香港恒生大學
THE HANG SENG UNIVERSITY OF HONG KONG

ESG 研究中心
RESEARCH CENTRE FOR ESG

January 2023

Fintech Penetration Survey

Comparing financial services provided by traditional banks, online banking platforms, virtual banks, and online investment platforms

Full report

Prof. Louis Cheng

Dr S H Ho Professor of Banking & Finance
Director of Research Centre for ESG
The Hang Seng University of Hong Kong

The Research Centre for ESG at the Hang Seng University of Hong Kong engaged Dynata, a global market research firm, to conduct the online survey during April to May 2022. A preliminary draft of the report was prepared in August for consultation and comments by related parties. The final report was published and released to the public in January 2023.

Research Team

Professor Louis Cheng (Coordinator and Author)
Dr. Fanny Chan (Questionnaire Design)
Angela Zhao (Design and Data Analysis)
Athena Liu (Writing Support and Translation)
Shirley Tu (Data Analysis)

Financial Support

The S. H. Ho Foundation

Disclaimer

Executive Summary

1.The survey objective is to find out, under Covid-19, how bank customers in Hong Kong view the financial services provided by traditional banks (both physical and online services), virtual banks, and online investment platforms.

2. We employ 24 questions under five dimensions that reflect customer satisfaction under Covid-19. The five dimensions are: *1) communication effectiveness*, *2) competence level*, *3) service quality* of the services providers, *4) commitment* and *5) trust* from the customers. A total of 501 valid responses was received.

3. Online investment platforms have a higher rating for all five dimensions. Customers seem to be more satisfied with the services provided by online investment platforms, regardless of gender, age, and personal wealth level, leading to a stronger commitment and trust with their services. This means that the technological barrier faced by the older generation can be overcome.

4. The intangible and technological nature of virtual banks could be a barrier for the older generation. Virtual banks can consider tailor-making their service platforms to be more user-friendly to win over the older customers. In addition, a more sustainable and long-lasting marketing campaign is needed to retain customers.

5.Traditional banks can consider enhancing their online services. As we expect the pattern of migrating to online services to be permanent when physical banking resumes, traditional banks can adopt a strategy to gradually educate and motivate lower and middle end customers to engage Fintech-driven services.

6. If traditional banks release information and services that are only available for high-net-worth individuals to retail customers, it is possible that Fintech-driven mobile banking apps can be launched to better capture these customer segments.

7. Traditional banks should devote additional resources to develop mobile financial services apps. The data captured can help services providers to design better financial services and investment products that meet the needs of specific client segments.

EXECUTIVE SUMMARY

學無前後，達者為先。

In learning, whoever learns and succeeds faster, the last shall become the first.

TABLE OF CONTENTS

1. Background and Methodology ____ 0
- 1.1 Background and Purpose ____ 0
- 1.2 Survey Method ____ 1
- 1.3 Sample ____ 3

2. Findings ____ 4
- 2.1 Who Wins? ____ 4
- 2.2 Looking through the Magnifying Lens ____ 5
- 2.2.1 Communication ____ 5
  - Overall and Gender Segmentation ____ 5
  - Age Segmentation ____ 6
  - Personal Wealth Segmentation ____ 7
- 2.2.2 Competence ____ 8
  - Overall and Gender Segmentation ____ 8
  - Age Segmentation ____ 9
  - Personal Wealth Segmentation ____ 9
- 2.2.3 Quality ____ 10
  - Overall and Gender Segmentation ____ 10
  - Age Segmentation ____ 11
  - Personal Wealth Segmentation ____ 12
- 2.2.4 Commitment ____ 13
  - Overall and Gender Segmentation ____ 13
  - Age Segmentation ____ 13
  - Personal Wealth Segmentation ____ 14
- 2.2.5 Trust ____ 15
  - Overall and Gender Segmentation ____ 15
  - Age Segmentation ____ 16
  - Personal Wealth Segmentation ____ 17
- 2.3 Under Covid-19 ____ 17

3. Conclusion & Implications ____ 19
- 3.1 Summing Up ____ 19
- 3.2 Implications ____ 20
  - Traditional Banks (Including its Online Banking Services) ____ 20
  - Virtual Banks ____ 21
  - Online Investment Platforms ____ 21
- 3.3 Proposed Strategies for Traditional Banks ____ 22

1. BACKGROUND AND METHODOLOGY

1.1 Background and Purpose

The invention of 3G mobile network signifies the birth of “broadband” in 2007 and enables online search engine to accelerate the formation of consumer-based big data. Consequently, AI and Fintech were developed to capture alternative data to support smarter financial applications and even for our daily lives. Since mid-2020, Hong Kong has been under relatively strict social distancing policy due to Covid-19. As a result, business activities and financial services were not functioning effectively due to sporadic closure and suspension of physical services until mid-2022. Such a health and economic crisis leads to an unintentional outcome of speeding up the adoption of Fintech on financial services for bank customers.

While during Covid-19, customers are ready to embrace Fintech-driven financial services more than ever, are the services providers ready to live-up to the customers’ expectation in providing these services? Furthermore, what kind of customers are more satisfied with these financial services providers? To answer these questions, we explore how demographic characteristics such as gender, age, and wealth level may affect customers’ behaviors in choosing financial services.

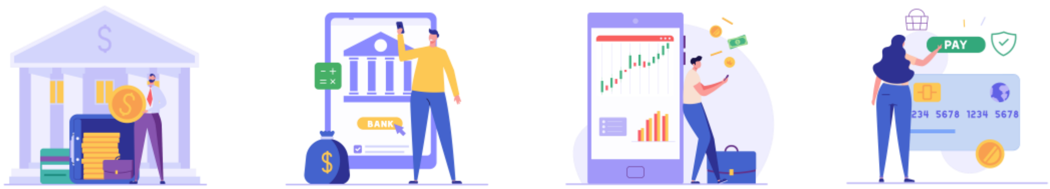
This project is funded by The S. H. Ho Foundation and implemented by the Research Centre for ESG at the Hang Seng University of Hong Kong. The main objective of this Fintech penetration survey is to find out, under Covid-19, how bank customers in Hong Kong view the financial services provided by traditional banks (both physical and online services), virtual banks, and online investment platforms. We employ questions which are theoretically structured under two categories with five dimensions in total:

The questions for the five dimensions are theoretically structured under two categories	
a) Perceptions towards the services providers	*1) communication effectiveness* *2) competence level* *3) service quality* of the services providers
b) Opinion from the customers	*4) commitment* *5) trust* from the customers

1.2 Survey Method

Our questionnaire consists of two sections. Section one asks for certain personal information for our demographic segmentation as well as to filter out unsuitable respondents who do not meet our requirement of financial services experience. Section two requires the respondents to answer a total of 24 questions under five dimensions reflecting financial services success and preferred financial services providers under Covid-19.

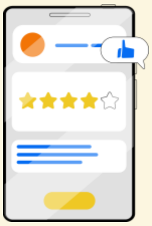
Categories of financial services providers	
Regular questions category: - Traditional bank (TB) - Virtual bank (VB) - Online investment platform (IP)	Covid-19 questions category: - Online services of traditional bank (OSTB) - Virtual bank (VB) - Online investment platform (IP)



TRADITIONAL BANK VIRTURAL BANK ONLINE INVESMTENT PLATFORM ONLINE SERVICES OF TRADITIONAL BANK

Fintech penetration is measured by the ratings of these five dimensions. While these dimensions may be related, they reflect different aspects of satisfaction from the customers. In general, the first three dimensions reflect the performance of the services providers, and the last two dimensions represent the induced opinion from the customers as a result of the first three dimensions.

All the questions for the five dimensions are based on previous academic surveys with proven validity. For all the Section two questions, the respondents are required to choose the answer from a scale of -5 to 5. A professional translator was hired to convert the English questions into Chinese. Then the Chinese version was tested for readability and fluency by five research team members as well as Dynata. The revised version is then used for the online survey. These 21 questions are scrambled so they do not cluster together. The last three questions are related to behaviors under Covid-19.	Technical aspects of survey 

 Conducting the survey	The Research Centre for ESG engaged Dynata, a global market research firm, to conduct the survey during April to May, 2022. A soft launch was implemented to test the questionnaire for its validity. As a result, redundant and misleading questions were removed. We have specified a certain quota for various demographic characteristics to meet our expected coverage of different client segments using traditional banks, virtual banks, and online investment platforms. Dynata received a total of 619 respondents for the survey. After filtering out 118 respondents who do not meet the requirements for the analysis based on our five dimensions, a final sample of 501 respondents with valid responses is available for this analysis. For the Covid-19 analysis, 619 responses are used.

