ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 10| Issue: 8| August2024|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2024: 8.402 || ISI Value: 1.188

EXPLORING DEMOGRAPHIC INFLUENCES ON THE ADOPTION OF THE UNIVERSAL PENSION SCHEME IN BANGLADESH

Ashish Basak[1], SK Muhammad Yeasin[2], Sanjana Shahnaj[3]
[1]*Assistant Professor, Department of Business Administration, Shanto-Mariam University of Creative Technology*
[2]*Assistant Professor, Department of Business Administration, Shanto-Mariam University of Creative Technology*
[3]*Assistant Professor, Department of English, Shanto-Mariam University of Creative Technology*

Article DOI: https://doi.org/10.36713/epra18036
DOI No: 10.36713/epra18036

ABSTRACT
The Universal Pension Scheme (UPS) aims to provide financial security to Bangladeshi citizens through a structured pension plan. This study investigates how income level, educational attainment and age influence the adoption of the UPS. We hypothesized that these demographic factors significantly affect participation in the scheme. Utilizing a quantitative approach, data from 463 participants was analyzed using chi-square testing and descriptive statistics. The results indicate a significant association between income level, education, and age with UPS adoption. Specifically, higher income, greater educational attainment, and younger age correlate with higher adoption rates. Despite a positive overall outlook, a substantial portion of participants remain uninterested or require more information. Addressing awareness and affordability issues could enhance adoption. This study highlights the importance of tailoring promotional strategies to diverse demographic factors to effectively increase UPS participation and ensure broader financial security.
KEYWORDS: *Universal Pension Scheme; Social Wellbeing; Demographic Factors; Bangladesh*

INTRODUCTION
The average life expectancy of people in Bangladesh is currently 72.3 years, but the average life expectancy is likely to increase further in the future (BBS,2015). The country is enjoying the benefits of demographic dividend. Currently about 62% of our total population is working. The number of people above 65 years is about 7% of the total population who are mainly dependent on the working population (Bangladesh Sangbad Sanstha, 2023). By 2050 this number will increase to 25%. At the same time, due to increase in the average life expectancy and rise in the number of single households the dependency ratio will increase in the future (CIA World Factbook. (2018). So it is necessary to build a sustainable social security structure. If it is possible to bring the population above the age of 18 years under the Universal Pension Scheme (UPS), they will be covered by a well-organized social security structure (Barkat-e-Khuda. (2011). The target has been set to bring 10 crore citizens of the country under the universal pension scheme. If this system is implemented effectively, the social security of our elderly population will be ensured (Banks & FIs.,2023).

The government has already started its activities by establishing the National Pension Authority. The Universal Pension Management System has been developed on a complete IT platform. It is noteworthy that 16,600 people have registered in the public pension scheme, against which 19 crores taka have been deposited till December 5, 2023 (Bangladesh Sangbad Sanstha, 2023) . In Universal Pension Scheme, 18 to 50 years old beneficiary has to pay subscription until 60 years of their age and above 50 years old beneficiary has to pay for 10 years to receive pension until their death. Any Bangladeshi citizen working or staying abroad can also participate in this scheme. There are several Universal Pension Schemes in place such as Probash, Progoti, Surakkha and Samata. Pensioners can choose their appropriate scheme according to their age and income level (Bangladesh Sangbad Sanstha, 2023).

Objectives:
1) To assess how income level influences the adoption of the Universal Pension Scheme.
2) To evaluate the effect of educational level on the adoption of the Universal Pension Scheme.
3) To analyze the impact of age on the adoption of the Universal Pension Scheme.
4) To assess the perception of the investors about the Universal Pension Scheme.

LITERATURE REVIEW
The Universal Pension Scheme (UPS) is introduced in a large number of countries in various forms. The variations of UPS are visible across the world. As per the report of ILO 2017, 186 countries have adopted at least one pension scheme for elderly citizens (ILO 2017). However, as per ILO (2021), only 46.9% of the people of the world are effectively covered by at least one

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 10| Issue: 8| August2024|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2024: 8.402 || ISI Value: 1.188

social benefits scheme. Though average public expenditure on social protection is 12.9% of GDP, Low-income countries are spending only 1.1%, Lower-middle income countries are spending 2.5%, Upper-middle income countries are spending 8%, where High-income countries are spending 16.4% of GDP (ILO, 2021).

