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Demographic and Socioeconomic Determinants Use of Financial Products/Service

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Abstract
The use of financial products/services in Indonesia is growing. And is one of the factors of economic growth. This study aims to investigate the demographic and socio-economic factors that influence the use of financial products/services. The data used are based on the 2023 National Socio-Economic Survey. The object of analysis is the population aged 15 years and over who use at least one financial product/service. There were 241,075,975 respondents in this study, of which 23.17% used at least one financial product/service. The dependent variable is the use of financial products/services. The independent variables used are Gender, Education, Island of residence, Urban/rural, and Marital status. The analysis was carried out using bivariate and multivariate methods. Multivariate analysis using a binary logistic regression model was used in the analysis. The results showed that higher use of financial products/services was associated with being male, college graduates, living in Java, living in urban areas, and being married.

Keywords: Financial Product/Service, Susenas 2023, Demographic And Socioeconomic Factors, Binary Logistic, Indonesia

1. Introduction

Recent research has provided strong evidence that financial development has a significant positive impact on economic growth (Papaioannou (2007), Ross Levine (2005), King and Levine (1993), Levine and Renelt (1992), Sala-i-Martin (1997), Ciccone and Jarocinski (2006). Financial development is related to economic growth even in industrial countries (Thiel (2001). A number of studies have also found the impact of financial inclusion or financial products on welfare (Chipunza, K. J., & Fanta, A. B. (2023), Campbell, J. Y. (2006), Munyegera, G. K., & Matsumoto, T. (2016), Hidayat, P., & Sari, R. L. (2022). Nanziri, E. L. (2016)). Not only on economic growth, financial products/services are positively associated with the welfare of a household and a country. Thus, financial

products/services are important and need to be studied. From the perspective of neoclassical growth theory, economic growth is driven by the accumulation of factor inputs and technical progress, with a potential role for finance in particular in assisting in capital accumulation. The endogenous growth approach emphasizes the role of entrepreneurship and innovation, allowing some leeway for finance to direct incentives toward research and innovation or rent-seeking. In this sense we can say that a developed financial system in a country is beneficial to growth. Sutton, C. N., & Jenkins, B. (2007). show that countries with well-established, efficient and well-used financial systems have lower poverty rates and better economic growth. Several studies have concluded that financial sector deepening contributes to poverty reduction (Beck et al. (2007), Jalilian & Kirkpatrick (2005), Quartey (2005)). Policy implications directed at developing a national strategic plan aimed at increasing access to finance combined with policies to improve the level of governance to maximize the impact of financial access on economic growth (Emara, N., & El Said, A. (2021).