1.3 Sample

We employed Dynata to conduct an online survey in Hong Kong for a total of 501 valid responses during April to May, 2022. Figure a, b, and c show the demographic characteristics of our sample. We have slightly more female than male respondents (52% vs. 48%).

In terms of age distribution, 40.9% comes from the age group of 18-34, while 42.5% belongs to the group of 35-54 years old. The remaining 16.6% is the older age group of 55 or above. For personal wealth (in HKD), the distribution is quite even across the seven wealth levels, ranging from 12.2% to 21.6% (except $2.5 mil-$3 mil category with 5% only), as shown in Figure c.

Figure a: Gender (n=501)

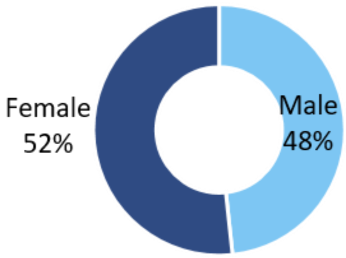


Figure b: Age (n=501)

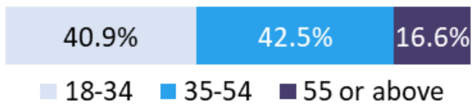
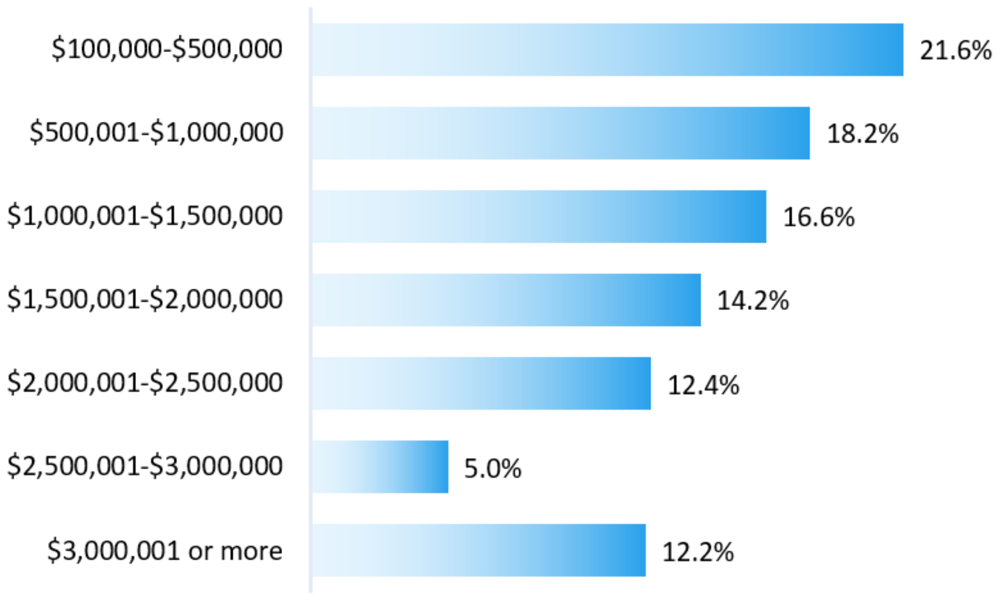


Figure c: Personal Wealth (n=501)



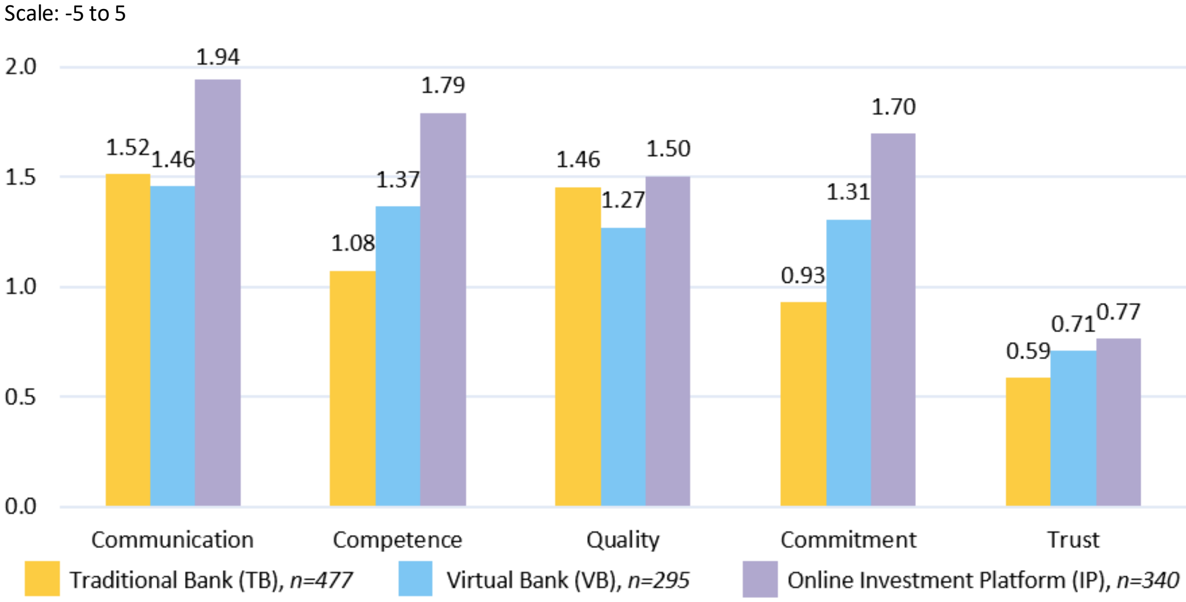
2. FINDINGS

2.1 Who Wins?

Let us take a snapshot at the overall result of our survey.

We employ a total of 21 questions under five dimensions to measure success of the financial services. The first three dimensions are *1) communication effectiveness*, *2) competence level* and *3) service quality* of the services providers. The other two dimensions are *4) commitment* and *5) trust* from the customers. To simplify our presentation, we group all questions under each dimension and report the means. The numerical values in our figures are bounded by -5 and +5. The higher the value, the more positive the attitude should be.

Figure 1: Five Dimensions of Financial Services (n=501)



First of all, we report the overall sample statistics to provide a general snapshot of the opinions related to the financial services of traditional banks, virtual banks, and online investment platforms. As shown in Figure 1, online investment platforms appear to have a higher rating for all five dimensions. Comparing the remaining two providers, traditional banks score slightly better than virtual banks in communication effectiveness and service quality. However, virtual banks show better ratings than traditional banks in competence, commitment, and trust. Of course, we have to acknowledge that the scope of services differs among the three providers so making comparisons and drawing a conclusion must be careful.

Nevertheless, this overall finding indicates that customers seem to be more satisfied with the services provided by online investment platforms, leading to a stronger commitment and trust with their services. The result also reveals the traditional banks are under strong competition in delivering services to customers. In the next section, we will further explore if demographic characteristics such as gender, age and wealth level affect our findings.

2.2 Looking through the Magnifying Lens

Our five dimensions are based on academic studies. We will interact each of the five dimensions with demographic characteristics to explore how demographic characteristics such as gender, age, and wealth level may affect customers' behaviors in choosing financial services providers. The respondents must have actual experience of the services to be allowed to answer the relevant questions. The numerical values in our figures are means bounded by -5 and +5. The higher the value, the more the positive attitude should be. We will report each of the five dimensions below and show their ratings with personal segmentations.

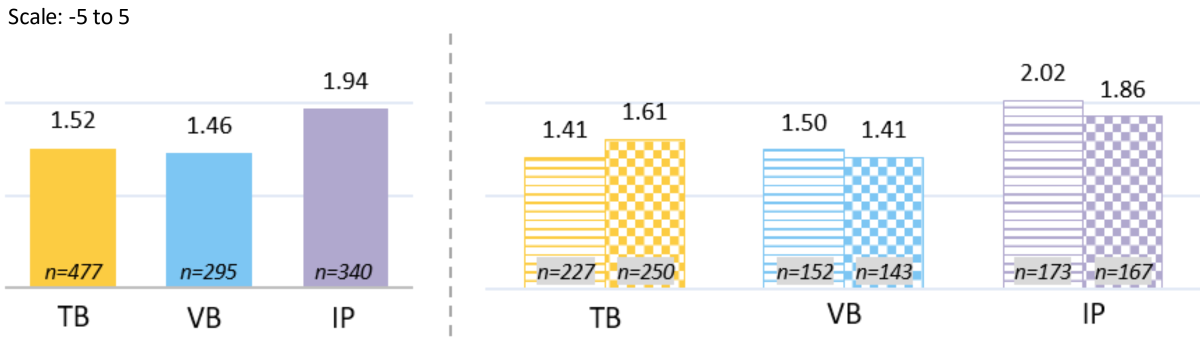
2.2.1 Communication

Overall and Gender Segmentation

The first dimension is communication effectiveness of the services providers as perceived by the respondents. Below Figure 2.1 shows the survey results of communication level for different services providers and breakdown by gender.

