Original Article

Beyond state-owned banks: Evidence from Shanghai bank customers

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ABSTRACT In light of a reformed and liberalized banking sector in China, this article sets out to examine the role of socio-demographic factors and customers' banking experiences and priorities in customers' selection of banks. As state-owned banks have long dominated the banking industry, the article also investigates the receptiveness of the Shanghai Chinese towards newer commercial banks, such as the joint-stock banks, and the penetration of foreign banks into China's banking industry. Comparing customers who use state-owned banks only and those who patronize joint-stock banks, it is found that education, income, age, occupation sector and location of hometown affects customers of state-owned banks only. Further, it is also found that state-owned banks remain dominant despite the opening up of the banking sector, and perception towards state-owned banks remains favourable.

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INTRODUCTION

Since 1978, China's banking industry has undergone extensive reforms and China's entry into the WTO in 2001 has further intensified the transformation process. During this period, the banking industry in China has evolved from a highly risky and monopolistic industry into a competitive

and prudent industry. Broadly, the reforms undertaken were focused on improving corporate governance, reforming management philosophies and enhancing risk mitigation techniques. By the end of 2006, following the lifting of restrictions on currency denominations business, customer groups and geographical barriers, foreign banks were free to operate in China.

China's entry into the WTO has generated a lot of interest as evidenced by the considerable number of studies concerning the impact of foreign entry on the sustainability of

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domestic banks and also on the survival of foreign banks in China (for example, Bonin and Huang, 2002; Leung *et al*, 2003; Leung and Chan, 2006; Wu *et al*, 2007; Xu and Lin, 2007; Berger *et al*, 2009; Shen *et al*, 2009). Most of the analysis paid attention to the performance, the profitability and the efficiency of the domestic banks.

However, there are fewer studies on the implications of the banking reforms and foreign entry on bank customers. The banking sector in China has largely been dominated by the five state-owned commercial banks that have long been in existence. These state-owned banks enjoy close links with China's largest companies, including state-owned and formerly state-owned enterprises. In other words, the state-owned banks operate from a highly advantageous position. Although the share of state-owned banks' assets has declined from 58 per cent in 2003 to 51 per cent in 2009, it still makes up over 50 per cent of the total assets in the banking sector (China Banking and Regulatory Commission, 2007, 2009). Extensive reforms have taken place in the banking sector to prepare the domestic banks for the entrance of foreign banks, and among the various domestic financial institutions, joint-stock commercial banks stand out in terms of their increased strength and popularity. The share of joint-stock commercial banks' assets over the total banking institutions' assets have increased from 10.7 per cent in 2003 to 14 per cent in 2009. Since 2006 the number of foreign banks has also increased from 14 to 32 in 2008 and their share of assets over the total banking institutions' assets have increased from 1.5 per cent in 2003 to 2.2 per cent in 2008 (China Banking and Regulatory Commission, 2007, 2009).

The growing affluence of the Chinese and higher literacy rates have resulted in demands for more sophisticated financial services that extend beyond the traditional deposits and loans services. Further, with the entrance of foreign banks and the strengthening of other

domestic financial institutions, consumers are now presented with a wider selection of banks. It has been 7 years since the complete opening up of the banking industry to foreign banks, but are the Chinese flocking to the newer types of banks, especially the foreign banks, or do they still have reservations towards the newer banks and place their trust only on the traditional state-owned banks?

China is one of the largest consumer markets in the world, and capturing a strong and wide customer base is critical to banks' profitability. For foreign banks, gaining an entry licence is not sufficient for their survival. With the intense competition among domestic Chinese banks, foreign banks are faced with the challenge of clamouring for a foothold in the Chinese market. What are bank customers' perceptions and sentiments towards the various groups of banks and what determines customers' choice of banks?

