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How and to what extent does age influence investment decisions and performance for Chinese investors?

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Abstract:

This study examines the impact of age on the investment decisions and performance of Chinese investors. Through a literature review and questionnaire survey (valid sample size: 123), the research reveals that as investors age, their risk aversion significantly increases, their investment portfolios tend to become more diversified, and they exhibit a stronger preference for long-term returns and capital preservation. Conversely, younger investors favor short-term high-yield investments and are more sensitive to macroeconomic shocks. The study validates that age affects investment behavior through multiple mechanisms, including risk attitudes, cognitive abilities, and behavioral biases. Additionally, gender differences emerge in stock selection experience, with men more likely to acknowledge the enhancement of investment skills through experience. However, the research is limited by a relatively small sample size, insufficient representation of older age groups, and gender imbalance. Future studies could enhance the generalizability and timeliness of conclusions by expanding sample sizes, optimizing sampling structures, and incorporating the latest literature.

Keywords: Age and investment decisions, Risk aversion; Portfolio diversification, Chinese investors, Long-term and short-term investment

1. Introduction

According to BJNEWS (2024), the Shanghai Stock Exchange's official website reported that the A-share investors achieved a total of 365 million people, of which individual investors 364 million. It has a significant increase, from 200 million in 2022. At the same time, people of almost all ages participate in investment, investors aged 30-45 have the highest proportion, and investors who are 60 or above have the least, as revealed by East Money.com.

As more and more people in different ages enter the stocks market, it is necessary to verify how different age influences investment and explore their level of effect, so the research is conducted by analyzing studies and sending a questionnaire, which will an-

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swer how and to what extent age influences investment decisions and performance for Chinese investors.

2. Literature Review

2.1 - The changes in investment in China in the past 10 years

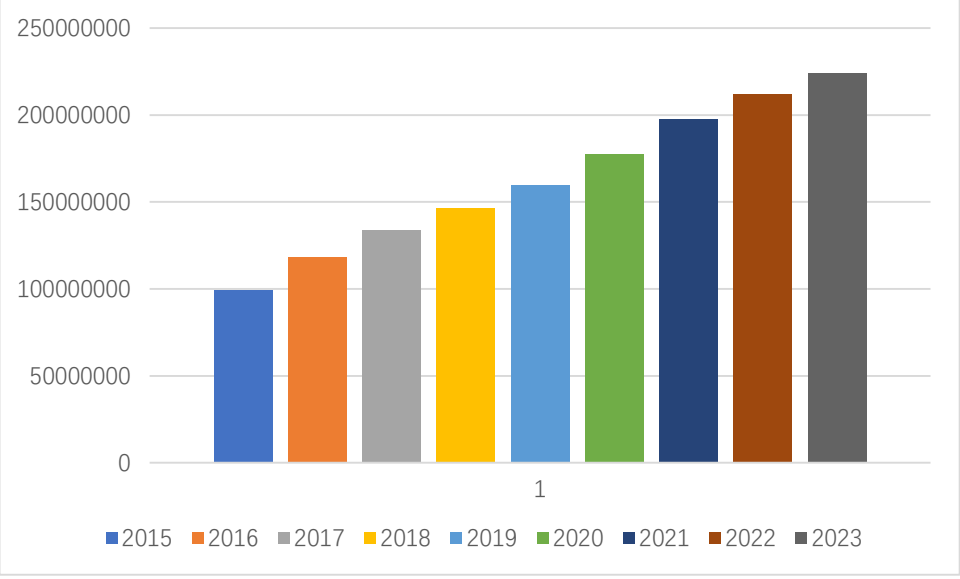

Figure 1: Annual total number of Chinese investors

Source: CSDC, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023

The most significant change is the total number of investors in China, which shows an upward tendency from 99105400 to 224060600 between 2015 and 2023 (CSDC, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023).

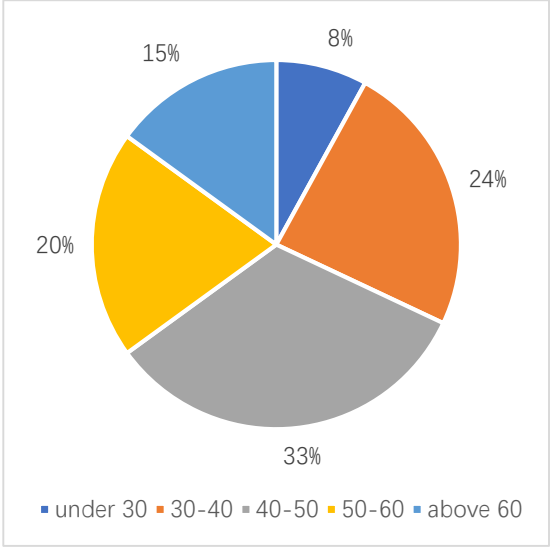

Figure 2: Age distribution of individual investors in 2012

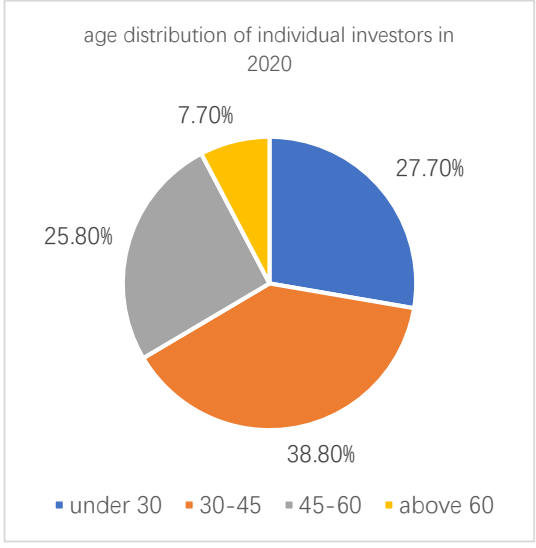

Figure 3: Age distribution of individual investors in 2020

Source: Asset Management Association of China, 2012;2020

As for the age distribution, investors tend to be younger. The age group that is above 60 occupied 15% in 2012; however, it became half of what it was before, accounting for only 7.7%.At the same time, the number of investors who are under 30 recorded a rapid increase from

8% to 37.7% (Asset Management Association of China, 2012;2020).

This growth has been driven by a variety of factors, including new economy sectors (IT, strategic industries), market reforms (registration system, Sci-Tech Board), and boosting confidence.

