employment losses in the world were recorded highest in Americas and lowest in Europe and Central Asia due to government schemes and initiative. Hence, unprecedented global employment losses in 2020 was 114 million jobs across the world.

Unprecedented crises have led to the disruption on labour market supply and demand. Wage adjustment and job losses have rose in global labour market during COVID-19 crisis. COVID-19 health crisis has affected people lives when this health disease can spread throughout human contact. Lockdown and movement control order has brought economic performance a sharp slowdown when it has affected the SMEs businesses including raw material production.

The COVID-19 pandemic triggered a global health crisis and quickly morphed into economic and labour market shocks resulting in a global job crisis of unprecedented magnitude. This current labour crisis has attracted the attention of many scholars in order to identify the key issues. As the pandemic progresses with little sign of a light at the end of the tunnel, any assessment of labour market disruptions is fraught with uncertainty. Projecting possible future development trajectories is even more uncertain. Nonetheless, it is crucial to monitor and analyse labour market impacts using the best data and methods available, and to update them on a regular basis, allowing countries to develop timely and informed policy responses. Since COVID-19 is an unprecedented crisis, the scale of labour market disruption that affects individuals and countries has become disproportionate, making certain segments of the workforce even more vulnerable. This crisis does have a greater impact on informal workers, youth, and women (Lee, Klau & Verick, 2020). Rules and lockdown order from government has given a tremendous impact to labour market system in the country. Increased government stringency exacerbates informal sector unemployment and increases labour inequality (Haldar & Sethi, 2022).

Malaysia Crises and Labour Market

Malaysia as one of the countries in the list of East Asia Miracle has tremendously improve in GDP performance in the year 1990s since the introduction of manufacturing industry in the domestic economy. This performance has highly contributed by the Multi-National Companies investors starting to open up new offices and factories into domestic market. On the other hand, Malaysia has been a leading exporter in commodities such as electronic equipment and other natural resources such as petroleum and natural gas. Malaysia has dramatically faced Asian Financial Crisis in 1998 where GDP performance has reduced to -7.3% per annum compared to the improvement of 7.3% in the previous year and 10% in 1996. During this crisis, labour market has impacted as manufacturing sector experienced the business sales turbulence and has recorded a contraction of 7.5% in GDP during 1998.

On January 7, 2020, a new virus known as COVID-19 was discovered in Wuhan, China and confirmed by the World Health Organization (WHO). The first case reported outside of China was in Thailand on January 13th. On January 24, the virus made its way to Malaysia, where the Ministry of Health confirmed the first three positive cases among incoming Chinese tourists. As an initial measure to contain the virus, Malaysia banned visa applications from tourists from

Wuhan and other areas in Hubei province a month after WHO identified and verified the virus. Malaysia's borders, both land and sea, were also subjected to health checks. There were also dedicated lanes for persons arriving from China, and quarantines were required for these groups.

In March 2020, the virus spread to more and more countries, with Europe being the epicentre of COVID-19. As an open economy with a significant reliance on international trade, Malaysia was impacted as the number of COVID-19 increased in neighbouring and trading partner countries. The ongoing economic crisis outbreak is causing significant disruption in the Malaysia's advanced economies especially tourism and service industry experienced a slump. This had considerable impact on a few sub-sectors, including transportation, lodging, and food and beverages. This issue has created uncertain economic shocks to the economic supply chain in manufacturing and construction industries.

As the daily number of cases in Malaysia increased significantly in March, the government implemented the first phase of a two-week MCO to contain the virus and flatten the infection curve. This resulted in a sharp reduction in significant economic activity, with only businesses providing critical services permitted to operate. Consequently, many workers that working in non-essential industries have chosen to work from home, and those who are unable to do so have quit working entirely, either for money or without pay. According to DOSM (2021) unemployment rate in Mac 2020 escalated to 4.9% recorded as the highest rate for 32 years ago. A significant drop in business performance has made firms adjust numerous methods in order to sustain the business.

From the standpoint of the firms, there was a requirement to pay for business costs regardless of the level of output produced. In contrast, households faced the challenge of maintaining a livelihood in the face of uncertain income.

Firm Wage Cuts Across Positions: Impacts and Considerations

Firm wage cuts across positions are a common response to financial challenges during economic crisis but ways of implementation and impacts vary depending on the organizational structure, job roles, and strategic priorities. Therefore, wage cuts across position could be explained as per below:

Wage Cuts Across Workers Skills

Wage cuts normally impacted among low skills workers as they are vulnerable towards any crisis and easily replaceable by the enhancement of technology. Meanwhile, firms are move to cuts the wage among high skilled workers when the technology has provided the options of high skilled workers task and thus reduce the firms costs in the long run. Therefore, the classifications of wage cuts across skilled and position is classify into three main group namely high, mid and low skilled workers.

High Skilled Workers

Executives are often expected to take larger pay cuts to demonstrate commitment to the organization's financial health. This symbolic movements can help them to maintain trust

among employees but may also lead to challenges in retaining top leadership talent if compensation becomes uncompetitive in the long run (Huselid, 1995). Executive compensation is closely tied to organizational performance and maintaining competitive pay levels is essential for attracting and retaining high skilled leaders.

One of the primary reasons of high-skilled workers were less vulnerable to wage cuts during the pandemic is the nature and skills of their job tasks. Many high-skilled positions involved in management, technology, finance, and professional services are characterized by a high degree of cognitive complexity and abstract thinking (Autor et al., 2003). These roles often involve tasks that can be performed remotely as a critical advantage during lockdowns and social distancing measures (Brynjolfsson et al., 2020). The rapid adoption of remote work technologies such as video conferencing, cloud computing, and project management software, enabled many high-skilled workers to maintain productivity and continue generating value for their employers (Davenport & Kirby, 2016).

The sectoral distribution of high-skilled workers also played a significant role in their relative stability. They are employed in sectors that are less susceptible to economic downturns, such as healthcare, technology, and finance. The healthcare sector, driven by the urgent need to address the pandemic, experienced sustained demand for its services. The technology sector, filled by the shift to remote work and the growth of the digital economy, thrived during the crisis (Manyika et al., 2017). The finance sector that initially volatile played a crucial role in stabilizing the economy through monetary policy and financial strategy (Goodhart et al., 2020).

However, it is important to acknowledge that even high-skilled workers were not entirely immune to the economic fallout of the pandemic. Some high-skilled sectors such as aerospace, hospitality management, and certain segments of the arts and entertainment industry experienced significant disruptions (Gössling et al., 2020). High skilled workers in these sectors may have faced temporary layoffs, reduced working hours and wage cuts although the impact was generally less severe than for low- and mid-skilled workers. Moreover, the increased competition for high-skilled jobs in certain fields, driven by the influx of displaced workers from other sectors have create downward pressure on wages for some workers (Shimer, 2012).