Figure 2.1 (n=501)

Total Communication Level **By Male | Female**

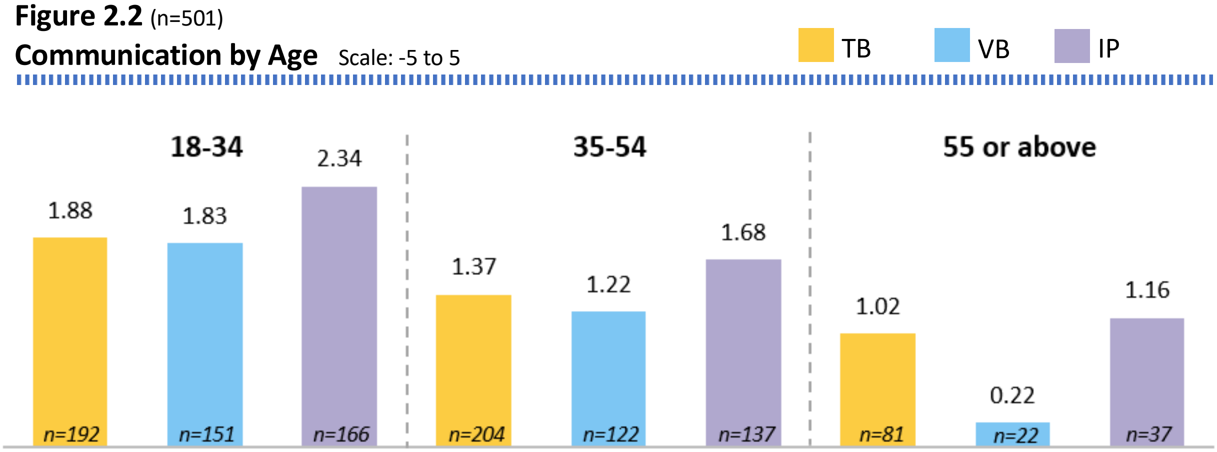


In this dimension, we report the communication effectiveness ratings. As for the total communication effectiveness level displayed on the left, online investment platforms have the highest rating (1.94). Examining the remaining two providers, the rating of traditional banks is slightly higher than that of virtual banks. When we explore the ratings by gender, male respondents give a higher score for virtual banks and online investment platforms. On the other hand, female respondents give a higher score for traditional banks. An interesting observation here is that the overall respondents like the communication approach of online investment platforms more. In addition, male respondents show even stronger appreciation than the female.

Age Segmentation

As shown in the communication dimension segmented by age in Figure 2.2, there is a declining trend of ratings for communication effectiveness when the age group becomes older. We believe that such a trend reflects the reality of cognitive ability of aging. All three age groups give the highest rating for online investment platforms while giving the lowest rating for virtual banks. Exceptionally, respondents with age of 55 or above give a quite low rating for virtual banks. However, this may be expected as elder people may find it difficult to learn the navigation of virtual bank functions using mobile apps, resulting in a lower rating. Interesting enough, the same elder age group gives the highest rating to online investment platforms, which is also mainly using mobile apps or online trading platforms. One possible reason for this contradictory phenomenon is that online investment platforms have a much longer history in Hong Kong but virtual banks are available only recently.

Figure 2.2 (n=501)
Communication by Age Scale: -5 to 5

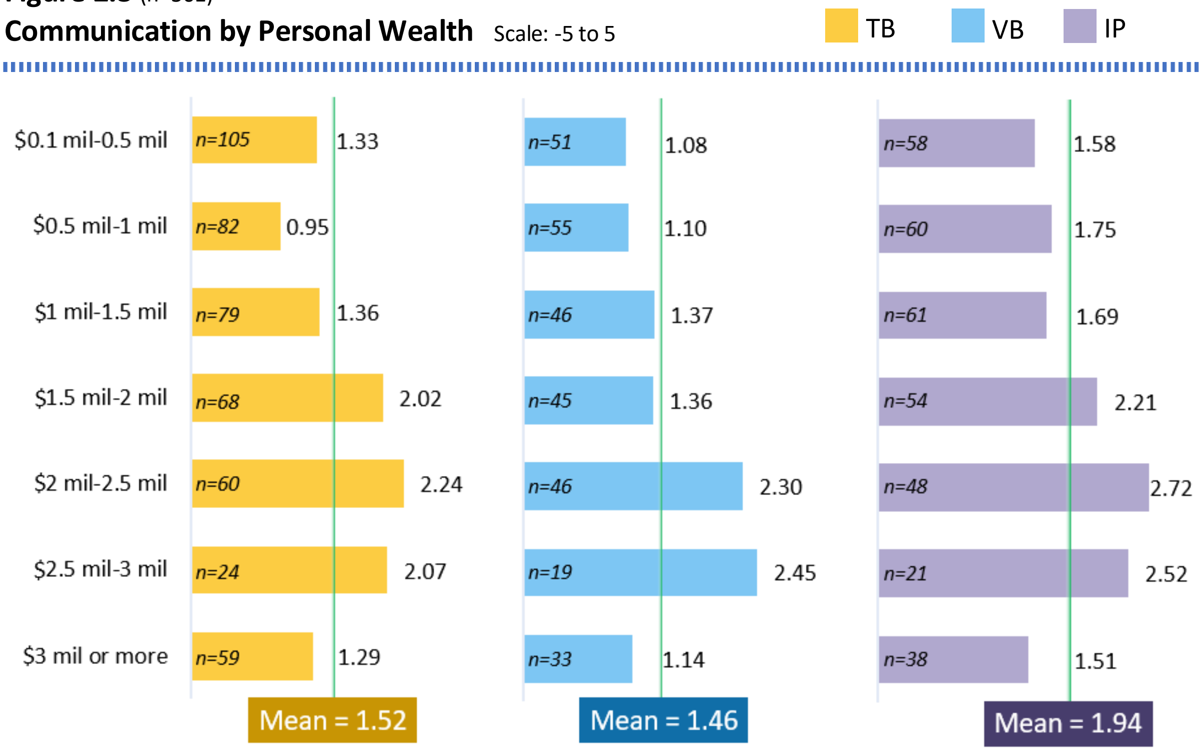


Personal Wealth Segmentation

The ratings pattern for communication by personal wealth are somewhat similar among the three services providers as can be seen from Figure 2.3. Respondents for the $2 mil-2.5 mil and $2.5 mil-3 mil groups give the highest rating for three services providers among all respondents. This result suggests that financial services providers consider to promote their products to these wealth segments more as they have more willing ears. Once again, the respondents give the highest raing for online investment platform at all wealth levels. For the remaining two providers, ratings are similar accorss different wealth levels.

Figure 2.3 (n=501)

Communication by Personal Wealth Scale: -5 to 5



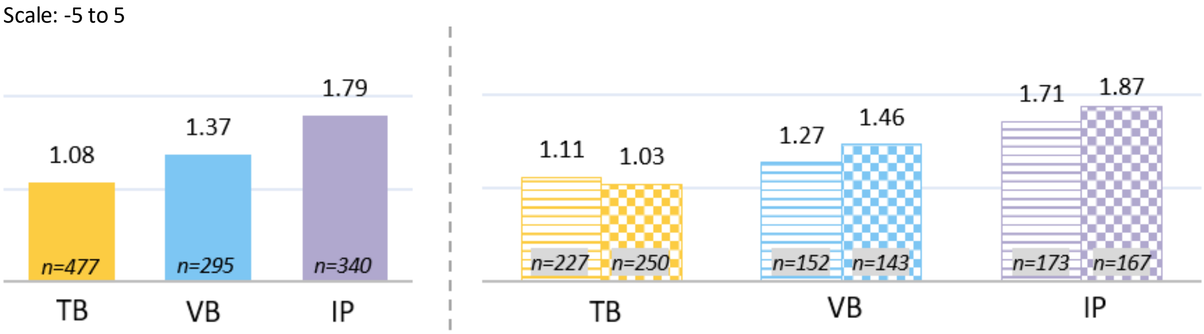
2.2.2 Competence

Overall and Gender Segmentation

Figure 3.1 shows the survey results of competence level for different services providers and breakdown by gender.

