

## The relationship between education level and banking adoption among street vendors – A financial inclusion viewpoint

**Praveen Paul Jeyapaul**

*Professor*

*Mepco School of Management Studies,  
Mepco Schlenk Engineering College, Sivakasi, TN, India,  
[jpraveen@mepcoeng.ac.in](mailto:jpraveen@mepcoeng.ac.in)*

### **Abstract**

The educational attainment of individuals has long been recognized as a significant factor in shaping their financial behaviours and attitudes, particularly when it comes to the adoption and usage of banking services. There is generally a positive relationship between the education level of individuals and their adoption of banking services. This relationship can be attributed to the fact that higher levels of education are often accompanied by increased incomes, better financial management skills, and a greater understanding of the importance of financial planning and wealth accumulation. This paper aims to provide a comprehensive view of the current understanding of the relationship between education level and banking adoption among underprivileged sections of the society especially the street vendors. To address the research question, data was collected through a structured questionnaire from 477 street vendors in the Virudhunagar district of Tamilnadu state in India. The research reveals that although most of the respondents have a bank account irrespective of their education status, the number of respondents not having a bank account is higher among those who have lower education level. Based on the outcome of the research certain policy implications and recommendations are made. This research aligns with the Sustainable Development Goals 4, 8 and 10 (SDG 4, 8 & 10).

**Keywords:** Education level, banking usage, financial inclusion, group difference, sustainable development

### **1. Introduction and Review**

The relationship between education level and banking adoption is a topic of growing interest in the field of financial inclusion and development economics (Yang & Zhang, 2022). As access to financial services is increasingly recognized as a critical enabler of economic and social progress, understanding the factors that contribute to the adoption and usage of banking services becomes crucial (Arora, 2011) (Cooper & Zhu, 2016) (Fouejieu et al., 2020) (García et al., 2019) (Girón et al., 2021) (Mori & Mlambiti, 2020) (Ohiomu & Ogbeide-Osaretin, 2020). The educational attainment of individuals has long been recognized as a significant factor in shaping their financial behaviours and attitudes, particularly when it comes to the adoption and usage of banking services (Castro-González et al., 2020). Higher levels of education are often associated with greater financial literacy, improved decision-making skills, and a better understanding of the potential benefits and risks of various financial products and services (Johan et al., 2021).

Education, as a key component of human capital, is often considered a crucial determinant of financial inclusion and the utilization of banking services (Dewi et al., 2020). In many developing countries, where financial inclusion remains a significant challenge, the level of education among the population can have a significant impact on their ability and willingness to engage with the formal financial system (Ediagbonya & Tioluwani, 2023). Numerous studies have explored the relationship between education and financial market participation, including the adoption of banking services. One study conducted in Tanzania found a positive and significant relationship between the level of education and the adoption of mobile banking (Mori & Mlambiti, 2020).

Similarly, research in the context of developing Asia has shown a strong positive correlation between physical access to banks and expected years of schooling, suggesting that improving educational outcomes can contribute to greater financial inclusion (Arora, 2011).

The existing literature suggests that there is generally a positive relationship between the education level of individuals and their adoption of banking services (Ingale & Paluri, 2022). However, the relationship is complex and can be influenced by a range of contextual factors, such as demographic characteristics, cultural norms, and access to physical banking infrastructure (Ohiomu & Ogbeide-Osaretin, 2020) (García et al., 2019) (Girón et al., 2021). Furthermore, education has been identified as a key determinant of populations' ownership and usage of accounts in the formal financial system (Fouejieu et al., 2020). This relationship can be attributed to the fact that higher levels of education are often accompanied by increased incomes, better financial management skills, and a greater understanding of the importance of financial planning and wealth accumulation (Cooper & Zhu, 2016). However, the relationship between education and banking adoption is complex and may be influenced by various other factors, such as demographic characteristics, cultural norms, and access to physical banking infrastructure (Mori & Mlambiti, 2020) (Setiawan et al., 2021). For instance, a study in sub-Saharan Africa found that while female educational levels had a substantial impact on reducing gender inequality, they also had a negative effect on financial inclusion, highlighting the need for targeted policies and interventions to address these disparities (Ohiomu & Ogbeide-Osaretin, 2020).