On the other hand, the pandemic has also highlighted the importance of continuous learning and upskilling for high-skilled workers. The rapid pace of technological showed that high skilled workers with advanced degrees are urge to update their knowledge and skills to remain competitive in the labour market (Brown et al., 2020). The rise of online learning platforms, micro-credentials, and other alternative forms of education has made it easier for high-skilled workers to acquire new skills and strive towards their professional development (Hanushek & Woessmann, 2008).

Mid-Level Workers

Mid-level managers often face moderate wage reductions as compare to high-skilled workers. This position acts as a bridge between executives and frontline workers and this position is crucial for the business operational stability. Wage cuts at mid-level managers can impact their ability to motivate their teams effectively (Cameron & Quinn, 2011). Mid-skilled workers

encompassing a diverse range of occupations such as manufacturing, construction, transportation, and certain administrative roles faced a nuanced experience during the pandemic (Barrero et al., 2020). The impact on this group varied significantly depending on the specific sector, the nature of their work and their ability to adapt to the changing circumstances.

Workers in sectors such as manufacturing, construction, and transportation experienced disruptions due to lockdowns, supply chain disruptions, and reduced demand for goods and services (Ivanov & Das, 2020). These sectors often involve physical labour and on-site presence, making them less amenable to remote work (Savić & Dobrijević, 2020). Consequently, mid-skilled workers in these industries faced a higher risk of job losses, reduced working hours, and wage cuts. The decline in global trade and investment further exacerbated the challenges faced by these workers as many manufacturing and construction jobs are tied to international supply chains and export markets (Baldwin & Tomiura, 2020).

However, mid-skilled workers particularly those in administrative and technical roles were better positioned to adapt to the changing landscape. The rapid adoption of remote work technologies enabled many businesses to maintain operations and retain their office-based staff (Brynjolfsson et al., 2020). Mid-skilled workers with digital skills and the ability to work independently were able to transition to remote work arrangements thus mitigates the impact on their employment and earnings. The pandemic also accelerated the demand for certain mid-skilled occupations such as logistic and supply chain management as these industries sought to adapt in the flow of goods and services disruptions (Christoper, 2016). Many mid-skilled workers faced significant uncertainty during the pandemic including wage stagnation or wage cuts in response to the economic downturn (Olatunde et al., 2022). The need to acquire new skills and adapt to new ways of working placed additional pressure on mid-skilled workers when many of them had to invest time and resources in training and education to remain competitive in the labour market (Hanushek & Woessmann, 2008).

Low-skilled workers

Low-skilled workers typically employed in sectors such as hospitality, retail, food service, and personal services, experienced the most severe repercussions of the pandemic (Rothstein, 2020). The sudden cessation of economic activity in certain industries led to widespread job losses and wage cuts for low-skilled workers during the pandemic. Low skilled workers sectors typically characterized by close physical contact between workers and customers, were particularly vulnerable to lockdowns and social distancing measures (Gössling et al., 2020). Several factors contributed to the heightened vulnerability of low-skilled workers towards wage cuts is their jobs often require minimal formal education or specialized training that leads them easily replaceable (Acemoglu & Autor, 2011).

In times of economic crisis, employers often prioritize cost-cutting measures, and low-skilled workers are often the first to be laid off or have their wages reduced (Piketty, 2020). Low-skilled workers typically have limited savings, few benefits, and little job security, making them not ready to weather economic shocks (Byrne et al., 2020). The loss of income can have devastating consequences for their ability to meet basic needs, such as housing, food, and healthcare (Furceri et al., 2021).

In the face of these challenges, low-skilled workers demonstrated a degree of resilience. Many found alternative sources of income, such as temporary jobs in essential services, self-employment in the informal sector, or reliance on government assistance. Community support networks and mutual aid initiatives also played a crucial role in helping low-skilled workers cope with the economic hardship caused by the pandemic. However, these coping mechanisms were often insufficient to fully offset the income losses and economic insecurity experienced by low-skilled workers.

Newly Hiring Workers and Wage Adjustment

A newly hired worker is defined as an individual who has recently joined an organization and has not been employed by the company. This group includes those who are entirely new to the organization and they tend to bring fresh perspectives and ideas, which can be valuable for innovation and growth (Eisenberger et al., 1986). However, integrating them into the existing culture requires careful management to ensure that they align with the company's values and mission. This integration process is often facilitated through mentorship programs and team-building activities designed to foster a sense of belonging among new employees (Kotter, 2001).

The dynamics of wage adjustments for newly hired workers during economic crises have garnered significant attention in labour economics, particularly regarding wage rigidity, labour market flexibility, and equity concerns. Workers entering the labour market during periods of wage cuts face persistent earnings losses and reduced employment prospects. Male college graduates affected by the Asian Financial Crisis experienced a 19% reduction in employment probability and a 25% decline in earnings over a decade (Borcan et al., 2014).

Firms operate within competitive labour markets where wage is a key factor in attracting and retaining skilled workers. Implementing wage cuts can significantly reduce a firm's competitiveness in the job market. A firm with reduced wages may struggle to attract top talent, potentially impacting the quality of new hires as compared to their competitors (Gray & Watson, 2002). According to Gerhart & Milkovich (1990) indicated that firms that offer competitive wages tend to have better recruitment outcomes and lower turnover rates. Conversely, firms with lower wages might need to compensate by offering other benefits or perks to attract candidates, which can be costly and may not fully offset the wage disadvantage. One of the primary concerns when implementing wage cuts is maintaining equity and fairness within the organization. Its stance that if existing workers face wage reductions, new hires might also be offered lower wages to maintain internal equity. Such practices can lead to a more cohesive workforce but may also reduce the firm's ability to attract top talent if competitors offer higher wages.

Research has shown that perceived fairness in compensation practices is crucial for employee satisfaction and engagement (Colquitt et al., 2001). When wage cuts are applied uniformly, it can foster a sense of shared sacrifice among employees, potentially enhancing organizational commitment. However, if new hires perceive their wages as lower than what they could earn, it might lead to dissatisfaction and higher turnover rates among new employees.

Wage cuts can lead to higher turnover among existing employees, as they may seek better-paying opportunities elsewhere. High workers turnover rate can result in higher costs for hiring and training for new workers (Elagra et al., 2016). The cost of replacing an employee is often estimated to be between 90% and 200% of the employee's annual salary depending on the position and industry (Huselid, 1995).