Figure 3.1 (n=501)

Total Competence Level **By Male | Female**



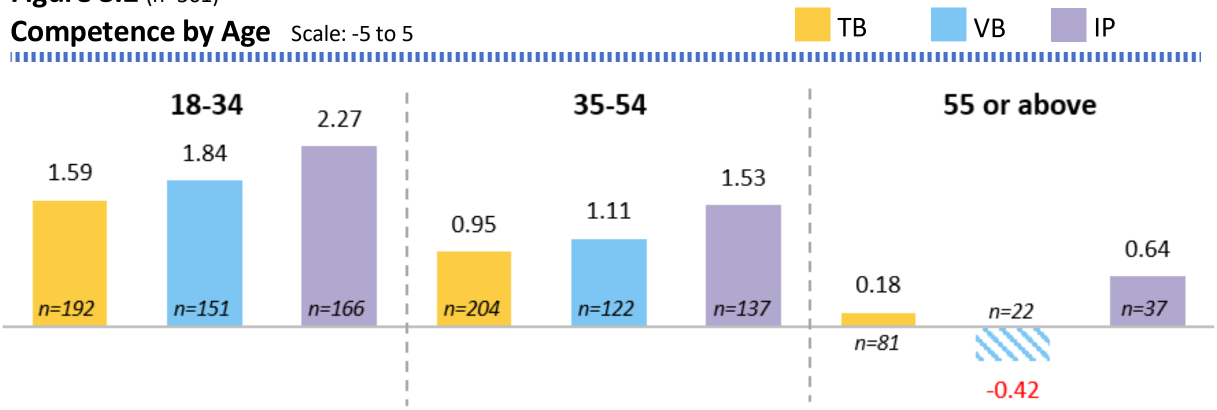
Online investment platforms receive the highest rating on competence level (1.79), which is significantly higher than the ratings of virtual banks and traditional banks. Such a difference in rating may be due to the fact that services and information provided by online investment platforms are all computer-driven with no room for human errors. In addition, online investment platforms mainly deal with securities trading and information provided is well structured and updated frequently. Such a business model can avoid inefficiency and strengthen the perception of competence among customers. In theory, virtual banks should be similar in operating mode. However, their services are broader, involving traditional banking services such as deposit, loans, and limited investment services (i.e., mutual funds and IPOs). Therefore, it may be more difficult to generate efficient services compared with online investment platforms. Nevertheless, virtual banks still enjoy a higher competence rating than traditional banks, indicating that customers are more satisfied with online banking platforms with technology-driven services.

When the ratings are separated by gender, we observe that female tends to give slightly higher rating for virtual banks and online investment platforms in terms of competence level. Nevertheless, the differences are not big. In short, we conclude that gender does not play a role in differentiating competence rating for the three services providers.

Age Segmentation

Figure 3.2 shows the survey results of competence level for different services providers sorted according to age group.

Figure 3.2 (n=501)
Competence by Age Scale: -5 to 5



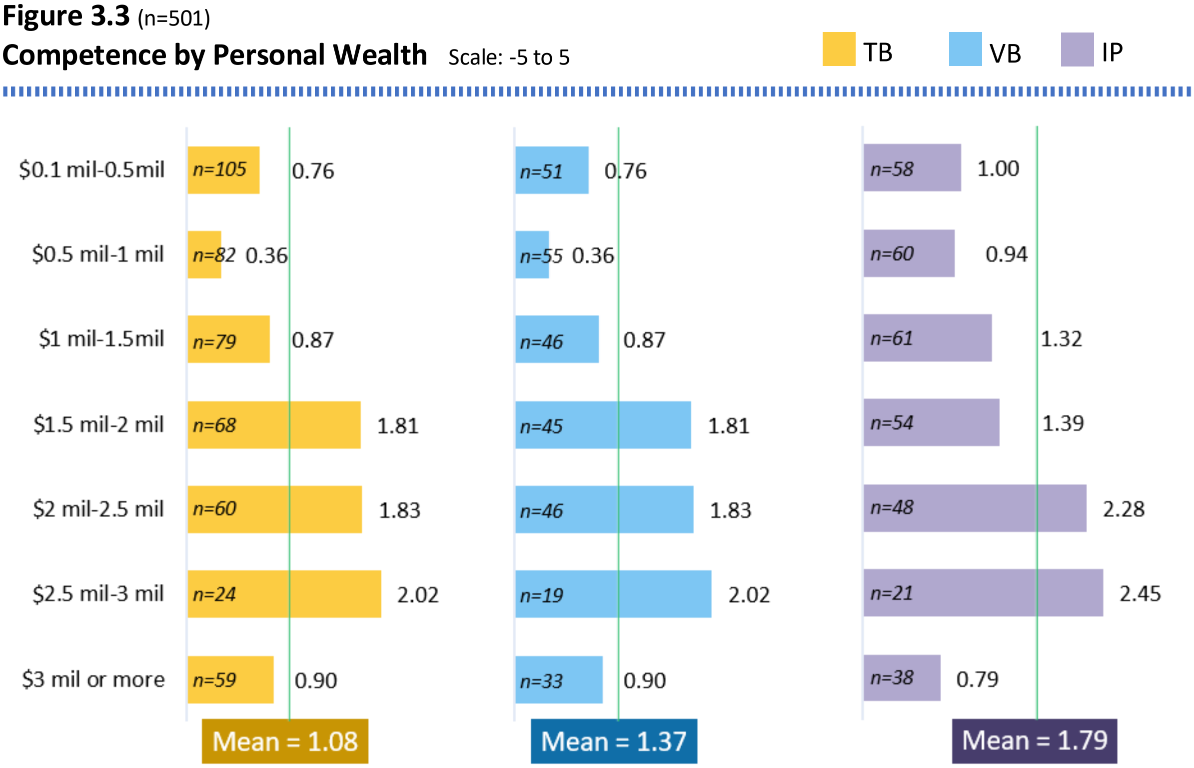
In all three age groups, the ratings for online investment platforms rank the highest, even for the 55 or above age group. This finding is interesting because one may expect that the oldest age group may be reluctant to engage mobile technology and give online investment platforms lower ratings. However, this is not the case. This result confirms the overall finding in Figure 1 that online investment platforms score the highest in competence level. Overall speaking, different age groups show consistent results in this regard.

Even though the ratings for online investment platforms are the highest among the three age groups, we can observe that the competence level rated by respondents descends when age increases. For instance, the 18-34 age group give a rating of 2.27, the 35-54 age group give a rating of 1.53 and the 55 or above age group give a rating of 0.64 only. We can also see such situation in the competence rating for virtual banks and traditional banks among the 35-54 age group and the 55 or above age group. A negative rating of competence level for virtual banks is recorded in the 55 or above age group, indicating that this age group feel that virtual banks is not competent. This result could be due to the fact that the older generation might be more critical of the services offered by the three services providers and are more difficult to satisfy.

Personal Wealth Segmentation

From Figure 3.3, it can be observed that the competence ratings from different personal wealth groups for the three services providers show a similar pattern. In general, the ratings increase as personal wealth level increase, except for the $0.5 mil-1 mil and $3 mil or more groups. Respondents from the two personal wealth groups ($2 mil-3 mil) give the highest rating for the three services providers among all respondents.

Figure 3.3 (n=501)
Competence by Personal Wealth Scale: -5 to 5



The explanation for this result could be that the three services providers are able to provide financial services and products which are suitable to these wealth groups, leading to a better competence rating. Yet respondents for the $3 mil or more group gave a low rating for all three services providers, possibly because this high wealth group may have other options in financial services from other financial institutions which tailor made services and products for their levels. Finally, as in line with the overall sample statistics in Figure 1, respondents from all wealth level give the highest rating for online investment platforms and the lowest rating for traditional banks.

