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# Challenges of Expanding Employment Opportunities in the Manufacturing Sector in The Prabowo-Gibran Era

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#### **Abstract**

The administration of Prabowo-Gibran will face challenges in expanding employment opportunities in the manufacturing industry sector. The expansion of employment opportunities is influenced by various internal and external factors. This research aims to analyze the development of knowledge related to employment in the manufacturing industry sector and to identify both internal and external factors affecting this expansion. The research methodology employs a qualitative approach with bibliometric analysis to review scientific literature sourced from the Web of Science database, consisting of 499 documents. It measures several variables related to employment expansion in the manufacturing industry. This method is crucial for understanding the development of a specific field of study and identifying variables associated with employment by utilizing the VOSviewer software.

Keywords: development of knowledge, web of science, Vosviewer, employment opportunity, internal factor, external factor.

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# 1. Introduction

The expansion of employment opportunities in the manufacturing sector during the Prabowo-Gibran administration will face complex and diverse challenges. A synergy between the government, industry players, and workers is needed to address these challenges, with a focus on improving infrastructure, developing skills, automation, and implementing fair and sustainable employment policies. The challenges of expanding employment opportunities in the manufacturing sector during the Prabowo-Gibran administration will likely be influenced by various internal and external factors.

Based on the results of the National Labor Force Survey, as of February 2024, the labor force numbered 149.38 million people, with 142.18 million employed. The three sectors that absorbed the most labor were Agriculture, Forestry, and Fisheries at 28.64 percent; Wholesale and Retail Trade, Repair and Maintenance of Motor Vehicles and Motorcycles at 19.05 percent; and the Manufacturing sector at 13.28 percent. As shown in Figure 1, there has been a decline in labor absorption in the manufacturing sector in 2023 and 2024.

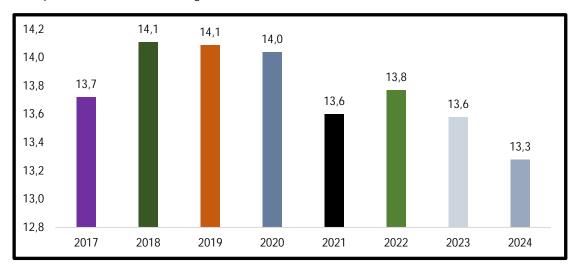


Figure 1. Percentage of Labor Absorption in the Manufacturing Sector Relative to Total Labor Absorption

Source: BPS (2024)

The increasing number of layoffs in the manufacturing sector is a sign that the manufacturing industry and economic growth are currently unstable. The Ministry of Manpower reported that 52,933 workers have been affected by layoffs from January to September 26, 2024. The rise in layoffs serves as a signal of deindustrialization or the declining role of industry in Indonesia's economy, which continues to persist. The performance of the manufacturing sector remains suboptimal, with its share of Gross Domestic Product decreasing over the past 10 years. Mass layoffs will also pressure the consumption of the middle-class households, which will hinder economic growth and make it difficult to achieve the target of 5.2 percent in 2024.

The middle class contributes 30 percent of total national consumption and significantly influences economic growth. Mass layoffs can also occur due to a decline in the quality of Indonesia's economic growth. One indicator of this is the reduction in labor absorption. Previously, a one percent increase in economic growth could absorb up to 400 thousand workers, but currently, a one percent economic growth increase can only absorb 100 workers, which is attributed to the decline in the quality of economic growth.

Currently, the performance of the manufacturing sector is still unable to drive the economy effectively. Many subsectors of the manufacturing industry, particularly labor-intensive ones, are facing significant performance constraints. This situation has a direct impact on the increasing



number of layoffs and unemployment. One of the main issues is the difficulty in creating new industries that can absorb a large workforce. Many existing industries struggle to survive and instead contribute to rising unemployment rates. If the performance of the manufacturing sector is not improved soon, Indonesia may face a surge in unemployment in the future. Poor industrial performance will hinder labor absorption, which is part of the Prabowo-Gibran cabinet's agenda and has the potential to increase unemployment in the coming years.

The Prabowo-Gibran administration is expected to develop strategies to improve the stability of the manufacturing sector. With the right strategies, the manufacturing industry will be able to absorb more labor in the future. Strengthening the manufacturing sector in Indonesia is crucial for enhancing global competitiveness. Thus, industrialization is anticipated to be a solution for reducing unemployment rates while achieving an economic growth target of 8 percent. The main challenge for future economic growth is ensuring that this growth is inclusive, thereby addressing current social and economic issues.

