



# The Impact of Financial Transactions, Economic Welfare, and Youth Demographics on Indonesia's Economy: A Path Analysis Approach

Samuel Dendy Krisandi

Samuel Dendy Krisandi, Pontianak State Polytechnic

**Abstract**— This research examines the relationship between three indices: the Financial Transaction Index (FTI), which measures the volume and value of financial transactions in Indonesia; the Economic Well-Being Index (EWI), which measures the level and distribution of economic welfare in Indonesia; and the Youth Demographic Ratio, which measures the proportion of young people, especially Generation Z, in the population. The research applies Principal Component Analysis (PCA) and Path Analysis to analyse the data and test the hypotheses. The results show that FTI has a direct and consistent impact on financial inclusion and consumer behavior, while EWI impacts broader economic policies and indicators. The Youth Demographic Ratio, especially Gen Z, appears to be stable and not influenced by the other indices. The research provides insights into the complex dynamic of these indices and the young population and can help in understanding the implications for Indonesia's economic growth and stability.

**Keywords**— Financial Transaction Index, Economic Well-Being Index, Youth Demographic Ratio, Generation Z, Path Analysis.

## I. INTRODUCTION

Financial inclusion has benefits for both individual financial well-being and the wider economy. By lowering inflation variability, financial inclusion helps to keep a stable economic environment. This stability is good for long-term economic planning and investment, as it reduces unpredictability and creates a more certain economic landscape (Chebli & Saidi, 2024; Esu, 2023; Fong et al., 2018).

The ways that Generation Z consumers act, and the broader effects of financial inclusion are related parts of a modern economy. It is important for policymakers, businesses, and financial institutions to understand these dynamics if they want to adjust to the changing economic conditions and to support lasting economic growth and stability.

Based on the World Bank data, the growth rate of Gen Z's population in Indonesia changed between 1997 and 2012, reaching a high of 1.72% in 1999 and a low of 1.07% in 2012. The average yearly population growth rate for this period was 1.34%, which means that the population of Indonesia grew by about 3.5 million people every year. The total population of Indonesia grew from 200.8 million in 1997 to 246.9 million in 2012, an increase of 46.1 million or 23%. According to the latest census data, the proportion of Generation Z of Indonesia, defined as those born between 1997 and 2012, ranges from a low of 24.4% to a high of 27.7% of the total population. This group has a big impact on the country's consumption patterns, as they have different tastes and habits than older



generations. The report estimates that Generation Z accounted for 15 percent of Indonesia's total consumption in 2019, and projects that this percentage will rise to 24 percent by 2030, representing a minimum of \$40 billion and a maximum of \$60 billion in extra spending.

A robust Financial Infrastructure is indeed a cornerstone for economic prosperity, as it facilitates a wider range of funding accounts, along with credit and debit transactions (World Bank, 2019; Yun, 2021). This inclusivity fosters a conducive environment for investments and stimulates spending, which are vital for economic growth. However, it's imperative to navigate the challenges prudently; without adequate financial literacy, an increase in credit transactions can escalate into unsustainable debt levels. Therefore, maintaining a balance in credit usage is essential to ensure economic stability and prevent financial crises (Arif-Ur-Rahman & Inaba, 2020; Teresiené et al., 2021).

Empowering Generation Z with financial literacy is a cornerstone for building a robust economy. When young people are educated about finances, they are equipped to make informed decisions, leading to a lifetime of economic participation and stability (Hong Shan et al., 2023). However, the challenge lies in providing equitable access to financial education and resources. Overcoming this hurdle is essential for fostering an inclusive environment where every young person has the opportunity to become a knowledgeable economic actor. This inclusivity not only strengthens individual financial well-being but also enriches the broader economic fabric (Bindhani & Gopinath, 2024; Hoffman et al., 2019; Soldevila-Pérez et al., 2022).

The rise of Generation Z is set to shape the future in profound ways. As they enter the labour market, their numbers could significantly boost economic growth by addressing current workforce shortages (Benítez-Márquez et al., 2022; Vieira et al., 2024). Their unique consumer behaviors are expected to influence market trends, technology adoption, and spending habits, potentially leading to a surge in innovation as this tech-savvy generation pushes for advancements and starts new businesses (Koksalmis & Gozudok, 2021; Priporas et al., 2017). However, challenges such as ensuring they have the right skills for today's job market, achieving gender equality, and fostering social inclusion will be critical to harnessing their full potential.