2.2 - different investment choices reflecting different attitudes to risk

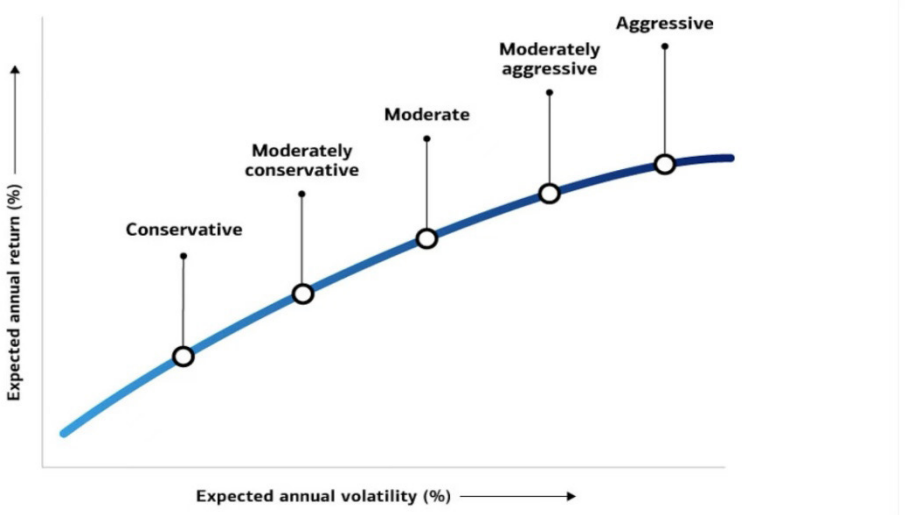

Figure 4: Different kinds of people in investment

Source: Chief Investment Office,2024

This graph illustrates the relationship between investment strategies and their expected annual returns and volatilities. It classifies all people specifically into five types: Conservative, Moderately conservative, Moderate, Moderately Aggressive, and Aggressive (Chief Investment Office,2024).

Risk-seeking investors favor high-risk, high-return stocks, embracing market uncertainty and innovation opportunities (Islam et al., 2024; Bortoli et al., 2019), often targeting new markets. Risk-neutral investors balance risk-return via diversified portfolios (stocks, bonds, funds) and value-preserving assets like real estate (Selim Aren & Zengin, 2016; Islam et al., 2024). And risk-averse investors prefer low-risk, stable returns (e.g., government bonds, fixed deposits), avoiding market volatility.

2.3 - How does the behavior in investment change as people grow older

2.3.1 -risk attitude

Senior citizens have a higher degree of risk aversion. According to research by Brooks et al. (2017), the elderly are more reluctant to undertake financial risk since cognitive decline diminishes their ability to take risks. They may then tend to choose low-risk investments because of their slower information handling and declining working memory.

Apart from that, the degree of loss aversion rises as people become older. The aged are more sensitive to loss, so they will be more cautious in investment(Dolder and Vandenbroucke, 2024). This study has analyzed about 5000 data points from the employees and customs of financial institutions, which have high authority.

2.3.2 -investment skills

As people become older, they perform worse in stock selection and have poor diversification skills. It may be because their cognitive competence has declined. The research illustrated that the age-skill relation has an inverted U-shape, which sharply deteriorates around the age of 70 (Kornioti and Kumar,2011). However, it does not take into account that the age-cohort-period identification problem also contributes to the decline of investment skills.

By contrast, some people argue that older investors, those aged sixty and above, tend to make better investment decisions (Saxena,2020), likely due to the accumulation of more experience and knowledge with age, leading them to be more cautious and rational when investing.(Charles and Kasilingam,2013)

2.3.3 -investment portfolio

As people become older, their investment portfolio will be more diverse to lower the risk. They may diversify funds among different asset classes and regions to achieve risk dispersion (Brown, Garlappi and Tiu, 2010). Other than that, it is widely considered that the old tend to be more conservative, and they choose less risky portfolios. They prioritize the safety and stability of their investments, as they desire to maintain their accumulated wealth and ensure financial security during their retirement (Korniotis

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and Kumar, 2011).
However, these authors overlook declining human wealth with age. As incomes drop, some may pursue riskier investments for higher returns to secure their financial future, taking more risk than in earlier, stable-income years (Ameriks & Zeldes, 2004).

2.3.4 -investment objectives

At a young age, investors often prioritize wealth accumulation. They are more inclined to take higher risks to pursue adequate recompense, which is reflected in the higher allocation of stock (Campbell and Viceira,2001). As people become older, they are more concerned about the overall financial burden on households. And they begin to face retirement, then their goal shifts to capital preservation and a stable income stream (Cutler, Poterba and Summers,1991). However, two of the articles are not current, so whether people still have the change objectives needs to be justified.

2.3.5 -investment strategy

As MA Charles and DR Kasilingam (2013) reported, young investors are more willing to take risks and trade short term, while older investors prefer the long term. As investors age, they are more conservative and gradually shift from high-risk, high-return to low-risk, high-return. However, the author neglects market conditions and objectives. Conservative investors with long-term goals benefit more from medium-risk portfolios (more stocks, fewer bonds) for higher returns and volatility resilience, while short-term goals or near-retirement plans warrant higher bonds and cash to mitigate risk (Chief Investment Office, 2024).

2.3.6 - Changes in Market Conditions and the Impact on Investment Choices

2.3.6 .1-investment decision sensitivity

Young people are more sensitive to recent macroeconomic shocks and tend to form more pessimistic expectations. By contrast, older people are less responsive to recent macroeconomic shocks, resulting in smaller expectation deviations and a weaker impact on economic activities (Lee, 2024).

2.3.6 .2-the strategies for dealing with inflation

Young people may combat inflation by investing in high-risk, high-return products such as stocks and hybrid funds. They are also more willing to take advantage of inflation expectations and adjust their investment portfolios by analyzing economic data, central bank policies, and market sentiment. Elderly people may choose real estate investment because property values and rental income may rise with inflation. They may also appropriately allocate some gold to hedge against inflation risks (Gnewuch and Zhang, 2025).

2.3.6 .3- response to monetary policy

Under an expansionary monetary policy, young people's investment decisions tend to be more inclined towards large-scale investment. Changes in monetary policy have a greater impact on the shape of young people's investment rate distribution, and they are more likely to shift from not investing to making large-scale investments. However, elderly people's investment decisions are relatively stable, and expansionary monetary policy has a smaller impact on the shape of their investment rate distribution (Gnewuch and Zhang, 2025).

2.3.6 .4-the response to the recession

Young people's consumption behavior is significantly affected during and after an economic recession because they have a more pessimistic outlook on future unemployment rates, leading to reduced consumption. By contrast, elderly people's consumption behavior is relatively stable, with smaller expectation deviations and a weaker impact on economic activities (Lee, 2024).