The manufacturing sector is one of the key components in pursuing the target for economic growth. This sector has the potential to create a significant number of jobs and absorb the workforce, especially among the youth. The manufacturing industry plays a crucial role in supporting the desired economic growth. Additionally, this sector has a substantial capacity to absorb labor, particularly among young people and Generation Z. By creating job opportunities in the manufacturing sector, it can help reduce the unemployment rate, particularly among the youth demographic.

The decision to choose a workforce is influenced not only by the characteristics of the workers but also by the company's policies. According to Andriani and Usman (2021), several factors can affect labor absorption in employment. Labor absorption indicates the extent to which a company can employ workers to produce goods or services. In other words, labor absorption is defined as the acceptance of workers to perform jobs or the condition that indicates that job openings are available for individuals seeking employment. Furthermore, Suryadi (2023) argues that the issue of declining labor absorption, particularly among Generation Z in Indonesia, should be a focus for the government in its annual development efforts. This problem is linked to unemployment; as the unemployment rate in a country rises, so does the poverty rate.

The objectives of this study are twofold. First, it aims to analyze the development of knowledge related to labor absorption, particularly as it pertains to the focus of the Prabowo-Gibran government's work program. Second, it seeks to identify the economic and technological variables associated with labor absorption based on findings from scientific publications in international journals.

### 2. Research Method

#### 2.1. Literature review

Labor refers to human resources with the potential and ability to work in specific fields and participate in development. According to Law No. 13 of 2003 Article 1, labor is defined as every person capable of performing work, whether in an employment relationship or not, to produce goods and services to meet societal needs. The minimum working age for the Indonesian population is 15 years.

Labor absorption refers to the number of filled job positions, reflected in the number of employed individuals across various economic sectors. The absorption of the working population is driven by the demand for labor. Economic sectors that employ many people will generate goods and services for community consumption. Each economic sector experiences different growth rates, affecting its capacity to absorb labor.

The disparities in growth rates lead to differences in productivity improvements across sectors, ultimately resulting in sectoral changes in both labor absorption and contributions to national income. Labor absorption can be understood as the equilibrium between labor demand and supply, which determines the equilibrium wage for labor. In the job market, labor absorption varies in its functioning, which can be distinguished based on education, specific skills, or a person's work experience.

The Neo-Classical Theory in the labor market posits that all parties possess perfect information, making voluntary unemployment impossible. At the prevailing real wage level in the market, every individual willing to work at that wage will find employment. Unemployment is only experienced by those who do not wish to work at the existing wage rate. In contrast, Keynesian Theory asserts that the labor market is dependent on the goods market. When output increases, the number of workers will also rise, and vice versa (Wolff and Resnick, 2012).

Labor absorption refers to the number of workers utilized within a specific business unit. Employed labor within the economic sector positively impacts the large-scale production of goods and services. In this research, labor absorption is defined as the number of individuals working across various sectors. The theory surrounding labor absorption is influenced by both external and internal factors (Putri, 2010). External factors include economic growth, inflation rates, unemployment, and interest rates. In contrast, internal factors encompass wage levels, labor productivity, job satisfaction, and capital.

# 2.2. Analysis method

This study utilizes Bibliometric Analysis to examine scientific literature by measuring various variables related to the expansion of employment opportunities. This method is essential for understanding the development of a specific field of knowledge and identifying research trends. One of the popular software tools used in bibliometric research is VOSviewer.



VOSviewer is software developed by Nees Jan van Eck and Ludo Waltman from Leiden University, Netherlands, designed for creating and visualizing network maps based on bibliometric data. VOSviewer allows users to visualize relationships between variables within scientific articles used in a particular research field. This application can process large volumes of data and display it visually in an easy-to-understand manner, making complex connections accessible and providing valuable insights into patterns, trends, and collaborations within the research landscape.

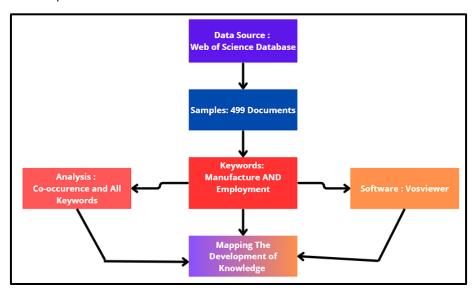


Figure 2. Flowchart of the Job Opportunity Expansion Study Method

The first step in bibliometric research is to gather data for analysis (Figure 2). The data source was extracted from the Web of Science scientific database, yielding 499 documents. The search criteria used were "Manufacture" and "Employment," ensuring that the selected documents focused on relevant topics within this research field.