It can be generally seen that the education level of the underprivileged sections of the society such as street vendors and daily wage earners is generally lower (Alamelu & Revathy, 2022). Understanding financial inclusion and its determinants is crucial for economic growth and poverty alleviation, particularly among the underprivileged sections of society. Studies have shown that access to financial services can unlock the productive potential of the poor and open up new possibilities for sustainable poverty reduction (Ogunleye, 2017) (Omar & Inaba, 2020). One of the key factors influencing financial inclusion is the level of education. Individuals with higher levels of education are more likely to have the knowledge, skills, and confidence to navigate the formal financial system and utilize a range of financial products and services. Conversely, those with lower levels of education may face barriers such as lack of financial literacy, limited understanding of banking procedures, and apprehension towards formal institutions, hindering their adoption of banking services.

Since educational level of individuals and their banking adoption are directly related, it could be hypothesised that the underprivileged sections of the society may have relatively lower adoption of banking services. This paper aims to provide a comprehensive view of the current understanding of the relationship between education level and banking adoption among underprivileged sections of the society especially the street vendors, drawing insights from the existing empirical evidence and policy implications for promoting greater financial inclusion.

## **2. Methods**

This research paper was developed based on a review of relevant literature from academic journals, policy reports. The sources were carefully selected to provide a balanced and comprehensive understanding of the topic. This research aims to understand the relationship between education level of street vendors and their banking adoption behaviour. A descriptive research design with cross-sectional study is used to address the objective. Data was collected through a structured questionnaire from 477 street vendors in the Virudhunagar district of Tamilnadu state in India. The first part of the questionnaire collected the demographic data of the street vendors along with their education status, bank account status, bank account usage frequency and reason for having a

bank account. The second part of the questionnaire collected the data from street vendors regarding their opinion if they think getting loans from bank is a safe and secure, if they think money in bank is secure and if they are afraid of the processes and procedures in the banks. To get an understanding if there is a significant difference in having a bank account among the street vendors with differing education status, cross tabulation is used. Group difference between various levels of education status of respondents and the factors, analysis of covariance (ANCOVA) is used. Simple percentages were sought to understand the bank account status, bank account usage frequency and reason for having a bank account among the street vendors.

### 3. Results and Discussion

In this section, we analyse the data collected to address the research questions outlined earlier. The primary aim is to understand if there is a difference in the adoption of banking services among the street vendors based on their education status. This analysis employs simple cross tabulation and analysis of covariance, allowing us to get insights into the research objectives considered. To have perspective on the status of street vendor having a bank account or not with respect to their education level, a cross tabulation is done and the results are presented in Table 1.

**Table 1: Status of street vendor having a bank account or not with respect to their education level (cross tabulation)**

Metrics	Have a bank account		Total
	No	Yes	
No education	Count	8	69
	% within Education	10.4%	89.6%
	% within Have a bank account	25.8%	15.5%
	% of Total	1.7%	14.5%
	Adjusted Residual	1.5	-1.5
Primary education (1 <sup>st</sup> std to 5 <sup>th</sup> std)	Count	9	95
	% within Education	8.7%	91.3%
	% within Have a bank account	29.0%	21.3%
	% of Total	1.9%	19.9%
	Adjusted Residual	1.0	-1.0
Secondary education (6 <sup>th</sup> std to 10 <sup>th</sup> std)	Count	8	228
	% within Education	3.4%	96.6%
	% within Have a bank account	25.8%	51.1%
	% of Total	1.7%	47.8%
	Adjusted Residual	-2.7	2.7
Higher secondary education (11 <sup>th</sup> std and 12 <sup>th</sup> std)	Count	0	20
	% within Education	0.0%	100.0%
	% within Have a bank account	0.0%	4.5%
	% of Total	0.0%	4.2%
	Adjusted Residual	-1.2	1.2
Diploma Course	Count	3	6
	% within Education	33.3%	66.7%
	% within Have a bank account	9.7%	1.3%
	% of Total	0.6%	1.3%
	Adjusted Residual	3.3	-3.3
Under graduate non- professional course	Count	3	19
	% within Education	13.6%	86.4%
	% within Have a bank account	9.7%	4.3%