Therefore, an effective social protection scheme, as well as effective UPS is expected in the developing countries. In China, the challenges of demographic transition have been identified as a critical factor in the framework of pension schemes (Chai & Cheng, 2014). Therefore, a hybrid system (between DCand DB) has been proposed in China. Conditional defined benefit (DB) and notional defined-contribution pension systems have been discussed in the context of China (Williamson & Shen,2004). Moreover, it has been mentioned that the lack of integrated institutional efforts (Freedman& Yanxia, 2016).

In Sub-Saharan African countries, too much generalization has been seen as a problem for an effective pension scheme for the senior citizens. Lack of institutional capacity has been identified as a problem in implementing the effective social security scheme in African countries as well (Thovoethin & Ewalefoh, 2018). Therefore, Thovoethin & Ewalefoh (2018) argue for the social context and existing institutions' compatible social protection schemes for the senior citizen in the Sub-Saharan African countries. They urged for a pluralistic social scheme combining both the contributory and non-contributory approaches considering the context and through various mechanisms, e.g., tax incentives. In African countries, lack of interest among the citizen has been found as a major challenge to implement the UPS as well. Considering the situation in India, four critical areas have been identified for an effective pension scheme (Narayana, 2019). Narayana (2019) identified adjustment of inflation in the expenditure, economic growth, continuous correction of inclusion and exclusion of errors are the major Challenges of the pension scheme in India.

Article 15 of the Bangladesh constitution requires the state to guarantee "the right to social security." According to (Bach, 2003), "social security" embodies the financial assistance given by the government that assists those with low or no income. All residents will receive social security benefits under the Universal Pension Scheme, which is dedicated to ensuring that no one is left behind from birth to death. The UPS was previously described in the National Social Security Strategy (NSSS) 2015 and the Seventh Five-Year Plan (7FYP). The Universal Pension Management Bill 2022 was approved by the Bangladesh Parliament on January 24, 2023 (Zaman, 2023).

However, given the current demographic trend, it is predicted that by 2051, nearly 20% of Bangladesh's population will be over 60 (BBS, 2015). The elderly population of Bangladesh currently lacks access to pension schemes. The older population has been impacted by poverty and landlessness as a result of the current socio economic landscape (Dulal, 2016). The magnitude of the pension benefit (expressed as a proportion) and the length of service have an immediate association. Both public and corporate pension plans have proven this assertion to be accurate. According to Bangladesh's regulatory framework for the pension system, managing pension funds is difficult because there is no single complete legal guidance for the pension system (Mamun & Hossain, 2022). In addition, (Khondker B. H. & Razzaque , 2018) advanced a compelling argument for a universal social pension scheme for Bangladesh in conjunction with the high rates of poverty and lower labor market engagement among the elderly, who also frequently have inadequate access to credit. Finally, as the government has issued this Universal Pension Scheme, there emerge other challenges regarding its acceptance in the society by the citizens.

The authors develop the study framework as follows in light of the aforementioned description.

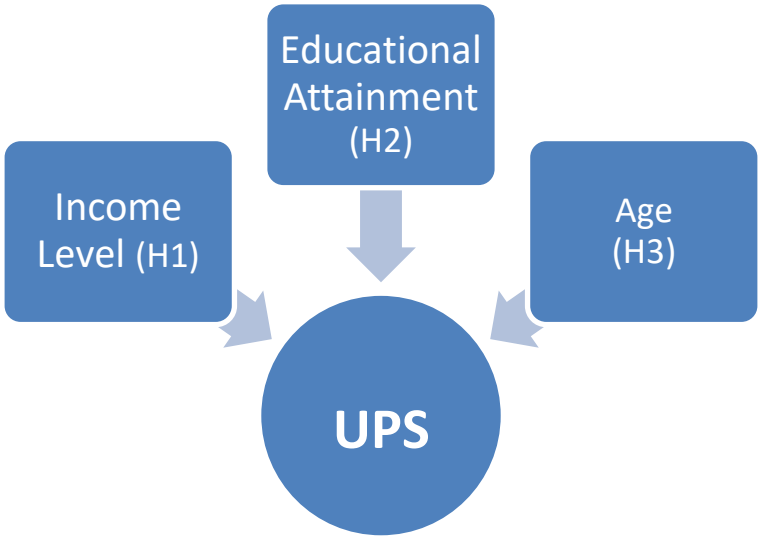


Figure 01: Study Framework developed by the researchers.