Once the data is collected, the next step is to export it into a format compatible with VOSviewer. Typically, the Web of Science database supports exporting data as a tab-delimited file. After exporting, the data is then imported into VOSviewer. VOSviewer provides several options for constructing network maps; for this study, a co-occurrence network was selected to analyze the relationships among frequently co-occurring keywords within a single article.

After selecting the network type, VOSviewer will create a map based on the imported data. Each node on the map represents an entity in the form of a keyword, and the lines connecting nodes indicate relationships. VOSviewer offers powerful visualization features, where each node can be color-coded according to a specific cluster. Clustering is based on the intensity of relationships between entities, so entities that are more frequently connected tend to be in the same cluster. With this visualization, researchers can identify trends in the research field most influential on frequently studied topics.

## 3. Results and Discussion

# 3.1. Bibliometric analysis

Bibliometric analysis, particularly co-occurrence, is a method used to observe the relationships between two or more concepts that frequently appear together in literature (Figure 3). In the context of the impact of economic and technological variables on employment opportunities, this analysis helps in understanding how economic, technological, and employment concepts interrelate and how research trends in this field have developed over time.

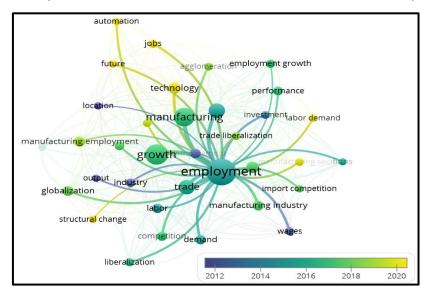


Figure 3. Bibliometric Analysis Using Co-Occurrence on The Words Employment and Manufacture

The manufacturing sector is a crucial component of the global economy, significantly influencing employment patterns and economic development. Understanding the trends in knowledge development related to employment in the manufacturing sector and how it connects with economic and technological variables is essential for policymakers, businesses, and researchers. This analysis explores current trends, implications for the workforce, and the interconnections with economic and technological factors (Figure 4).



	THE VARIABLES RELATED TO EMPLOYMENT IN THE DEVELOPMENT OF KNOWLEDGE IN THE MANUFACTURING INDUSTRY SECTOR		
	5 VARIABLES Wages, Location, Output, Industry and Unemployment	2012	
	3 VARIABLES Demand, Labor and Investment	2014	
	2 VARIABLES Manucturing Firm and Liberalization	2016	
	6 VARIABLES  Performance, Employment Growth, Trade Liberalization, Globalization, Manufacturing industry and import Competition	2018	
	5 VARIABLES Jobs, Automation, Future, Technology and Structural Change	2020	

Figure 4. Current Trends in Knowledge Development on Employment Opportunities in the Manufacturing Sector

#### 3.2. Trends in 2012

In 2012, the development of employment expansion in the manufacturing sector showed several significant trends and dynamics. Here are some points that describe the conditions and developments in its relationship within the manufacturing sector:

## a. The Relationship between Employment and Wages

Wages are a fundamental aspect of economics and the labor market. Wages represent the compensation received by workers for the work they perform. Wages can be defined as the amount of money workers receive in exchange for the services and labor they provide to a company. Employment, on the other hand, encompasses all tasks, responsibilities, and functions carried out by individuals in a professional context. Wages serve as a motivating factor for individuals to engage in specific jobs.

Wage levels are often influenced by the type of work performed. Jobs requiring higher skills, formal education, or more experience typically offer higher wages. Conversely, jobs that do not require specific skills or training tend to offer lower wages. This reflects the market value and demand for types of skills and work (Tadjoeddin, 2016).

The relationship between employment and wages is also influenced by the demand and supply mechanisms in the labor market. When demand for a particular type of job increases, the wages offered for that job generally rise as well. Conversely, if there are many workers

competing for the same job, wages tend to stagnate or decrease. Therefore, changes in market conditions can significantly affect the wages workers receive.

