



**Change Labor Force Structure in Indonesia: An Overview
Demographic and Economic Literature**

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ARTICLE INFO	ABSTRACT
<p>Accepted : March 9 2025 Revised : April 9 2025 Approved : May 9 2025</p> <p>Keywords: Labor Force Structure, Demographic Bonus, Labor Market, Skill Mismatch, Employment Policy, Economic Development</p>	<p>This study aims to analyze the structural changes in the Indonesian workforce using an approach that integrates demographic and economic perspectives. The primary objective of this study is to explore the dynamics of the workforce composition stratified by age, gender, education, and economic sector, and their impact on national development policies and sustainable economic growth. These structural changes are examined within the framework of demographic transition, urbanization, economic globalization, and technological advances, which simultaneously influence labor supply and demand.</p> <p>The techniques used a systematic literature review of scientific publications, policy reports, and official secondary data from various national institutions over the past two decades. The analyzed references were selected based on their thematic relevance, empirical validity, and contribution to explaining changes in the structure of the Indonesian workforce. The analysis method was thematic and descriptive-critical to capture patterns of change, key challenges, and emerging strategic opportunities.</p> <p>The analysis shows that Indonesia is currently experiencing a demographic bonus, marked by an increasing number of individuals in the productive age group. However, this potential has not been fully utilized due to low female participation rates in the workforce, a skills gap, and structural inequalities between the formal and informal sectors. Furthermore, a significant shift from the primary to the tertiary sector has been observed, but this has not been accompanied by improvements in job quality. This study recommends strengthening employment policies, investing in vocational education, and restructuring the labor market to support an inclusive and sustainable economic transformation.</p>

INTRODUCTION

Demographics power work plays important role in influence direction and speed growth economy a country. In Indonesia, the transformation structure population, especially increasing proportion age work, has create dynamics new in the labor market work. Existence population big young offer opportunity significant demographic, but also presents challenge alone, especially related readiness power Work in fulfil need sectors growing economy. One of issue crucial issues faced is existence inequality between skills power work and demands competence of the job market, which is then create gap productivity and efficiency. In order to developing adaptive and inclusive development strategies is important For do analysis to characteristics demographics power work, trends participation force work, and skills mismatch problem. Projection show that amount power Indonesia's work will Keep going increase in period 2018 to 2023 (Ferdiyan Saputra et al., 2024)

Based on data from the Central Statistics Agency (BPS), the number of power work in Indonesia in 2023 was recorded reach around 140 million soul, with proportion the biggest be in range aged 20 to 39 years. Increase percentage resident age Work show that Indonesia is in the middle enjoy the demographic bonus period, namely when amount resident age productive is at in very dominant proportions. If potential power Work This can distributed optimally through creation field adequate work, then opportunity For push growth economy will the more big. However However, Indonesia still face challenge in matter level participation force relatively high workload (TPAK) low. Although amount power Work Keep going increased, Indonesia's TPAK in 2023 will only reach around 68%, left behind compared to neighboring countries such as Malaysia and Thailand which recorded TPAK above 70%. Development amount power work in Indonesia is greatly influenced by the dynamics economy, structure demographics, as well as policy government. Growth This part big sourced from increasing population age productive, which is consequence from number relative birth tall during a number of decade lastly, so that push surge amount resident age young.

As time goes by time, structure force Indonesia's work has experience quite a transformation complex. Displacement power Work from sector agriculture going to industry and services be one of indicator important from the process of industrialization and modernization economy national. In addition, participation Woman in the world of work Keep going increased, while digital economy starts open forms work new. Behind trend positive here, there is problem urge like domination informal sector, inequality access to training, as well as regional disparities in availability work productive. National development No can released from role strategic population and fields Work as two main pillars that support each other influence. Interaction between both of them give significant impact to development social, economic, even culture something nation. For that, a comprehensive analysis to issues related become very important, especially in understand variables demographic like dynamics growth population, distribution age, and trends migration that forms structure employment in a way overall (Mukaromah et al., 2024)

Growth economy can interpreted as improvement income national or total production a country that occurs in a way sustainable from year to years. Almost all countries are trying For speed up rate growth the economy Because aspect This be

one of indicator important in evaluate level welfare public as well as progress development a country(Nainggolan & Budiman, 2024)

main purpose from journal This is For serve A review comprehensive literature related change structure force work in Indonesia, with integrate approach demographics and economics in a way balanced . Through exploration to various publication scientific , report institution official , and available empirical data , journals This try map trends the main thing that forms structure power current Indonesian work this , and evaluate the impact to development economy national .