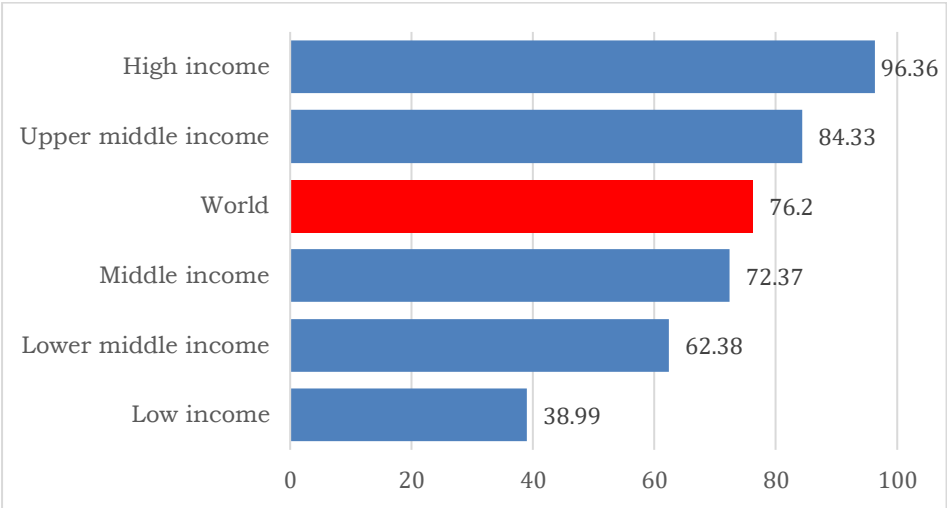

Figure 1. Percentage of formal financial services usage by Country Group, 2024

Source: World Bank, World Development Indicators. 2025. Own calculation

From Figure 1, it can be seen that the higher the use/utilization of financial services is associated with the level of economic development of a group of countries. High-income, upper-middle-income, middle-income, lower-middle-income, and low-income countries are respectively 96.365, 84.33%, 72.37%, 62.28%, and 38.99%). While at the world level, the use of formal financial institutions is 76.2%.

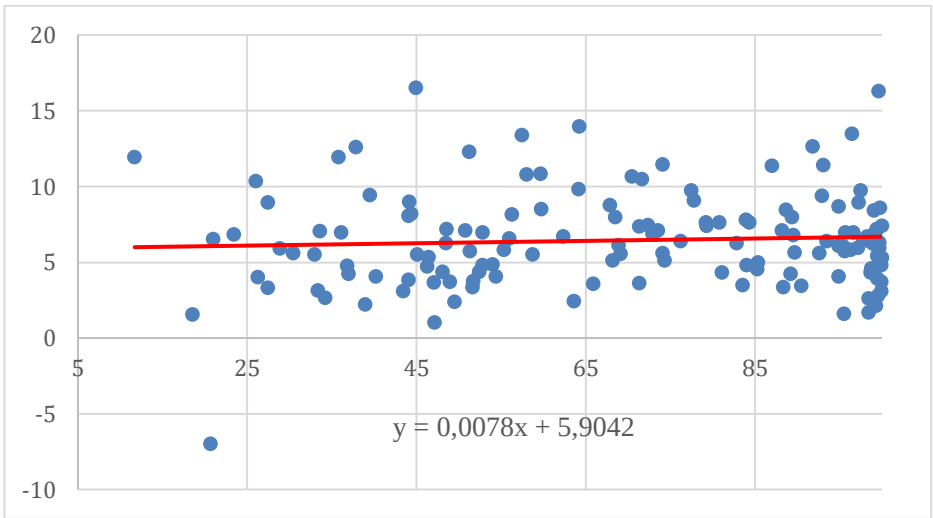

Figure 2. Account ownership at a financial institution (% of population ages 15+) with GDP growth (annual %), countries in the world. 2021

Source: World Bank, World Development Indicators. 2025. Own calculation

Figure 2 shows that every 1% increase in account ownership at a financial institution or with a mobile-money-service provider (% of population ages 15+) is associated with a 0.0078% increase in GDP Growth (%) across a number of countries in the world.