The objective of this article is to use the bank customers' socio-economic characteristics and customers' priorities to delineate customers' bank selection decision. The article focuses on three types of banks: (i) state-owned commercial banks, (ii) joint-stock commercial banks, and (iii) foreign banks. Only two types of domestic commercial banks are chosen to represent the two most prominent domestic commercial banks in China. Foreign banks are particularly selected to gauge customers' acceptance and sentiments towards foreign banks. It is very likely that consumers may patronize more than one type of bank. This article is also interested in paying special attention to state-owned banks, given their historically strong dominance in China, by singling out customers who have reservations towards other banks and patronize state-owned banks only. Hence, a customer's choice of banks is divided into: (i) state-owned banks – a customer who has accounts in state-owned banks *only*; (ii) joint-stock banks – a customer who has an account in a joint-stock bank, and (iii) foreign banks – a customer who has an

account in a foreign bank. In groups (ii) and (iii), a customer can be a single-type bank customer (has an account in a joint-stock bank or a foreign bank only) or a multiple bank customer (has accounts in a combination of state-owned banks and joint stock and/or foreign banks).

It is found that although there are no major differences in the determinants in the probability of being a customer who is a single user of state-owned banks and a joint-stock bank customer, factors such as education, income, age, occupation sector and location of hometown significantly affect the single user of state-owned banks only. Further, it is also found that state-owned banks remain dominant despite the opening up of the banking sector, and perception towards state-owned banks remains favourable.

LITERATURE REVIEW

There is a considerable amount of literature on customers' bank selection criteria over the years (for example, Mårtensson, 1985; Denton and Chan, 1991; Kaynak *et al*, 1991; Kennington *et al* 1996; Devlin, 2002; Devlin and Gerrard, 2005; Manrai and Manrai, 2007; Dhade and Mittal, 2008) and these studies are conducted in several countries such as Britain, India, United States, Poland, Hong Kong, Turkey and Sweden. The subject of bank choice criteria have largely focused on customers' perception and satisfaction towards bank's products, service quality, reputation, price and location.

On the other hand, there are limited studies that specifically analysed the customers' choice between a local and a foreign bank or the choice between a public and a private bank. Dhade and Mittal (2008) analysed the satisfaction and perception of bank customers between state-owned banks and foreign banks in India while Angelis *et al* (2005) added customers' socio-demographic characteristics in their analysis on bank customers' choice between Hellenic state-controlled banks and

private banks. Further, Kennington *et al* (1996); conclude that reputation and pricing concerns are more important to customers in Poland, who are gradually adapting to the emergence of private banks in Poland.

Generally, customers' socio-demographic factors are used to explain customers' perception and rating of banks' characteristics (for example, Boyd *et al*, 1994; Gerrard and Cunningham, 1999; Devlin, 2002; Devlin and Gerrard, 2005; Manrai and Manrai, 2007; Dhade and Mittal, 2008), and far less attention is given on the influence of socio-demographic characteristics on customers' choice of bank. Denton and Chan (1991) and Burnett and Chonko (1981) examined the socio-demographic factors that distinguished single bank users from multiple bank users whereas Angelis *et al* (2005) incorporated customer's socio-demographics in the customer's choice between a public and a private bank.

Age, education, income and gender are the main socio-demographic factors that are included in the existing studies on bank selection. In the case of the choice between a state-controlled bank and private banks, Angelis *et al* (2005) found that customers who have lower education and are from the lower income groups prefer state-controlled banks to private banks. Denton and Chan (1991) and Burnett and Chonko (1981) found that gender, age and education showed significant differences in the preference for multiple banking while Gerrard and Cunningham (1999) showed that higher educated and higher income consumers are more likely to be multiple bank users than single bank users.

Given the lack of empirical research on customers' choice of banks in China and the limited literature on the specific decision of choice between a public and a private or foreign banks, the selection of variables in this study are drawn from the above-mentioned literature. The socio-demographic variables such as age, gender, education and income follow from Devlin and Gerrard (2005), Manrai and Manrai (2007),

Devlin, (2002), Gerrard and Cunningham (1999), Boyd *et al* (1994), Denton and Chan (1991) and Burnett and Chonko (1981) among others.

Apart from the socio-demographic variables, this study includes other personal background factors such as occupation sector and hometown location. In a study by Kamakodi and Khan (2008), one of the top three reasons for customers to switch bank is the change in the bank that disburse their salary, which is known as the 'house banks'. Given the close links that state-owned banks enjoy with domestic private firms and state-government offices, the customers' occupation sector is likely to have effect on the customers' bank selection decision.