3. Methodology

3.1 -The research gap

Although previous studies have explored the impact of age on investment decisions, there is a lack of systematic research on how age directly affects investment performance in the context of the Chinese market. Further investigation is needed into how age influences investment performance through various mechanisms such as risk preference, cognitive ability, and behavioral biases. Besides, as investors age, their investment strategies may change. It is necessary to further study how age affects the adjustment of investment strategies under different market conditions and how these adjustments impact investment performance. Furthermore, existing research is conducted in the USA, the UK, and so on. But attitudes of investors are influenced by culture, tradition, etc, and we need information specific to Chinese investors. Finally, although the existing research is good and studies have great authority, they are sometimes a little old and do not reflect today's attitudes. In China, in particular, older people will have very different attitudes now compared to 2010.

3.2 -Research Hypothesis

1. That as people grow older, they become more risk-averse in their investment choices.

2. That as people become older, they perform better in stock selection because of experience.

3. That as people grow older, their investment portfolio

will be more diverse to lower the risk.

4. That elderly people shift their goal to capital preservation and a stable income stream from taking higher risks to pursuing adequate recompense

5. That the aged prefer to trade in the long term than the young

6. That young people are more responsive to macroeconomic shocks than the old

7. That seniors choose real estate and gold allocations to hedge against inflation risk rather than high-risk, high-yield products such as stocks and hybrid funds

3.3 -Research Method

Design a questionnaire through wjx.cn according to the hypotheses listed above. Questions include single choice, multiple choice, and the Richter scale. Send it out via WeChat and REDnote, such as social software, and ask others to fill it out in public like a shopping mall, then collect results and analyze them.

4. Results

4.1 -Survey Sample

age/gender	male	female	total
below 18	14	11	25
18-35	12	26	38
36-50	13	41	54
above 50	4	2	6
total	43	80	123

age/gender	male	female	total
below 18	14	11	25
18-35	12	26	38
36-50	13	41	54
above 50	4	2	6
total	**43**	**80**	**123**

Figure 5: survey sample

This research has received 129 replies, and 6 of them are not valid and were deleted. The number of females holds the largest proportion at about 65%. And at the same time, the number of males accounts for roughly 35%. Most people are in the 36-50 age group, which is 54, making up 43.9%. However, there are only 6 people above 50 who occupy 4.9%.

4.2 -Results by Question

4.2.1 - Question 3-It is suggested that as people grow older, they become more risk-averse in their investment choices.

This question was asked as an agreement scale question with 1 being strongly disagree and 10 being strongly agree. The distribution of replies is shown below.

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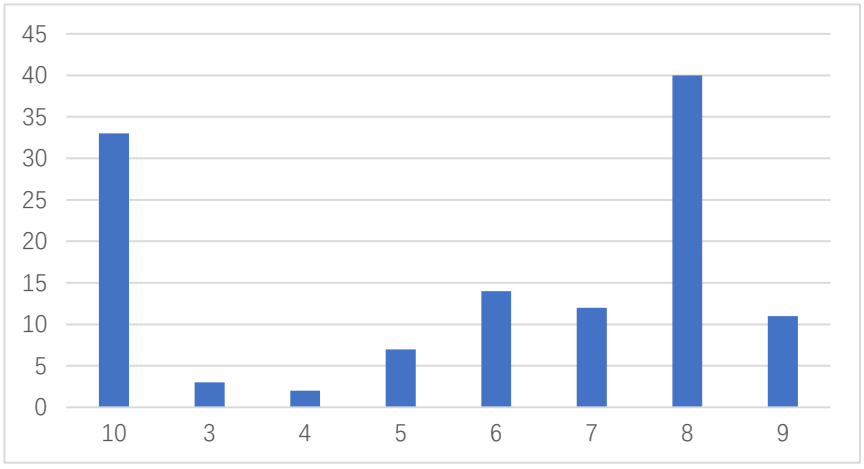

Figure 6: It is suggested that as people grow older, they become more risk-averse in their investment choices.

The mean response for this question was 7.93, and the mode was 10. The standard deviation was 1.77. This suggests that the data for this question is highly reliable.

4.2.2 -Question 4-It is suggested that as people become older, they perform better in stock selection because of experience.

This question was asked as an agreement scale question with 1 being strongly disagree and 10 being strongly agree. The distribution of replies is shown below.

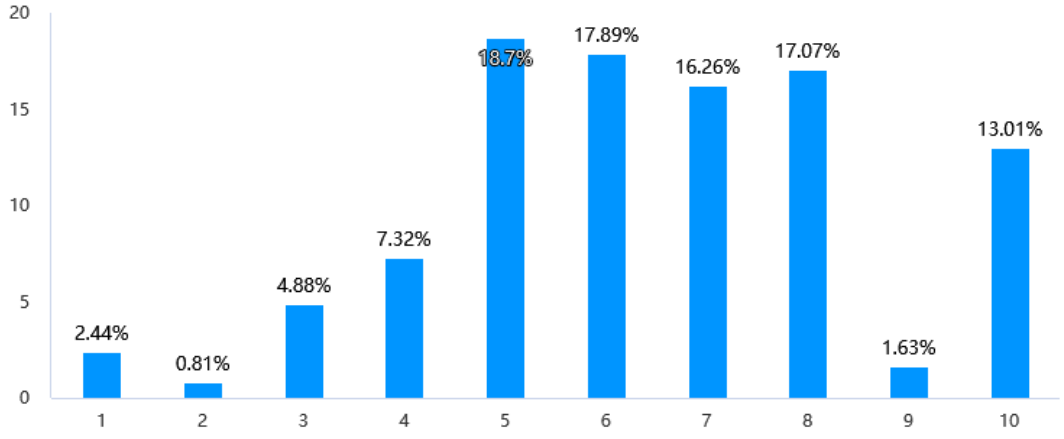

Figure 7: It is suggested that as people become older, they perform better in stock selection because of experience.

The mean response for this question was 6.44, and the mode was 10. The standard deviation was 2.14. This suggests that the data for this question is reliable.

4.2.3 -Question 5-It is suggested that as people grow older, their investment portfolio will be more diverse to lower the risk.

This question was asked as an agreement scale question with 1 being strongly disagree and 10 being strongly agree. The distribution of replies is shown below.