Literature Gap

The past academic and policy discourse is heavily dominated by the issue on the minimum wage. However, low skilled workers is vulnerable to wage cuts during crisis as their job is in the business operation scope and easily replaceable by enhancement of technology occurs. Meanwhile, middle skilled position that acts as a backbone to the country economy is also affected during economic crisis. There is a gap in research to study on firms behaviours towards uncertainty or a surplus of graduates in the labour market. It is vital to understand firms behaviour that implemented a silent pay cut to ensure their business continuation during economic crisis.

High-skilled workers is often assumed that they are protected from wage cuts during economic crisis due to their skills and talent scarcity and high demand that brings them immune to wage reductions. However, this assumption is not been proved by any research and this group are also vulnerable to any wage cuts if economic crisis hits in the country.

In conclusion, while Malaysia grapples with the new wage policies model, the foundational data on how wages are being set among newly hiring workers is still missing. A one-size-fits-all approach to wage analysis is still insufficient and wage adjustment occurs among newly hiring workers remains unresolved. Quantifying the prevalence and impact of these position-specific wage cuts across low, mid, and high-skilled roles is essential for formulating effective economic policy thus ensuring fair labour practices for the development of wage growth in the nation.

Research Methodology

Data Source

This research using administrative data to identify the firm response towards wage adjustment during Covid-19 crisis. Firm survey research is not preferred for this research due to certain circumstances that leads to the low response rate. The sample of firms provided by the authority is not updated where firms under the sampling list could be active and inactive enterprises and may stop operation during crises. These challenges in collecting firms' data have brought to the choice of using administrative data using job portal "MyFutureJob" as the source of information. This job portal is made available in June 2020, organized and managed by PERKESO. This portal focus to promote efficiency for job matching between Small Medium Enterprises (SME) and job seekers.

Job posted from June 2020 to recent in the job portal was collected for this study for analysis. Web scraping for all relevant information will be carried out to collect the information of job vacancy, number of job applicants, firms' size by occupations category (1-digit MASCO 1 to

9) and by economic sectors (MSIC). MyFutureJob was selected as the main source of extraction due to the reliability of data that governed by PERKESO Malaysia. Furthermore, the job offer in the website are related with Malaysian firms as compare to other job application website that are open access internationally and might not able to portray the real situation of Malaysia labour market during and after Covid-19 crisis.

Data Scarping

The data is extracted using Python and Selenium technique is scrapped quarterly (4 months) for every year to avoid double counting due to one job posted as average lasts for two to three months in the portal. The extraction sequence of the web-scraper started by first extracting the complete set of job links for every job vacancy according to salary category. Only job vacancy with contract type 'permanent' is selected. After that, by opening each job link hyperlink address through automated google driver, the web-scraper further extracted every job information of the respective job vacancy as planned. The job details are extracted into comma separated value (CSV) file format.

However, starting January 2023 MyFutureJob portal has made few changes that brings disturbance for Selenium technique to extract the data for the portal. Therefore, Octoparse software has been used as platform to extract the data from the portal. Octoparse is a software used to the parsing processes of data extraction (Slamet et al., 2016). The process of extraction was still similar where the vacancy with permanent 'contract type' was selected and all the related information was extracted similar to the Pyhton and Selenium technique. However, starting October 2023, MyFutureJob portal has added security that blocked every data scrapping and extraction process from any software including Phyton and Octoparse. Thus, the data extraction process was stopped until September 2023.

Data Preparation

Python and the Selenium technique were used to extract the data. The web-extraction scraper's sequence began by extracting the entire set of job links for each job vacancy based on salary category. Only job vacancies with the contract type 'permanent' were selected. The web-scraper then extracted every job information of the respective job vacancy as planned by opening each job link hyperlink address via automated Google driver. The job details are saved as a comma separated value (CSV) file.

Web scraping for all relevant information will be carried out to collect the information of job vacancy, number of job applicants, firms' size by occupations category (1-digit MASCO 1 to 9) and by economic sectors (MSIC). The data source for determining the salary trend is determined for each job vacancy based on what has been published by the SOCSO. The salary trend is determined for each job vacancy using the median of the frequency of wage for each quarter. Job in position '1' (Professionals) will be listed and the median is developed and set as freeze figure. Any wage above median will be increase and wage below median will be decrease. The National Economic Report provided a suitable reference for the ratio comparison of fixed and variable allowances granted by employers according to MASCO classifications, which aided the research in developing a realistic wage range guideline. Furthermore, while establishing the compensation categorization of the job vacancy, the median minimum and

maximum monthly basic salary per employee established the threshold for the salary range by MASCO 1-digit.

Prevailing wage market rate is set up according to the wage offered in every wage category. For instance, the median selected will be set as the amount for wage 'freeze' for that quarter, every amount that lower than median is set as 'decrease' and every amount that higher than median is recognized as 'increase'. This methodology will set freeze as the amount of prevailing wage market rate during every particular quarter and the amount is vary across quarter to explain the situation of firms are vary in offering wage to newly hiring across times. The category of increase, decrease and freeze is set as the dependent variable (y) namely as Salary Trend.

Data Segregation, Data Cleaning and Data Information

The overall data from the year 2020 to 2023 has been segregated into two sections, pandemic and endemic. The data sets for pandemic phase are started April 2021 until March 2022, as the data sets were not started from the year 2020 due to the lack of information on variables in data features for the year 2020 in “MyFutureJob”. The idea of segregation is to identify the degree of wage adjustment during and after crisis. The data cleaning process was made to remove all double counting data including incomplete data during data extraction process. Data description is tabulated and explain in the graph below. Dataset consists various information regarding job sector and wage offered. MASCO code, MSIC code, state, company size, number of job positions, number of job applications and salary trend are info provided in the dataset.

Moreover, this study is merged as per The Malaysia Standard Classification of Occupations (MASCO) for Position. MASCO categorizes jobs into a hierarchical structure by providing a standardized language for policymakers, employers, and job seekers. A key aspect of this classification is the delineation of occupations into high, mid, and low-skilled categories, which primarily reflects the complexity of tasks, the level of formal education, and the extent of training required for a particular role.