In a way special , journal This aim For :

1. Analyze change composition force work in Indonesia in two decades lastly , including growth amount power work , shift distribution age , gender role , level education , as well as sector absorbing economy power Work .
2. Identifying influence dynamics demographics , such as demographic bonus , urbanization , transition fertility and mobility resident to structure force work and potential economy that can produced from change the .
3. Review impact change economy national and global, including industrialization , digitalization , and change pattern consumption , against request power work and restructuring sector economic factors that affect the job market national .
4. Review gap skills mismatch between power available jobs and the needs of the world of work that continue to grow developing , including challenges faced in matter education , training vocational and readiness face digital economy .
5. Evaluate policy employment and development source Power humans who have implemented by the Indonesian government , as well as see to what extent the policy the capable respond change structural in the labor market Work .
6. Drafting recommendations based literature that can made into runway conceptual in designing policy more employment inclusive , responsive and sustainable , in order to optimize potential power Work national in support growth economy .
7. Give contribution to development study academic cross discipline , especially in understand connection between dynamics demographics and economics in context developing country development like Indonesia.

Through achievement goals said , journal This expected No only can enrich treasury academic in field studies employment and development , but also to become reference for taker policies , researchers , and other parties related other in formulate development strategies power adaptive work to changing times. With approach systematic literature , journals this also aims become runway beginning for study further continuation empirical and applicable in the future .

Change in structure force Work is indicator important that reflects dynamics social , economic , and demographic a country. In Indonesia, the transformation This ongoing in very strategic context : middle country is in the demographic bonus phase which is marked by with domination resident age productive , but at the same time face challenge Serious related labor market readiness Work For absorb and optimize potential the . Urgency study This appear from fact that characteristics force Indonesia's work has experience significant changes in a number of decade

last . Shift sector work , improvement power informal work , growth participation Work women , and inequality skills become issues that are increasingly real . Change This influential direct to productivity national , distribution well-being and effectiveness policy existing employment .

In the era of globalization and digital transformation , the labor market Work national sued For adapt with fast . However , the discrepancy between skills power work and market needs (skills mismatch) is still become challenge main . This is exacerbated by Indonesia's relatively low Labor Force Participation Rate (TPAK) low compared to neighboring countries like Malaysia and Thailand, though amount power Work Keep going increase. From the side demographics , increasing population age productive consequence height number birth in the past , pushing surge amount power work. However, without improvement quality and availability chance proportional work, conditions This precisely can cause pressure more social and economic big. From the side theoretical , study This important Because fill in emptiness studies that link factor demographics and economics in a way holistic in context employment in developing countries . Meanwhile in a way practical , results study This can become references in compile policy employment , education , and development better economy inclusive and adaptive .

Demographic Bonus and Economic Conditions in Indonesia

Population is one of the fundamental aspects in the development process national , especially in developing countries developing . Problems related population in Indonesia is still become common issues found in many developing countries others . Residents something nation , if viewed as source Power human beings , have a very important role in push growth economy . Various study empirical show that improvement income national per capita is highly dependent on the ability something nation in develop quality source Power human beings , who are embodied through improvement productivity as well as efficiency Work .

Growth amount population that continues to grow increase accompanied by with decline reserves source Power natural become challenge Serious for the world, including Indonesia. It is necessary strategic and targeted policies for generation young people so that the job market can adapt with dynamics change structure population , especially in face surge amount resident age work that has been happen since 2010. Research This aim For describe demographic bonus conditions as well as profile resident age productive in Indonesia, at the same time analyze opportunities and challenges faced government , in particular government area , in manage source Power nature in its area (Satyahadewi et al., 2023)

Structure demographics along with changes that occur from time to time is factor important things that can influence rate growth economy . Ignoring aspect demographics can cause inconsistency in policies and impact on the weakness planning development . As a result , it can happen imbalance in various field , good economic , social , and politics . Among various sector , sector economy be the most affected by change structure demographics . Demographic factors also have role in determine level investment , savings , consumption , and growth economy . Efforts to reach growth high economy and development sustainable become objective main every country, but matter the demand proper identification to factors potential as well as optimal (Ayuningtyas & Sari Islami, 2022)utilization