2.2.3 Quality

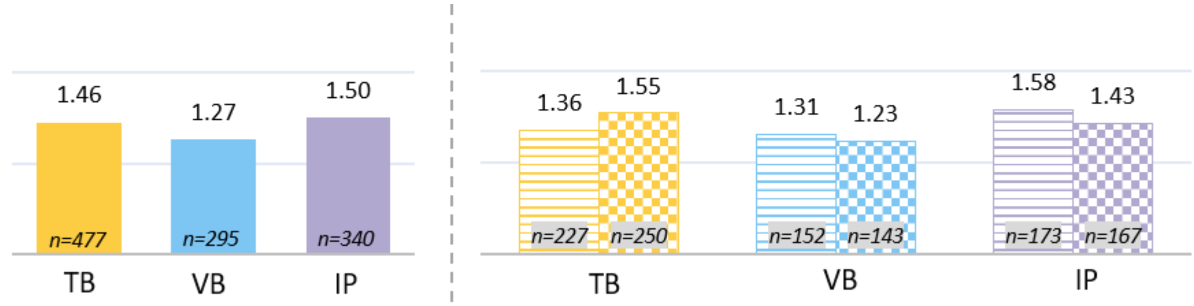
Overall and Gender Segmentation

Figure 4.1 shows the survey result of quality level for different services providers and breakdown by gender. Traditional banks and online investment platforms receive higher ratings than virtual banks for quality level, meaning that customers are least satisfied with the service quality of virtual banks. But the differences between the quality level ratings for the three services providers are not very significant, indicating that respondents think the services offered by the three services providers are of similar quality.

Figure 4.1 (n=501)

Total Quality Level **By Male | Female**

Scale: -5 to 5



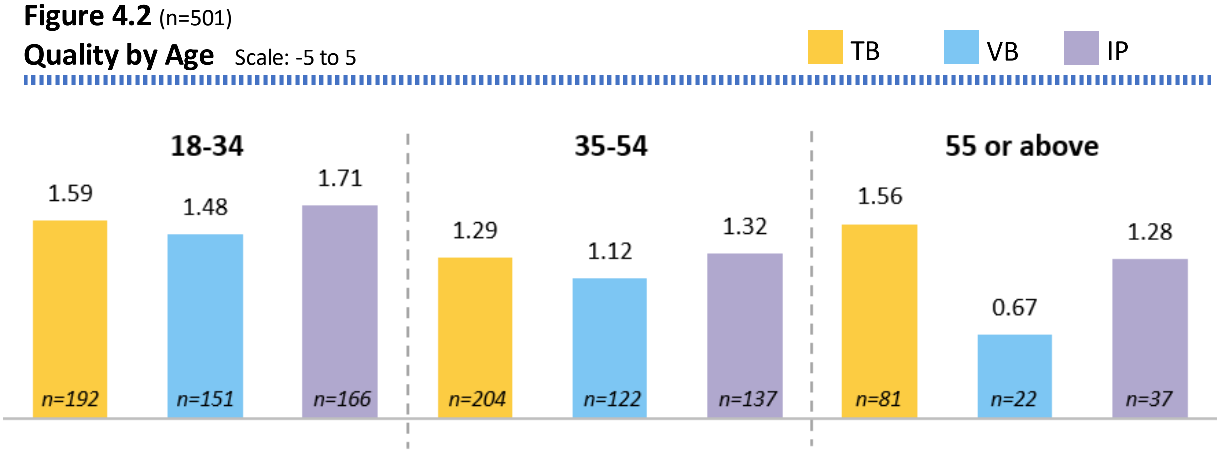
When we separate the quality level ratings by gender, we find that male respondents give a higher score for virtual banks and online investments platforms, while female respondents give a higher score for traditional banks. An explanation for this could be that male prefer a systematic and scientific oriented service approach, while female prefer face to face communication which provides opportunities for a more personal engagement environment. In this regards, traditional banks can offer a personalized service through physical branches.

Age Segmentation

Below is Figure 4.2 which shows the survey result of quality level for different services providers sorted according to age group. The quality level of online investment platforms ranks the highest among the 18-34 and 35-54 age group.

Figure 4.2 (n=501)

Quality by Age Scale: -5 to 5



When we explore the results in more detail, we can observe that the young age group (18-34 years old) give the highest rating for all three services providers compared to the other two age groups. Within this young age group, respondents give the highest rating for online investment platforms, showing that young people believe that services provided by online investment platforms are of the best quality.

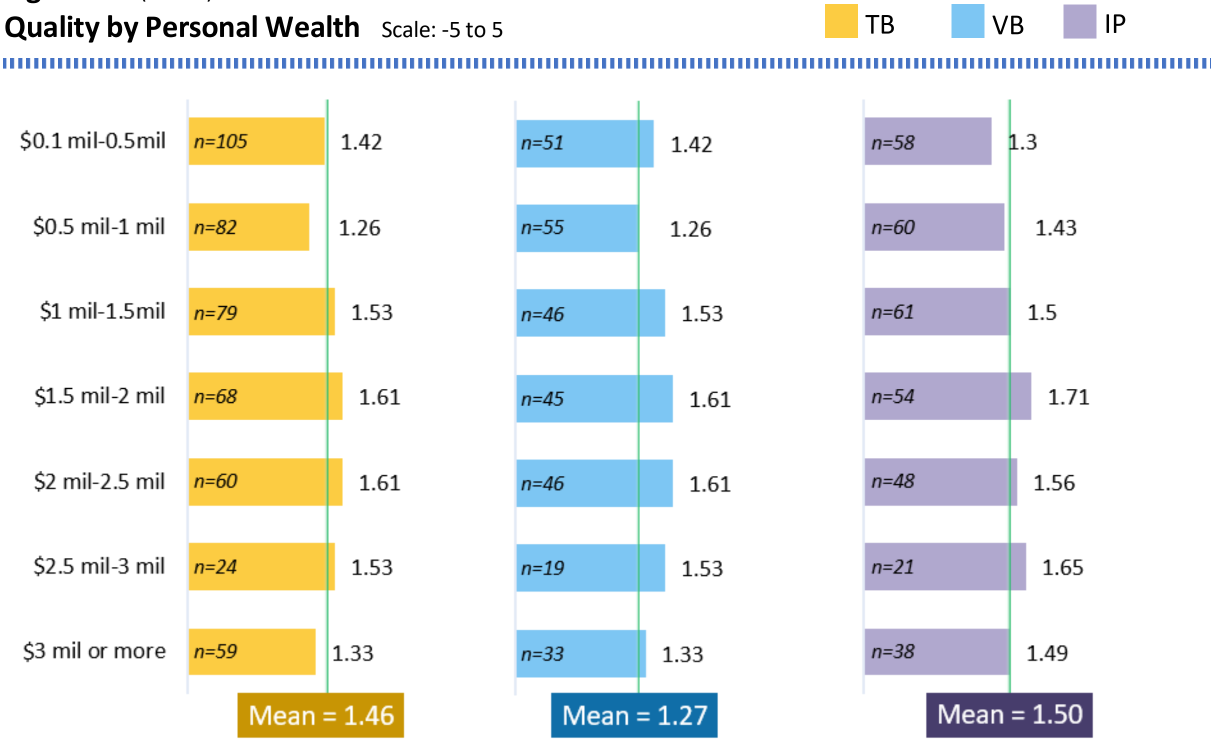
As for the 55 or above age group, respondents give traditional banks the highest rating and virtual banks the lowest rating. This situation could be explained by the fact that virtual banks and online investment platforms offer their services online, yet the older generation is not familiar with technology. Therefore, they feel less enjoyment for the services offered by these two services providers and hence they have lower rating. In addition, traditional banks have been serving the old age group for a long time. It is possible that such a long service experience induces positive feelings towards traditional banks' services, leading to a relatively higher rating (1.56) for this category.

Personal Wealth Segmentation

With reference to Figure 4.3, online investment platforms have slightly higher rating than traditional banks (1.50 vs. 1.46). Overall speaking, the quality level ratings from different wealth level and the mean quality level ratings for the services offered by the services providers do not show great differences, indicating that respondents from all wealth level share a similar view on the service quality of the three services providers. Respondents from the four wealth groups ($1 mil- 3 mil) all give the three services providers a rating equal or higher than the mean.

Figure 4.3 (n=501)

Quality by Personal Wealth Scale: -5 to 5



2.2.4 Commitment

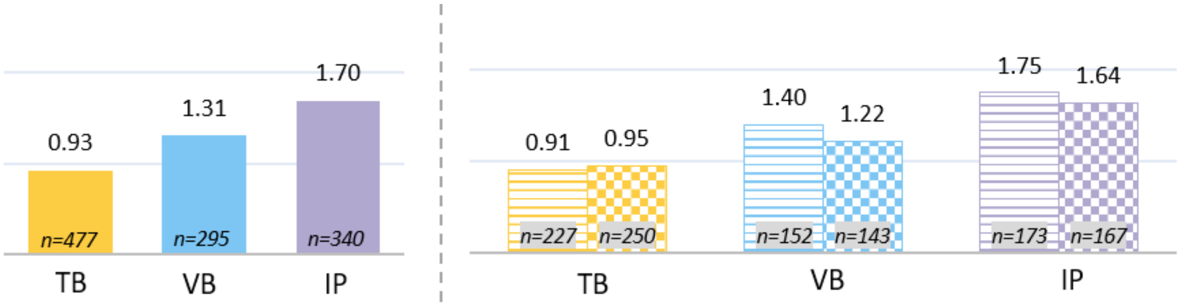
Overall and Gender Segmentation

Figure 5.1 shows the survey result of commitment level for different services providers and breakdown by gender. Respondents are most committed to online investment platforms (1.70) and least committed to traditional banks (0.93). With reference to Figure 1, we can expect such a result. Communication, competence and quality contribute to how customers perceive the services providers, which in terms affect their commitment towards the financial services provider.