Table 2: MASCO Classification across Position

| MASCO | Major Group | Variable |
|-------|---|--------------|
| 1 | Managers | High skilled |
| 2 | Professionals | |
| 3 | Technician and Associate Professionals | |
| 4 | Clerical Support Workers | Mid Skilled |
| 5 | Service and Sales Workers | |
| 6 | Skilled Agricultural, Forestry, Livestock and Fishery Workers | |
| 7 | Craft and Related Trade Workers | |
| 8 | Plant and Machine Operators and Assemblers | |
| 9 | Elementary Occupations | Low skilled |

Data & Result Discussion

The results for this study is segregated to pandemic and endemic. This section discusses the numbers of firms to predict firms wage adjustment offered to newly hiring workers starting (April 2021 – March 2022) for the pandemic of Covid-19 phase and (April 2022 - September 2023) for the period of endemic. In Malaysia, Minister of Health (Yb Khairy Jamaluddin) has

announced the endemic phase for the whole Malaysia starting 1st April 2022 (2nd Quarter of 2022). Therefore, the result has been classified into two groups as shown below:

Table 3: Classification of Data

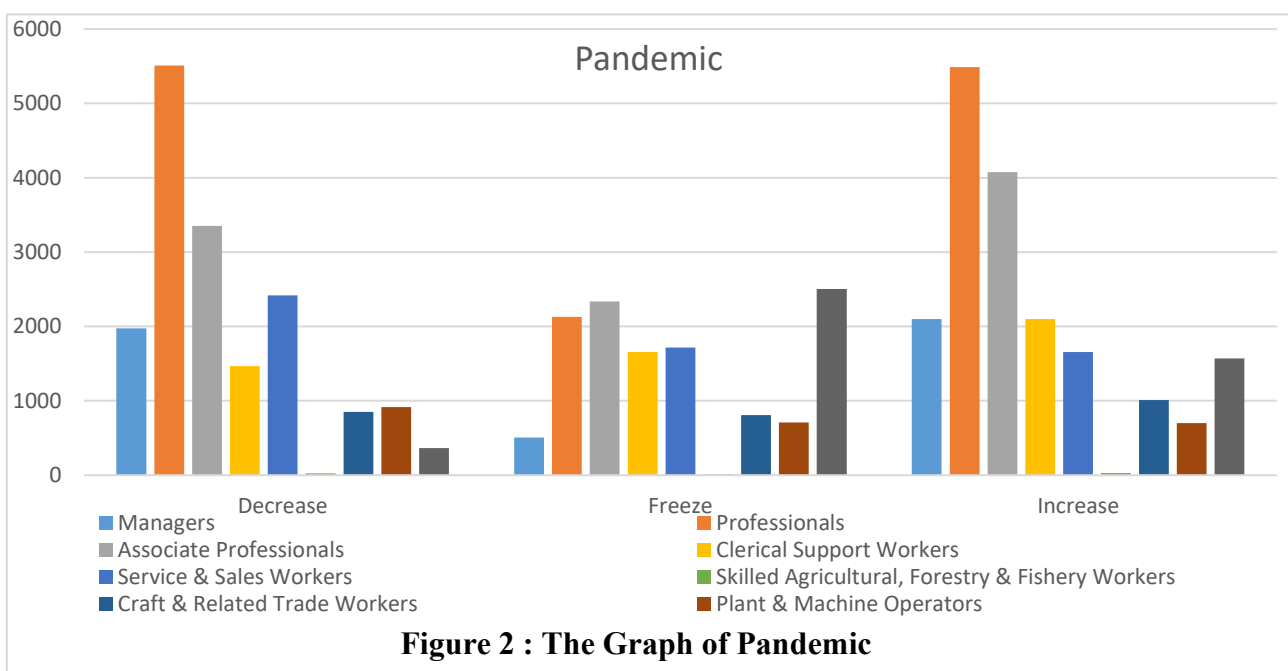
| Covid-19 Phase | Time |
|----------------|-----------------------------|
| Pandemic | April 2021 – March 2022 |
| Endemic | April 2022 – September 2023 |

Pandemic Result

Pandemic signifies an infectious disease outbreak on a much broader geographical scale, often leading to significant societal and economic disruption. The COVID-19 pandemic has made firms face immense pressure from falling demand, interrupted supply chains, and operational restrictions. Consequently, businesses often resort to various wage adjustment strategies to survive. These can include wage decreases to cut labour costs and wage freezes to prevent further expenditure increases particularly in essential sectors or for roles requiring specialized skills or hazard exposure. The specific approach to wage adjustment during a pandemic is thus a critical response mechanism for firms navigating profound economic uncertainty and aiming to maintain financial viability. The results for the pandemic phase of Covid-19 as per below:

Table 2 : The Number of of Firm's Wage Adjustment During Pandemic

| | Managers | Professionals | Associate Professionals | Clerical Support Workers | Service & Sales Workers | Skilled Agricultural, Forestry & Fishery Workers | Craft & Related Trade Workers | Plant & Machine Operators | Elementary Occupation |
|----------|----------|---------------|-------------------------|--------------------------|-------------------------|--|-------------------------------|---------------------------|-----------------------|
| decrease | 1973 | 5510 | 3355 | 1467 | 2420 | 23 | 850 | 918 | 365 |
| freeze | 509 | 2132 | 2338 | 1655 | 1715 | 12 | 807 | 711 | 2504 |
| increase | 2100 | 5488 | 4077 | 2102 | 1655 | 30 | 1010 | 702 | 1569 |



Meanwhile, Professionals exhibit very high frequencies for both wage decreases (5510 firms) and increases (5488 firms), with a considerable number also reporting freezes (2132 firms). This suggests a highly dynamic and perhaps polarized wage adjustment environment for professionals, potentially reflecting diverse demand for specialized skills during the crisis. Associate Professionals also show a high number of firms opting for wage increases (4077), followed by decreases (3355) and freezes (2338), indicating substantial adjustments for this tier as well. Clerical Support Workers recorded wage increases (2102 firms) were more commonly reported than freezes (1655 firms) or decreases (1467 firms).

Service & Sales Workers most frequently faced wage decreases (2420 firms), outnumbering freezes (1715 firms) and increases (1655 firms), which could reflect the severe impact of lockdowns and demand shifts on this sector. Skilled Agricultural, Forestry & Fishery Workers continue to show very low frequencies across all categories, consistent with the previous dataset. While increases (30 firms) are marginally higher, the small numbers necessitate caution in interpretation, possibly reflecting a smaller sample size or different employment conditions in this sector within Malaysia (Cheong & Lee, 2021). Craft & Related Trade Workers saw increases (1010 firms) as the most common adjustment, followed by decreases (850 firms) and freezes (807 firms). Plant & Machine Operators experienced a relatively balanced distribution, with decreases (918 firms) being slightly more prevalent than freezes (711 firms) or increases (702 firms). A significant observation for Elementary Occupations in this dataset is the high incidence of wage freezes (2504 firms), followed by increases (1569 firms) and a much lower number of decreases (365 firms). This pattern suggests that for this group, maintaining existing wage levels was a dominant strategy among the surveyed firms, differing markedly from data that might show higher vulnerability to decreases.