Demographic bonus can be called a phenomenon where the population is very beneficial for society in terms of development because the number of productive age is more than the non-productive age, in the sense that the dependency burden will be reduced by a ratio of 64 percent of the productive age population to only around 34 percent of the non-productive age population. In this case, the productive age is the population that has reached the age of 15-64 years and has been declared capable of becoming workers and produces a percentage of around 66.5 percent of the total population of Indonesia, while in the non-productive age of the Indonesian population 0-14 years around 27.3 percent and above 64 years around 6.1 percent of which are children and the elderly. There are several opinions regarding the demographic bonus. The demographic bonus can be said to be a blessing because the abundance of the productive age will be beneficial from the development side so that it can increase economic, social, and cultural growth to a higher level, but the demographic bonus can be a disaster if it is not prepared for its arrival from now. (Cory Marlia et al., 2022)

Demographic bonus is a phenomenon that only happens once in a while cycle in the life of a country and in general ongoing during one up to two decades. This phenomenon is temporary because, along with working time, the proportion of the resident age productive will decrease consequently increase the amount of the non-productive. This condition causes a significant improvement on the ratio of the dependency burden. A number of countries in the world have succeeded in utilizing the demographic bonus period effectively, so that now they develop and become a new strength in the global economy (Satyahadewi et al., 2023). According to data from the Central Statistics Agency (BPS) in February 2024, the number of the workforce in Indonesia reached 149.37 million people with a participation level of 95.18%. This data reflects the level of involvement in the job market and becomes a basis for analyzing the connection between education and opportunities.

In a more detailed way, general high school graduates have a participation level of 93.27%, while vocational school graduates amounted to 91.38%. Findings show that although education in vocational schools is designed to produce work-ready graduates, vocational school graduates still face constraints in getting suitable jobs with competence. On the other hand, diploma graduates or academy show a participation level more than 95.13%, indicating that education in vocational schools plays a significant role in increasing work opportunities through mastery of skills specific to industry needs. University graduates have a participation level of 94.37%, more than compared to high school and vocational school graduates, but a little more low compared to diploma graduates. This indicates that graduates with education still face challenges alone, such as a mismatch between academic skills with labor market needs or tightness of competition in the formal sector.

In a general way, improvement in education level compared straight with improvement in work opportunities. However, without relevant skills needed in industry, education alone can also increase the risk of unemployment. BPS also noted that education impacts on the type of jobs and income levels, where the more education someone has, the more opportunities they get to earn more. Good. Although thus, the level of unemployment for vocational school graduates (8.6%) is still more than compared to high school (6.31%) and university (5.52%). In fact, the level of unemployment for elementary school graduates (2.32%) is relatively more low.

Because part big working in the informal sector such as laborers , farmers , traders small , and workers loose that is not need education tall (Febrianty et al, 2025)

METHOD

Study This use approach literature review or review library as method main in compilation study scientific approach This chosen Because aim For get comprehensive understanding about the demographic bonus phenomenon in Indonesia and relation with employment , literacy economy and development source Power human . Literature review method done through the process of collection , selection , analysis and synthesis various source relevant and credible literature . Sources the covering book academic , articles journal scientific national and international , report research institution official. Collection process literature done with method searching scientific databases such as Google Scholar, Garuda, and Sinta . using keywords like Indonesia's demographic bonus , employment and education vocational , literacy economy society , and the structure of the workforce . The literature collected Then selected based on criteria certain , namely relevance with topic research , data validity , currency source (minimum five years) last , namely 2020–2025), and contribution to strengthening argumentation theoretical . In addition , documents are also used policy public , such as Regulation President Number 68 of 2022 concerning Revitalization of Vocational Education and Training , which has relevance direct to effort government in face challenge employment and demographic bonus .

All secondary data obtained interpreted For produce systematic , logical and based discussion proof empirical approach this also allows researchers For evaluate to what extent the policy government and development strategies source Power man has walk effective in support growth economy and expansion chance work . With Thus , the use of method literature review in study This No only functioning as base conceptual , but also as means For connect theory and empirical data to compile relevant recommendations for formulation policy employment in the demographic bonus era .

RESULTS AND DISCUSSION

Change Structure of the Workforce in Indonesia

Search results literature show that structure force Indonesian work is experiencing enough shift big in two decades last . Based on data from the Central Statistics Agency (BPS, 2024), the number of power Work national reached 149.37 million soul with level participation Work by 95.18%. Shift significant happen from primary sector (agriculture) towards sector secondary and tertiary , marking the process of industrialization and diversification economy . Currently , the sector service become absorber power Work the largest , followed by industry manufacturing and trade .