The economic landscape is significantly influenced by the youthful demographic, which brings a vibrant and dynamic element to the market (Bloom et al., 2001; Sun et al., 2023). This group, often characterized by their adaptability and eagerness to embrace new technologies, has a profound impact on investment trends. Investors are typically drawn to markets with a young, energetic workforce, anticipating that these qualities will translate into high productivity and innovative developments. The youth's inclination towards technology not only fosters a culture of innovation but also propels technological advancements that can revolutionize industries and create new sectors entirely (Sun et al., 2023).

Moreover, Generation Z, with their distinct consumer behavior, plays a crucial role in shaping market growth. Their preferences and spending habits often set trends and drive demand for new and diverse products and services (Grigoreva et al., 2021). However, this demographic also presents challenges that need to be addressed to



maintain economic stability. One of the primary concerns is unemployment; ensuring that there are sufficient employment opportunities for the young population is crucial for harnessing their potential and avoiding the socioeconomic issues that arise from high unemployment rates.

Another significant challenge is debt management, especially among young adults who may be new to credit usage. Educating this demographic on responsible financial practices is essential to prevent the pitfalls of debt accumulation, which can have long-lasting effects on both individual financial stability and the broader economy (Aydin, 2022; Muhamad & Norwani, 2019). Balancing credit usage with financial literacy and sound economic policies is vital for fostering an environment where the youth can thrive economically without being burdened by debt (Azimi, 2022).

Economic growth and innovation can benefit from the young population, but policies and programs need to address the challenges of unemployment and debt management (Rasheed & Jianhua, 2023; Varsha Pramod & Ramachandran, 2023). This way, economies can grow and also stay stable and resilient amid changing demographics. Policymakers must find the right balance between using the positive aspects of a young workforce and tackling the related issues to foster economic growth and stability (Varsha Pramod & Ramachandran, 2023).

Indonesia has both opportunities and challenges from the interplay of the FTI, EWI, and the Youth Demographic Ratio. The young population can enhance growth and innovation with more financial inclusion and better economic policies, but problems like inflation, credit access, and youth employment need to be resolved to enjoy the demographic dividend. The World Bank projects steady growth for Indonesia, showing the possibility of using these indices for economic advancement. However, structural issues like inequality and productivity still need to be improved for long-term prosperity. The FTI and the EWI interact with the Youth Demographic Ratio in a complex way that affects economic growth and stability. The FTI can help the youth participate in the economy, while the EWI can lower risks from economic shocks. However, as Indonesia favours stability over rapid growth, the challenge is to use the young population's potential for sustainable development without harming financial stability. Policymakers need to comprehend these interactions and their outcomes to balance growth and stability with Indonesia's growth goals.

## II. LITERATURE REVIEW

The Financial Transaction Index (FTI) is a multifaceted indicator that can provide insights into the economic vitality and financial health of a region. The number of accounts held by individuals and businesses often reflects the degree of financial inclusion, a key aspect of economic well-being (Agrawal, Sharma, Dhayal, et al., 2024; Atta, 2023; Malik et al., 2022).

Debit transactions, representing the outflow of funds from these accounts, can serve as a proxy for consumer spending and economic activity (Bhattacharya & Rahman, 2024; Cevik, 2022; Lindgreen et al., 2018). When consumers and businesses are spending more, it typically signals confidence in the economy and can lead to



increased production and employment. Thus, a rise in debit transactions often correlates with a robust economic environment (Bhattacharya & Rahman, 2024; Lindgreen et al., 2018).

On the other hand, credit transactions, which reflect the inflow of funds, can be indicative of borrowing and investment levels (Bhattacharya & Rahman, 2024; Lindgreen et al., 2018). When credit transactions are on the rise, it may suggest that consumers and businesses are investing in future growth, which can be a precursor to economic expansion. This borrowing and investing activity can stimulate production, innovation, and the creation of new markets (Konstantakopoulou, 2023; Wehinger, 2011).