Parental influence and family tradition were found to be one of the important factors in bank selection criteria. For example, Schram (1991) found that students are more likely to choose to stay or to be loyal with the bank that their family members primarily use. Devlin and Gerrard (2005), Tan and Chua (1986) and Mårtensson (1985) also found location and parental influence to be important in motivating bank choice. As Shanghai is a cosmopolitan city and China's financial centre, many Chinese from different provinces migrate to Shanghai for better job opportunities. Based on this notion, the customer's hometown location is added in this article to proxy for parental influence.

MODEL AND DATA

Model

A multinomial logit model is used to cater for the dependent variable that consists of three choices of bank. The equation can be written as:

$$\text{Prob}(y = j) = \frac{e^{\sum_{k=1}^K \beta_{jk} X_k}}{1 + \sum_{j=1}^J e^{\sum_{k=1}^K \beta_{jk} X_k}} \quad (1)$$

gives $\text{Prob}(y=j)$, where $j=1, 2, \dots, J-1$ and $k=1, 2, \dots, K$. $J=3$ refer to the three choices of bank. The state-owned bank is the base category and hence the estimates for the other chosen banks will be contrasted with the state-owned banks. Parameters β have two subscripts in the model: k for distinguishing the explanatory variables (X), and j for distinguishing the chosen banks. The subscript j indicates that there are $J-1$ ($3-1=2$) sets of β estimates while the subscript k indicates that there are $K=18$ explanatory variables. Table 1 summarizes the 18 explanatory variables used in the analysis.

Equation (1) can also be written as:

$$\ln \left[\frac{\text{Prob}(y = j)}{\text{Prob}(y = J)} \right] = \sum_{k=1}^K \beta_{jk} X_k \quad (2)$$

where e^β from (1) will give the odds ratio and β from (2) gives the log of odds estimates of j happening in contrast to $J-1$. Although the usual focus is on the coefficient estimates, in actual fact the coefficients of the multinomial logit model are difficult to interpret and associating β_j with the j th outcome would be misleading (Greene, 2003). By differentiating (1), the marginal effects of the characteristics on the probabilities are:

$$\delta_j = \frac{\partial P_j}{\partial x_i} = P_j \left[\beta_j - \sum_{k=0}^J P_k \beta_k \right] = P_j [\beta_j - \bar{\beta}] \quad (3)$$

From (3), it can be seen that every subvector of β enters every marginal effect, both through the probabilities and through the weighted average that appears in δ_j . Hence, according to Greene (2003), to minimize the confusion that arises from the coefficient estimates, interpretation of the model should be based on the marginal effects of the explanatory variables on the probabilities. It is also pointed out that for any x_k , $\partial P_j / \partial x_k$ need not have the same sign as β_{jk} . A multinomial logit model has a

Table 1: Summary of sample characteristics

<i>Characteristics</i>	<i>Total sample (N=388) (per cent)</i>	<i>Customers of state-owned banks only (n₁=176) (per cent)</i>	<i>Customers of joint-stock banks (n₂=176) (per cent)</i>	<i>Customers of foreign banks (n₃=36) (per cent)</i>
<i>Age-group</i>				
18–24	33	38	28	31
25–30 ^a	32	26	39	31
31–40	22	20	23	28
>40	13	16	10	10
<i>Gender</i>				
Male ^a	48	45	47	75
Female	52	55	53	25
<i>Income</i>				
Low income ^a : <RMB2000	15	20	10	17
Mid-low income: RMB2001–RMB6000	54	56	57	30
Mid-high income: RMB6001–RMB10 000	19	19	19	22
High income: >RMB10 000	12	5	14	31
<i>Education</i>				
Tertiary education ^a	84	75	90	97
No tertiary education	16	25	10	3
<i>Occupation sector</i>				
Self-employed	8	11	3	14
Private enterprise	30	35	28	11
Foreign firm ^a	34	25	40	47
Government-linked firm	16	15	19	14
Others (retiree, student, homemaker or unemployed)	12	14	10	10
<i>Place of origin (hometown):</i>				
Shanghai ^a	38	44	36	22
City – another city outside Shanghai	44	38	46	56
Countryside – countryside outside Shanghai	18	18	18	22

^aRefers to base categorical variable.