Endemic Result

Endemic involves a widespread and often unexpected surge of a spread disease across multiple certain location. From a business perspective, firms often integrate the impact of endemic towards business costs such as employee absenteeism, healthcare provisions, and potential minor productivity fluctuation and thus leads to disruptions into their standard operational procedures and budgeting over the long term.

Therefore, firms always take a wage reduction strategy to ensure the business keep afloat during this challenges times. The results for the endemic phase of Covid-19 as per below:

| | Managers | Professionals | Associate Professionals | Clerical Support Workers | Service & Sales Workers | Skilled Agricultural, Forestry & Fishery Workers | Craft & Related Trade Workers | Plant & Machine Operators | Elementary Occupation |
|----------|----------|---------------|-------------------------|--------------------------|-------------------------|--|-------------------------------|---------------------------|-----------------------|
| decrease | 2655 | 1978 | 3492 | 1005 | 3121 | 124 | 320 | 1568 | 5850 |
| freeze | 3305 | 1105 | 2599 | 1682 | 2594 | 67 | 638 | 1537 | 1788 |
| increase | 2650 | 2424 | 3385 | 1391 | 2394 | 82 | 331 | 2205 | 5609 |

Table 5 : The Number of of Firm's Wage Adjustment During Endemic

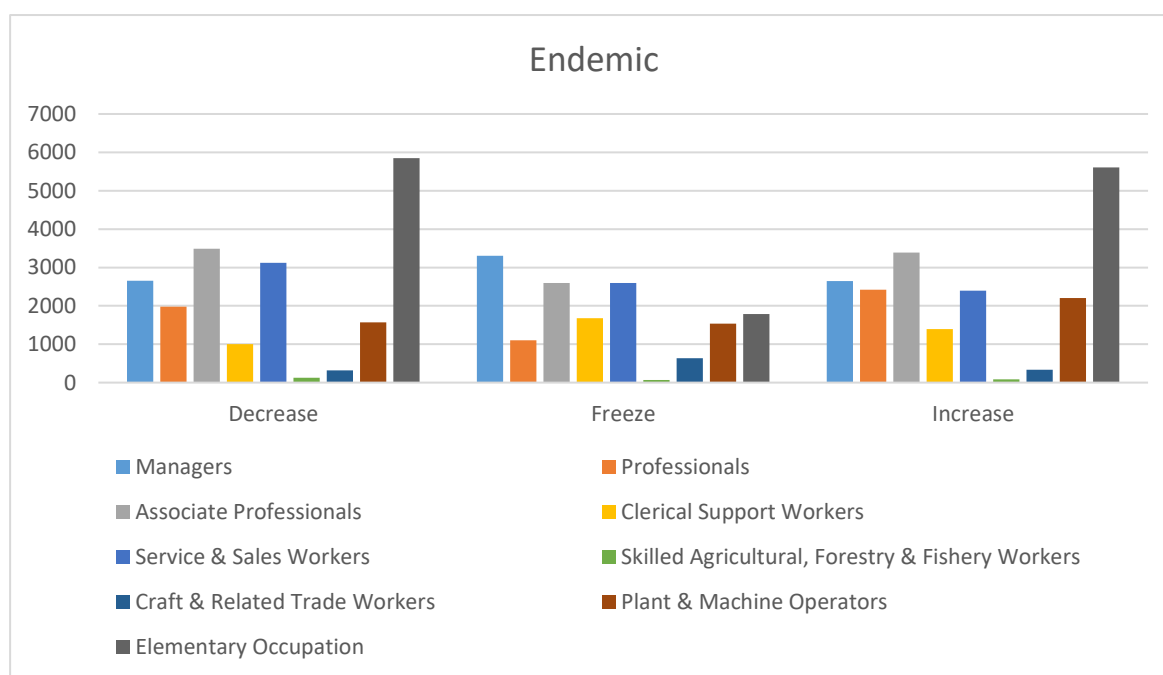


Figure 4 : The Graph of Endemic

According to Table 5 and Figure 4, Managers appear to have experienced a high incidence of wage freezes (3305 firms), with comparable numbers of firms reporting decreases (2655) and increases (2650). This might suggest a cautious approach by firms towards altering managerial compensation, possibly reflecting the critical role of management during a crisis alongside cost-containment pressures.

Professionals positions show a lower frequency of wage freezes (1105) compared to decreases (1978) and increases (2424) with increases being the most reported adjustment. This could indicate a more varied response, perhaps tied to specific professional skills in high demand even during the endemic. In addition, Associate Professionals exhibit high frequencies across all

categories, particularly decreases (3492) and increases (3385), suggesting significant volatility in wage adjustments for this group.

Next, Elementary Occupations present a striking pattern, with the highest reported frequencies for both wage decreases (5850 firms) and wage increases (5609 firms), and a relatively lower number of freezes (1788). This polarization could reflect the diverse nature of elementary occupations, with some facing severe downturns while others might have been in essential services experiencing heightened demand or hazard pay. Meanwhile, Skilled Agricultural, Forestry & Fishery Workers and Craft & Related Trade Workers show markedly lower frequencies across all adjustment types.

Discussion

During the initial pandemic phase, firms in Malaysia implemented wage cuts as a cost-saving measure during economic downturns. However, wage cuts have far-reaching consequences for the whole economy system including labour market disruptions and low consumer spending. Wage reductions can depress domestic consumption more than it stimulate exports and investment thus harming economic growth. Wage cuts strategy may provide temporary relief for firms but will create another long-term effect to firms including productivity, market share and income distribution. According to Kube et al. (2010), worker productivity dropped by over 20% following wage reductions. Moreover, reduced wages have restricted skill acquisition and limiting productivity growth. The reduction in consumer spending caused by wage cuts creates a negative market loop. Lower demand for goods and services reduces business revenues, prompting further cost-cutting measures such as layoffs or additional wage reductions. This cycle exacerbates economic downturns and delays recovery. According to Belser (2012) firms' wage cuts led to prolonged recessions in several countries during the European debt crisis. The data from the pandemic phase showing a diverse landscape of wage adjustments. While some positions experienced significant wage decreases and others recorded increases or freezes. This trend indicated a nuanced response to immediate economic shocks and operational disruptions. As Malaysia transitioned to the endemic phase, firms remain to offer a low wage as the impact is still severe as reopening the economy process is still working progressively. Therefore, firms might consider wage reduction strategies to newly hiring workers to ensure business continuation strategy during this challenging time.