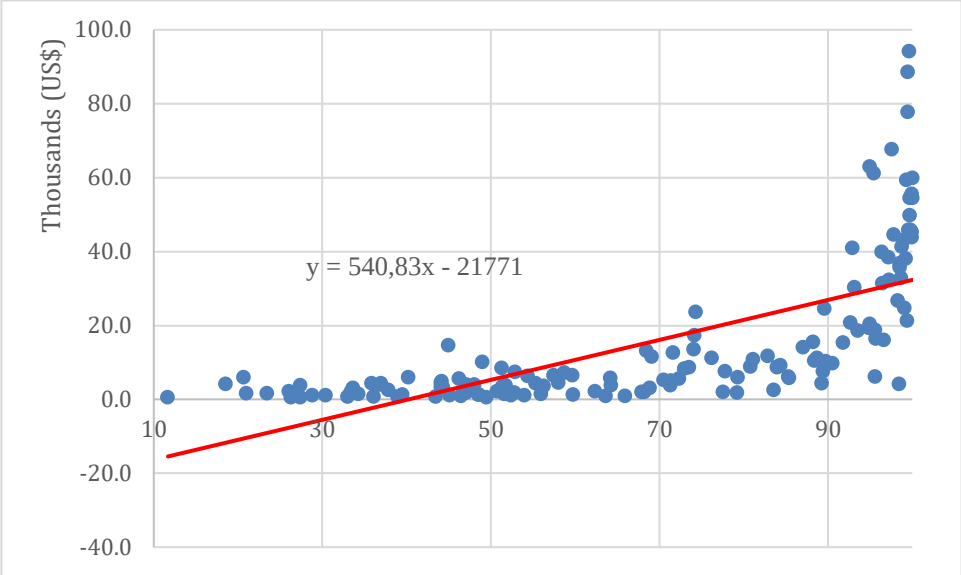

Figure 3: Account ownership at a financial institution (% of population ages 15+) with GDP per capita (US$) of countries in the world. 2021

Source: World Bank, World Development Indicators. 2025. Own calculation

Figure 3 shows that every 1% increase in Account ownership at a financial institution is associated with an increase in GDP per capita of US$ 540.85. From Figure 1, Figure 2, and Figure 3 it can be seen that at the global level, financial institutions are positively associated with economic growth and welfare. Boakye & Amankwah (n.d) conducted a study using interview data from 3643 citizens on the determinants of financial product usage in Ghana. It was found that financial literacy, income, income or expenditure stability, urban residence, access to income, access to communication channels, and local residents' perceptions of the inherent benefits of a product, as factors that determine whether someone will use a financial product. It was also found that financial literacy, financial products that accommodate unstable cash flows, communication about the inherent benefits obtained from financial products, and the use of mobile phones and the internet to provide services will increase the acceptance of financial products in Ghana.

Furthermore, the study wanted to conduct a study on the determinants of financial institution usage in Indonesia using data from the 2023 National Economic Survey. Susenas 2023 provides data on various aspects of economic levels and fulfillment of life needs such as clothing, food, shelter, income, security and employment opportunities. Susilowati, E. & Leonnard, L. (2019), found that in Indonesia there is a significant positive relationship between individual characteristics (gender, age, income level, age, employment sector) on the use of financial services, financial service inclusion, motivation to use financial services, and credit sources. Kumar, S., Pradhan, K.C. (2024) conducted research in South Asia on the determinants of financial product/service use. It was found that individuals who are male, older, richer, and more educated tend to have access to financial product services, it was also found that income and have a greater influence.

2. Data and Analysis Methods

2.1. Data

The data in this study uses/is taken from the 2023 National Socio-Economic Survey (SUSENAS). The 2023 National Socio-Economic Survey (Susenas) is a survey conducted by the Central Statistics Agency (BPS) to collect economic data. Data obtained from Susenas are used for national-level planning and evaluation. SUSENAS 2023

was implemented by the Central Statistics Agency in March and September and covers all provinces in Indonesia. SUSENAS 2023 is implemented to meet the need for data and economy at the district, provincial, and national levels, including data on the achievement of Sustainable Development goals. The sample of the March 2023 National Socio-Economic Survey (Susenas) is 345,000 households. This sample is used to produce statistical data at the national, district, and city levels. The 2023 SUSENAS data is cross-sectional data.

Table 1: Percentage distribution of using financial products/services aged 15 years and above by background characteristic

Background	Number of observation	Percentage
Gender		
Male	121,448,272	23.77
Female	119,627,703	22.57
Education		
Don't have a diploma	48,290,664	7.78
Elementary School Equivalent	59,797,855	13.65
Junior High School Equivalent	47,979,851	20.23
Senior High School	63,631,935	34.81
College	21,375,670	56.53
Island		
Sumatera	53,578,834	20.33
Jawa	136,014,459	24.77
Bali and Nusa Tenggara	13,289,436	22.86
Kalimantan	14,785,780	22.86
Sulawesi	17,498,199	22.28
Maluku and Papua	5,909,266	16.27
Urban/Rural		
Urban	14,1986,849	27.55
Rural	99,089,126	16.90
Marital Status		
Married	132,333,151	27.85
Unmarried	92,074,775	16.98
Divorced Living	4,026,992	25.83
Divorced Dead	12,641,058	18.51
Total	241,075,975	23.17