Figure 5.1 (n=501)

Total Commitment Level **By Male | Female**

Scale: -5 to 5



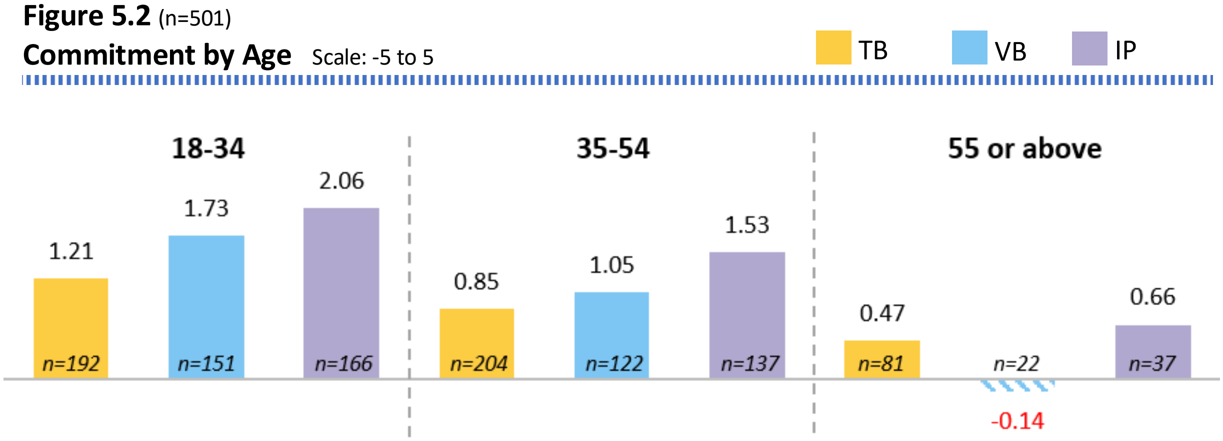
Since online investment platforms receive better ratings from the first three dimensions (i.e., communication, competence, and quality), it is logical to see online investment platforms rank first in generating commitment from customers.

When we separate the commitment level by gender, we find that male respondents give a higher rating for virtual banks and online investment platforms, indicating that male respondents are slightly more committed to these two services providers.

Age Segmentation

Figure 5.2 shows the survey results of commitment level for different service provides sorted according to age group. We can observe a general trend that commitment levels for all services providers decrease as age increase, meaning that the younger the respondents are, the more committed they are towards the services providers.

Figure 5.2 (n=501)
Commitment by Age Scale: -5 to 5



We also observe that respondents across the three age groups are all committed to online investment platforms the most. But the rating performance of online investment platforms is relatively weak when it comes to the older age group as their commitment level is 0.66 only.

An interesting result is that respondents of age 55 or above actually give a negative rating (-0.14) for virtual banks, suggesting that there is a slight resistance in commitment from this group. We find this survey result interesting as the young generation seem to be more receptive to the service experiences for all three services providers. In addition, the commitment rating for the young age group has a rating exceeding 2 (i.e., 2.06), which is high in our study.

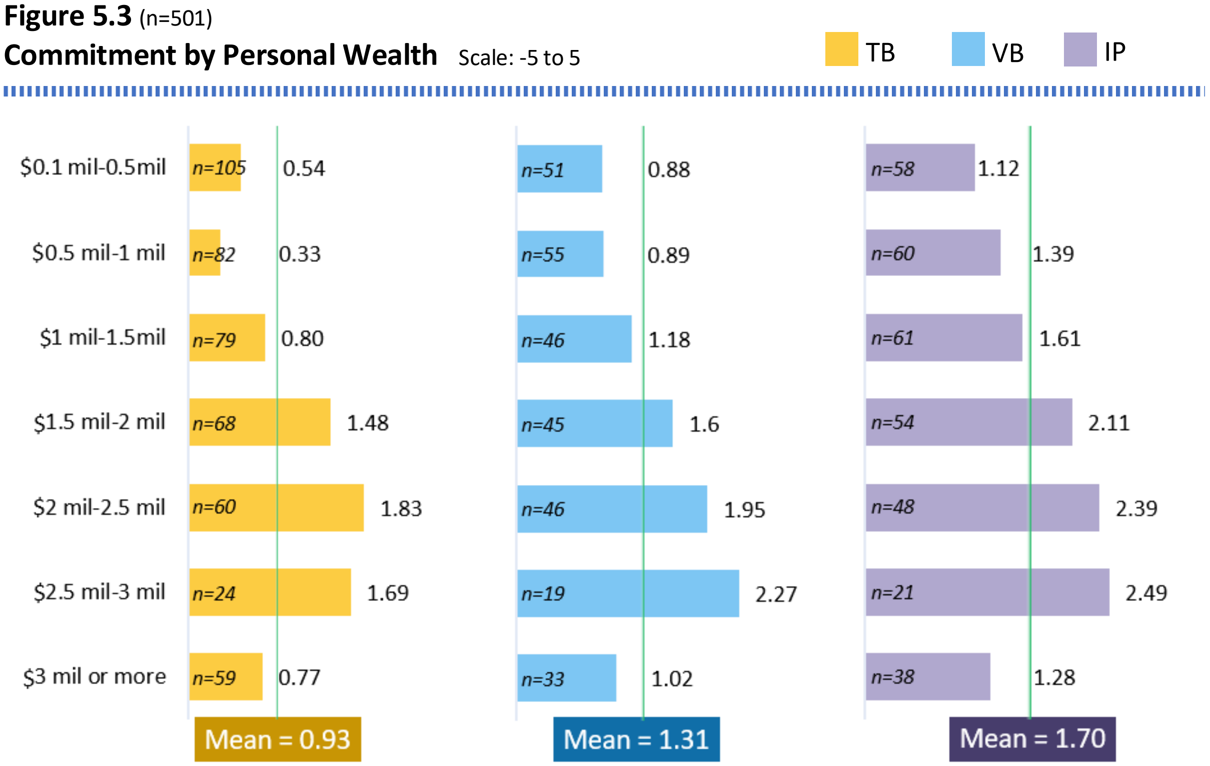
As for why respondents of age 55 or above are slightly negative towards virtual banks, it is possible that the older generation might be skeptical about putting their money into a bank which has no physical branches and provides financial services over the internet only. It is commonly known that older people are more reluctant to embrace new technology in general. Virtual banks should consider enhancing their online and mobile platforms to be more user-friendly from the perspective of the older age segment.

Personal Wealth Segmentation

From Figure 5.3, we can observe a general trend that commitment level increases as personal wealth level increases, except for the $3 mil or more group. Online investment platforms receive the highest commitment level among the three services providers.

Figure 5.3 (n=501)

Commitment by Personal Wealth Scale: -5 to 5



The three personal wealth groups ($1.5 mil-3 mil) give a relatively high rating for all three services providers. They also give a rating exceeding 2 for online investment platforms, which is unusual in our study. This indicates that online investment platforms have really done a good job in penetrating the wealthier group.

To explain why the $3 mil or more group give a relatively lower rating for all three services providers, as discussed in section 2.2.2 Competence level sorted by personal wealth, this personal wealth group may have other options when choosing a financial services provider, leading to lower commitment ratings for the three services providers in our survey.