High-Skilled Workers during the pandemic phase has showed that Manager position has a tendency towards wage increases (2100 firms) or decreases (1973 firms) with a notably smaller number of firms reporting wage freezes (509). This suggests active adjustments based on performance or firm outlook, possibly contrasting with scenarios where managerial pay is often frozen as a primary cost-containment step. Professionals exhibited very high frequencies for both wage decreases (5510 firms) and increases (5488 firms), with a considerable number also reporting freezes (2132 firms). This indicates a highly dynamic and perhaps polarized wage adjustment environment for professionals, potentially reflecting diverse demand for specialized skills during the crisis. Associate Professionals also showed a high number of firms opting for wage increases (4077), followed by decreases (3355) and freezes (2338), indicating substantial adjustments for this tier as well. Many high-skilled positions, such as those in management, technology, finance, and professional services, are characterized by a high degree of cognitive

complexity and abstract thinking. These roles often involve tasks that can be performed remotely, a critical advantage during lockdowns and social distancing measures. The rapid adoption of remote work technologies such as video conferencing, cloud computing and project management software will enabled many high-skilled workers to maintain productivity and continue generating value for their employers. The pandemic also accelerated the demand for certain high-skilled occupations such as business continuation strategy, remote working technology, business growth and innovation during crisis including business diversification. The surge in demand for specific skill sets provided by high-skilled workers with greater bargaining power, shielding them from wage cuts and leading to wage increases in certain circumstances.

In the endemic phase, Managers appeared to have experienced a high incidence of wage freezes (3305 firms), with comparable numbers of firms reporting decreases (2655) and increases (2650). This might suggest a cautious approach by firms towards altering managerial compensation, possibly reflecting the critical role of management during a crisis alongside cost-containment pressures. Professionals positions showed a lower frequency of wage freezes (1105) compared to decreases (1978) and increases (2424), with increases being the most reported adjustment. This could indicate a more varied response, perhaps tied to specific professional skills in high demand even during the pandemic. Associate Professionals exhibited high frequencies across all categories, particularly decreases (3492) and increases (3385), suggesting significant volatility in wage adjustments for this group. However, even high-skilled workers were not entirely immune to the economic fallout, with some high-skilled sectors such as aerospace, hospitality management, and certain segments of the arts and entertainment industry experiencing significant disruptions. High skilled workers in these sectors may have faced temporary layoffs, reduced working hours and wage cuts although the impact was generally less severe than for low and mid-skilled workers.

Mid-Skilled Workers during the pandemic phase exposed that Clerical Support Workers recorded wage increases (2102 firms) more commonly than freezes (1655 firms) or decreases (1467 firms). Service & Sales Workers most frequently faced wage decreases (2420 firms), outnumbering freezes (1715 firms) and increases (1655 firms), which could reflect the severe impact of lockdowns and demand shifts on this sector. Skilled Agricultural, Forestry & Fishery Workers continued to show very low frequencies across all categories. Craft & Related Trade Workers saw increases (1010 firms) as the most common adjustment, followed by decreases (850 firms) and freezes (807 firms). Plant & Machine Operators experienced a relatively balanced distribution, with decreases (918 firms) being slightly more prevalent than freezes (711 firms) or increases (702 firms). Mid-skilled workers encompassing a diverse range of occupations such as manufacturing, construction, transportation, and certain administrative roles faced a nuanced experience during the pandemic. The impact on this group varied significantly depending on the specific sector due to the nature of their work and their ability to adapt to the changing circumstances. Workers in sectors such as manufacturing, construction, and transportation experienced disruptions due to lockdowns, supply chain disruptions, and reduced demand for goods and services.

In the endemic phase showed markedly lower frequencies across all adjustment types. Many mid-skilled workers faced significant uncertainty during the pandemic including wage stagnation or wage cuts in response to the economic downturn. Job security also became a major concern as businesses started to restructure their operations and downsized the workforce. The need to acquire new skills and adapt to new ways of working placed additional pressure on mid-skilled workers when many of them had to invest time and resources in training and education to remain competitive in the labour market.

Low skilled workers uniquely showed a high incidence of wage freezes (2504 firms), followed by increases (1569 firms) and a much lower number of decreases (365 firms). This pattern suggested to maintaining existing wage levels was a dominant strategy among the firms. Low-skilled workers typically employed in sectors such as hospitality, retail, food service and personal services has experienced the most severe repercussions of the pandemic. The sudden cessation of economic activity in certain industries led to widespread job losses and wage cuts for low-skilled workers during the pandemic. Low skilled workers sectors typically characterized by close physical contact between workers and customers were particularly vulnerable to lockdowns and social distancing measures. Several factors contributed to the heightened vulnerability of low-skilled workers towards wage cuts is their jobs often require minimal formal education or specialized training that leads them easily replaceable. In times of economic crisis, employers often prioritize cost-cutting measures, and low-skilled workers are often the first to be laid off or have their wages reduced. Low-skilled workers typically have limited savings, few benefits and little job security making them not ready to weather economic shocks. The loss of income can have devastating consequences for their ability to meet basic needs, such as housing, food and healthcare. The shift to online commerce and automation further threatened their job prospects, as many of their tasks could be performed more efficiently by machines or online platforms. Many of skilled workers found alternative sources of income, such as temporary jobs in essential services, self-employment in the informal sector, or reliance on government assistance. Community support networks and mutual aid initiatives also played a crucial role in helping low-skilled workers cope with the economic hardship caused by the pandemic. However, these coping mechanisms were often insufficient to fully offset the income losses and economic insecurity experienced by low-skilled workers.

In the endemic phase, low-skilled workers present a striking pattern, with the highest reported frequencies for both wage decreases (5850 firms) and wage increases (5609 firms), and a relatively lower number of freezes (1788). This polarization could reflect the diverse nature of elementary occupations, with some facing severe downturns while others might have been in essential services experiencing heightened demand or hazard pay. Such heterogeneous impacts on lower-skilled workers have been noted in broader pandemic literature.