Source: SUSENAS 2023. Own calculation

2.2. Method of analysis

The data used in this study are presented in Table 1. There are 241,075,975 people as samples and 23.17% use financial products/services in Indonesia. The Central Bureau of Statistics uses the age of 15 years and above as the working age.

The dependent variable of this study is var R702 for "Using financial services/products" then a dummy variable 1 is created for respondents who use financial services/products and 0 for respondents who do not use financial services/products. Furthermore, the independent variables from the 2023 SUSENAS data from var R101 for "Province," var R105 for "Village/City," label var R404 "Status," label var R405 "Gender", label var R407 "Age", label var R614 "Highest education completed", and label var R702 for "Using financial services/products". The Gender variable is divided into two, namely (1). male and (2) female. The urban/rural variable is divided into (1). Urban, (2). Rural. The Martial Status variable is divided into (1). Unmarried, (2). Married, (3). Divorced Living,

and (4). Divorced Dead. The Island variable is divided into (1). Sumatra, (2). Java, (3). Bali and Nusa Tenggara, (4). Kalimantan, (5). Sulawesi, and (6). Maluku and Papua. The Education variable is divided into (1). Don't have a diploma, (2). Elementary School Equivalent, (3). Junior High School Equivalent, (4). Senior High School, and (5). College.

The data in this study were analysed using bivariate (Table 1) and multivariate analysis (Table 2). Bivariate analysis was used to examine the percentage of Using financial services/products based on demographic and socio-economic background characteristics. Multivariate analysis was conducted to investigate the relationship between demographic and socio-economic factors with Internet usage using binary logistic regression. The model is as follows.

$$log\left(\frac{\pi_{ij}}{\pi_{ij^*}}\right) = \mathrm{x_i^T}.\beta_j; i \neq j \quad (1)$$

Where $\beta_j = \left(\beta_{1j}\beta_{2j} \ldots \beta^{pj}\right)^T$ and

To calculate π_{ij} dan $\pi_{ij}^* = \left(1 - \pi_{ij}\right)$ used formula

$$\pi_{ij} = \frac{Exp(x_i^T.\beta_j)}{1+\sum_{k\neq j*} Exp(x_i^T.\beta_{k)}} \quad (2)$$

$$\pi_{ij*} = \frac{1}{1+\sum_{k\neq j*} Exp(x_i^T.\beta_{k)}} \quad (3)$$

The complete binary logistic regression model for this research (Hosmer DW, Lemeshow S (2000)) is written in the form

$$\ln\left(\frac{1}{1-p}\right) = \beta_o + \beta_1.Gender + \beta_2.Education + \beta_3.Island + \beta_4 Urban(rural) + \beta_5.Martial\ Status + \varepsilon \quad (4)$$

Where p is the probability of using financial services/products. β_0 the intercept. β_k is the regression coefficient for the k-th independent variable, k=1,2,...,5. And ε is the error term. The results of the multivariate analysis are presented in Table 2.

