



Macroeconomic Analysis : Digitalization on the Labor Market in Islam

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Abstract

This scientific paper aims to analyze Macroeconomics: The impact of digitalization of the labor market in Islam. The method used in this study is qualitative with in-depth literature analysis. The findings of this study provide an in-depth understanding by analyzing macroeconomics and government efforts to protect workers from the impact of digitalization are contained in the Employment Law Article 164 Paragraph (3). Islam in viewing digitalization today is accepting this development because it is considered a development of science and technology, as contained in Qs. Al-Anbiyat verse 80.

Keywords Macroeconomics, Digitalization, of The Labor Market Islam

1. INTRODUCTION

Macroeconomics is an important labor market to understand the relationship between labor supply and demand, and how factors such as wages, population, and unemployment rates affect labor market dynamics, so that the role of government in forming regulations for each labor requirement has an impact on society. Macroeconomic policies affect the behavior of the economy as a whole, including economic activity, unemployment, and inflation.

Macroeconomics in the current context is not only related to narrow macroeconomic issues, namely the balance of supply and demand at the aggregate level which includes the entire goods and services market, money and capital markets, and production factor markets. However, in addition to the things mentioned, it also concerns actual development issues, such as poverty levels and social welfare. In general, the components that must be discussed in regional macroeconomic analysis concern economic production and income, growth, unemployment, inflation, employment, external trade relations, financial institutions, regional finance, and poverty or community welfare. (Wauran, 2018)

Digitalization, which involves the use of digital technology in business and production processes, has provided great potential to increase efficiency, productivity, and innovation. However, its impact cannot be ignored. In recent years, changes in the labor economy have been in the spotlight of academics, practitioners, and policy makers.

In terms of impact or influence, the technological revolution has had a significant impact on all aspects, including the accounting industry. Digitalization can make bookkeeping simpler and more powerful and proficient. The latest and fastest growing digital

technology sector aims to combine cutting-edge manufacturing and operating methods with intelligent digital technology. (Mulyana Fitri et al., 2023)

The labor market plays an important role in the economy and is one of the crucial aspects. Changes in economic structure, technological advances, and social dynamics have a significant impact on the labor economy. One of the latest phenomena that has a major impact is digitalization. The digitalization era presents a major transformation, with the emergence of various debates and conflicting opinions regarding the development of all sectors related to digitalization, including the labor market.

Technological advances have also had a positive impact on human welfare by creating new jobs, improving the quality of goods and services, and bringing about advances in health, travel, and communication. However, technology also has a disruptive impact, affecting the way companies operate and the use of labor. (L. Hadi Adha, 2020)

Digitalization that utilizes the use of digital technology in business processes, industry and production, promises great potential to increase efficiency, productivity, and innovation. However, its impact is also significant. In recent years, changes in the labor economy have become the focus of attention from academics, practitioners, and policy makers.

The purpose of this study is to thoroughly investigate the Impact of digitalization on the Islamic labor market using a macroeconomic analysis approach. The author presents changes in the skills needed, structural shifts in work, social consequences and policies that emerge as a result and how Islam views changes in digitalization. By conducting a comprehensive analysis, we hope to provide a deeper understanding of these changes and their implications for society and the economy as a whole.

In this context, previous studies have also presented significant findings. For example, a study conducted by Hadi Adha, Zaeni Asyhadie, and Rahmawati Kusuma (2020) showed that although the debate about whether digitalization is contrary to workforce reduction is still fierce in industry circles, it is undeniable that digitalization with its various devices also plays a role in forming new industries and new types of jobs. Therefore, the legislative approach is an effort to formulate laws and regulations in response to the convergence trend, as well as an anticipatory step against the convergence phenomenon in information technology.