The dynamics of wage adjustments for newly hired workers have garnered significant attention in labour economics particularly regarding wage rigidity and labour market flexibility Workers entering the labour market during periods of wage cuts face persistent earnings losses and reduced employment prospects. Firms operate within competitive labour markets where wage is a key factor in attracting and retaining skilled workers. Implementing wage cuts can significantly reduce a firm's competitiveness in the job market. A firm with reduced wages may

struggle to attract top talent as compared to their competitors. Firms that offer competitive wages tend to have better recruitment outcomes and lower turnover rates. Firms with lower wages might need to compensate by offering other benefits or perks to attract candidates and can be costly and may not fully offset the wage disadvantage. Maintaining equity and fairness within the organization is a primary concern when implementing wage cuts as firms often strive to ensure that new hires are not treated differently from existing employees to avoid perceptions of unfairness. If existing workers face wage reductions, new hires might also be offered lower wages to maintain internal equity. This practice can lead to a more cohesive workforce but may also reduce the firm's ability to attract top talent if competitors offer higher wages.

Conclusion

The unprecedented global health crisis instigated by the COVID-19 pandemic fundamentally reshaped economies and labour markets worldwide. As countries transitioned from the acute pandemic phase to the more prolonged endemic phase, the nature of economic challenges and firm responses evolved. This paper undertook a comprehensive investigation into the dynamics of firm wage adjustments across nine main occupational positions in Malaysia, specifically examining patterns during both the pandemic and endemic phases of COVID-19. The central motivation for this research stemmed from the critical need to understand how firms as key actors in the labour market, responded to the severe disruptions and subsequent adaptations necessitated by the pandemic and how these responses varied across different type of positions. Focusing on wage adjustment trend which is decrease, freeze and increase as tangible indicators of firm level reactions to economic pressures and opportunities, the study aimed to provide granular insights into the heterogeneous impact of the crisis on the Malaysian workforce.

It shows that the impact on firm wage adjustments was not uniform but varied significantly across different occupational positions. The analysis revealed a complex landscape characterized by simultaneous wage decreases, freezes, and increases during the endemic phase, with distinct patterns emerging for different roles. Some positions experienced high volatility, while others remained relatively stable, highlighting the segmented nature of the Malaysian labour market's response to the crisis. The exploration of "Pandemic" and "Endemic" provided a conceptual link to the evolving demand for and dynamics of skills throughout the crisis, suggesting that the value and application of different types of skills were influenced by the changing environment. In the nutshell, the discussion underscores that the Malaysian labour market's response to the COVID-19 crisis was a dynamic and differentiated process. Firms employed a mix of strategies to navigate the economic fallout, and the impact on wages varied significantly across different occupational positions and likely across different phases of the pandemic.

Limitations of Study & Future Research

This study is subject to several limitations that necessitate caution in interpreting the findings and highlight avenues for future research. The study relies on data regarding the number of firms making wage adjustments and not the number of employees affected or the magnitude of the wage changes. A decrease reported by a firm could range from a minor salary cut for a few employees to significant reductions across a large portion of the workforce. Similarly, an increase could be a small cost-of-living adjustment or a substantial raise. The data on the

percentage change in wages and the number of employees impacted within each position is vital to understand the full economic impact on the workforce can be accurately assessed. Future research should aim to collect data on the magnitude and wider scope of wage adjustments. Next, the study lacks firm-specific characteristics that could significantly influence wage adjustment decisions. Factors such as firm size, industry sector, profitability, financial leverage and business ownership structure during the pandemic and endemic are likely determinants of a firm's ability and willingness to adjust wages. Analysing the data while controlling for these variables would provide a more nuanced understanding of the drivers of wage adjustments.

Future research is needed in addressing the limitations of this study and essential to deepen our understanding of these complex dynamics and inform effective strategies for navigating future economic uncertainties and ensuring a prosperous and inclusive labour market for all Malaysians.

Acknowledgements

The path to completing this paper has been fraught with both professional challenges and personal adversities. I am profoundly grateful for the enduring support of my supervisor, whose steadfast belief in my capabilities and academic potential that encouraged me to persevere even during my lowest moments. Her guidance was a beacon of light in times of doubt. I must also express my deepest appreciation for my wife, kid and families, who stepped in not only with emotional reassurance, understanding and opportunity given when unexpected personal challenges arose. Their unconditional love and sacrifice have been the foundation of my resilience and success. I am thankful for Faculty of Economics, Universiti Malaya for support services at the university, including the facilities provided with the tools to manage the research and maintain the quality of every research made. Each of these individuals and institutions played a crucial role in my journey, reminding me that the pursuit of knowledge is not a solo expedition but a communal effort.

References

- Acemoglu, D., & Autor, D. (2011). Skills, tasks and technologies: Implications for employment and earnings. In O. Ashenfelter & D. Card (Eds.), *Handbook of labor economics* (Vol. 4B, pp. 1043-1171). Elsevier.
- Autor, D. H., Levy, F., & Murnane, R. J. (2003). The skill content of recent technological change: An empirical exploration. *Quarterly Journal of Economics*, 118(4), 1279-1333.
- Aziz, N. A., & Semudram, M. (2004). The impact of economic fluctuations on labour force participation in Malaysia. *Malaysian Journal of Economic Studies*, 41(1), 1-21.
- Baldwin, R., & Tomiura, E. (2020). Thinking ahead about the trade impact of COVID-19. In R. Baldwin & B. W. di Mauro (Eds.), *Economics in the time of COVID-19* (pp. 59-71). Centre for Economic Policy Research.
- Barrero, J. M., Bloom, N., & Davis, S. J. (2020). *COVID-19 and labor market facts*. (NBER Working Paper No. 27007). National Bureau of Economic Research. <https://www.nber.org/papers/w27007>
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. Columbia University Press.
- Belser, P. (2012). *Wage flexibility in the Eurozone: A review of the evidence*. (Conditions of Work and Employment Series No. 34). International Labour Office.
- Berg, J., & Salerno, M. (2008). The origins of unemployment insurance: lessons for developing countries. In *In Defence of Labour Market Institutions* (pp. 80-99). Palgrave Macmillan, London.
- Borcan, O. (2014). *Deflation risks in the euro area and the role of monetary policy*. (ECB Working Paper No. 1699). European Central Bank. <https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1699.en.pdf>
- Borcan, O., Kube, F., & Sprenger, C. (2014). Wage cuts and real wages: Evidence from a large-scale firm survey. *IZA Journal of Labor Economics*, 3(1), 1-22.
- Brown, P., Lauder, H., & Ashton, D. (2020). *The global auction: The great ascent of the global 1 per cent and the new world of work*. Oxford University Press.
- Brynjolfsson, E., Horton, J. J., Ozimek, A., Rock, D., S_h_arma, G., & TuYe, H. (2020). *COVID-19 and remote work: An early look at new data*. (NBER Working Paper No. 27344). National Bureau of Economic Research. <https://www.nber.org/papers/w27344>
- Brynjolfsson, E., Horton, J. J., Ozimek, A., Rock, D., S_h_arma, G., & TuYe, H. (2020). *COVID-19 and remote work: An early look at new data*. (NBER Working Paper No. 27344). National Bureau of Economic Research. <https://www.nber.org/papers/w27344>
- Byrne, A., Houlden, V., & Maître, B. (2020). The distributional impact of the COVID-19 crisis on household income and wealth in Ireland. *ESRI Working Paper*, 682, 1-28. <https://www.esri.ie/system/files/publications/WP682.pdf>
- Cameron, K. S., & Quinn, R. E. (2011). *Diagnosing and changing organizational culture: Based on the Competing Values Framework* (3rd ed.). Jossey-Bass.
- Christopher, M. (2016). *Logistics & supply chain management* (5th ed.). Pearson.
- Chuma, T. (2002). The rise in unemployment in Japan: Causes and cures. *Japan Labor Review*, 2(1), 2-27.
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, 86(3), 425-445.