Wage levels can also affect job satisfaction. Workers who feel they are fairly compensated for their work tend to be more satisfied and motivated. Conversely, if workers feel that their wages do not match their workload or responsibilities, it can reduce their motivation and satisfaction. Achieving a balance between work and wages is essential for creating a positive work environment.

Government policies, such as the establishment of minimum wages, also play a crucial role in the relationship between employment and wages. Minimum wage laws are designed to protect workers from excessively low wages and ensure that they receive fair compensation for their work. However, these policies can also impact companies' decisions regarding hiring and retaining employees, and they may affect unemployment rates if businesses cannot meet minimum wage requirements.

## b. The Relationship between Employment and Location

Employment and location are important aspects that influence various factors in the workforce. Location refers to the place where work is performed, which can include geographical factors, infrastructure, and social environment. This relationship has a significant impact on job availability, worker mobility, and the economic development of a region (Wahyudi and Jantan, 2012).

Geographical location greatly affects job availability. In large urban areas, there are typically more job opportunities compared to rural areas. Certain sectors, such as technology, finance, and manufacturing, are often concentrated in business hubs, attracting more workers. Conversely, in rural areas, job options may be more limited and often focus on agriculture or local services.

## c. The Relationship between Employment and Output

Employment and output are key concepts in human resource management and economics. Output refers to the results or products generated from the work process, which can be in the form of goods or services. This relationship is crucial as it reflects efficiency and productivity in the workplace. Output can be measured in various forms, such as the number of products produced, the quality of services provided, or the contribution to achieving organizational goals. Understanding this relationship helps organizations evaluate employee performance effectiveness.

Skills and qualities of workers significantly affect output. Skilled and experienced workers tend to produce better output compared to less trained workers. Therefore, investing in training and employee development can enhance their skills, which in turn improves output and the quality of work results (Ogar et al., 2024).



A supportive and conducive work environment can influence the relationship between employment and output. Comfortable physical conditions, access to appropriate tools and technologies, and a positive organizational culture can enhance worker motivation and productivity. Conversely, a poor work environment can hinder performance and reduce output.

The relationship between employment and output is also influenced by the goals and motivations of workers. Employees who have clear objectives and the motivation to achieve good results tend to be more committed to performing their jobs. With appropriate incentives or rewards, workers can be encouraged to enhance their output.

# d. The Relationship between Employment and Industry

Employment and industry are crucial concepts in economics and the workforce. Employment refers to the activities performed by individuals to earn compensation, while industry is a collection of economic activities that produce goods and services. This relationship reflects how the dynamics of employment and industry influence each other and their impact on the economy and society. Industries consist of various companies or entities operating within specific economic sectors, such as manufacturing, services, and agriculture. Understanding these two concepts is essential for analyzing how employment is structured within the broader context of industry (Nurhayani, 2022).

The availability of jobs is greatly influenced by the types of industries that are developing in a region. Certain industries, such as information technology and construction, typically offer more job opportunities compared to more traditional industries. When an industry grows, it can create more employment opportunities, providing individuals with the chance to earn an income.

The relationship between employment and industry is also evident in the different skill requirements across industries. Each industry has unique skill and training needs. For example, the technology industry requires workers with skills in programming and data analysis, while the healthcare industry requires medical and patient care skills. Proper education and training are essential to prepare workers to meet the demands of each industry.

Innovation within an industry can impact the types of jobs available. As technology and new methods advance, industries often require workers with higher skills and different specializations. This can lead to changes in job structures, where some roles become obsolete while new ones emerge. Workers need to adapt to these changes to remain relevant in the labor market.

# e. The Relationship between Employment and Unemployment

Unemployment is a critical issue in economics and employment policy. Employment refers to activities undertaken by individuals to earn compensation, while unemployment

refers to the condition in which individuals who are able and willing to work cannot find jobs. Understanding this relationship helps identify factors that influence job availability and its impact on the economy and society (Maschke, 2024).

Job availability can affect the unemployment rate in a region or country. The more job openings there are, the lower the unemployment rate tends to be. In favorable economic conditions, industries tend to grow, creating more job opportunities and reducing unemployment rates. Conversely, during an economic recession, many companies cut back on employees, which can lead to an increase in unemployment rates.

Changes in economic structure, such as a shift from traditional industries to the service or technology sectors, can affect the relationship between employment and unemployment. Workers unable to adapt to these changes may struggle to find jobs, thereby increasing unemployment. It is essential for workers to continuously upgrade their skills and knowledge to remain relevant in an evolving job market.