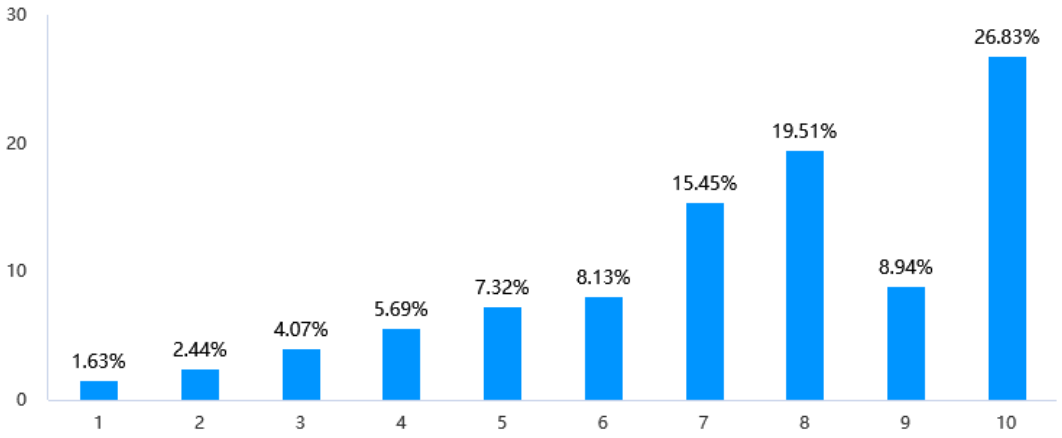

Figure 8: It is suggested that as people grow older, their investment portfolio will be more diverse to lower the risk.

The mean response for this question was 7.4, and the mode was 10. The standard deviation was 2.36. This suggests that the data for this question is reliable.

4.2.4 -Question 6- It is suggested that as people become older, they shift their goal to capital preservation and a stable income stream from taking higher risks to pursuing adequate recompense.

This question was asked as an agreement scale question with 1 being strongly disagree and 10 being strongly agree. The distribution of replies is shown below.

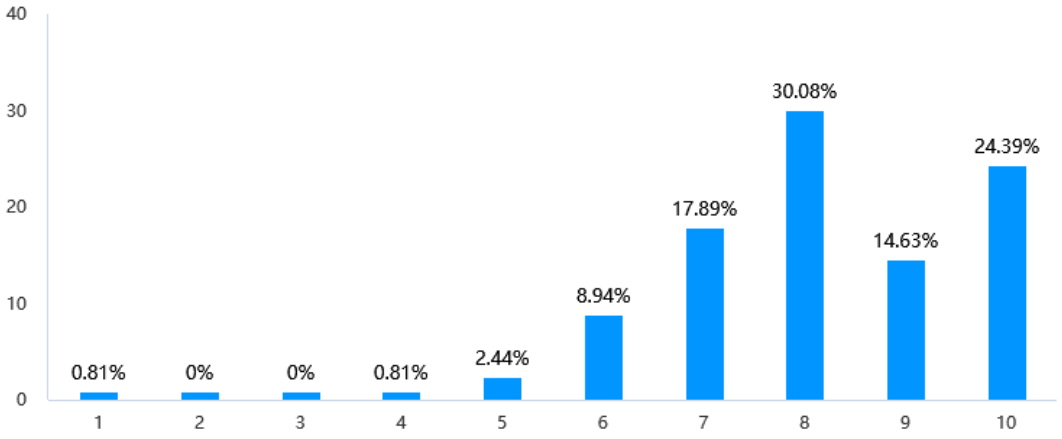

Figure 9: It is suggested that as people become older, they shift their goal to capital preservation and a stable income stream from taking higher risks to pursuing adequate recompense.

The mean response for this question was 8.11, and the mode was 10. The standard deviation was 1.55. This suggests that the data for this question is highly reliable.

4.2.5 -Question 7-It is suggested that older people are more inclined to trade for the long term than younger people.

This question was asked as an agreement scale question with 1 being strongly disagree and 10 being strongly agree. The distribution of replies is shown below.

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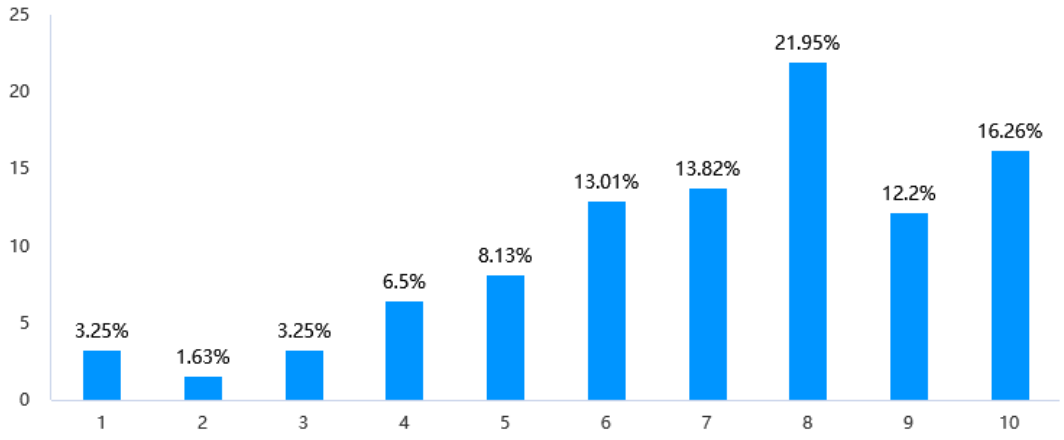

Figure 10: It is suggested that older people are more inclined to trade for the long term than younger people.

the mean response for this question was 7.8, and the mode was 8. The standard deviation was 2.31. This suggests that the data for this question is reliable.

4.2.6 -Question 8-It is suggested that young people are more responsive to macroeconomic shocks than the old.

This question was asked as an agreement scale question with 1 being strongly disagree and 10 being strongly agree. The distribution of replies is shown below.