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 10| Issue: 8| August2024|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2024: 8.402 || ISI Value: 1.188

Based on the conceptual framework, this study develops three hypotheses. Flowing hypotheses are developed for this study.
Hypothesis 01: There is a significant association between the income level and the adoption of Universal Pension Scheme.
Hypothesis 02: There is a significant association between the educational level and the adoption of Universal Pension Scheme.

Hypothesis 03: There is a significance association between the age limit and the adoption of the Universal Pension scheme.

METHODS

This study uses a quantitative method. Data was collected from 463 participants aged over 18 years old as the UPS is eligible for Bangladeshi citizen aged between 18 to 50 years according to their National Identity card. The data collection was done using a close ended questionnaire following the simple random sampling method. The SPSS software was used to analyze the data for chi square testing and descriptive statistics.

RESULTS AND DISCUSSION

Our first objective was to assess the impact of the income level on the adoption of Universal Pension Scheme and following hypothesis was developed:

- **Null Hypothesis (H_0):** Income level has no effect on the adoption of the Universal Pension scheme.
- **Alternative Hypothesis (H_1):** Income level has a significant effect on the adoption of the Universal Pension scheme.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.383E2[a]	30	<.001
Likelihood Ratio	446.558	30	<.001
N of Valid Cases	463		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 37.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.835	<.001
	Cramer's V	.565	<.001
N of Valid Cases		463	

The Pearson Chi-Square statistic is significantly large, with a p-value of <.001. This indicates that there is a statistically significant association between the variables future plan about UPS and the level of income. Since the p-value is much less than the common alpha level of 0.05, we reject the null hypothesis, which suggests that there is a significant relationship between the categorical variables. The Likelihood Ratio statistic also has a very small p-value (<.001), further supporting the conclusion that there is a significant association between the variables future plan about UPS and the level of income. This test is an alternative to the Pearson Chi-Square test and similarly indicates that the relationship between the variables is not due to chance. The Phi coefficient is a measure of association, the value of .835 is quite high, which suggests a strong association between the future plan about UPS and the level of income. Since the p-value is <.001, this association is statistically significant. Cramer's V is a measure of association for nominal data and ranges from 0 (no association) to 1 (perfect association). A value of .565 suggests a moderate to strong association between the variables. The statistical significance is confirmed by the p-value of <.001, indicating that the strength of the association is not due to random chance.

Our second objective was to assess the impact of the educational level on the adoption of Universal Pension Scheme and following hypothesis was developed:

- **Null Hypothesis (H_0):** Educational level has no effect on the adoption of the Universal Pension scheme.
- **Alternative Hypothesis (H_1):** Educational level has a significant effect on the adoption of the Universal Pension scheme.

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 10| Issue: 8| August2024|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2024: 8.402 || ISI Value: 1.188

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.097E2[a]	30	<.002
Likelihood Ratio	377.229	30	<.002
N of Valid Cases	463		

a. 0 cells (0%) have expected count less than 5. The minimum expected count is .37.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.883	<.002
	Cramer's V	.554	<.002
N of Valid Cases		463	

The Pearson Chi-Square value of 709.7 with 30 degrees of freedom is associated with a very small p-value (<.002), indicating a highly significant result. This means that there is a statistically significant association between the Future plan about UPS and the Level of Education. The Likelihood Ratio test also shows a significant p-value, reinforcing the result from the Pearson Chi-Square test. Both tests suggest that there is a strong association between the variables. A Phi coefficient of .883 is quite high, suggesting a strong association between the Future plan about UPS and the Level of Education. A Cramer's V of .554 indicates a moderate to strong association between the Future plan about UPS and the Level of Education.