#### 3.3. Trends in 2014

In 2014, the development of expanding employment opportunities in the manufacturing sector showed several significant trends and dynamics. Here are some points that illustrate the state and progression of employment relationships in the manufacturing sector:

# a. The Relationship between Employment and Labor Demand

Employment and labor demand are crucial aspects in understanding labor market dynamics. Labor demand refers to a company's need for employees to fill specific positions and perform various tasks necessary to achieve organizational goals. Several factors influence labor demand, including economic conditions, technological developments, and industry trends. When the economy grows, demand for products and services increases, leading companies to hire more employees. Conversely, in poor economic conditions, labor demand may decrease.

The growth of certain industries can create significant labor demand. Labor demand is also closely related to the skills and qualifications required for specific jobs (Farm, 2020). Companies seek employees who possess the skills that align with their needs. Therefore, workers must have relevant and up-to-date skills to compete for their desired jobs.

Education and training play a crucial role in connecting employment with labor demand. Educational programs should be tailored to meet industry needs so that graduates are prepared to enter the workforce. Continuous training is also necessary to ensure that workers can develop their skills and meet market demands.

# b. The Relationship between Employment and Labor

Labor is one of the essential factors of production in the economy. It provides the skills, time, and effort needed to produce goods and services. Employment serves as the means by



which labor can be utilized across various sectors. The level of employment reflects the extent to which labor is utilized in the economy. A high employment rate indicates that a significant amount of labor is absorbed by various sectors, such as industry, services, or government. Conversely, if the employment rate is low, a substantial amount of labor may be unemployed or not optimally utilized (Gogoi, 2023).

Employment provides a source of income for labor, impacting the economic well-being of individuals and society. With employment, workers can meet their living needs, improve their standard of living, and reduce poverty. The productivity level of labor in employment significantly affects a country's economic performance. When labor is employed in productive sectors, it can enhance Gross Domestic Product (GDP) and economic growth. Conversely, labor that is not optimally utilized or works in the informal sector may have a limited impact on national productivity.

# c. The Relationship between Employment and Investment

Jobs and investment are crucial aspects of the economy that impact growth, productivity, and job creation. Investment includes spending on capital goods, infrastructure, and human resource development, all of which contribute to enhancing the availability and quality of jobs. The level of investment can influence job availability in a region or sector. Investment in infrastructure, industry, and new technology can create new employment opportunities. When companies invest to expand their operations, they often need more workers to operate and manage new facilities. Therefore, increased investment can contribute to a reduction in unemployment rates.

Investment not only affects the number of jobs but also the quality of available jobs. Investment in worker training and skill development can enhance productivity and equip workers with better capabilities. Additionally, investment in modern technology and equipment can create safer and more efficient jobs, improving worker well-being.

Investment in research and development drives innovation, which can transform how work is performed. Companies investing in new technology tend to improve efficiency and productivity, potentially influencing the types of jobs available. New technologies can create jobs that require different skill sets, making it essential for workers to continuously upgrade their skills.

Governments often invest in infrastructure and training programs to support job creation. On the other hand, private sector investments, such as the construction of new factories and facilities, also play a significant role in providing employment opportunities (Malik, 2019).

### 3.4. Trends in 2016

In 2016, the expansion of employment opportunities in the manufacturing sector experienced various important trends and dynamics. Here are some points that reflect the conditions and developments in employment relations within the sector:

## a. The Relationship between Employment and Manufacturing Firm

Manufacturing firms are one of the essential aspects of the economy, as they are a primary source of employment. Manufacturing firms encompass all types of activities involved in the production of goods, from raw materials to finished products. In the production process, these firms require labor to carry out daily operations. The jobs generated are not limited to the production line but also cover various areas such as management, marketing, and logistics.

Manufacturing firms often require workers with specialized skills suited to their production processes. Therefore, this relationship emphasizes the importance of relevant education and skills training. Workers with appropriate educational backgrounds or those who have completed industry training programs are more likely to be accepted by manufacturing firms. Manufacturing firms often adopt new technologies and innovative production methods to increase efficiency and productivity (Przywara, 2019). This relationship affects the types of jobs available, as workers need to adapt to technological changes. Workers who can master new skills will have a competitive advantage in the labor market.

The presence of manufacturing firms in a region can have a significant economic impact. In addition to creating jobs, these companies also contribute to local economic growth through expenditures on raw materials, building rentals, and other supporting services. This can help improve household income and the quality of life for communities around the factory location.