Table 2. Odds ratio of the binary logistic regression of using financial products/services aged 15 years and above by background characteristic

Covariates	Odds ratio [95% CI]	p-value
Gender (ref: male)		
Female	0.920599 [-0.0928546 - -0.0726063]	< 0.001
Education (ref: Don't have a diploma)		
Elementary School Equivalent	1.493873 [0.0382542 - 0.4202018]	< 0.001
Junior High School Equivalent	2.270986 [0.8014108 - 0.8390174]	< 0.001
Senior High School	4.227074 [1.424899 - 1.46012]	< 0.001
College	9.981716 [22.280207 - 2.321304]	
Island (ref: Sumatera)		
Jawa	1.226992 [0.1914864 - 0.2176451]	< 0,001
Bali and Nusa Tenggara	1.233953 [0.1900476 - 0.2301756]	< 0,001
Kalimantan	1.130569 [0.108789 - 0.1456378]	< 0.001
Sulawesi	1.131374 [0.1072088 - 0.1396566]	< 0.001
Maluku and Papua	0.611131 [0.5140827 – 0.4708038]	
Urban/Rural (ref: urban)		
Rural	0.685258 [0.03885037 - -0.36417]	<0.001
Martial Status (ref: unmarried)		
Married	1.764833 [0.5563648 – 0.5797472]	< 0.001

Divorced Living	1.729943 [0.5130778 – 0.5830988]	< 0.001
Divorced Dead	1.799433 [0.563929 – 0.6110141]	< 0.001
Constant	0.048912 [-2.485378 - -2.446891]	< 0.001

Source: SUSENAS 2023. Own calculation

Table 2 presents the results of the multivariate analysis. It can be seen that all demographic and socioeconomic factors in the model have a statistically significant effect on the use of financial products/services.

Gender is associated with the use of financial products/services. After controlling for other factors, female respondents are less likely to use financial products/services by 0.920599 times than male respondents.

Education is associated with the use of financial products/services. After controlling for other factors, the higher the education, the more likely they are to use financial products/services. With (Don't have a diploma) as a reference, respondents with Elementary School Equivalent, Junior High School Equivalent, Senior High School, and College education have a tendency of 1.49, 2.27, 4.22, and 9.98 times the tendency of respondents who do not have a diploma.

Respondents with the island of residence are associated with the use of financial products/services. Using the island of Sumatra as a reference, respondents who live in Java, Bali and Nusa Tenggara, Kalimantan, and Sulawesi are more likely to use financial products/services. While respondents who live in Maluku and Papua are less likely to use financial services. The ratio of the tendency to use obsolete products/services for the islands of Java, Bali and Nusa Tenggara, Kalimantan, and Sulawesi is 1.23, 1.23, 1.13, 1.13 times that of Sumatra. Meanwhile, the ratio of the tendency to use financial products/services in the islands of Maluku and Papua is 0.611 times that of Sumatra.

The Urban/Rural variable is associated with the use of financial products/services. With urban as a reference, respondents living in rural areas are less likely to use financial products/services compared to respondents living in urban areas. The ratio of rural tendency is 0.685258 times Urban.

Marital status is associated with the use of financial instruments/products in Indonesia. Using unmarried as the reference variable, Married, Divorced Living, Divorced Dead respondents are more likely to use financial services/products by 1.76, 1.73, and 1.80 times respectively compared to unmarried respondents.

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References

Beck, T., Demiguc-Kunt, A. & Peria, M.S.M. (2007). Reaching out: Access to and use of banking services across countries". Journal of Financial Economics, 85(1), pp. 234 - 26.

Boakye, & Amankwah (n.d). Determinants of the demand for financial Products in Ghana. https://www.findevgateway.org/sites/default/files/publications/files/mfg-en-paper-determinants-of-the-demand-for-financial-products-in-ghana-2012.pdf

Ciccone, A., & Jarociński, M. (2010). Determinants of Economic Growth: Will Data Tell? *American Economic Journal: Macroeconomics*, *2*(4), 222–246. http://www.jstor.org/stable/25760327

Emara, N. & El Said, A. (2021). Financial inclusion and economic growth: The role of governance in selected MENA countries, International Review of Economics & Finance, Elsevier, vol. 75(C), pages 34-54.