necessary and sufficient characteristic of independence of irrelevant alternatives (IIA) (Hausman and McFadden, 1984). Quite simply, the assumption of IIA implies that the ratio of choosing any two alternatives is independent of the attributes of any other alternative in the choice set. This implies that if a subset of the choice set is truly irrelevant, omitting it from the model altogether will not change the parameter estimates systematically (Greene, 2003). Therefore, the Hausman–McFadden test is used to test the difference between the full model with k outcomes and a restricted model. If the difference between the two models is found to be significant, the assumption is violated. Following on from

Greene (2003), the Hausman–McFadden test statistics is given as follows:

$$\chi^2 = (\hat{\beta}_s - \hat{\beta}_f)' [\hat{V}_s - \hat{V}_f]^{-1} (\hat{\beta}_s - \hat{\beta}_f) \quad (4)$$

where s is the estimate based on the restricted subset, f the estimate based on the full set of choices, and $\hat{V}_s$ and $\hat{V}_f$ are the respective estimates of the asymptotic covariance matrices.

Data

Data used in this study are collected from a survey that took place between June and July 2009 in Shanghai. Shanghai is chosen as

it is the main financial centre of China and has the highest number of foreign bank branches compared with the other major cities in China. Face-to-face interviews were conducted with randomly selected respondents using a prepared questionnaire. A respondent must be at least 18 years of age, a resident of Shanghai and must currently have a bank account in a large commercial bank, a joint stock bank or a foreign bank. A resident of Shanghai is defined as someone who has been residing in Shanghai for at least 12 months or more from the date of survey. To avoid misinterpretation, Chinese language was used in the questionnaire. A total of 388 respondents participated in the survey. For the approximate population size of 19.5 million in Shanghai, the sample size of 388 fulfils the minimum sample size of 384 at 95 per cent confidence interval (Wessa, 2008).

The variables

The variables selected in this study are broadly divided into two categories: (i) socio-economic factors and (ii) customers' banking experience and priorities. The socio-economic variables that are adopted from the existing studies are gender, education, income and age. Under the category of socio-economic factors, occupation sector and hometown location is added in this study.

Occupation sector is added to the model because employers of different sectors differ in the banks they choose to disburse salary and this will have an influence on the customer's bank selection as salary will most likely be the customer's main source of wealth. As state-owned banks enjoy close links with domestic private firms and state-government offices, it is expected that employees who work within such sectors are more likely to be customers of state-owned banks whereas those who work with foreign firms are more likely to have an account with foreign banks.

Shanghai being a business and financial hub of China attracts Chinese migrants from

other provinces to work there. Apart from the family tradition and parental influence, the migrants are expected to choose a bank that has large branch networks that enable them to remit money to their families and is convenient for them to conduct any banking activities when they are back in their hometowns. Among the different types of banks, state-owned banks have the widest branch network.

Customers' banking experience is measured in terms of years of banking. Customers who have a long banking history may have more faith in banking services and are more likely to have less reservations in trying newer types of banks, whereas those who are new to banks may be more cautious and are likely to choose banks that they perceive as popular and safe. In such cases, the state-owned banks may come across as the safest option, given that their funds are guaranteed by the government.

Respondents are given a list of 10 factors, which includes convenience, security, service, product, technology, recommendation, reputation, charges, technology and appearance, to rank in order of priority when they decide on their choice of bank. Convenience, service and security are the top three factors that are ranked most important by the respondents. These three factors are selected and included in the model. Previous studies found that convenience, service and security play a significant role, though in varying degrees in customers' choice of banks (for example, Devlin and Gerrard, 2005; Karatepe *et al*, 2005; Al-Hawarl, 2006; Manrai and Manrai, 2007).

Characteristics of survey respondents

Among the 388 respondents, 176 (45.4 per cent) respondents have an account in state-owned banks only, another 176 (45.4 per cent) are customers of joint-stock banks and the remaining 36 (9.2 per cent) are customers of foreign banks. On further analysis, it is found that of the

388 respondents, 351 (90.5 per cent) are customers of state-owned banks, 203 (52.3 per cent) are customers of joint-stock banks and 36 (9.3 per cent) are customers of foreign banks. It can be inferred that the majority of the respondents have at least one account in state-owned banks and half of them (176; 50.1 per cent) patronize state-owned banks only.