## b. The Relationship between Employment and Liberalization

Employment and liberalization are significant issues in the context of the global economy and labor policies. Liberalization refers to the reduction or elimination of barriers in trade, investment, and capital flows, aimed at improving economic efficiency and strengthening global market integration. Economic liberalization involves opening markets to foreign trade and investment, reducing tariffs and trade barriers, and eliminating regulations that restrict the movement of goods and services. In the labor context, liberalization can impact job availability, the types of employment opportunities, and working conditions.

The liberalization process can create new job opportunities, particularly in sectors involved in international trade (Ali et al., 2018). As companies operate in global markets,



they may expand their operations and hire more workers to meet demand. This can lead to an increase in job creation, especially in countries open to foreign investment.

Liberalization often affects the structure of employment within a country. Competitive and efficient sectors tend to grow, while less competitive sectors may decline. This can result in shifts in the types of jobs available, with increased demand for skills aligned with the needs of global industries. While liberalization can create new job opportunities, it may also lead to unemployment in sectors unable to compete in the global market. Workers in declining industries may struggle to transition to other sectors. Therefore, it is crucial to implement policies that support the transition for workers impacted by these changes.

#### 3.5. Trends in 2018

In 2018, the expansion of employment opportunities in the manufacturing sector experienced various significant trends and dynamics. Here are some points that reflect the conditions and developments in employment relations within the manufacturing sector:

# a. The Relationship between Employment and Performance

Employment and performance are crucial aspects in the world of business and management that influence an organization's productivity and success. Performance refers to how well individuals or teams execute tasks and achieve predetermined goals. Work encompasses all activities carried out by individuals to achieve specific objectives, both within and outside the work environment. Meanwhile, performance can be measured through various indicators, including efficiency, effectiveness, and outcomes achieved. The relationship between the two indicates that how work is performed significantly impacts the results achieved.

Employment with skills, knowledge, and a positive attitude tend to deliver better performance. Skill development and training can contribute to the quality of work, resulting in higher performance. Additionally, motivation is a key factor influencing the relationship between employment and performance. Motivated workers are more likely to work hard and give their best in their tasks. A positive work environment, rewards, and recognition for achievements can enhance motivation, which ultimately boosts performance (Suryadi and Nasution, 2024).

A conducive and supportive work environment can enhance performance. Good facilities, adequate tools, and management support can help workers perform their tasks more effectively. Conversely, a poor or unsupportive work environment can hinder employee performance.

# b. The Relationship Between Employment and Employment Growth

Employment and employmet growth are key elements in the economy that impact the well-being of society and overall economic development. Job growth refers to the increase in the number of available jobs within an economy, and this relationship has many

dimensions that need to be understood. Job creation is often influenced by the growth of specific economic sectors. When sectors such as manufacturing, services, or technology expand, they tend to require more labor. Therefore, job growth in these sectors can serve as an indicator of the overall health of the economy (Aksoy, 2013)

Technological innovation and efficient production methods can influence employment growth. While some innovations may replace traditional jobs, many also create new types of jobs that require different skills. Therefore, innovative sectors can become significant sources of employment growth. The availability of appropriate skills in the labor market plays a crucial role in job growth. Skilled and highly educated workers are more likely to be employed in growing sectors. On the other hand, if there is a skills gap in the labor market, it can hinder job growth.

# c. The Relationship Between Employment and Trade Liberalization

Employment and trade liberalization are important themes in the study of global economics and labor. Trade liberalization refers to the reduction of barriers to international trade, such as tariffs and quotas, which allows for freer flow of goods and services between countries. This process directly impacts labor market dynamics and job creation.

One of the positive impacts of trade liberalization is the potential for creating new jobs (Ali et al., 2018). With market openings, companies can expand their market reach and produce goods in larger volumes, often requiring additional labor. Growing sectors, such as exports, may experience increased demand for workers. Trade liberalization can also transform the structure of employment within an economy. More competitive and efficient sectors tend to grow, while sectors unable to compete may decline. This can lead to shifts in the types of jobs available, with an increased demand for specific skills.

## d. The Relationship between Employment and Globalization

Employment and globalization are crucial aspects in understanding the dynamics of the current global economy. Globalization refers to the process of integration and interaction among countries worldwide, involving the flow of goods, services, capital, and information. It encompasses increased interconnectedness between nations through trade, investment, and technology. This process transforms how companies operate and impacts labor markets across various parts of the world. In the context of work, globalization has a significant impact on the types and availability of jobs.