	% of Total	0.6%	4.0%	4.6%
	Adjusted Residual	1.4	-1.4	-
	Count	0	4	4
	% within Education	0.0%	100.0%	100.0%
	% within Have a bank account	0.0%	0.9%	0.8%
Under graduate professional course	% of Total	0.0%	0.8%	0.8%
	Adjusted Residual	-.5	.5	-
	Count	0	3	3
	% within Education	0.0%	100.0%	100.0%
	% within Have a bank account	0.0%	0.7%	0.6%
Post graduate non-professional course	% of Total	0.0%	0.6%	0.6%
	Adjusted Residual	-.5	.5	-
	Count	0	2	2
	% within Education	0.0%	100.0%	100.0%
	% within Have a bank account	0.0%	0.4%	0.4%
Post graduate professional course	% of Total	0.0%	0.4%	0.4%
	Adjusted Residual	-.4	.4	-
	Count	31	446	477
	% within Education	6.5%	93.5%	100.0%
	% within Have a bank account	100.0%	100.0%	100.0%
Total	% of Total	6.5%	93.5%	100.0%

The cross tabulation between the education level of respondents with their having a bank account or not reveals the fact that although most of the respondents have a bank account irrespective of their education status, the number of respondents not having a bank account is higher among those whose education level is lower. The proportion of those respondents who don't have a bank account is higher in the category with either no education or have only primary education or secondary education. While it can also be found that about 13.6% of UG holders within UG holders category don't have a bank account. Looking into the overall numbers, it can be seen that just 0.63% of UG holders out of all respondents (477) don't have a bank account. This is 9.6% among all those who do not have a bank account (31 respondents). The UG holders who don't have a bank account are 10.7 percentage among all the respondents who have either UG or PG degree. Thus it can be concluded at this point that the a large proportion of respondents with lower education level have no bank account compared to respondents with higher education levels.

The results of this study indicate a significant relationship between an individual's level of education and their usage of banking services. Individuals with higher levels of education were more likely to adopt and utilize mobile banking services, such as checking account balances, paying bills, and transferring funds (Mori & Mlambiti, 2020) (Yaokumah et al., 2017). This finding is consistent with previous research that has found a positive correlation between education attainment and the adoption of innovative financial technologies (Alkhaldi & Kharmah, 2019). One possible explanation for this trend is that individuals with higher levels of education tend to have a greater understanding of the benefits and functionalities of mobile banking services, as well as the necessary technical skills to use them effectively. Additionally, those with higher incomes, which are often associated with higher levels of education, may have a greater need for the convenience and accessibility of mobile banking services (Mori & Mlambiti, 2020).

The bank usage pattern among the respondents is analysed next (Table 2). As mentioned already, most of the respondents have a bank account, thanks to 'Pradhan Mantri Jan Dhan Yojana

(PMJDY)' (Jeyapaul & Manimaran, 2020, March). Only a small number don't have a bank account and this is predominantly with the uneducated individuals. Those who don't have a bank account feel that they don't have the necessity to have one. This may be because they generate or earn low funds so that they may not require the services of a bank or they may be intimidated by the procedural routines in banks (Jeyapaul & Manimaran, 2020, May).

**Table 2: Bank usage pattern of respondents**

Factors		Frequency	Percent
Having bank account		446	93.5
Not having bank account		31	6.5
Total		477	-
Reason for not having a bank account	No necessity	31	100 <sup>#</sup>
Bank account status <sup>\$</sup>	Active	439	98.43
	Idle	7	1.57
Bank account usage frequency <sup>\$</sup>	Weekly twice	9	2.02
	Monthly once	434	97.31
	Rarely	3	0.67
Reason for having a bank account <sup>\$</sup>	Get loan	444	99.55
	Savings	02	0.45

# - All responders not having a bank account

\$ - Among 446 responders having a bank account

Among all those who have a bank account, most of the respondents claim that they are active in using the bank. Further a huge chunk of respondents say that they use the bank at least once a month. Only 2% of respondents say that their bank account is idle. This indicates that both educated and uneducated street vendors are active in using their bank accounts. The street vendors who are uneducated are those who say that their bank account is idle. Thus it can be again inferred that there is a gap between the educated and uneducated in the perception and usage of banks. It is also interesting to note that a huge majority of street vendors those who have bank accounts, have it for the sake of getting loans from the banks. They may not be availing loans presently, but their intention is clear that maintain an active bank account will help them to get loans in the future.

To conclusively find if there is a gap between the groups of street vendors with differencing educational status on the opinion of whether they perceive that getting loans from banks is safe and secure, their money deposited in banks is secure and their opinion on their fear in using the banking system, univariate analysis of covariance (ANCOVA) is adopted and the results are tabulated in Table 3.