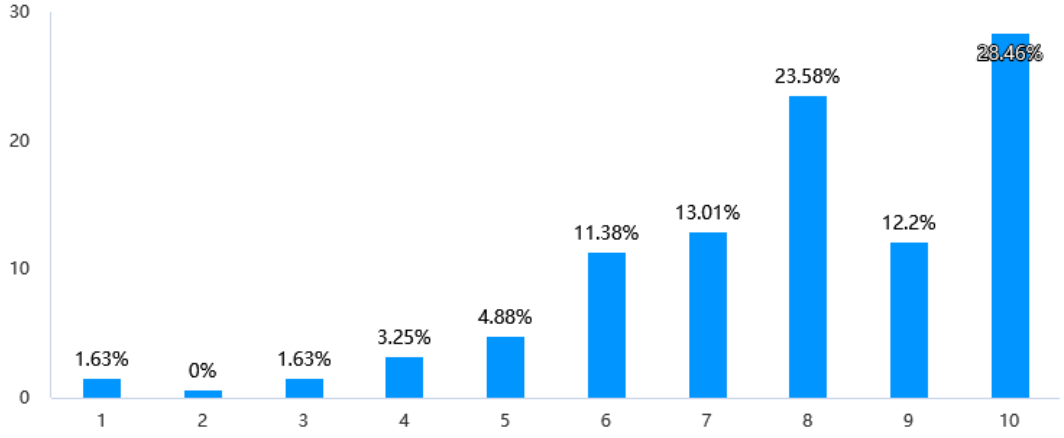

Figure 11: It is suggested that young people are more responsive to macroeconomic shocks than the old.

the mean response for this question was 7.06, and the mode was 10. The standard deviation was 2.00. This suggests that the data for this question is reliable.

4.2.7 -Question 9-That seniors choose real estate and gold allocations to hedge against inflation risk rather than high-risk, high-yield products such as stocks and hybrid funds

This question was asked as a choice question with 4 options containing real estate, ggold, stock, and a hybrid fund. The distribution of replies is shown below.

Figure 12: That seniors choose real estate and gold allocations to hedge against inflation risk rather than high-risk, high-yield products such as stocks and hybrid funds

People mostly choose gold in the age group of "below18","18-35", and"36-50", which account for 64%, 81.58% and 57.14%, respectively. The number of people who invest in stock is the lowest in the three age groups, however, it reaches 66.67% in the "above 50". So what they choose to deal with inflation risk is not really related to age. This suggests that the data for this question is less reliable.

4.3 -Main Age Differences

4.3.1 - that as people grow older, they become more risk-averse in their investment choices shows an age difference.

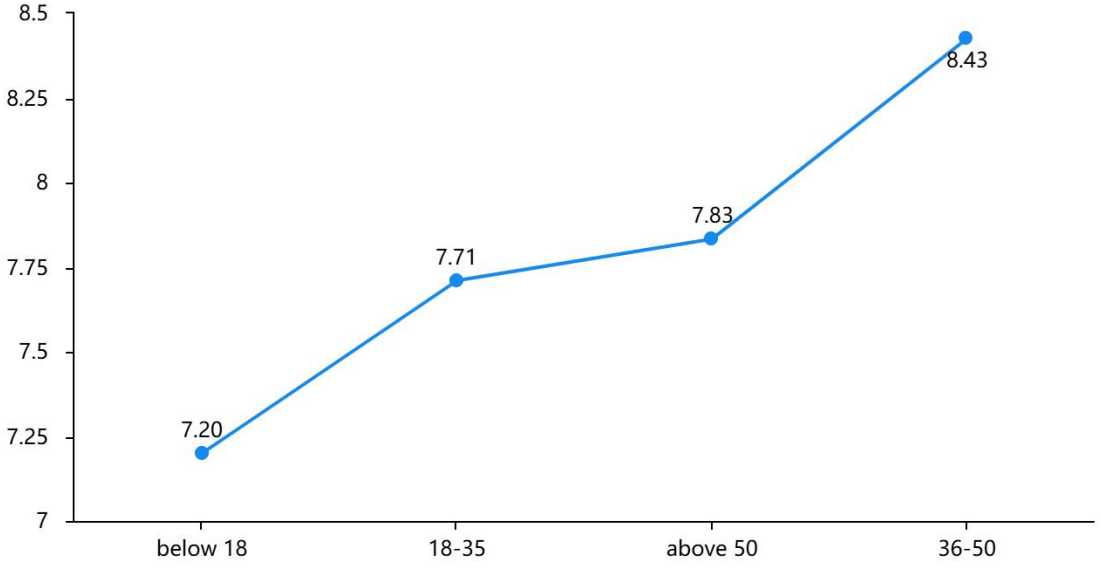

Figure 13: Age differenced in "that as people grow older, they become more risk-averse in their investment"

By using ANOVA, hypothesis 1 was tested, and the results show there is a significant difference between the "36-50" mean of 8.43 and the "below 18" mean of 7.20. Precisely, $p=0.027<0.05$, so that hypothesis 1 shows an age difference.

4.3.2 -That as people grow older, their investment portfolio will be more diverse to lower the risk show an age difference.

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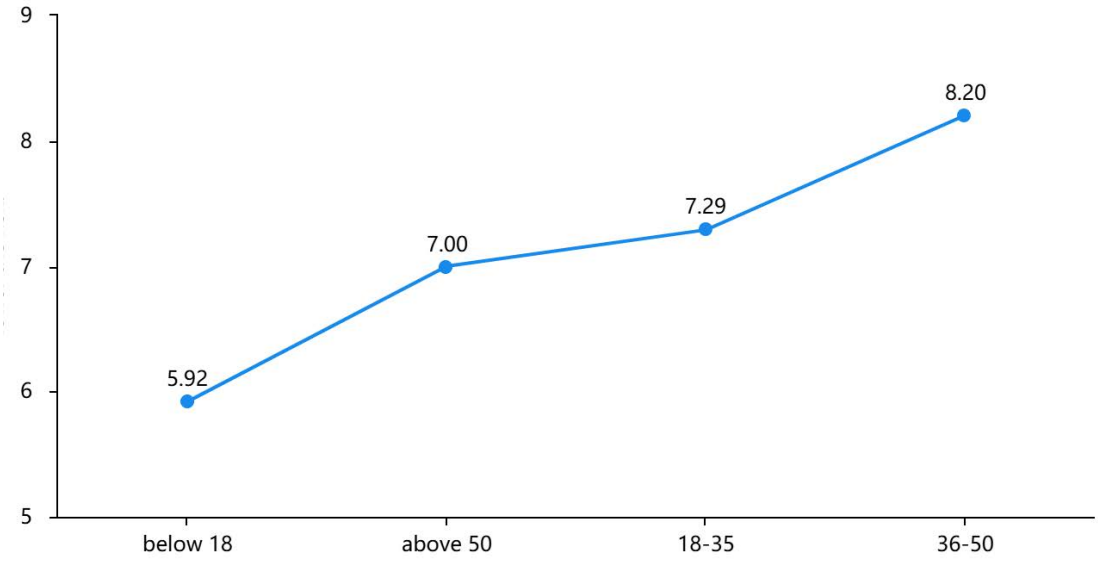

Figure 14: Age difference in "That as people grow older, their investment portfolio will be more diverse to lower the risk"

By using ANOVA, hypothesis 4 was tested, and the results show there is a significant difference between the "36-50" mean of 8.20 and the "below 18" mean of 5.92. Precisely, $p=0.001<0.05$, so that hypothesis 4 shows an age difference.