Furthermore, the Credit to GDP Ratio is another significant component of the FTI. This ratio compares the total credit in the economy to the gross domestic product (GDP), providing a measure of economic leverage. A higher Credit to GDP Ratio can indicate that there is more credit available relative to the size of the economy, which can fuel economic growth through increased spending and investment (Fincke & Greiner, 2015; Hilton, 2021; Woo & Kumar, 2015). However, it is also important to monitor this ratio to ensure that credit growth is sustainable and does not lead to excessive debt levels that could pose risks to the economy (Bhattacharya & Rahman, 2024; Hilton, 2021).

The FTI encompasses several key financial indicators that, together, offer a comprehensive view of the financial dynamics within an economy. By analysing trends in account counts, debit and credit transactions, and the Credit to GDP Ratio, policymakers, economists, and investors can gauge the financial stability and growth prospects of an economy (Bhattacharya & Rahman, 2024; Hilton, 2021; Wehinger, 2011). It is important to consider these indicators in conjunction with other economic data to form a well-rounded understanding of the economic landscape.

The Economic Well-Being Index (EWI) is a multifaceted gauge that captures the essence of financial health within an economy. It intricately weaves various economic indicators, such as interest rates, bank lending rates, and inflation, to provide a comprehensive picture of economic prosperity (Feldkircher & Tondl, 2020; Oscar Arce et al., 2023). Interest rates, for instance, hold a significant sway over financial well-being; when they soar, they escalate borrowing costs, dampening consumer spending and business investment. Conversely, bank lending rates can act as a catalyst for economic vitality (Cao & Dinger, 2022; MORAIS et al., 2019). Accessible credit at favourable rates can stimulate entrepreneurial activities and consumer spending, thereby strengthening economic well-being (Agrawal, Sharma, & Dhayal, 2024). Inflation, the subtle yet pervasive force, can erode purchasing power if left unchecked, making the management of inflation a linchpin in safeguarding the populace's financial health (Hilmola, 2021). Thus, the EWI serves as a barometer, reflecting the nuanced interplay of these variables and their collective impact on the economic landscape.

### III. METHODOLOGY

This research employs Principal Component Analysis (PCA) and Path Analysis as statistical tools to examine the data on the Financial Transaction Index (FTI), the Economic Well-Being Index (EWI), and other economic



indicators in Indonesia. PCA is used to extract the main components of the FTI and EWI, reducing the data complexity and capturing the most relevant information. Path Analysis is used to test the causal hypotheses of the relationships between the FTI, EWI, and other variables, such as the Interest Rate, Bank Lending Rate, Inflation, Youth Demographic Ratio, and Gen Z statistics. These methods allow the researchers to explore the underlying patterns and connections in the data and to assess the impact of the FTI and EWI on the economic well-being of Indonesia.

The FTI and EWI measure economic activities and societal prosperity in Indonesia. These indices, along with the Interest Rate, Bank Lending Rate, and Inflation, show the financial situation and potential of the country. The Youth Demographic Ratio, especially the Gen Z group, is a large and important part of the population, set to shape future market trends and economic policies. Their participation in the economy is crucial for Indonesia's development.

Sources like the World Bank or Bank Indonesia offer public data on the Interest Rate, Bank Lending Rate, and Inflation. Census reports and BPS-Statistics Indonesia provide detailed demographic data, such as the Youth Demographic Ratio and Gen Z statistics. These sources help with analysing economic trends and making policies that suit the changing Indonesian market.

**Table 1. Statistic's Description**

Composite Variable	Variable	Definition	Min.	Max.	Average ( $\mu$ )	SD ( $\sigma$ )
<b>Financial Transaction Index (FTI)</b>	Account	Number of funding account	642.40	1588.99	994.99	253.43
	Debit	Number of transactions per debit	2.74	3.87	3.34	0.21
	Credit	Number of transactions of credit	1.11	1.77	1.44	0.15
	Credit to GDP	Credit to private sector of GDP	0.89	1.18	1.08	0.07
<b>Economic Well-Being Index (EWI)</b>	Interest Rate	The proportion of a loan that is charged as interest to the borrower, typically expressed as an annual percentage of the loan outstanding.	3.5	12.75	6.25	1.933
	Bank Lending Rate	The lowest rate of interest at which banks can lend money to other banks.	8.5	32.2	12.5433	5.247
	Inflation	General increase in the prices of goods and services	1.56	1136.25	568.9917	327.578587
<b>Youth Demographic Ratio</b>	Gen Z	Percentage of Gen Z population of total population	24.4	27.7	25.99332	1.41420485