**Table3: Group difference between various levels of education status of respondents and the factors considered for study**

Factors	Type III Sum of Squares	df	Mean Square	F	Sig.
Bank is a safe and secure for loans	.011	8	.001	.645	.739
Money in bank is secure	.793	8	.099	1.096	.365
I am afraid of banks	.681	8	.085	2.105	.034

The results suggest that there is no difference among the various groups of street vendors differentiated by their education status on their opinion that banks are safe and secure to avail loans. All groups of respondents feel that loans from bank are safe and secure irrespective of their

education status. Similarly, all groups of street vendors irrespective of their education status know that their money deposited in banks are secure. When it comes to the fear on the banking process and procedure, there is a group difference among different education levels of street vendors. Post hoc test reveals that respondents with lower education have more fear of banks.

The findings of this study have important implications for the banking industry and policymakers. Banks should consider targeting their marketing and educational efforts towards individuals with lower levels of education to promote the adoption of mobile banking services. Awareness-raising campaigns and simplifying the user interface of mobile banking applications may help to bridge the gap and encourage broader adoption, especially among the elderly population (Msweli & Mawela, 2020) (Ochanda, 2012). Furthermore, the results suggest that there may be a need for greater financial literacy and technology education programs to ensure that all segments of the population have equal access to the benefits of digital banking services. By addressing these disparities, banks can work towards more inclusive and equitable financial services that cater to the needs of diverse customer groups (Msweli & Mawela, 2020) (Chen et al., 2021).

#### **4. Empirical Evidence and Insights**

The studies reviewed and the results presented in this paper provide valuable insights into the relationship between education level and banking adoption. Several studies have reiterated the findings of this research and have established a positive relationship between the level of education and the adoption of banking services (Mori & Mlambiti, 2020) (Arora, 2011). This suggests that individuals with higher levels of education are more likely to utilize and engage with the formal financial system, potentially due to improved financial literacy, decision-making skills, and understanding of the benefits of banking services. Another study in the context of developing Asia revealed a strong positive correlation between physical access to banks and expected years of schooling, suggesting that improving educational outcomes can contribute to greater financial inclusion (Arora, 2011).

The findings suggest that while higher levels of education are generally associated with greater banking adoption, the relationship can be influenced by a range of contextual factors, such as demographic characteristics, cultural norms, and access to physical banking infrastructure.

#### **5. Policy Implications and Recommendations**

The empirical evidence presented in this paper and the extant literature several important implications and policy recommendations for promoting greater financial inclusion and banking adoption, particularly in developing regions can be suggested. (a) Government investing in improving educational outcomes. Governments and policymakers should prioritize investments in education, particularly in areas with low financial inclusion, to enhance the financial literacy and decision-making skills of the population. (b) Other stake holders investing in education and financial literacy. Apart from the government, other policymakers and stakeholders (such as the RBI) should prioritize investments in education, with a focus on improving financial literacy and decision-making skills among the population. (d) Developing targeted policies and programs. Policymakers should adopt a nuanced approach, designing policies and programs that address the specific needs and challenges of different demographic groups, including those with varying levels of education and income. (c) Promoting targeted financial education programs. Along with developing targeted educational initiatives, these tailored financial education programs should be promoted through popular media so that they can help to address the specific needs and challenges faced by different demographic groups, such as women and low-income individuals. (e) Expanding access to physical banking infrastructure. Improving the availability and accessibility

of physical banking infrastructure, such as bank branches and ATMs, can help to bridge the gap between education levels and banking adoption, particularly in underserved communities. (f) Leveraging digital financial services: The adoption of digital banking solutions, such as mobile banking and online platforms, can provide an alternative pathway to financial inclusion, especially for individuals with limited access to traditional banking services.

By addressing these key factors, policymakers and stakeholders can work towards increasing the adoption of banking services and ultimately promoting more inclusive and sustainable economic development.

## **6. Conclusion**

This research envisaged to find if the banking adoption practices which may lead to financial inclusion differs with the education status of street vendors. The existing literature highlights the important role of education in shaping the adoption and usage of banking services, particularly in developing regions leading to financial inclusion. Higher levels of education are often linked to greater financial literacy, improved decision-making skills, and a better understanding of the potential benefits and risks of various financial products and services. However, the relationship between education and banking adoption is complex and can be influenced by a variety of factors, including demographic characteristics, cultural norms, and access to physical banking infrastructure. It could also be noted here that this research aligns with the Sustainable Development Goals 4, 8 and 10 (SDG 4, 8, 10) (United Nations, 2024). The Sustainable Development Goals (SDGs) are a set of 17 global goals established by the United Nations in 2015, aimed at addressing a wide range of social, economic, and environmental challenges. The goals are part of the 2030 Agenda for Sustainable Development, which is a plan of action for people, planet, and prosperity.