Table 1 gives the mean statistics of the variables. Thirty-three per cent of the total sample is 18–24 years old, followed by 32 per cent who are 25–30 years old and 22 per cent who are 31–40 years old. Only 13 per cent of the total sample is above 40 years old. Males account for 48 per cent of the total sample and there is a significantly higher proportion of foreign bank customers who are male (75 per cent) compared to the state-owned and joint-stock banks' customers. For the total sample, the majority of the respondents (84 per cent) have attained tertiary education. The majority of the respondents (54 per cent) are from the lower middle income group (earning between RMB2001 (USD303.40) and RMB6000 (USD909.75) per month), followed by 19 per cent from the upper middle income group (earning between RMB6001 (USD909.90) and RMB10 000 (USD1516.25)), 15 per cent from the low-income group (earning less than RMB2000 (USD303.25)) and 12 per cent from the high-income group (earning more than RMB10 000 (USD1516.25)). Whereas only 5 per cent of the state-owned banks' customers are from the high-income group, 31 per cent of the foreign banks' customers belong to the high-income group. The contrasts appear to show that high-income customers are more receptive to foreign banks or that foreign banks are more interested in targeting high-income customers only.

From the total sample, 34 per cent of the respondents work in foreign firms, 30 per cent work in private enterprises, 16 per cent work in large commercial firms or the civil service and 8 per cent are self-employed.

Although the survey is conducted in Shanghai, it is found that the majority of the respondents are not locals. For example, 44 per cent of them noted that their hometown is in another city in mainland China outside Shanghai, 18 per cent of them are from the countryside in mainland China outside Shanghai. Only 38 per cent of the respondents are of Shanghai origin. Of the total sample, 51 per cent of the respondents chose convenience as the most important factor when choosing a bank, while 23 per cent and 16 per cent of the respondents chose security and service, respectively, as the most important factor.

ESTIMATION RESULTS

To ensure that the data meet the assumption of IIA in a multinomial logit model, the Hausman–McFadden specification test (Hausman and McFadden, 1984) is used. According to the Hausman–McFadden test (Hausman and McFadden, 1984) based on a χ -squared statistics ($\chi^2(15) = 11.02$; $\text{Prob} > \chi^2 = 0.7512$), it is found that the null hypothesis of IIA is not rejected, indicating that the distinction among the different types of bank customers satisfies the basic assumption of IIA. Maximum likelihood estimation was carried out to estimate the multinomial logit model. Given the potential confusion in the interpretation of the coefficients of the model, only the marginal effects of the explanatory variables on the probabilities of the type of customer will be discussed instead (Greene, 2003). The marginal effects are presented in Table 2.

The number of years of banking is found to have positive and significant effect on the probability that a customer chooses a joint-stock bank. For every additional one year of banking experience, the probability that a customer is a joint-stock bank customer increases by 1.3 per cent. Gender is found to have significant influence only on the probability that a customer is a foreign bank customer. Being male increases the probability that the customer is receptive

Table 2: Marginal effects of explanatory variables on the probabilities of the type of bank customers

<i>Explanatory variables</i>	<i>State-owned bank customers</i>	<i>Joint-stock bank customers</i>	<i>Foreign bank customers</i>
Years of banking use	−0.014 (0.007)	0.013** (0.007)	0.001 (0.003)
Male	−0.008 (0.058)	−0.052 (0.057)	0.061** (0.025)
Low income	−0.005 (0.109)	−0.060 (0.110)	0.065 (0.079)
Mid-high income	0.060 (0.077)	−0.076 (0.074)	0.017 (0.034)
High income	−0.236*** (0.091)	0.126 (0.101)	0.110 (0.074)
Education	−0.020** (0.082)	0.132 (0.083)	0.064 (0.020)
Self-employed	0.286*** (0.10)	−0.312*** (0.085)	0.025 (0.047)
Private enterprise	0.153** (0.072)	−0.101 (0.071)	−0.053** (0.023)
Government linked	0.037 (0.087)	−0.020 (0.084)	−0.017 (0.025)
Others	0.102 (0.125)	−0.089 (0.123)	−0.013 (0.041)
Age 18–24	0.078 (0.075)	−0.080 (0.074)	0.002 (0.030)
Age 31–40	0.094 (0.088)	−0.115 (0.083)	0.021 (0.039)
Age >40	0.268** (0.118)	−0.286*** (0.103)	0.018 (0.058)
City	−0.094 (0.068)	0.052 (0.068)	0.042 (0.031)
Countryside	0.133* (0.080)	0.062 (0.085)	−0.071 (0.056)
Convenience	0.257*** (0.098)	−0.190** (0.096)	−0.067* (0.038)
Service	0.236** (0.111)	−0.206* (0.106)	−0.031 (0.025)
Security	0.347*** (0.095)	−0.303*** (0.091)	−0.044* (0.024)

Asterisks indicate levels of significance: ***=1 per cent, **=5 per cent, *=10 per cent. Standard errors in parentheses.