Globalization can create new job opportunities, especially in developing countries. With the opening of international markets, companies can expand their operations and take advantage of lower labor costs, which in turn can generate more jobs. Sectors involved in exports often experience significant growth.

However, globalization also brings changes to the structure of employment (Mushtaq et al., 2022). The demand for specific skills may increase alongside the growth of technology-



based and innovation-driven sectors. Jobs previously performed locally may be relocated to other countries, while new jobs that emerge might require different skill sets.

# e. The Relationship between Employment and Manufacturing Industry

Employment and the manufacturing industry are highly significant in the context of the economy, as the manufacturing industry is one of the most influential sectors in job creation. Manufacturing involves the production of goods from raw materials into finished products through various methods and technologies. This sector plays a crucial role in the economy by contributing to economic growth, exports, and job creation (Przywara, 2019).

One of the key impacts of the manufacturing industry is job creation. This sector often requires a large workforce, ranging from skilled to unskilled workers, to carry out various production processes. Consequently, the manufacturing industry serves as a major source of employment in many countries, particularly in developing nations.

Jobs in the manufacturing sector often require specific skills, both technical and non-technical. Adequate education and training are essential to prepare the workforce to meet the demands of the industry. Training programs that focus on skills relevant to the manufacturing industry can help improve the quality of the workforce.

# f. The Relationship between Employment and Import Competition

Employment and import competition are critical themes in the context of an increasingly integrated global economy. Import competition refers to the condition where foreign goods and services enter domestic markets, often at more competitive prices. This competition arises when products and services from other countries are sold in domestic markets, usually at lower prices than local products. It can affect the competitiveness of domestic products and have a direct impact on the availability and types of jobs.

Import competition can lead to a decline in demand for local products, impacting employment in certain sectors. Industries unable to compete with imported products may experience workforce reductions, resulting in increased unemployment within those sectors. Conversely, sectors that can adapt and compete may create new job opportunities (Akkus, 2016).

Although import competition can threaten jobs in some sectors, it can also create opportunities in others. More efficient and innovative sectors can grow, creating a demand for new labor. Furthermore, with the availability of cheaper imported products, consumers gain better access to goods and services, which can stimulate growth in the retail and service sectors.

### 3.6. Trends in 2020

In 2020, the expansion of employment opportunities in the manufacturing sector experienced various significant trends and dynamics. Here are some points that reflect the conditions and developments in employment relations within the manufacturing sector:

## a. The Relationship between Employment and Job

Employment and job are closely related concepts, with meanings that are nearly similar but have some nuanced differences. In this context, employment refers to any activity performed by an individual to earn a reward, while job often refers to a specific position or role held by someone within an organization or company.

Employment is a general term encompassing all activities performed by individuals to produce something or earn a reward. Meanwhile, a job refers to a specific position that typically includes defined tasks, responsibilities, and requirements within an organization. Employment creates jobs, as the various types of work in society serve as the foundation for establishing specific positions across industries. As a sector grows, it tends to create more jobs available to the workforce, subsequently reducing unemployment.

Both are also closely related to the skills and qualifications required. Specific jobs often demand skills acquired through education and training. Different types of work may require varying levels of skill, creating the need for training and skill development for workers. The relationship between work and jobs is also evident in labor market dynamics. Demand for certain jobs can fluctuate based on economic conditions, industry trends, and societal needs. Workers must adapt to these changes to remain relevant in the job market.

### b. The Relationship between Employment and Automation

Employment and automation are key themes in today's economic and technological transformations. Automation refers to the use of technology to perform tasks or processes previously carried out by humans. It involves the utilization of machines, software, and technological systems to complete tasks automatically. This spans various industries, from manufacturing to services, and can involve processes ranging from simple to complex.

Automation can also transform the types of jobs available in the labor market. Routine and repetitive tasks, such as product assembly or data processing, are more susceptible to automation. Meanwhile, jobs requiring high skills, creativity, and human interaction—such as roles in management and customer service—are generally less at risk (Jiang et al., 2024).

With the rise of automation, there is a risk of a reduction in traditional jobs in certain sectors. For example, in the manufacturing industry, the use of robots on production lines can decrease the need for human workers. This may lead to increased unemployment, especially among workers lacking the skills required to transition to other types of jobs.