Composite Variable	Variable	Definition	Min.	Max.	Average ( $\mu$ )	SD ( $\sigma$ )
<b>Youth Demographic Ratio</b>	Gen Z	Percentage of Gen Z population of total population	24.4	27.7	25.99332	1.41420485

The Financial Transaction Index (FTI) is a composite variable that encompasses various aspects of financial transactions within a given economy. It includes sub-variables such as the number of funding accounts, which represents the accessibility and prevalence of financial services to the public. The range of this variable, from a minimum of 642.40 to a maximum of 1588.99, with an average of 994.99 and a standard deviation of 253.43, indicates a significant variance, suggesting disparities in financial access among different demographics or regions.

The number of transactions per debit card is another critical component, reflecting the frequency of electronic payment usage, which has a narrower range from 2.74 to 3.87, an average of 3.34, and a standard deviation of 0.21. This suggests a relatively stable use of debit transactions across the board. Similarly, the number of transactions of credit, ranging from 1.11 to 1.77 with an average of 1.44 and a standard deviation of 0.15, might indicate the population's credit utilization habits, which appear to be less variable than debit transactions.

Lastly, the Credit to GDP ratio, which measures the credit provided to the private sector as a percentage of GDP, ranges from 0.89 to 1.18, with an average of 1.08 and a standard deviation of 0.07. This ratio is crucial for understanding the level of private sector leverage and its potential impact on economic growth and stability.

Overall, the FTI provides a multifaceted view of the financial health and behavior within an economy. It serves as a valuable tool for policymakers and economists who aim to gauge the effectiveness of financial policies, identify areas needing improvement, and understand the broader economic context in which these financial variables operate. The data presented can be used to inform decisions on regulatory changes, financial inclusion initiatives, and economic forecasting. Understanding the nuances of each variable and their interplay is essential for a comprehensive analysis of the financial system's dynamics.

The Economic Well-Being Index (EWI) is a composite measure that can include various economic indicators such as interest rates, bank lending rates, and inflation levels. Interest rates, which represent the cost of borrowing money, are crucial for understanding economic health. They can affect consumer spending, business investment, and the overall economic growth. The figures provided, such as 3.5, 12.75, and 6.25, could represent different interest rates over time or across different loan types. Similarly, bank lending rates are indicative of the financial health of the banking sector and the economy at large. Rates like 8.5, 32.2, and 12.5433 might reflect the variability in the cost of interbank lending, which can influence the rates that consumers and businesses pay for loans. Inflation, measured by the general increase in prices, is another critical factor. It affects purchasing power and can be a sign of economic stability or volatility. The numbers 1.56, 1136.25, and 568.9917 could be indicative of inflation rates at different times or in different economic contexts. Understanding these figures in relation to each

other provides insights into the economic conditions and trends that can impact financial decision-making and policy development.

The Youth Demographic Ratio, particularly concerning Generation Z, is a statistical measure that reflects the percentage of the Gen Z population in relation to the total population. This composite variable is crucial for understanding demographic trends, social dynamics, and potential market shifts. The data provided indicates a minimum percentage of 24.4 and a maximum of 27.7, with an average, denoted by the Greek letter mu ( $\mu$ ), of approximately 25.99332. The standard deviation, represented by the Greek letter sigma ( $\sigma$ ), is 1.41420485, suggesting a relatively tight distribution around the mean. This implies that in the observed population, the proportion of Gen Z individuals does not fluctuate widely, maintaining a consistent presence within the given range. Such information can be invaluable for policymakers, economists, and businesses as they plan for a future that increasingly involves this younger generation. It can influence decisions on education, employment, and product development tailored to the unique characteristics and preferences of Gen Z. Moreover, understanding this ratio helps in anticipating the challenges and opportunities that may arise as this demographic cohort matures and becomes more influential in society.