4.4 Main Gender Differences- that as people become older, they perform better in stock selection because of experience shows a gender difference.

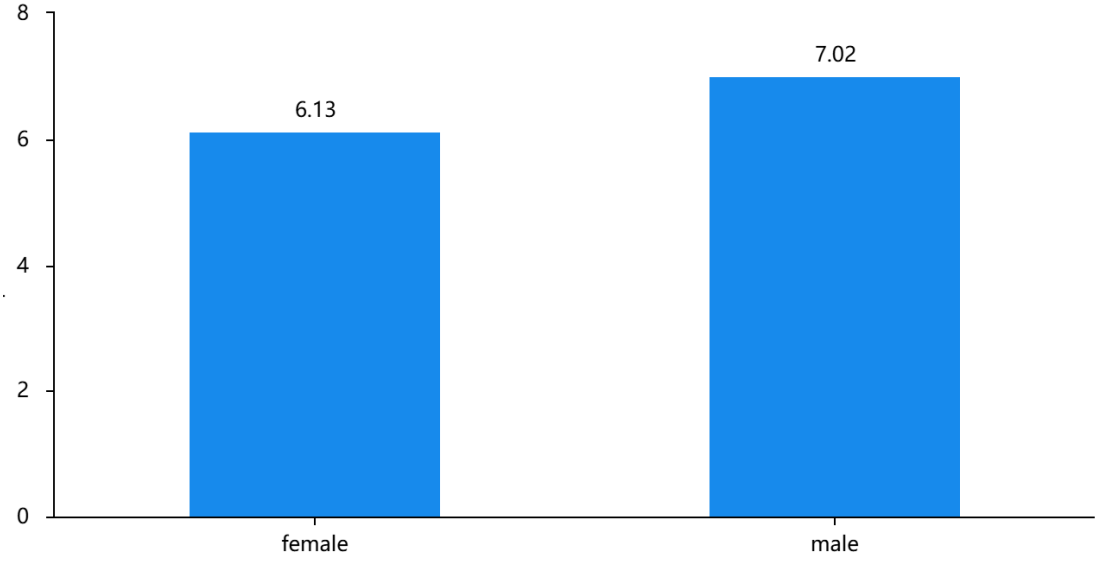

Figure 15: Gender difference in " that as people become older, they perform better in stock selection because of experience"

By using a t-test, hypothesis 2 was tested and the results show there is a significant difference between the female mean of 6.13 and the male mean of 7.02. Precisely, $p=0.026<0.05$ so that hypothesis 2 shows a gender difference

5. Discussion

5.1 -Hypothesis 1 - that as people age, they become more risk averse in their investment

choices.

In 2.3.1, Brooks et al.(2017) suggest that Senior citizens have a higher degree of risk aversion because of cognitive decline, which diminishes their ability to assess risks. Apart from that, the aged are more sensitive to loss, so they will be more cautious in investment according to Dolder and Vandenbroucke (2024). Thus, through secondary research, it is known that ageing significantly affects investment preferences through the dual mechanism of declining cognitive functioning and loss aversion, leading to more conservative investment choices among the elderly.

There was a strong agreement for this hypothesis also in my primary research. In 4.2.1, the mean response for this question was 7.93, which means that people generally considered that "as people grow older, they become more risk-averse in their investment choices" in accord with them. The mode was 10, which suggests that most of the people highly agree with this assumption. The standard deviation was 1.7, illustrating that some people may doubt this. However, it can still be concluded that this hypothesis is highly reliable.

There was also a high degree of agreement for this hypothesis across all age groups and genders. However, there is a difference between the "36-50" mean of 8.43 and the "below 18" mean of 7.2. And $p=0.027<0.05$, so the hypothesis shows an age difference. It may be because as people become older, they agree more about the change in investment based on their experience. So this makes the hypothesis more reliable.

Therefore, both the secondary and primary research give strong evidence for hypothesis 1. So that it should be accepted.

5.2 -Hypothesis2-That as people become older, they perform better in stock selection because of experience.

In 2.3.2, Saxena argues that older investors, those aged sixty and above, tend to make better investment decisions (2020). Charles and Kasilingam also proposed that the old are more cautious and rational when investing. likely due to the accumulation of more experience and knowledge with age (2013). However, Korniotis and Kumarthey considered that senior citizens perform worse in stock selection and have poor diversification skills because their cognitive competence has declined (2011).

In 4.2.2, the mode was 10, which means most of the people agree with this statement, thinking the old perform better. However, the mean response for this question was 6.44 and the standard deviation was 2.14, so it suggests that there are still a lot of people who are slightly skeptical of this hypothesis. It may be because they considered that although they gain more experience, their mind is not as flexible as when they were young, so sometimes they have poor stock selection skills.

By using ANOVA, the p-value is $0.648>0.05$, which suggests that there is almost no age difference in this hypothesis. So all people agree on this generally. Surprisingly, by using a t-test, the results show there is a significant difference between the female mean of 6.13 and the male mean of 7.02. Precisely, $p=0.026<0.05$, so the hypothesis shows a gender difference. It may be because men's historical dominance in high-barrier fields like finance grants earlier exposure to market dynamics and tools, so they accumulate a lot of experience. While females may think that they can't benefit a lot from experience in investment.

Therefore, both the secondary and primary research argue about hypothesis 2. So it should be accepted, but some are in doubt.

5.3 -Hypothesis 3-That as people grow older, their investment portfolio will be more diverse to lower the risk.

In 2.3.3, we saw that Brown, Garlappi and Tiu considered that the aged may diversify funds among different asset classes and regions to achieve risk dispersion(2010). They prioritize the safety and stability of their investments, as they desire to maintain their accumulated wealth and ensure financial security during their retirement. (Korniotis and Kumar,2011). However, to maintain their standard of living or accumulate sufficient capital for retirement, older individuals take on more investment risk than they might have earlier in their careers when they had a steadier stream of income (Ameriks and Zeldest,2004).

There was also some argument in 4.2.4, the mean response for this question was 7.4, and the mode was 10, which means that it is highly accepted by people. The standard deviation was 2.36. It suggests that there are still some people who don't think senior citizens will make portfolios more diverse to lower the risk.