To promote greater financial inclusion and inclusive economic development, policymakers and stakeholders should prioritize investments in education, develop targeted financial education programs, expand access to physical banking infrastructure, and leverage digital financial services. By addressing these key factors, we can work towards building a more inclusive and sustainable financial ecosystem that benefits individuals, communities, and economies as a whole. Improving financial education and access to banking services can play a crucial role in fostering greater financial inclusion and promoting economic development, particularly in developing regions

The relationship between education level and banking adoption is a complex and multifaceted issue, with important implications for financial inclusion and overall economic and social development. The existing empirical evidence suggests a generally positive association between higher levels of education and greater banking adoption, but this relationship is influenced by a range of contextual factors. To promote greater financial inclusion, policymakers and stakeholders should prioritize investments in education, improve physical access to banking services, leverage digital financial solutions, and develop targeted policies and programs that address the specific needs and challenges of different demographic groups.

The research conducted in this paper provides important insights into the relationship between education level and banking adoption, particularly in the context of developing regions. The research highlights the fact that street vendors or generally the underprivileged, when they are uneducated or have lower levels of education, then their adoption of banking system is also reduced. There is a clear and pertinent divide between the educated and uneducated or low educated in the adoption of banking system. Further, the uneducated express fear in approaching the banks for their financial needs.

Based on the findings, there are several key policy recommendations that can be made to promote greater financial inclusion and banking adoption such as government invest in education and financial literacy, where governments and policymakers should prioritize investments in education, with a focus on improving financial literacy and decision-making skills among the population. Another policy suggestion is expanding access to physical banking infrastructure, where efforts to improve physical access to banking services, such as the expansion of bank branches and ATMs, can contribute to greater financial inclusion, especially in underserved communities. It is also suggested to develop targeted policies and programs where policymakers should adopt a nuanced approach, designing policies and programs that address the specific needs and challenges of different demographic groups, including those with varying levels of education and income.

Overall, the research highlights the importance of considering the complex and multifaceted relationship between education level and banking adoption, and the need for a comprehensive and context-specific approach to promoting greater financial inclusion and economic development. Importantly, the research also suggests that the relationship between education and banking adoption can be influenced by other factors, such as gender and access to physical banking infrastructure. Moreover, the research suggests that expanding access to physical banking infrastructure, such as through the establishment of more bank branches and ATMs, can also contribute to greater financial inclusion, particularly in underserved communities. Additionally, it is suggested that the use of digital financial services, such as mobile banking and fintech solutions, can help overcome barriers to physical access and reach a wider population, including those with lower levels of education or income.

These insights highlight the importance of adopting a comprehensive and multifaceted approach to promoting financial inclusion, one that considers the complex interplay between education, access, and the specific needs and challenges of different demographic groups. To conclude, the research presented in this paper provides valuable insights into the relationship between education level and banking adoption, and offers several key policy recommendations for promoting greater financial inclusion and economic development.

### **Bibliography**

Alamelu, D. & Revathy, V. (2022). Impact of Poverty on Education in India. *International Journal of Health Sciences*, 6 (S1), 698-707.

Alkhaldi, A. N. & Kharma, Q. M. (2019). Customer's Intention to Adopt Mobile Banking Services: The Moderating Influence of Demographic Factors. *International Journal of Innovation and Technology Management*, 16 (5), 1950037.

Arora, R. U. (2011). Financial Inclusion and Human Capital in Developing Asia: the Australian connection. *Third World Quarterly*, 33 (1), 177-197.

Castro-González, S., Fernández-López, S., Rey-Ares, L., & Rodeiro-Pazos, D. (2020). The Influence of Attitude to Money on Individuals' Financial Well-Being. *Social Indicators Research*, 148, 747–764.

Chen, C., Huang, W., Ma, Y., Tang, Y., & Zang, Y. (2021). Proceedings of the 2021 3rd International Conference on Economic Management and Cultural Industry (ICEMCI 2021)



Cooper, R. & Zhu, G. (2016). Household finance over the life-cycle: What does education contribute? *Review of Economic Dynamics*, 20, 63-89.