Although automation may reduce certain jobs, it can also create new opportunities in technology and innovation fields, such as the growing demand for IT specialists, engineers, and skilled workers in maintaining and operating automated systems. Thus, automation can open new opportunities for workers who can adapt to these changes.

# c. The Relationship between Employment and The Future

Employment and the future are highly relevant themes in the context of the rapid changes occurring in the world of employment. With technological advancements, demographic shifts, and global economic dynamics, the way we view work in the future will differ significantly from today (Arancibia and Torres, 2021). The future of work will be heavily influenced by labor market transformations. Many industries are undergoing significant changes due to technological innovation, automation, and digitalization. Current jobs may evolve or even disappear, while new jobs—unimaginable today—are likely to emerge.

Future jobs will require different skills compared to those needed today. Technological skills, such as data analysis, programming, and understanding artificial intelligence, are becoming increasingly important. Additionally, social and emotional skills, such as collaboration, communication, and adaptability, will be highly valuable in an ever-changing work environment.

To prepare for the future, education and training must adapt to the new demands of the labor market. Educational programs should focus on developing relevant skills and providing practical experience. Lifelong learning will also become essential, as workers will need to continuously develop their skills throughout their careers.

# d. The Relationship between Employment and Technology

Technology has a significant impact on employment in various ways. Technological advancements are changing the way work is done, the types of jobs available, and the skills required by workers. Here are some key relationships between employment and technology: Technology, particularly automation and digitalization, can replace routine or manual jobs that were previously performed by humans. For example, the use of robots in manufacturing production lines can reduce the need for workers in certain sectors. However, technology also creates new jobs related to the development, maintenance, and operation of new technologies, such as jobs in information technology, artificial intelligence (AI), and data analysis.

Technology enables increased productivity and efficiency in the workplace. With the help of software and automated systems, tasks can be completed faster and with fewer errors. This can reduce the workload of workers, allowing them to focus on more complex tasks and improve the quality of their output. However, it can also reduce the number of jobs needed in certain industries (Yogashree and Dhanashree, 2023).

With the advancement of technology, the skills required in the labor market are also changing. Workers need to acquire new skills that are relevant to technology, such as programming, data analysis, and the use of digital tools. As a result, there is an increased demand for training and education to help workers adapt to these technological changes.

# e. The Relationship between Employment and Structural Change

Employment and structural change are crucial aspects in understanding the dynamics of the economy and labor market. Structural change refers to deep, long-term shifts in how an economy functions, including changes in industrial sectors, the skills required, and the composition of jobs (Liu, 2020). Structural changes involve significant shifts in the economic structure, such as the transition from an agriculture-based economy to an industry- or service-based economy. It may also include changes in how companies operate, such as the adoption of new technologies and changes in business practices.

Structural changes often result in shifts in the types of jobs available. For example, if a country transitions from an industrial sector to a service sector, the demand for workers in service-related fields, such as healthcare, education, and information technology, will increase. This leads to a decline in demand for jobs in the manufacturing sector.

#### 4. Conclusion and Recommendations

The challenges of expanding employment opportunities during the Prabowo Subianto and Gibran Rakabuming administration are caused by many interrelated factors. The issue of job loss is influenced by macroeconomic conditions, business competitiveness, and technological changes. Several factors related to the challenges of expanding employment opportunities are:

- a. Wages and Unemployment: Achieving a balance between fair wages and business competitiveness is a major challenge. Fair wage policies are needed to increase workers' purchasing power without overburdening industries, especially in the manufacturing sector, which is facing the impact of layoffs (redundancies).
- b. Technology and Automation: Technological advancements and automation continue to replace manual labor, creating a need for reskilling workers to compete in technology-driven sectors.
- c. Globalization and Import Competition: Local manufacturing industries face significant pressure from cheap imported products. This demands strategic protectionist policies as well as support for innovation and productivity improvements.
- d. Investment and Location: The equitable distribution of investment outside of Java is necessary to create jobs in underdeveloped regions. This requires the development of infrastructure, including transportation and logistics.
- e. Economic Structural Changes: The shift from traditional sectors to modern industrial and service sectors requires policy adaptations to enable workers to transition to high-productivity sectors.



f. Trade Liberalization: The challenge of globalization also includes the need to balance the benefits of an open market while protecting domestic sectors that are vulnerable to competition.

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