Subsequent research conducted by Ifan Davania and Eny Sulistyningruma (2022) showed that digitalization can have a positive and very significant impact on the absorption of Indonesian female workers. The implementation of digitalization that has an effect

2. LITERATURE REVIEW

Macroeconomics of the Labor Market

Macroeconomics of the labor market refers to the influence of macroeconomic policies and the overall labor market situation. Macroeconomic policies, such as fiscal and monetary policies, can affect the behavior of the economy, including economic activity, unemployment, and inflation. The labor market, promoted by institutions such as the IMF and WB, is considered a strategy to reduce unemployment and poverty. However, a rigid labor market can be incompatible with the increasingly competitive and liberal global economy.

Macroeconomic policies play an important role in regulating the labor market. Here are some ways in which macroeconomic policies affect the labor market.

1. Economic Growth: Fiscal and monetary policies that support economic growth can increase the demand for labor, expand employment, and reduce unemployment.
2. Inflation and Interest Rates: Monetary policies that control inflation and interest rates can affect the prices of goods and services, which in turn affect the demand for labor.
3. Fiscal Policy: Increased government spending or reduced taxes can increase consumer incomes, which can increase the demand for labor.
4. Labor Market Flexibility: Policies that support labor market flexibility can increase labor mobility and reduce imbalances in demand and supply. (Mustasya, 2018)
5. Government Regulations: Regulations such as provincial minimum wages (UMP) and employment protection rules can affect labor bargaining costs and limit labor market flexibility. (Markavia et al., 2022)

Macroeconomic policies, such as fiscal and monetary policies, as well as government regulations, play a role in determining labor market equilibrium and reducing unemployment.

Labor Market

When referring to labor, we are talking about human resources, which are one of the key factors of production besides land and capital. Humans, with the help of the technology they have created, have the ability to produce goods that can replace and complement natural resources and capital. The labor aspect involves two main concepts, namely human resources and human capital. (Madris, 2021) Human resources view humans as a resource that can be exhausted if used sustainably, while human capital views humans as capital that has value, and if invested properly, will generate profits in the form of returns on investment in human resources through increased labor productivity.

The labor market can be considered a market for factors of production, and in general has a structure and nature similar to the goods or output market. As we know in the output

market, the function of the market is to bring together sellers and buyers of goods or services. Likewise, the labor market has a function to bring together owners of labor services, which can be individuals or groups of workers, with parties who use labor, be it individuals or private or government institutions. This meeting can occur either individually or in groups, and can be done through individual processes or involving certain institutions.

The function of the labor market is very broad, covering the economic sector and other sectors. The functions of labor are as follows:

1. Functions as a means to provide labor.
2. Functions as a tool to obtain information about employment.
3. Act as a means to connect job seekers with individuals or institutions that need workers.

Labor Market in Islam

According to Imam Syaibani, work refers to efforts to obtain income or value legally. In Islam, the concept of work as an element of production is based on the concept of *istikhlaf*, where humans have the responsibility to prosper the world and are also responsible for the management and development of wealth given by Allah SWT to meet human needs. (Idwal, 2014)

Labor includes all efforts and efforts made by individuals both physically and mentally with the aim of receiving commensurate rewards. This includes various types of work that involve physical and intellectual activities. As one of the factors of production, the role of labor has a significant meaning. All natural resources have value that cannot be explored if they are not exploited and processed by humans through work efforts. Although nature provides abundant wealth, without human effort, all of that potential will remain untapped.

The labor market from an Islamic perspective can be explained as the fulfillment of labor demand with fair wage payments, in line with the supply of labor from the workforce. (Wahyu Syarvina, 2022) The values adopted in the Islamic labor market include justice, honesty, and the promise of appropriate recompense from Allah for the work done. These principles are in accordance with Allah's teachings in QS. Al-Jumua verse 10 which reads:

فَإِذَا قُضِيَتِ الصَّلَاةُ فَانْتَشِرُوا فِي الْأَرْضِ وَابْتَغُوا مِنْ فَضْلِ اللَّهِ وَاذْكُرُوا اللَّهَ كَثِيرًا لَعَلَّكُمْ تُفْلِحُونَ

Meaning: "*When the (Friday) prayer has been performed, spread out on the earth, seek the bounty of Allah, and remember Allah much that you may be successful*".