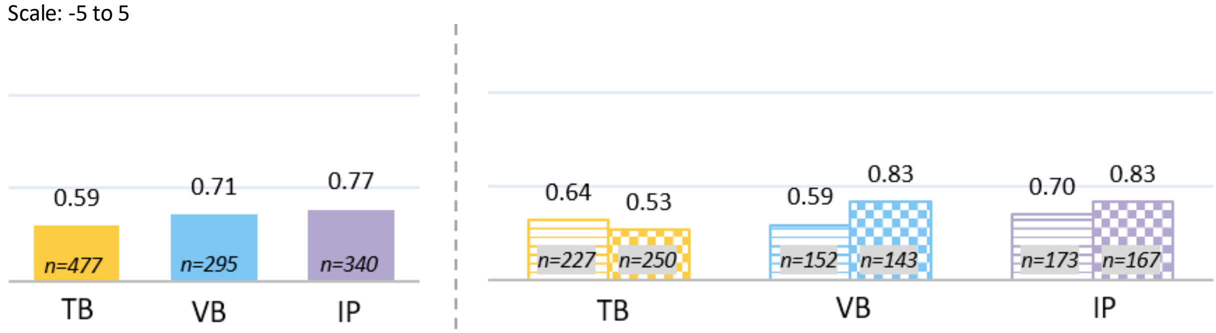
2.2.5 Trust

Overall and Gender Segmentation

Figure 6.1 shows the survey result of trust level for different services providers and breakdown by gender. Generally speaking, the trust level for all services providers are low (i.e., lower than 1). We do not observe a significant difference in trust level, but traditional banks receive the lowest trust level (0.59) from respondents.

Figure 6.1 (n=501)
Total Trust Level **By Male | Female**

Scale: -5 to 5

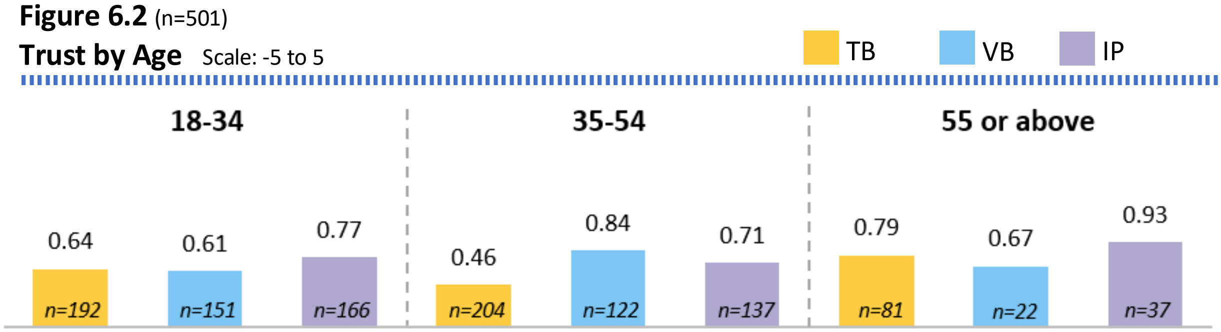


When we breakdown the result by gender, we can see that female respondents have higher trust level for virtual banks and online investment platforms. However, female respondents give lower ratings for communication and quality compared with male counterparts. Combining these two pieces of information, we conjecture that it may be easier to gain trust from female customers. Of course, further research in this area is needed to confirm this issue.

Age Segmentation

When we breakdown trust level by age, we see from Figure 6.2 that the trust level across all age groups do no exceed 1, meaning that the trust level is low. Both the young and old age groups (18-34 and 55 or above) have the least trust in virtual banks, while the 35-54 age group have the most trust in virtual banks. Another observation is that the old age group give a relatively higher trust level rating for all platforms, compared to the 18-34 and 35-54 age groups. This situation is different from the previous dimensions, where we observe a declining trend of rating when the age group becomes older. We cannot provide a rational explanation for this result, so additional analysis in future research is needed to verify and understand such a finding.

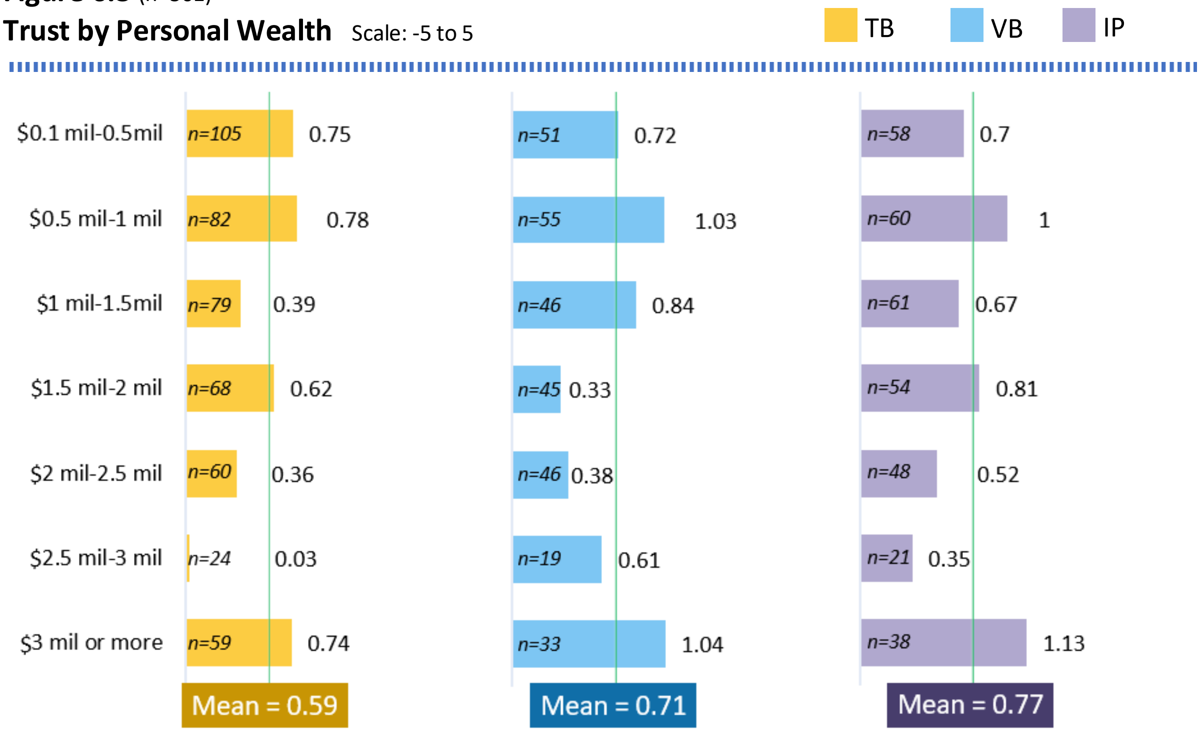
Figure 6.2 (n=501)
Trust by Age Scale: -5 to 5



Personal Wealth Segmentation

In general, there is not a clear overall trend for trust level from different personal wealth groups observed from Figure 6.3. But overall speaking, the trust level across all wealth groups is low as all three mean ratings do not exceed 1. When analyzing the result in detail, we see that the $0.5 mil- 1 mil and $3 mil or more wealth groups give relatively higher trust ratings for all the services providers. Both groups give a rating higher than the mean for all three services providers. This indicates that these two groups of respondents have more trust in their financial services providers than other wealth groups.

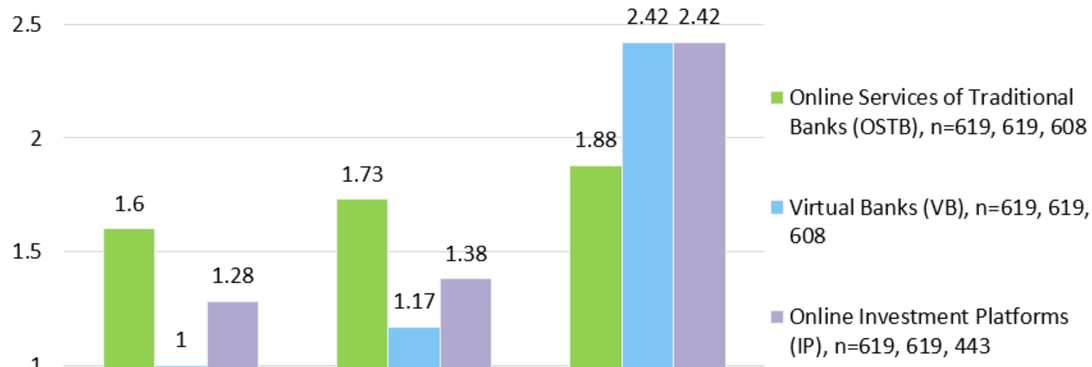
Figure 6.3 (n=501)
Trust by Personal Wealth Scale: -5 to 5

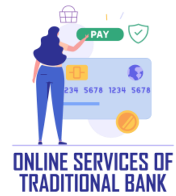


2.3 Under Covid-19

We pay special attention to the issue on how Covid-19 may affect customers' behaviors in choosing financial services providers. Comparing with physical banks, three questions are designed to capture customers' views on attention to information, interest level, and actions taken in using financial services. The alternatives are online banking of traditional banks, virtual banks, and online investment platforms. As shown in Figure 7, all three alternatives have a mean value higher than zero, indicating that respondents have a stronger preference towards online banking of traditional banks, virtual banks, and online investment platforms in terms of seeking information, interest level, and actions taken during Covid-19. As physical banks only opened with limited hours during our sample period, choosing online alternatives is an expected outcome.