However, this hypothesis had a high degree of agreement across all age groups. There is a significant difference between the "36-50" mean of 8.20 and the "below 18" mean of 5.92. Precisely, $p=0.001<0.05$, so that "as people grow older, their investment portfolio will be more diverse to lower the risk" shows an age difference. It may be because as people become older, they agree more about the change in investment based on their experience. So this makes the hypothesis more reliable.

To sum up, most people agree with hypothesis 3, but there is still some doubt. Therefore, it should be accepted, but with some doubt.

5.4 -Hypothesis 4-That elderly people shift their goal to capital preservation and a stable income stream from taking higher risks to pursuing ad-

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equate recompense

In 2.3.4, Campbell and Viceira considered that, at a young age, investors often prioritise wealth accumulation. (2001). As people become older, they are more concerned about the overall financial burden on the household and their goal shifts to capital preservation and a stable income stream. (Cutler et al.,1991). Thus, through secondary research, it is known that elderly people shift their goal to capital preservation and a stable income stream from taking higher risks to pursuing adequate recompense.

There was a strong agreement for this hypothesis also in my primary research. In 4.2.5, the mean response for this question was 8.11 and the mode was 10, which means people generally considered that "elderly people shift their goal to capital preservation and a stable income stream from taking higher risks to pursuing adequate recompense". The standard deviation was 1.55, which means that most of the data are around the average. So this statement is highly reliable.

There was also a high degree of agreement for this hypothesis across all age groups. P=0.184>0.05, so there is no significant age difference. People generally accepted this.

It can be determined at this stage that both the secondary and primary research give

strong evidence for hypothesis 4. So that it should be accepted

5.5 -Hypothesis 5-That the aged prefer to trade in the long-term than the young

In 2.3.5, Charles and Kasilingam (2013) reported that young investors are more willing to take risks and trade short term, while older investors prefer long-term. Thus, through secondary research, it is known that older investors are inclined to invest in the long term because of experience and risk aversion.

There was also an agreement in my primary research. In 4.2.6, the mean response for this question was 7.8 and the mode was 8, which means most of the people agree that the aged are more inclined to trade in the long term than the young, although the standard deviation was 2.31, meaning that there are still some people who are skeptical about this. This suggests that the hypothesis is reliable.

There was also a high degree of agreement for this hypothesis across all age groups. P=0.7>0.05, so there is no significant age difference. People generally accepted this.

It can be determined at this stage that both the secondary and primary research give evidence for hypothesis 5. So that should be accepted.

5.6 -Hypothesis 6-That young people are more responsive to macroeconomic shocks than the old

In 2.3.6, Lee illustrated that Young people are more sensitive to recent macroeconomic shocks. By contrast, older people are less responsive to recent macroeconomic shocks (2024). Changes in monetary policy have a greater impact on the shape of young people's investment rate distribution. However, elderly people's investment decisions are relatively stable. (Gnewuch and Zhang, 2025). Lee also suggests that Young people's consumption behavior is significantly affected during and after an economic recession (2024). Thus, through secondary research, it is known that younger people react more obviously.

There was also an agreement in my primary research. In 4.2.7, the mean response for this question was 7.06 and the mode was 10, which means that most of the people think this hypothesis fits their actual condition. And the standard deviation was 2.00, suggesting that there are still some people who don't agree with this. But generally, these suggest the hypothesis is reliable.

There was also a high degree of agreement for this hypothesis across all age groups. P=0.79>0.05, so there is no significant age difference. People generally accepted this.

It can be determined at this stage that both the secondary and primary research

give evidence for hypothesis 6. So that it should be accepted.

5.7 -Hypothesis 7-That seniors choose real estate and gold allocations to hedge against inflation risk rather than high-risk, high-yield products such as stocks and hybrid funds

In 2.3.6 that Gnewuch and Zhang suggest that Young people may combat inflation by investing in high-risk, high-return products such as stocks and hybrid funds. However, Elderly people may choose real estate investment because property values and rental income may rise with inflation. They may also appropriately allocate some gold to hedge against inflation risks (2025).

However, there is a disagreement in my primary research. In 4.2.8, Platinum investment is most popular among those below 50 (64% under 18, 82% aged 18-35, 57% aged 36-50), while stock investment is least favored in these groups but rises sharply to 67% among individuals over 50. So it suggests that the old prefer to choose stocks, which justifies that hypothesis 8 is less reliable.

Although the secondary research illustrated hypothesis 7, the data my primary research collected showed no correlation with age. So this hypothesis may be rejected with some doubt.

6. Conclusion-How and to what extent does age influence investment decisions

and performance for Chinese investors?

The first and most important way age influences investment decisions is people's goal, which shifts to capital preservation and a stable income stream from taking higher risks to pursuing adequate recompense. In 5.5 that the hypothesis was supported by a wide range of authors and articles, and this question in my questionnaire had a very strong agreement level with no major differences in views between age groups and genders. The second most important way that age affects investment behavior is that younger people tend to earn greater short-term profits from their investments, and senior investors tend to earn greater long-term profits from their investments. Other important ways include risk attitude, investment period and reaction to macroeconomic shocks. Ways in which age affects behavior that were studied but found to be less important include investment skills, the degree of diversity of their investment portfolio and choices of financial assets to deal with inflation.

In my view, the Future investment behavior of people will exhibit a "two ends converging" characteristic. Young people, due to economic pressure, will shift towards more pragmatic strategies, while the elderly, with longer life expectancy and accumulated wealth, will accept moderate risks. With better healthcare and education, the old will have just little cognitive functioning decline, while the young will have more knowledge to make wise choices although they have less experience, so now their investment skills may all have improved to a moderate level. As AI technology advances, it helps people make better investment decisions. As a result, the investment portfolios of both young and elderly people will tend to be more diversified and carry a certain level of risk to increase returns. So, precisely speaking, in an era characterized by rapid transformations, the risk attitude, investment skills, investment portfolio, investment objective, investment strategies and their responses to macroeconomic problems, which are influenced by age, will all have some changes to a different extent.

7. Evaluation

This study has three main limitations: Firstly, the sample size is relatively small (123 valid responses), especially with only 6 individuals over the age of 50, which may lead to insufficient representativeness of age-related conclusions. Secondly, the gender ratio in the sample is imbalanced (80 females and 43 males), and the age distribution is uneven, which may affect the generalizability of the research results. Additionally, there might be social desirability bias in the questionnaire responses, limiting the authenticity of the data. Lastly, there are a few authoritative and relevant latest research findings after 2023 in the references, which may weaken the timeliness of support for some of the conclusions.

So, future research should be improved by expanding the sample size, optimizing the sampling structure, and supplementing with the latest literature.