Hausman test $\chi^2(15)=11.02$; Prob > $\chi^2=0.7521$. Log-likelihood of the multinomial logit regression = −304.0631, LR $\chi^2(16)=102.16$.

towards foreign banks by 6.1 per cent. The result is supported by the fact that compared to females, males have a higher level of awareness of the various banking options and have fewer reservations towards trying new types of banking alternatives.

Compared to a customer who is from the lower middle income group (who earns RMB2001 (USD303.40) to RMB6000 (USD909.75) a month), only a high-income customer who earns above RMB10 000 (USD1516.25) a month has significant effect on the probability that a customer chooses to patronize the state-owned banks only. In fact, the probability that a customer who is

in the high-income bracket is a customer of state-owned banks only falls by 23.6 per cent compared to a customer from the lower middle income bracket. Perhaps this is because high-income earners may require more sophisticated financial services such as wealth management facilities, which is not the forte of the state-owned banks.

Given the long existence and dominance of state-owned banks, the lower educated customers (non-tertiary) may only place their trust in state-owned banks whereas the tertiary educated customers may be more receptive to other banking alternatives. Thus, it is found that the probability that

a customer patronizes only state-owned banks reduces by 2 per cent for a customer who has tertiary education compared to one who does not.

Compared to a respondent who works in a foreign firm, being self-employed increases the probability that a respondent uses only state-owned banks by 28.6 per cent but reduces the probability that a respondent is a joint-stock bank customer by 31.2 per cent. On the other hand, compared to a respondent who works in a foreign firm, a respondent who works in a private enterprise increases the probability that a respondent is a single user of a state-owned bank by 15.3 per cent while it reduces the probability of being a foreign bank customer by 5.3 per cent. Given the close links between state-owned banks and domestic firms, it is very likely that the employers of private enterprise or self-employed persons use state-owned banks for their financial transactions and for salary disbursements. Hence, that explains the higher probability of respondents who are self-employed or who work in private enterprises being customers of state-owned banks only.

Among the different age-groups, the probability that a respondent uses only state-owned banks increases by 26.8 per cent if the respondent is above 40 years old compared to a respondent who is 25–30 years old. Further, the probability that a respondent is a customer of a joint-stock bank falls by 28.6 per cent if the respondent is above 40 years old compared to someone who is 25–30 years old. The finding supports the notion that those above 40 years old are more likely to be comfortable with state-owned banks than the other types of banks, given the long dominance of state-owned banks in China's banking industry. Hence, compared to respondents who are 25–30 years old, those who are above 40 years old are more supportive of state-owned banks than joint-stock banks, which are also domestic banks.

The probability that a respondent is a customer of a state-owned bank will

increase by 13.3 per cent if the respondent originally hails from the countryside compared to a customer of Shanghai origin. The finding supports the *ex ante* premise that respondents who are not of Shanghai origin will be more likely to be customers of state-owned banks only, given that state-owned banks have wide branch networks throughout the country and these respondents may be more accustomed to state-owned banks than the other types of banks. Compared to those from cities outside Shanghai, it is reasonable to expect that respondents of rural origins will be more dependent on state-owned banks.

The probability of being a customer of only a state-owned bank increases by 25.7 per cent but the probability of being a joint-stock bank and foreign bank customer decreases by 19 per cent and 6.7 per cent, respectively, if the respondent prioritizes convenience when choosing a bank. However, if a respondent prioritizes quality of service offered by a bank when making his/her choice of bank, it will increase the probability of only being a state-owned bank customer by 23.6 per cent but decreases the probability of being a joint-stock bank customer by 20.6 per cent. Last, if security is the most important factor for a respondent when selecting a bank, the probability that the respondent only holds state-owned bank accounts increases by 34.7 per cent whereas the probability of being a joint stock and foreign bank customer increases by 30.3 per cent and 4.4 per cent, respectively. The findings suggest that respondents perceive state-owned banks to be relatively more convenient, offer better services and be more secure than joint-stock banks or foreign banks.