Figure 7: Banking Behavior during Covid-19 (scale: -5 to 5)





Comparing among the three options, online services of traditional banks capture the highest rating for information seeking (mean=1.6) and interest level (mean=1.73). In addition, OSTB captures a high rating (in absolute sense) of 1.88 for usage. This result confirms the success of OSTB during Covid-19 when services from physical branches are not always available.

However, as reflected by the higher mean values (both means=2.42), virtual banks and online investment platform receive more actions taken by customers. Deeper understanding on the reason of this phenomenon is needed for traditional banks to enhance their services.

3. CONCLUSION & IMPLICATIONS

3.1 Summing Up

While the digital era arrived in the second half of the 20th century, it mainly reflects the technological development of computers and digitization of record-keeping. Then the invention of 3G mobile network signifies the birth of "broadband" in 2007 and allows the digital technology spillover from business to consumers in a massive manner. The invention of 3G also enables online search engine to accelerate the formation of consumer-based big data, allowing AI and Fintech to capture alternative data to support smarter decisions for businesses and even for our daily lives.

Under Covid-19, Hong Kong has been under relatively strict social distancing policy. Business activities and financial services are not functioning effectively due to sporadic closure and suspension of physical services. Such a health and economic crisis also serves as a catalyst for customers to speed up the adoption of online financial services. While the customers are getting ready to embrace Fintech-driven financial services more than ever, are the services providers ready to live-up to the customers' expectation in providing these services? Furthermore, what kind of customers are more satisfied with the financial services providers?

To answer these questions, we explore how demographic characteristics such as gender, age and wealth level may affect customers' behaviors in choosing financial services. We interact each of the five dimensions with demographic characteristics to explore the determinants of customer satisfaction in financial services. In short, the purpose of this Fintech penetration survey is to explore, under Covid-19, how customers view various financial services provided by traditional banks (both physical and online services), virtual banks, and online investment platforms through our online survey.

The Research Centre for ESG at the Hang Seng University of Hong Kong engaged Dynata, a global market research firm, to conduct an online survey during April to May 2022. A final sample of 501 participants with valid responses is collected for our research.

We employ questions which are theoretically structured under two categories: a) perceptions towards the services providers (i.e., *1) communication effectiveness, 2) competence level and 3) service quality* of the services providers) and b) opinion from the customers (i.e., *4) commitment, and 5) trust* from the customers). Next, we control for gender, age, and personal wealth level to evaluate performances of the three financial services providers using the five dimensions of customer satisfaction.

Our overall result shows that online investment platforms have a higher rating for all five dimensions. Customers seem to be more satisfied with the services provided by online investment platforms, leading to a stronger commitment and trust with their services.

3.2 Implications

The recent development and maturity of technology in artificial intelligence (AI), big-data, cloud computing, blockchain, and smartphones have provided the necessary components to integrate Fintech into financial services. As many of the traditional hurdles regarding speed, reliability and security of internet-based transactions have been overcome to meet the users' requirements in a satisfactory manner, mobile technology has become the driving force in developing virtual banks and online investment platforms covered in our study. Under this backdrop, we observe the following implications:

Traditional Banks (Including its Online Banking Services)

Generally speaking, traditional banks have been providing financial services in Hong Kong for a long time, hence they possess a strong customer base. Depending on gender, age, and wealth level, customers' preference for mode (physical vs online) of financial services can be vastly different. Younger age customers demand a high level of interactions in digital financial services similar to that in social media. However, due to Covid-19 and social distancing restrictions, the role of digital banking becomes more important even for the older age groups.

Our findings show that traditional banks perform better than virtual banks in the communication effectiveness and service quality aspect, yet they need to improve in the areas of competence level to gain more commitment and trust from customers. As respondents give the lowest competence rating to traditional banks, they could consider enhancing their online services similar to those provided by virtual banks and online investment platforms. In this way, the service efficiency gap can be reduced, and the perception of competence can be strengthened.

During Covid-19, online services of traditional banks capture a high rating (in absolute sense) for usage. This confirms the success of such online service during Covid-19 when physical branches are not always available. We expect that the pattern of migrating to online services will be permanent even when physical banking resumes. Therefore, it is important for banks to adopt a strategy to gradually educate and motivate lower and middle end customers to engage Fintech-driven services while human services can be persevered for high-net-worth clients who can justify the higher cost of tailor-made banking solutions.

Virtual Banks

For virtual banks, they are relatively new to the public and are still in the developing stage. Compared to traditional banks, virtual banks have a shorter history serving the older generation, and they have no physical branches. Also, virtual banks offer financial services through online platforms, which might be difficult for the older generation to navigate through. These reasons are reflected on the commitment level ratings segmented by age, which show that respondents aged 55 or above give a negative rating for virtual banks. This might indicate that the intangible and technological nature of virtual banks could be a barrier for the older generation.

As the usage experience of non-financial mobile apps (e.g., online games and shopping platforms) for young age group is much more mature, Fintech-driven financial services apps can be more advanced and the young customers would have no problem in handling app navigation features. However, the older customers have limited experience in using mobile apps before, they may face a tough time in learning how to navigate the financial apps while making financial decisions at the same time. So, virtual banks can consider tailor-making their service platforms to be more user-friendly to win over the older customers. We also observe that even during our survey period, virtual banks rank the last in information seeking and interest level from customers. Hence, virtual banks might want to consider a more sustainable and long-lasting marketing campaign to attract customers.

Online Investment Platforms

Our findings show that online investment platforms rank first for all five dimensions, meaning that they are the market leader of the investment and trading services as customers are most satisfied with them. When the results are segmented by demographic characteristics, we observe that most respondents give online investment platforms the highest rating as well. This indicates that online investment platforms have done a good job in penetrating different customer groups. Such a finding proves that the technological barrier faced by the older generation can be overcome. As online investment platforms now offer low commissions and provide objective investment and trading indicators that were only available to institutional investors in the past, this valuable set of information can attract and encourage older age and wealthier customers to use online investment platforms more frequently. When users are exposed to the platform more, they will slowly learn to navigate through the platform and hence overcoming the technological barrier, resulting in the high ratings.

3.3 Proposed Strategies for Traditional Banks

Among all three services providers, we find overwhelming evidence of superior ratings for online investment platforms. Thus, naturally, the next question is: what traditional banks should do to catch up? We have the following observations and suggestions:

1. It is believed that a key determinant of Fintech success is the satisfaction level given by the old age group and high wealth group towards online financial services. The assumption is that the older generation is reluctant to engage with technology, and the high personal wealth group has other options in choosing financial services. So, if customers from these two groups are satisfied with the online services and embrace them, it indicates that Fintech is able to overcome this customer barrier.

   As online investment platforms are able to receive high ratings from the older age and higher wealth level customers, traditional banks must formulate a corresponding strategy to resolve this issue. Online investment platforms achieve this performance by providing valuable trading information to retail clients which were only available to institutional investors in the past. For other financial services provided by traditional banks, a similar approach can be considered. For instance, by releasing information and services that are only available for high-net-worth individuals to retail customers, it is possible that Fintech-driven mobile banking apps can be launched to better capture these customer segments. By doing so, it is expected that the low competence rating given to traditional banks can be reversed.

2. Traditional banks must understand the difference between computer-based online banking and mobile financial services apps. In order for AI and big data analytics to function effectively, the users must frequently engage the platform/app so that high frequency behavioral data are captured. Then, Fintech can provide useful information for the services providers to design better financial services and investment products that meet the needs of specific client segments. While mobile apps can serve this purpose to capture the needed data as everyone uses their mobile phones frequently nowadays, many people do not always have a computer nearby to conduct financial services. Consequently, computer-based online banking cannot capture the needed big data and the embedded Fintech cannot be used at its full potential. In short, traditional banks should devote additional resources to develop mobile financial services apps to capture this.

香港恒生大學
THE HANG SENG UNIVERSITY OF HONG KONG

ESG 研究中心
RESEARCH CENTRE FOR ESG

Click me!