Our third objective was to assess the impact of the age level on the adoption of Universal Pension Scheme and following hypothesis was developed:

- **Null Hypothesis (H_0):** Age level has no effect on the adoption of the Universal Pension scheme.
- **Alternative Hypothesis (H_1):** Age level has a significant effect on the adoption of the Universal Pension scheme.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.366E2[a]	25	.000
Likelihood Ratio	334.067	25	.000
N of Valid Cases	463		

a. 0 cells (0%) have expected count less than 5. The minimum expected count is .37.

Symmetric Measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.765	.000
	Cramer's V	.524	.000
N of Valid Cases		463	

The Pearson Chi-Square test assesses whether there is a significant association between the Future plan about UPS and the age level. A high chi-square value (636.6) and a very low p-value (.000) suggest a significant relationship between the Future plan about UPS and age level. The null hypothesis, which states that there is no association between the variables

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 10| Issue: 8| August2024|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2024: 8.402 || ISI Value: 1.188

Future plan about UPS and the age level, can be rejected. In other words, the data provides strong evidence that the variables are not independent of each other. The Likelihood Ratio test is an alternative to the Pearson Chi-Square test and assesses the same hypothesis. The significant result (p-value of .000) confirms the finding from the Pearson Chi-Square test that there is a significant association between the Future plan about UPS and the age level. Phi Coefficient value of .765 suggests a very strong relationship between the variables. A Cramer's V value of .524 indicates a moderate to strong association between the variables.

Finally, we have tried to find out the perception of the investors about the Universal Pension Scheme. The opinion of the pensioners varies according their income level, educational qualification and the age limit.

Future plan about UPS

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	13	2.8	2.8	2.8
I have already taken up the Scheme	64	13.8	13.8	16.6
I must take up the scheme	87	18.8	18.8	35.4
I am thinking about the scheme	41	8.9	8.9	44.3
I need more information about the scheme	102	22.0	22.0	66.3
I am not interested about the scheme	156	33.7	33.7	100.0
Total	463	100.0	100.0	

According to the finding 13.8% of the pensioners have already taken up the scheme and 18.8% of the participants is committed to enroll with the universal pension scheme. However, 8.9% of the participants are interested about the scheme and 22% of the participants need more information in making their mind about the scheme. Unfortunately, 33.7% of the participants are reluctant about the universal pension scheme and different reasons have been mentioned for not taking up the UPS.

Reasons not to take up the UPS

	Frequency	Percent	Valid Percent	Cumulative Percent
Positive about the UPS	288	62.2	62.2	62.2
Don't aware about the scheme	48	10.4	10.4	72.6
Don't have confidence on the scheme	40	8.6	8.6	81.2
Age - too old to take up the scheme	15	3.2	3.2	84.4
Cannot afford to subscribe for the scheme	41	8.9	8.9	93.3
Better to invest in other investment	13	2.8	2.8	96.1
Others	18	3.9	3.9	100.0
Total	463	100.0	100.0	

Although, 62.2% of the participants are positive about the universal pension scheme but rest of the participants have shown different reasons for their unwillingness. About 10.4% of the participants are not aware about the scheme and 8.6% of the participants don't have confidence on the scheme. Another 8.9% of the participants cannot afford to subscribe for the scheme and 3.2% of the participants have shown their opinion that old age is the factor not for taking up the scheme. 2.8% of the participants think that it's better to invest somewhere else. Finally, 3.9% of the participants have shown other reasons not for taking up the scheme.

CONCLUSION

In conclusion, this study investigated the influence of income level, educational attainment, and age on the adoption of the Universal Pension Scheme (UPS) and explored investor perceptions regarding the scheme. The analysis revealed a significant association between income level and the adoption of

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 10| Issue: 8| August2024|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2024: 8.402 || ISI Value: 1.188