#### IV. RESULTS AND DISCUSSION

Utilizing Principal Component Analysis (PCA) in this context serves as a robust statistical method to distil these complex indices into principal components. This technique simplifies the data by transforming a large set of variables into a smaller, more manageable number of uncorrelated indices, which are linear weighted combinations of the original variables. Such an analytical approach is invaluable for policymakers and economists as it provides a clearer understanding of the underlying economic conditions and helps in formulating targeted interventions. The following pictures illustrate the difference between the composite variable FTI before and after PCA, showing how the data distribution, mean, and variance have changed because of the transformation. The pictures also highlight the most significant principal components that capture most of the information in the original dataset.

Financial Transaction Index: Before PCA      Financial Transaction Index: After PCA

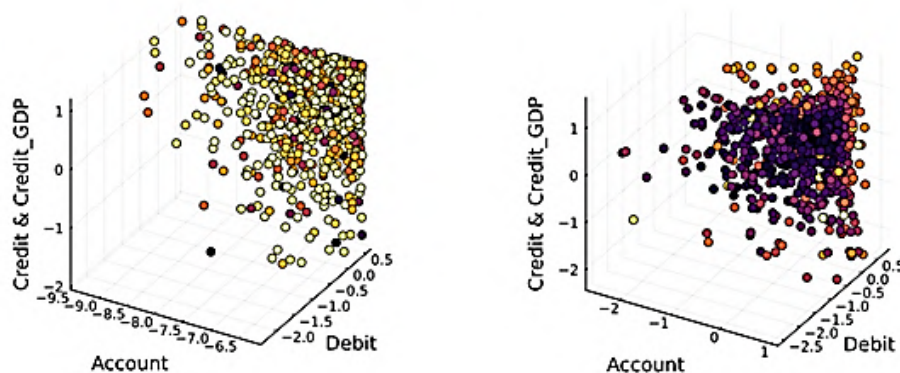
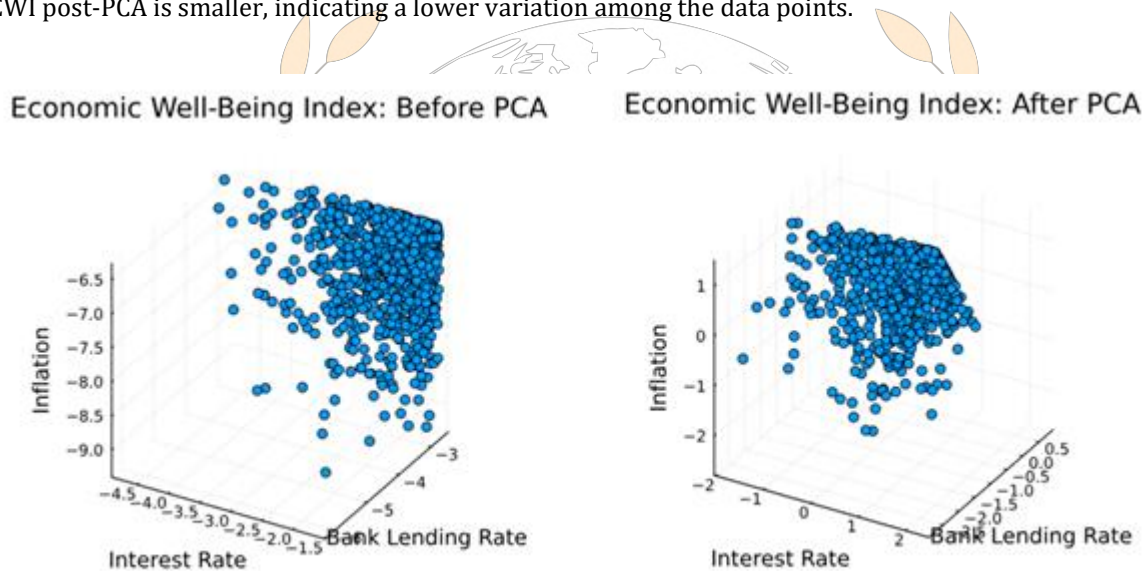


Figure 1. Financial Transaction Index (FTI)