References

Ameriks, J., & Zeldes, S. P. (2004). How Do Household Portfolio Shares Vary With Age? Columbia Business School. Retrieved from https://www.semanticscholar.org/paper/How-do-household-portfolio-shares-vary-with-age-Ameriks-Zeldes/0dd37989b1c2157d78eb78aa523090893559573e

Ashima Saxena (2020) Does aging impacts on Financial behavior and investment decisions? https://www.gjeis.com/index.php/GJEIS/article/download/580/548

Asset Management Association of China Investor investment analysis report(2012,2020) https://www.amac.org.cn/xwfb/tzgg/201306/P020231126370397414263.pdf [Accessed 16th December 2024]

Brown, K. C., Garlappi, L., & Tiu, C. (2010). Asset allocation and portfolio performance: Evidence from university endowment funds. Journal of Financial Economics, 97(3), 433-450.

Brooks, C., Sangiorgi, I., Hillenbrand, C., & Money, K. (2017). Why are older investors less willing to take financial risks? Retrieved from https://www.sciencedirect.com/science/article/pii/S1057521917302168

BJNEWS (2024)Investors "running" into the market, A shares from 200 million in less than two years exceeded 300 million households https://www.bjnews.com.cn/detail/1730903159129376.html

CSDC (2023)*Annual Report 2023* http://www.chinaclear.cn/zdjs/tjnb/202411/25010f68524a4313b9325da84972b1b6/files/2023%E5%B9%B4%E7%BB%9F%E8%AE%A1%E5%B9%B4%E6%8A%A5.pdf[Accessed 15th December 2024]

CSDC (2022)*Annual Report 2022* http://www.chinaclear.cn/zdjs/tjnb/202307/302e9f5f445749038341de40dbd44ff2/files/2022%E5%B9%B4%E7%BB%9F%E8%AE%A1%E5%B9%B4%E6%8A%A5.pdf[Accessed 15th December 2024]

CSDC (2021) *Annual Report 2021* http://www.chinaclear.cn/zdjs/tjnb/202207/7f40cbee5bc34f9594757c652ed36e69/files/2021%E7%BB%9F%E8%AE%A1%E5%B9%B4%E6%8A%A5.pdf [Accessed 15th December 2024]

CSDC (2020) *Annual Report 2020*

ISSN 2959-6130

http://www.chinaclear.cn/zdjs/tjnb/202108/8f-4170021cd744d392412454c3f05b6a/files/2020%E7%B-B%9F%E8%AE%A1%E5%B9%B4%E6%8A%A5.pdf [Accessed 15th December 2024]
CSDC (2019) *Annual Report 2019*
http://www.chinaclear.cn/zdjs/tjnb/202007/4f9f-c2f914f24b7aa7e605026e0654a7/files/2019%E7%B-B%9F%E8%AE%A1%E5%B9%B4%E6%8A%A5.pdf [Accessed 15th December 2024]
CSDC (2018) *Annual Report 2018*
http://www.chinaclear.cn/zdjs/tjnb/201907/0801765b9e-8f47cc89ccfbcf07b2fbee/files/2018%E7%B-B%9F%E8%AE%A1%E5%B9%B4%E6%8A%A5.pdf [Accessed 15th December 2024]
CSDC (2017) *Annual Report 2017*
http://www.chinaclear.cn/zdjs/tjnb/201805/f6ceb-30c4004442bbcc4217f42bb33f1/files/2017%E7%B-B%9F%E8%AE%A1%E5%B9%B4%E6%8A%A5.pdf [Accessed 15th December 2024]
CSDC (2016) *Annual Report*
http://www.chinaclear.cn/zdjs/tjnb/201707/4d2670f9e-0c3410785a17d03175026e1/files/2016%E7%B-B%9F%E8%AE%A1%E5%B9%B4%E6%8A%A5.pdf [Accessed 15th December 2024]
Chief Investment Office(2024) *Risk tolerance: What is it — and how can I measure it?*
https://www.ml.com/articles/what-is-risk-tolerance.html [Accessed 1th January 2025]
Campbell, J. Y., & Viceira, L. M. (2001). Strategic Asset Allocation: Portfolio Choice for Long-Term Investors. Oxford University Press.
https://academic.oup.com/book/6093
silingam, D. R. (2013). Does the investor's age influence their investment behavior? Journal of Behavioral Finance, 14(3), 235-249.
Cutler, D. M., Poterba, J. M., & Summers, L. H. (1991). What Moves the Stock and Bond Markets? A Variance Decomposition for Long-Term Asset Returns. NBER Working Paper No. 3820.
Dennie van Dolder, Jurgen Vandenbroucke. (2024). Behavioral risk profiling: Measuring loss aversion of individual investors. Journal of Financial Economics, 142(1), 330-351.
Daiane De Bortoli , Newton da Costa Jr , Marco Goulart , Jéssica Campara (2019) Personality traits and investor profile analysis: A behavioral finance study
https://pubmed.ncbi.nlm.nih.gov/30917175
Gnewuch, M., & Zhang, D. (2025). Monetary policy, firm heterogeneity, and the distribution of investment rates. Retrieved from
https://www.sciencedirect.com/science/article/pii/S0304393224001740
Islam, K. U., Bhat, S. A., Lone, U. M., Darzi, M. A., & Malik, I. A. (2024). Financial risk propensity and investment decisions: An empirical analysis using behavioral biases. Journal of Behavioral Finance, 25(1), 1-18.
Korniotis, G. M., & Kumar, A. (2011). Do older investors make better investment decisions? Review of Financial Studies, 24(1), 348-387
Lee, J. (2024). Heterogeneous biased expectations of young and old individuals: macroeconomic effects and policy implications. Retrieved from https://www.cambridge.org/core/journals/macroeconomic-dynamics/article/heterogeneous-biased-expectations-of-young-and-old-individuals-macroeconomic-effects-and-policy-implications/67418D90967313B5A57BDD41F6603C1B
Lei Feng and Marks.Seasholes (2005). Do Investor Sophistication and Trading Experience Eliminate Behavioral Biases in Financial Markets?
https://www.cis.upenn.edu/~mkearns/finread/feng_seasholes_RoF_2005.pdf
Selim Aren, Asiye Nur Zengin. (2016). Influence of Financial Literacy and Risk Perception on Choice of Investment. Procedia - Social and Behavioral Sciences, 234, 260-268.
Salthouse, T. A. (2000). Steps toward the explanation of adult age differences in cognition. In T. J. Perfect & E. A. Maylor (Eds.), Models of cognitive ageing (pp. 19–49). Oxford University Press.