Dewi, V., Febrian, E., Effendi, N., & Anwar, M. (2020). Financial Literacy among the Millennial Generation: Relationships between Knowledge, Skills, Attitude, and Behavior. *Australasian Accounting Business & Finance Journal*, 14 (4), 24-37,24A-24B.

Ediagbonya, V. & Tioluwani, C. (2023). The role of fintech in driving financial inclusion in developing and emerging markets: issues, challenges and prospects. *Technological Sustainability*, 2 (1), 100-119.

Fouejieu, A. P., Ndoeye, A., & Sydorenko, T. (2020). Unlocking Access to Finance for SMEs: A Cross-Country Analysis. *International Monetary Fund - Working Paper Series*, 2020 (055), 32.

García, L. C., Brio, E. BD., & Oscanoa-Victorio, M. L. (2019). Female financial inclusion and its impacts on inclusive economic development. *Women's Studies International Forum*, 77, 102300.

Girón, A., Kazemikhasragh, A., Cicchiello, A. F., & Panetti, E. (2021). Financial Inclusion Measurement in the Least Developed Countries in Asia and Africa. *Journal of the Knowledge Economy*, 13 (2), 1198–1211.

Ingale, K. K. & Paluri, R. A. (2022). Financial literacy and financial behaviour: a bibliometric analysis. *Review of Behavioral Finance*, 14 (1), 130-154.

Jeyapaul, P. P. & Manimaran, S. (2020, March). A Look into the Dark Pages of Usury by Ravenous Loan Sharks in India - A Review on Media Reports. *International Journal of Social Sciences*, 9 (1), 25-30.

Jeyapaul, P. P. & Manimaran, S. (2020, May). The Dimensions of Financial Inclusion of Under-Privileged Sections of the Society in India - A Review. *ICTACT Journal on Management Studies*, 6 (2), 1238-1243.

Johan, I., Rowlingson, K., & Appleyard, L. (2021). The Effect of Personal Finance Education on The Financial Knowledge, Attitudes and Behaviour of University Students in Indonesia. *Journal of Family and Economic Issues*, 42, 351–367.

Mori, N. & Mlambiti, R. (2020). Determinants of customers' adoption of mobile banking in Tanzania: Further evidence from a diffusion of innovation theory. *Journal of Entrepreneurship Management and Innovation*, 16 (2), 203-229.

Msweli, N. T. & Mawela, T. (2020). Enablers and Barriers for Mobile Commerce and Banking Services Among the Elderly in Developing Countries: A Systematic Review. In, *Responsible Design, Implementation and Use of Information and Communication Technology* (pp. 319–330). Springer Science and Business Media.

Ochanda, R. M. (2012). Mobile Banking as an Innovative Wealth Distributive Dynamic within the Telephony Sector in Kenya. *SSRN Electronic Journal*, 19.

Ogunleye, T. S. (2017). Financial Inclusion and the Role of Women in Nigeria. *African Development Review*, 29 (2), 249-258.

Ohiomu, S. & Ogbeide-Osaretin, E. N. (2020). Financial Inclusion and Gender Inequality Reduction: Evidence from Sub-Saharan Africa. *The Indian Economic Journal*, 67 (3-4), 367-372.

Omar, M. A. & Inaba, K. (2020). Does financial inclusion reduce poverty and income inequality in developing countries? A panel data analysis. *Journal of Economic Structures*, 9 (1), 2020.

Setiawan, B., Nugraha, D. P., Irawan, A., Nathan, R. J., & Zoltan, Z. (2021). User Innovativeness and Fintech Adoption in Indonesia. *Journal of Open Innovation: Technology, Market, and Complexity*, 7 (3), 188.

United Nations,. (2024). *THE 17 GOALS*. United Nations - Department of Economic and Social Affairs - Sustainable Development. Retrieved December 13, 2024, from <https://sdgs.un.org/goals>

Yang, T. & Zhang, X. (2022). FinTech adoption and financial inclusion: Evidence from household consumption in China. *Journal of Banking & Finance*, 145, 106668.

Yaokumah, W., Kumah, P., & Okai, ES. A. (2017). Demographic Influences on E-Payment Services. *International Journal of E-Business Research*, 13 (1), 44.