CONCLUSIONS

Given the liberalization and reforms that have taken place in China's banking industry, two levels of competition among banks are discernible. On the first level, there is the competition among the domestic

banks, whereas, on the second level, the competition is between the domestic banks and the foreign banks. Taking this into account, this article sets out to determine if socio-demographic factors and customers' banking priorities affect their choice of banks. Customers' bank choices are divided into three groups, namely the single user of the state-owned banks, which have dominated China's banking landscape for many years, users of the joint-stock banks, which are the main competitors of the state-owned banks, and finally users of foreign banks.

In general, the factors that affect the probability of a respondent being a sole user of state-owned banks and a user of joint-stock banks are similar, with the exception that education, income, occupation sector and location of hometown have significant marginal effects only on the probability of being a state-owned bank customer.

The findings here show that education and income have adverse marginal effects on the probability that a respondent is a loyal customer of state-owned banks. This corroborates with the study by Angelis *et al* (2005). Tertiary educated respondents and high-income earners have less inclination to have their financial needs managed by state-owned banks only. This also suggests that those of lower education and lower income have reservations towards the newer types of banks and the long-established state-owned banks have reinforced their conviction. The study does not rule out the role played by joint stock banks and foreign banks in targeting and attracting the higher educated and higher income segment of customers, which could also explain the lower likelihood of this segment being customers of state-owned banks only.

As those above 40 years old are found to be more likely to use only state-owned banks, newer types of banks such as joint-stock banks and foreign banks are faced with the challenging task of breaking customers' old banking habits and perceptions. This

highlights the advantageous position enjoyed by state-owned banks owing to their dominant presence in China's banking industry.

The positive marginal effects of convenience, security and service on the probability of a customer being a sole user of state-owned banks but resulting in negative marginal effects on the probability of a customer being a joint-stock bank or foreign bank customer suggests that state-owned banks are perceived to be superior than joint-stock banks and foreign banks in terms of convenience, service and security.

In conclusion, although foreign banks have now gained access to operate liberally in China, Shanghai bank customers have yet to fully accept the foreign banks. There are still reservations, especially from those aged over 40 years, the less educated and those from the lower income bracket. In short, despite the liberalization of the banking industry, the Chinese have not quite gone beyond the state-owned banks in their choice of banks.

MANAGERIAL IMPLICATIONS

The significance of customers above 40 years of age who patronize state-owned banks only reveals that newer banks such as the joint-stock banks and foreign bank may need to understand clients better to penetrate this relatively more old-fashioned or traditionalist group of customers. For example, foreign banks may consider to apply more Asian or conservative model of wealth management and promotion strategies to attract such group of customers.

The findings in this article that indicate that customers who originally hail from the countryside utilize state-owned banks only may be a consequence of the control imposed by the Chinese government on the number of foreign banks' branches. Given the barrier to expand their market reach, foreign banks may need to be creative in their distribution channels such as by capitalizing on mobile phone banking, have

co-branding credit card partnerships with retailers that have wide networks or increase the intensity of their cross-selling strategies in existing branches.

The larger branch networks of state-owned banks that provide the customers with the convenience of banking and state ownership of state-owned banks that give the customer a sense of security have put the foreign banks in a disadvantaged position. This is indicated by the findings that bank customers who prioritize convenience and security are more likely to patronize state-owned banks only. Given the less positive perception of customers on the security of foreign banks and the joint stock banks, the foreign banks may need to invest more resources into developing their reputation as a trustworthy and secured bank. The foreign banks may exploit their expertise with high-end technologically financial products that provide customers varied ways to hedge and manage their wealth, and this may provide a new dimension to the idea of security to bank customers. Foreign banks may do this by initially targeting the younger customers, who are more receptive to innovative wealth management.

Finally, given the new deposit rule that came into force since December 2011, foreign banks are faced with greater challenge to scramble for deposit to meet the required loan–deposit ratio. As a result, there is a greater need for foreign banks to find a niche to take a stake in the consumer banking sector. Otherwise, a foreign bank may have to consider diverting its resources into corporate banking given that foreign banks are generally located in bigger cities or business hubs.

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