The comparison between the Economic Well-Being Index (EWI) before and after applying Principal Component Analysis (PCA) is shown in the following picture. The picture shows how the data distribution, mean, and variance have changed due to the transformation. The picture also emphasizes the most important principal components that capture most of the information in the original dataset. The EWI data has several advantages from applying PCA. First, the data mean has been moved closer to zero, which means that PCA has made the data centred around the origin, which often makes the data analysis easier. Second, the data standard deviation has been decreased, which means that PCA has removed less relevant variations, keeping only the most influential features. Third, the data variance has been preserved, which means that PCA has kept the core structure of the data while reducing its dimensions. This means that PCA has identified the most useful components that reflect the underlying economic conditions and can be used for more analysis or predictive modelling. The observation shows that the average values in the Summary Statistics for EWI after applying Principal Component Analysis (PCA) are almost zero. This implies that the PCA has successfully centred the data. Also, the standard deviation in the Summary Statistics for EWI post-PCA is smaller, indicating a lower variation among the data points.



**Figure 2. Economic Well-Being Index (EWI)**

The pictures above depict the difference between FTI, EWI before and after PCA. They reflect the robust data that has been processed by PCA. Moreover, they give highlighted points through the statistics' description below. The statistics' description below describes how the model is working with the robust data from PCA.

One way to evaluate the quality of the PCA transformation is to compare the model fit between the original and the transformed data. The model fit measures how well the data can be explained by a linear combination of the principal components.

A higher model fit indicates that the principal components capture most of the variation in the data, while a lower model fit indicates that there are some features that are not well represented by the principal components. Table 2 shows the model fit for the FTI and EWI data before and after PCA.



**Table 2. R-Squared Values**

Symbol	Value
<b>R-squared (FTI before PCA)</b>	0.734
<b>R-squared (FTI after PCA)</b>	0.999
<b>R-squared (EWI before PCA)</b>	0.829
<b>R-squared (EWI after PCA)</b>	0.994

The table shows that the model fit has increased significantly after applying PCA to both FTI and EWI data. This means that the PCA transformation has improved the representation of the data by identifying the most relevant components and removing the noise and redundancy. The high R-squared values indicate that the principal components explain almost all of the variation in the data, which suggests that the PCA transformation has preserved the essential information and structure of the data. This also implies that the PCA transformation has reduced the dimensionality of the data without compromising its quality. Therefore, the PCA transformation can be considered as a successful and efficient technique for data preprocessing and analysis.

**Table 3. Standardized Coefficients and Significance Levels of Model**

Symbol	Value
<b>minus2ll</b>	-66465.6
<b>AIC</b>	-66429.6
<b>BIC</b>	-66341.3
<b>df</b>	18.0
<b><math>\chi^2</math></b>	18.0671
<b>p_value</b>	0.451239
<b>RMSEA</b>	0.00193101
<b>n_par</b>	18.0

The table above shows the standardized coefficients and significance levels of the direct, indirect, and total effects of the variables in the path model. Path Analysis is a powerful statistical technique used to examine the directional relationships between variables. Based on the given model, the minus two log likelihood (minus2ll) value of around -66465.6 shows a strong model fit, as smaller values are desired. The Akaike Information Criterion (AIC) and the Bayesian Information Criterion (BIC), with values of about -66429.6 and -66341.3 respectively, demonstrate a model that balances fit and complexity well. With 18 degrees of freedom, the model has enough independent data points to estimate parameters. The chi-square statistic near 18.0671 and a p-value around 0.451239 suggest that the model's predictions do not differ significantly from what was observed; thus, there's no reason to reject it. The p-value above 0.05 further supports the model's adequacy. Moreover, the Root Mean Square Error of Approximation (RMSEA) close to 0.00193101 indicates a precise fit to the population's covariance matrix, as values below 0.05 are indicative of a good fit. Finally, the model's estimation of 18 parameters, equal to the degrees of freedom, indicates a well-defined model structure.

The values show a good model fit to the data, with no major problems or flaws found by the chi-square test, and a very tight fit shown by the RMSEA. These statistics should be examined together, and in light of the theory and the research questions.