Hosmer D.W., & Lemeshow S. (2000). Applied Logistic Regression. Second Edition. John Wiley & Sons, Inc., New York. URL: https://ftp.idu.ac.id/wp-content/uploads/ebook/ip/REGRESI%20LOGISTIK/epdf.pub_applied-logistic-regression-wiley-series-in-probab.pdf

Jalilian, H. & Kirkpatrick, C. (2005): "Does financial development contribute to poverty reduction?". Journal of Development Studies, 41(4).

Kandari, P., Bahuguna, U., & Salgotra, A. K. (2021). Socio-Economic and Demographic Determinants of Financial Inclusion in Underdeveloped Regions: A Case Study in India. The Journal of Asian Finance, Economics and Business, 8(3), 1045–1052. https://doi.org/10.13106/JAFEB.2021.VOL8.NO3.1045

King, R. G., & Levine, R. (1993). Finance and Growth: Schumpeter Might be Right. *The Quarterly Journal of Economics*, *108*(3), 717–737. https://doi.org/10.2307/2118406

Kumar,S. & Pradhan, K.C. (2024). Socioeconomic and demographic determinants of financial inclusion in South Asia: Integrated policy for targeted groups of population, Journal of Policy Modeling, Volume 46, Issue 3, pp655-682, ISSN 0161-8938, https://doi.org/10.1016/j.jpolmod.2024.03.002. (https://www.sciencedirect.com/science/article/pii/S0161893824000280)

Levine, R. & Renelt, D. (1992). A Sensitivity Analysis of Cross-Country Growth Regressions. *The American Economic Review*, *82*(4), 942–963. http://www.jstor.org/stable/2117352

Levine, R. (2005). Finance and Growth: Theory, Evidence, and Mechanisms. in The Handbook of Economic Growth, ed., Philippe Aghion and Steve Durlauf, Amsterdam, Netherlands: North-Holland.

Papaioannou, E. (2007). Finance and Growth A Macroeconomic Assessment of The Evidence from A European Angle, European Central Bank, Working paper series, No 787.

Quartey, P. (2005): "Financial sector development, savings mobilization and poverty reduction in Ghana." United Nations University Research Paper 2005/71. London.

Boakye, C. & Amankwah, N.O.A (undate) Determinants of the demand for financial Products in Ghana.

Rajagukguk W (2022) The demographic and economic features: the nexus with internet use. Heliyon 8(9): e10686. https://doi.org/10.1016/j.heliyon.2022.e10686

Rajagukguk, W., Samosir, O.B., & Samosir, P. (2024). The Link between Socioeconomic and Demographic Factors and Access to Legal Assistance in Indonesia. *Iranian Economic Review*, (), -. doi: 10.22059/ier.2024.368431.1007857

Ross Levine, R. (2005). Finance and Growth: Theory and Evidence, Ch.12. edit. Philippe Aghion, Steven N. Durlauf..Handbook of Economic Growth,Elsevier,Volume 1, Part A.

Samosir OB, Kiting AS, Aninditya F (2020) Role of Information and Communication Technology
and Women's Empowerment in Contraceptive Discontinuation in Indonesia. Journal of Preventive
Medicine and Public Health 53(2): 117-25. https://doi.org/10.3961/jpmph.19.300

Sutton, C. N., & Jenkins, B. (2007). The role of the financial services sector in expanding economic opportunity. Harvard University.

Susilowati, E. & Leonnard, L. (2019). Factors Influence Financial Inclusion: Evidence from Indonesian Micro Data. ETIKONOMI. 18. 10.15408/etk.v18i1.9070.

Xavier X. Sala-I-Martin. (1997). I Just Ran Two Million Regressions. *The American Economic Review*, *87*(2), 178–183. http://www.jstor.org/stable/2950909

Thiel, M. (2001). Finance and economic growth – review of theory and the available evidence, Directorate General for Economic and Financial Affairs, European communities Economic paper Number 158. https://ec.europa.eu/economy_finance/publications/pages/publication884_en.pdf