UPS. High-income individuals are more likely to adopt the scheme, with a strong association indicated by both Pearson Chi-Square and Likelihood Ratio tests, as well as high Phi and Cramer's V values. This suggests that income level plays a crucial role in determining one's likelihood to adopt the UPS, possibly due to financial capability and perceived benefits of the scheme.
Similarly, educational level significantly impacts UPS adoption. The Chi-Square results show a strong relationship between education and adoption, supported by high Phi and Cramer's V values. Educated individuals are more likely to understand and value the benefits of the UPS, leading to higher adoption rates. This highlights the importance of education in influencing financial decision-making and pension planning. Age also significantly affects UPS adoption. Younger individuals are more inclined to consider or adopt the scheme, as evidenced by the high Chi-Square statistic and significant p-value. The strong Phi coefficient and moderate to strong Cramer's V value suggest that age is a critical factor, with younger participants being more engaged and proactive about their pension planning. Investor perceptions reveal a mixed response towards the UPS. While a majority express positive sentiments about the scheme, a significant proportion remains uninterested or requires more information. Notable reasons for reluctance include lack of awareness, confidence issues, and affordability concerns. Addressing these issues through improved awareness campaigns and targeted communication could enhance adoption rates.

Overall, these findings underscore the need for tailored strategies to promote the UPS, considering income, education, and age factors, while also addressing barriers to adoption identified through investor feedback.

REFERENCES

1. *Barkat-e-Khuda. (2011). Social safety net programmers in Bangladesh: A review. The Bangladesh Development Studies, 87-108.*
2. *Bangladesh Sangbad Sanstha. (2023, November 27). "President declares elderly people as 'senior citizens." . Retrieved from The Daily Star.*
3. *Bach, D. (2003). 1001 Financial Words You Need to Know. Oxford University Press, USA .*
4. *BBS. (2015). Population projection of Bangladesh: Dynamics and trends – 2011–2061.Dhaka: Bangladesh Bureau of Statistics (BBS), Government of Bangladesh (GoB)*
5. *Banks & FIs. (2023, November). Retrieved from Bangladesh Bank: https://www.bb.org.bd/en/index.php/financialactivity/bankfi?fbclid=IwAR0Hm8ekaNrQ49pHfSXJTU0Kud7_AUmv44HccBKJ7WS_yJQIstkLVyiH*
6. *Cai, Y., & Cheng, Y. (2014). Pension reform in China: Challenges and opportunities. Journal of Economic Surveys, 28(4), 636-651*
7. *CIA World Factbook. (2018). Bangldesh Demographic Profile . Retrieved from Index Mundi : https://www.indexmundi.com/bangladesh/demographics_profile.htm*
8. *Dulal, M. G. (2016). Income Security for Older Persons in South Asia Bangladesh Perspective. Retrieved from unescap.org. https://www.unescap.org/sites/default/d8files/Bangladesh%20Perspective_Dulal.p df*
9. *Freedman, J., &Yanxia, Z. (2016). China's pension paradoxes: challenges to creating an equitable and stable pension scheme. China: An International Journal, 14(3), 153-166*
10. *International Labour Organization (ILO) (2017). World Social Protection Report 2017-2019: Universal social protection to achieve the sustainable goals. International Labour Office - Geneva*
11. *International Labour Organization (ILO) (2021). World Social Protection Report 2020-2022: SocialProtection at the crossroads – in pursuit of a better future. International Labour Office – Geneva*
12. *Khondker B. H., & Razzaque , M. A. (2018). Pension insights: Is a universal scheme an option for Bangladesh? Policy Insights.*
13. *Mamun, M. Z., & Hossain, M. Z. (2022). The Bangladesh Pension System. International Comparison of Pension Systems, 315–356*
14. *Narayana, M. R. (2019). Old age pension scheme in India: Distributional impacts. South Asia Research, 39(2), 143-165*
15. *Thovoethin, P. S., &Ewalefoh, J. O. (2018). Universal old-age pension: Can Africa overcome it's challenges?. Africa's Public Service Delivery and Performance Review, 6(1), 1-7*
16. *Williamson, J. B., & Shen, C. (2004). Do notional defined contribution accounts make sense as part of the old-age security mix for China?. Journal of aging & social policy, 16(4), 39-57*
17. *Zaman, M. A. (2023, January 31). The Daily Star. Retrieved from Universal pension scheme: What it is and how it will work: https://www.thedailystar.net/business/economy/news/universal-pension-scheme- what-it-and-how-it-will-work-3234871*