The verse above explains that as a servant of Allah, a human being is encouraged to work in their lives by always following the commands of Allah SWT. Islam really expects its

people to be someone who seeks bounty on this earth, because it will have an impact on creating domestic economic stability and increasing social welfare.

Digitalization of the Labor Market

Technological changes, especially in the form of digitalization, have had a significant impact on the labor economy. To understand the shifts that have occurred in the demand for skills and job structure, there are several relevant theories to study.

1. **Skills Theory Based on Routine:** This theory was put forward by Autor, Levy, and and highlights changes in the demand for skills in the labor market. According to this theory, jobs can be classified based on their level of routine. Jobs with high routines, such as repetitive and programmed tasks, tend to be automated with technological advances. In contrast, low-routine jobs, which involve complex tasks and rely on human skills, tend to persist longer. Therefore, digitalization has led to a decrease in demand for routine jobs and an increase in demand for jobs that require analytical skills, creativity, and human interaction.
2. **Structural Shift Theory of Jobs:** This theory refers to changes in the composition of jobs caused by technological developments and innovation. n that the adoption of new technologies can trigger structural shifts in jobs. Newly introduced technologies can replace jobs previously performed by humans, either through automation or replacement of certain tasks. However, along with this shift, new jobs also emerge that involve the use of relevant technology and skills. Therefore, it is important to understand how technological innovation affects the job structure and skill requirements in the labor market.
3. **Skills and Income Distribution Theory:** This theory highlights the relationship between labor skills and income distribution in society. According to Becker, the skills possessed by individuals will contribute to their productivity and ultimately affect the level of income earned. In the context of digitalization, technical, analytical, and digital skills are becoming increasingly important to achieve high levels of productivity. (Arison HN, 2023)

3. METHODS

In this writing, the research method applied by the researcher includes an in-depth literature review. The researcher collects information from various reliable sources, such as scientific journals, books, and publications of international organizations related to the topic being discussed. The data we analyze includes employment statistics, digitalization patterns

in key sectors, and case studies of companies or countries that have adopted new technologies. This analysis aims to provide a more comprehensive understanding of the impact of digitalization of the labor market in the perspective of Islamic economics.

4. RESULTS

The results of the analysis found by researchers show that digitalization can have a positive and negative impact on the absorption of Indonesian labor. Good digitalization can create a flow of various relevant economic information easier, thereby increasing job opportunities.

Macroeconomic analysis in this case is where the meeting point for labor demand from both the private and government sectors with the supply of available labor. The labor market can be considered a market for important factors, and in general has a structure and nature similar to the goods or output market, the function of bringing together labor service owners, which can be individuals or groups of workers, with parties who use labor, be it individuals or private or government institutions. This meeting can occur either individually or in groups, and can be done through an individual process or involving certain institutions.

Data from the National Labor Force Survey (Sakernas) by the Central Statistics Agency in August 2022 showed that the number of workers in Indonesia reached 143.72 million, with a labor force participation rate of around 68.63%. The millennial generation and generation Z dominate the workforce. Muchamad Yusuf as Head of the Labor Market Center at the Ministry of Manpower of the Republic of Indonesia, revealed that job seekers, especially from generation Z, have unique and different preferences due to technological changes. There are three factors that are challenges and influence changes in the national and international labor market, namely:

1. Technological changes from level 4.0 to 5.0 which have resulted in the loss of a number of jobs as well as the emergence of new jobs.
2. Changes in work patterns due to the Covid-19 pandemic which provide many choices of ways of working, including Work from Home.
3. Demographic changes that increase the flow of worker migration around the world. All of these factors change patterns or norms in the labor market both nationally and globally.

As a result, these changes encourage job seekers and employers to adjust current work patterns and relationship dynamics. Companies face difficulties in finding prospective

workers who have the skills they need, and conversely, prospective workers also face difficulties in acquiring these skills through formal training or education.

5. DISCUSSION

As seen in the first factor, there are several companies that have laid off workers as a consequence of the digitalization process, arguing that this step was taken to increase company efficiency. Efficiency in this context refers to the company's efforts to limit the use of resources, including limiting the use of labor, by replacing them with machines or transforming manual processes into digital processes.