Change This show increasing complexity economy as well as need power Work with more skills diverse . However , the increase amount power Work the Not yet in line with improvement its quality . Its low competence technical and non-technical Still become obstacles , especially for workers in the informal sector . Conditions This in line with Human Capital Theory put forward by Gary Becker (1969), where

investment in education and training viewed as factor key improvement productivity and growth economy .

Demographic Bonus and Potential Its use

Indonesia at the moment This middle enjoy demographic bonus phase , where the proportion resident age productive (15–64 years) reached approximately 66.5% of the total population . The situation This open opportunity big for improvement growth economy national Because availability power more work Lots potential increase national productivity and output . Although Thus , the opportunity this is also accompanied by a number of challenge like low participation Work women , tall level unemployment among young , and mismatch between skills possessed power Work with needs of the industrial world .

Various studies (for example by Cory Marlia et al., 2022 and Satyahadewi et al., 2023) show that without appropriate policies in the field education , training vocational , and expansion field work , excellence demographic This can changed become burden development . Therefore Therefore , an employment strategy is needed that focuses on increasing quality source Power man through alignment system education with job market demands as well as strengthening training based competence.

Mismatch Skill Mismatch and Its Impact to Unemployment

One of problem fundamental in the labor market Indonesian work is mismatch skills between power work and needs industry (skill mismatch). Based on BPS data (February 2024), the level of unemployment open highest originate from graduate of School Intermediate Vocational (SMK) by 8.6%, more tall compared to high school graduates (6.31%) and Higher Education (5.52%). Condition This show that even though SMK is designed For produce graduate of Ready work , suitability between curriculum education and market needs are still not optimal.

This matter in harmony with Skill Mismatch Theory, which explains that gap between ability power work and needs industry is reason main slowness absorption power work in the formal sector (Rahmayani et al., 2025). In the context of this , policy Revitalization of Vocational Education and Training through Regulation President Number 68 of 2022 becomes step strategic . Government , institutions education and industrial world need strengthen collaboration in designing adaptive curriculum to development technology as well as digitalization economy.

Policy Government in Strengthening Employment

Indonesian government has take various step strategics For strengthen absorption power Work at a time optimize demographic bonus potential . Law Number 13 of 2003 concerning Employment confirm right every citizens to get decent work and a dignified life . In practice , the government focused on expansion chance Work through two approaches main : development industry congested work as well as project infrastructure public like development roads , bridges , water channels and dams that can open field Work new. However , the increase amount field Work need balanced with improvement quality power work . Through policy Revitalization of Vocational Education , government make an effort synergize curriculum education with industrial world needs through Work The same cross

sectors , including with the Chamber of Commerce and Industry (KADIN). Certification program skills , training based competence , as well as improvement flexibility connection work in the digital era becomes focus main For increase Power competition power Work national.

Implications towards Economic and Social Development

Based on results study , Indonesia's success in Taking advantage of the demographic bonus momentum is very dependent on synergy between policy education , training , and employment . Without improvement quality source Power human , number resident age large productivity precisely potential add number unemployment and widening gap social . Therefore that , policy development economy need directed at creation field Work quality , sustainable and inclusive , accompanied by improvement access education and literacy economy throughout Indonesia .

In a way overall , changes structure force Work show that Indonesia is move going to economy based knowledge and skills (knowledge and skill-based economy). For ensure growth equitable and sustainable economy , strengthening policy employment , investment in education vocational , as well as improvement literacy economy become priority main . This effort No only strengthen Power competition national , but also become foundation important for achievement development inclusive social and economic future .

CONCLUSIONS

Analysis results show that change structure force work in Indonesia reflects dynamics transformation the economy is currently taking place , where the shift power Work from primary sector to sector secondary and tertiary marks the process of modernization and diversification economy national . Although change This bring direction positive for economy , still there is a number of challenges that need to be overcome faced , such as mismatch between skills power work and needs industry (skill mismatch), low level literacy society, as well as Not yet maximum implementation education vocational in print power work that has Power competition tall .

The current demographic bonus phenomenon happen open opportunity big for Indonesia to speed up growth economy through improvement productivity resident age work. However, the opportunity This only can utilized optimally when accompanied with policy development that focuses on increasing quality source Power human. Without existence improvement capacity education, training vocational and literacy economy, advantages demographic the precisely potential become burden development consequence increase number unemployment in groups age productive. Various policy government, such as Revitalization of Vocational Education and Training and development field Work through industry congested works and projects infrastructure, is step strategically appropriate appreciated. However, the effectiveness its implementation Still need strengthened through more collaboration synergistic between government central and regional institutions education, as well as the business world so that the results more comprehensive and sustainable.

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