**Table 4. Path Analysis Result**

from	parameter_type	to	free	value_fixed	start	estimate	identifier
TFI	→	account	false	1.0	0.0	0.0	const
TFI	→	debit	true	0.0	0.0	0.25446	θ <sub>1</sub>
TFI	→	credit	true	0.0	0.0	-0.21728	θ <sub>2</sub>
TFI	→	Credit to gdp	true	0.0	0.0	-0.22166	θ <sub>3</sub>
EWI	→	ir	false	1.0	0.0	0.0	const
EWI	→	blr	true	0.0	0.0	0.47799	θ <sub>4</sub>
EWI	→	inf	true	0.0	0.0	-0.61731	θ <sub>5</sub>
GENZ	→	GenZ	false	1.0	0.0	0.0	const
EWI	→	TFI	true	0.0	0.0	-1.3485e-8	θ <sub>6</sub>
TFI	→	GENZ	true	0.0	0.0	-3.8403e-9	θ <sub>7</sub>
account	↔	account	true	0.0	0.0	3.07568e-5	θ <sub>8</sub>
debit	↔	debit	true	0.0	0.0	5.41919e-6	θ <sub>9</sub>
credit	↔	credit	true	0.0	0.0	9.36572e-6	θ <sub>10</sub>
Credit to gdp	↔	Credit to gdp	true	0.0	0.0	3.27026e-6	θ <sub>11</sub>
GenZ	↔	GenZ	true	0.0	0.0	0.0249995	θ <sub>12</sub>
ir	↔	ir	true	0.0	0.0	5.98461e-5	θ <sub>13</sub>
blr	↔	blr	true	0.0	0.0	7.61148e-5	θ <sub>14</sub>
inf	↔	inf	true	0.0	0.0	0.00014817	θ <sub>15</sub>
TFI	↔	TFI	true	0.0	0.0	0.0251445	θ <sub>16</sub>
EWI	↔	EWI	true	0.0	0.0	0.0251771	θ <sub>17</sub>
GENZ	↔	GENZ	true	0.0	0.0	0.0250002	θ <sub>18</sub>

In this model, the Total Financial Inclusion (TFI) latent variable appears to have a varying degree of influence on observed variables such as account ownership, debit and credit usage, and the ratio of credit to GDP. This suggests that TFI is a significant factor in financial behavior and economic outcomes. On the other hand, the Economic Welfare Index (EWI) impacts interest rates (ir), bank lending rates (blr), and inflation (inf), with a notably strong positive association with blr and a strong negative one with inf. The minimal interaction between EWI and TFI, as well as TFI's negligible effect on the Generation Z (GENZ) latent variable, indicates that these pathways may not be significant within the model's framework. The bidirectional arrows indicating correlations are expected in such models to account for inherent variances. However, the negative correlation associated with GenZ with itself is unusual and may point to an anomaly or an area where the model could be refined for greater accuracy. It's



essential to scrutinize these findings further to ensure the model's validity and to understand the underlying dynamics fully.

The path analysis results provide a nuanced view of the financial variables' interrelationships. The Total Financial Index (TFI) emerges as a pivotal factor with a consistent, unvarying influence on the account variable, symbolized by a parameter value fixed at 1.0. This constancy suggests a foundational role for TFI within the financial model. Additionally, TFI's positive relationship with the debit variable, indicated by an estimate of 0.25446, implies that an augmentation in TFI is likely to elevate the debit figures. In contrast, TFI inversely affects the credit variable and the Credit to GDP ratio, with estimates of -0.21728 and -0.22166, respectively, hinting at a decline in these variables as TFI ascends.

Simultaneously, the Economic Welfare Index (EWI) maintains a steady influence on the interest rate, also pegged at a value of 1.0, denoting a direct and unaltered impact. The EWI's significant positive effect on the bank lending rate, with an estimate of 0.47799, suggests that an upsurge in EWI correlates with an increase in the bank lending rate. Conversely, the negative impact of EWI on inflation, estimated at -0.61731, posits that escalating EWI levels could be a harbinger of reduced inflation rates, a finding of particular interest to policymakers and economists.