- Davenport, T. H., & Kirby, J. (2016). *Only humans need apply: Winners and losers in the age of smart machines*. HarperBusiness.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71(3), 500–507.
- Elagra, F., El-Amin, A., & Osman, M. (2016). The impact of compensation on employee retention: A case study of Etisalat Telecommunication Company, Sudan. *International Journal of Social Sciences and Humanities Research*, 4(2), 173-182.
- Fabiani, S., Lamo, A., Messina, J., & Rõõm, T. (2015). European firm adjustment during times of economic crisis. *IZA Journal of Labor Economics*, 4(1), 1-28.
- Furceri, D., Loungani, P., Ostry, J. D., & Pizzuto, P. (2021). The distributional effects of recessions revisited: Evidence from firm-level data. *Journal of Development Economics*, 150, 102602.
- Gerhart, B., & Milkovich, G. T. (1990). Organizational differences in managerial compensation and financial performance. *Academy of Management Journal*, 33(4), 663–691.
- Goh, E. T. (2000). The Malaysian Financial Crisis: Economic Impact and Recovery Prospects. *The Developing Economies*, 38(4), 417-442.
- Goodhart, C., Pradhan, M., & Tsomocos, D. P. (2020). *The great demographic reversal: Ageing societies, waning inequality, and an inflation revival*. Palgrave Macmillan.
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1–20.
- Gray, S., & Watson, R. (2002). Executive remuneration, company performance and corporate governance: evidence from the UK. *British Journal of Management*, 13(2), 105-121.
- Halder, A., & Sethi, N. (2022). The economic effects of COVID-19 mitigation policies on unemployment and economic policy uncertainty. *Bulletin of Monetary Economics and Banking*, 25(Special I), 61-84.
- Hanushek, E. A., & Woessmann, L. (2008). The role of cognitive skills in economic development. *Journal of Economic Literature*, 46(3), 607-668.
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38(3), 635-672. International Labour Organization. (2021). *ILO Monitor: COVID-19 and the world of work. Seventh edition*. International Labour Office. https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/briefingnote/wcms_767028.pdf
- Ivanov, D., & Das, A. (2020). Novel coronavirus (COVID-19) crisis and supply chain resilience: A systematic literature review and future research agenda. *Computers & Industrial Engineering*, 142, 106412.
- Kotter, J. P. (2001). What leaders really do. *Harvard Business Review*, 79(11), 85-96.
- Kube, F., Maréchal, M. A., & Puppe, C. (2010). The currency of reciprocity: Gift-exchange in the workplace. *American Economic Review*, 100(4), 1644-1652.
- Lane, M., & Conlon, P. (2016). *Digital skills and the digital transformation*. Publications Office of the European Union. <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/digital-skills-and-digital-transformation>
- Latham, S. (2009). Contrasting strategic response to economic recession in start-up versus established software firms. *Journal of Small Business Management*, 47(2), 180–201.

- Lee, S., Schmidt-Klau, D., & Verick, S. (2020). The Labour Market Impacts of the COVID-19: A Global Perspective. *The Indian Journal of Labour Economics*, 63(Suppl 1), 11-15.
- Manyika, J., Chui, M., Miremadi, M., Doshi, K., Woetzel, J., Mohr, P., & Boulton, P. (2017). *A future that works: Automation, employment, and productivity*. McKinsey Global Institute. <https://www.mckinsey.com/featured-insights/digital-disruption/harnessing-automation-for-a-future-that-works>
- Milkovich, G. T., Newman, J. M., & Gerhart, B. (2018). *Compensation* (13th ed.). McGraw-Hill Education.
- Olatunde, N. A., Gento Municio, A. M., and Awodele, I. A. (2022). Examination of survival strategies of quantity surveying firms' amid covid-19 pandemic disruption in Lagos State, Nigeria. *African Journal of Economic and Management Studies*, 14(3), 339–354. <https://doi.org/10.1108/ajems-05-2022-0215>
- Özar, Ş., Erdoğan, H., & Yücel, E. (2008). Micro and small enterprise growth in Turkey: Under the shadow of financial crisis. *Applied Economics Letters*, 15(7), 543-548.
- Piketty, T. (2020). *Capital and ideology*. Belknap Press of Harvard University Press.
- Pohlig, J. (2021). Intragenerational occupational mobility: The effect of crisis and overeducation on career mobility in a segmented labour market. *Public Sector Economics*, 16(2), 167-190.
- Rothstein, J. (2020). *The coronavirus crisis and the 2020 jobless recovery*. (NBER Working Paper No. 27242). National Bureau of Economic Research. <https://www.nber.org/papers/w27242>
- Savić, M., & Dobrijević, S. (2020). The impact of the COVID-19 pandemic on the labour market: A comparative analysis of selected countries. *Journal of Business Economics and Management*, 21(6), 1432–1447.
- Shafi, M., Liu, J., & Ren, W. (2020). The impact of COVID-19 on employment and the global economy. *Emerging Markets Finance and Trade*, 56(10), 2200-2210.
- Shimer, R. (2012). The long-run dynamics of the labor market. *Journal of Political Economy*, 120(4), 1014-1049.
- Smith, J., & Lee, K. (2024). *Fairness in compensation: A guide for modern organizations*. Routledge
- World Bank. (2021). *Global economic prospects: January 2021*. World Bank Publications. Retrieved from <https://www.worldbank.org/en/publication/global-economic-prospects>