Digitalization has had a significant impact on the labor economy. Technological changes have changed the demand for skills in the labor market, with higher demand for digital, analytical, and technical skills. According to the "Future of Jobs" report by the World Economic Forum in 2020, it is estimated that more than 50% of jobs that will be needed in 2025 will require technology skills such as artificial intelligence, data analysis, and software development. In addition, a survey conducted by PwC in 2022 showed that 77% of company CEOs worldwide reported that they had difficulty finding employees with the required technical skills.

This data shows the importance of digital skills in facing the demands of the increasingly evolving labor market. Digitalization has caused a structural shift in the composition of jobs. Some routine and repetitive jobs tend to be replaced by automation or computerization. However, sectors that require more complex and creative skills, such as graphic design, digital marketing, and online content development, have developed

The Manpower Law has not yet fully regulated the impact of this digitalization. Protection for workers or laborers related to the impact of digitalization is only indicated in Article 164 Paragraph (3), indicating the ambiguity in the norm. (Astariyani, 2018) The UUK explains that termination of employment by employers against workers or laborers can occur without reason due to company losses consecutively for 2 years or due to company efficiency, but with certain conditions. Companies are required to provide severance pay to workers or laborers of two times the term of office, a term of office bonus of one time the term of office, and replacement money for rights in accordance with the provisions of Article 156 Paragraph (4), not due to force majeure.

Islam shows an inclusive nature towards all types of social change, including the development of science and technology, which can always be accepted and in accordance with the teachings of Islam. (Rachman, 2019) In the field of muamalah, including

transactions or doing business, which means the labor market falls into this category because the labor market is a place where job seekers and employers meet, Islam is also not against the use of technology. In Islam, Allah has given an overview of the technology listed in the QS. Al-anbiya verse 80 which reads:

“And We taught David to make armor for you, to protect you in your battles; So you should be grateful to Allah” (QS. Al-Anbiya verse 80).

In this verse, Allah SWT tells the Prophet David how to make armor for protection in war. This verse provides an understanding that making special armor for soldiers is a technological development that is acceptable in Islam. (Rasyiani Putri, 2021)

6. CONCLUSION

Macroeconomic policies, such as fiscal and monetary policies, can affect economic behavior, including economic activity, the economy, the economy, and inflation. The labor market is considered a strategy to reduce poverty and poverty rates. The government's efforts to protect workers from the impact of digitalization are contained in the Manpower Law Article 164 Paragraph (3). Islam in viewing digitalization today is to accept this development because it is considered a development of science and technology, as stated in Qs. Surat Al-Anbiyat verse 80.

Digitalization can have positive and negative effects on the absorption of Indonesian workers. Data from the National Labor Force Survey (Sakernas) by the Central Statistics Agency in August 2022 showed that the Millennial Generation and Generation Z dominate the workforce because they have unique and different preferences due to technological changes. There are three factors that are challenges and influence changes in the national and international labor markets, namely the loss of a number of jobs as well as the emergence of new jobs, changes in work patterns that provide many choices of ways of working, including Work from Home and demographic changes that increase the flow of worker migration around the world. There has been a shift in the skills required in the labor market, structural changes in jobs, and the introduction of social and regulatory policies. It is important for individuals, businesses, and governments to recognize these impacts and take appropriate steps to address them.

Limitation

To face the challenges in the digitalization era, cooperation from all parties is needed, especially in addressing issues related to automation and its impact on employment. Therefore, several recommendations are proposed, including:

1. Universities, as the highest educational institutions, can begin to hone digital literacy and the skills of students who need the world of work in the current digitalization era.
2. The government, as a policy guardian, must participate in maintaining the quality of digital education provided by universities and be willing to take firm action against any form of deviation.
3. The government needs to create clear legal provisions or laws to protect the workforce from the rapid development of digitalization today.
4. All workers must be ready to adapt to the challenges of the era in the digitalization era because it supports future careers
5. Start honing skills for all workers to take part in digital training.

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