The intricate connection between Total Financial Inclusion (TFI) and Economic Welfare Index (EWI) shows the diverse aspects of financial systems. TFI's importance as a key factor in financial behaviour affects crucial economic outcomes such as account ownership and credit usage. On the other hand, EWI's association with interest rates and inflation reflects its effect on wider economic indicators. The low interaction between TFI and EWI, along with TFI's weak effect on Generation Z, indicates possible areas for more research to reveal deeper insights into the financial model's structure. Also, the negative correlation of Generation Z with itself is a discrepancy that could result in significant improvements in the model's predictive accuracy if examined. A thorough analysis of these relationships is not only vital for verifying the model but also for improving our knowledge of the dynamics between financial inclusion and economic welfare. The path analysis highlights TFI's foundational influence, with its positive and negative effects on various financial variables, while EWI's consistent impact on interest rates and bank lending rates illustrates the index's role in creating economic conditions. These findings are useful in guiding policy decisions and strategic planning for economic development.

The analysis views the GENZ variable as a constant within the financial model, suggesting it is a basic element that is not affected by other changing metrics. The low impact of EWI on TFI and vice versa suggests that these variables may not directly affect each other, but rather interact through more complex mechanisms or are affected by additional variables not included in this model. The TFI's evident direct effect on financial indicators contrasts with the broader economic influence of EWI, showing the different roles these indices have within the economic framework. The stability of GENZ underscores its potential role as a benchmark or control variable, providing a consistent point of reference amidst the variable dynamics of financial and economic indicators. This analysis reveals the complex interplay between economic factors and emphasizes the importance of considering both direct and indirect relationships when studying the financial system's structure and behaviour.



#### IV. CONCLUSION AND RECOMMENDATION

The research shows that the Financial Transaction Index (FTI), which measures the volume and value of financial transactions in Indonesia, has a direct and consistent impact on the financial inclusion of the population, as indicated by the account, debit, and credit variables. Higher FTI values are associated with higher account and debit transactions, and lower credit transactions, per capita. This suggests that more people are accessing and using financial services, and that they prefer to use debit over credit as a mode of payment. The research also shows that FTI negatively affects the Credit to GDP ratio, which could imply a lower risk of financial instability or a lower demand for credit in the economy.

The research also shows that the Economic Well-Being Index (EWI), which measures the level and distribution of economic welfare in Indonesia, has a direct and stable impact on the interest rate, bank lending rate, and inflation variables. Higher EWI values are associated with higher interest rates and bank lending rates, and lower inflation rates. This suggests that when the economic welfare of the population is higher, the banks may charge more for lending, and the prices of goods and services may remain stable. The research also shows that EWI inversely affects the inflation variable, which could imply that economic welfare may help to keep the prices stable.

The research also shows that the Youth Demographic Ratio, particularly the Gen Z percentage, which measures the proportion of young people in the population, has negligible negative effects on both FTI and EWI, and a negative covariance with itself. This suggests that the generational shift represented by Gen Z is not strongly influenced by or influencing the financial and economic conditions measured by FTI and EWI. This could mean that the young population has different preferences and behaviors than the older generations, and that they may face different opportunities and challenges in the financial system and the economy.

The main conclusion of the research is that FTI seems to have a more direct influence on financial inclusion and consumer behavior, while EWI impacts broader economic policies and indicators. The Youth Demographic Ratio, especially Gen Z, appears to be stable and not influenced by the other indices in this research. These results provide insights into the complex dynamic of these indices and the young population and can help in understanding the implications for Indonesia's economic growth and stability.

Generation Z, stepping into financial independence, exhibits a complex financial portrait marked by a blend of sophistication and a need for further education in financial literacy. They are actively seeking ways to navigate the economic challenges posed by the current environment, such as inflation and high housing costs, while also exploring avenues for additional income. This generation's unique approach to money, coupled with their entrepreneurial spirit, positions them to potentially reshape business landscapes and contribute significantly to innovation and social change. As they grow in influence, their diverse perspectives and digital fluency could lead to meaningful advancements in various sectors, including the economy. The recommendation for future research is to analyse the role of Gen Z in the financial system and the economy, and to identify their needs, preferences, challenges, and opportunities, as well as their potential contributions to innovation, entrepreneurship, and social change.



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