Original Article

The interrelationship of stock ownership and customer relationship volume: Case of a Nordic retail bank

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ABSTRACT Researchers have been increasingly interested in the fact that individuals who own stocks of publicly listed companies may also act as the same companies' customers, buying their products and services. This article studies the relationship between an individual's stock ownership and his/her customer relationship (purchase/sales) volume. Examining a large sample of customers of a Nordic retail bank, the authors find that the proportion of high-volume customers is significantly greater among stock-owning customers than among non-stock-owning customers. Generally, it is found that there is a positive relationship between a customer's relationship volume and his/her stock ownership.
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INTRODUCTION

Traditionally, individuals' consumption behavior and investment behavior have been considered to be rather isolated: one's qualitative consumption choices are not supposed to affect one's investment choices or vice versa (that is, not beyond the ratio of money consumed versus invested). Nevertheless, both marketing[1–7] and finance researchers[8–10] have recently begun to

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recognize that the same individuals who act as customers of companies may also invest in and own those companies' stocks – in such ways that their customer and investor roles actually become interrelated. For instance, Schoenbachler *et al*[1] recently explored the links between individuals' investing in companies' stocks and their buying of the same companies' products. Specifically, they investigated whether individuals' brand-loyal purchases of the *products* of a company increased the likelihood that the individuals also purchased the *stocks* of the company – and vice versa. The results suggested that individuals tend to repeatedly buy products from companies in which they hold stocks, and that individuals may buy stocks of a company because they have good experiences with its products. Now, for the financial services (and banking) context, such results are especially interesting as it has been recently speculated what the loyalty of such bank customers who own the bank's shares is actually like.[11]

Within general marketing research, in turn, there has been an ever-growing interest in the relationships that companies have with their customers. The focus has shifted away from the sales generation for individual products (transactions) to the sales and profits generated in individual customer relationships of a company.[12–20] In this literature, the attitudinal (brand) loyalty of a company's customer to the company is seen to give rise to her *repeated* purchases of the company's products and services and, thereby, to the (sales) volume of the customer relationship. In the banking context, this customer relationship volume would mean the total volume of the mortgages, credit card and other personal loans, and cheque and savings accounts that a customer holds in the bank.[11]

Thus, it has been suggested, on the one hand, that an individual's stock ownership in a company may be related to her attitudinal brand loyalty towards the company's products and services and, on the other hand, that such loyalty is related to repeated product and services purchases and customer relationship (sales) volume. However, the interrelationship between stock ownership and customer relationship volume has not been directly studied. In this article, we address this research gap with an empirical study, examining a large sample of customers of a retail banking company, who differ in terms of customer relationship volume. We perform simple statistical testing on this sample. The results interestingly suggest that the proportion of high-volume customers is significantly greater among stock-owning customers than among non-stock-owning customers and that there is an overall positive relationship between a customer's relationship volume and his/her stock ownership. These findings essentially question the traditional finance paradigm that assumes that individuals' investment and consumption patterns would be totally isolated from each other. Therefore, our novel findings have interesting theoretical and managerial implications, which will be discussed.

THEORY AND HYPOTHESES

Stock ownership→(Attitudinal loyalty→) Customer relationship volume

Considering first the effect of stock ownership on attitudinal loyalty and, thereby, on customer relationship volume, Schoenbachler *et al*[1] recently studied whether there is a relationship between individuals' stock ownership of a company and their attitudinal loyalty towards buying the products of that company. Their findings suggested that individuals who own stock in a company are generally likely to exhibit brand loyalty towards the company's products – in part because of the very stock ownership. That is, they are attitudinally loyal to buying the company's products and services partly owing to their stock ownership in the company. This was indicated by the mean response (mean = 3.72) of the surveyed individual investors leaning towards 'definitely will', when questioned about 'likelihood of purchasing products/services *based on stock owned*' (1 = definitely will not, 5 = definitely will). In a similar vein, in Aspara's[7] survey study among the individual stockowners of a set of companies, approximately 60 per cent of the individuals indicated that their motivation to favor company X's products over those of competitors had certainly increased as a consequence of their investing in company X's stock. An additional 20 per cent indicated that the motivation to prefer the company's products had perhaps somewhat increased.

Theoretically, the above kind of findings can be explained in three complementary ways. First, if the individual consumer needs or wants to buy (for consumption) a product of such a product category that a company which she owns produces, the consumer will be better off financially, if she buys the product from her 'own' company rather than from its competitors (assuming that the products are comparable in terms of quality and price).[1,7,8] After all, the consumer then gets a fraction of the cost of the product back to herself, in the form of profits of the company that she owns. Second, the consumer may have the 'feeling' that she can support the company that she owns and, thereby, herself financially by buying that company's products – regardless of whether she is objectively better off financially by doing that.[7] Third, one's ownership in a company may generate positive affect for the company and its products and services[8] – analogously as one usually has more liking for one's own children or pets than for those of other people. This affect will then reinforce one's attitudinal preference for the company's products. Moreover, *not* having positive attitude towards the company and not preferring its products while owning its stock would likely create cognitive/attitudinal dissonance, which the individual is likely to try to reduce by shaping her attitude towards the company and its products to become more positive.[7,21]

What the aforementioned empirical findings and theoretical points suggest is, hence, that one's stock ownership in a company gives rise to one's mental or attitudinal loyalty towards buying the products or services of the company. Now, in relationship marketing literature, there is wide agreement of the fact that a person's attitudinal loyalty to a company is actually further related to her *repeated* purchases of the company's products and services – and, therefore, to the (sales) *volume of her customer relationship* with the company, from the company perspective. The attitudinal loyalty may, for instance, manifest in the customer concentrating her purchases in a product/service category to the particular company[22–27] and her decreased willingness to switch product/service providers.[28,29]

In sum, we propose that an individual's stock ownership of a company leads to increased attitudinal loyalty towards the company, which in turn leads to higher customer relationship volume. Therefore, treating stockowners as a segment or population of customers distinct from non-stockowners, we expect to empirically find that the proportion of high-volume customers is greater among stock-owning customers of the company than its non-stock-owning customers.

Hypothesis 1: The proportion of high-volume customers is higher among stock-owning customers of the company than its non-stock-owning customers.

(Attitudinal loyalty→) Customer relationship volume and stock ownership

In addition to the potential effect of an individual's stock investment/ownership – whenever it occurs – on her attitudinal loyalty to the company and further on customer relationship volume, the chain of influence may alternatively, in some cases, start from an individual's attitudinal loyalty. Namely, it is possible that a customer's attitudinal loyalty towards a company and its products and services also leads to her increased predisposition to invest in the company's stock in the first place and, hence, her coming to own the stocks. Indeed, the results of Schoenbachler *et al*[1] suggested that individuals may buy stocks of a company because they have good experiences with its products and services. Aspara and Tikkanen[8] further suggest that this may be due to the fact that an individual's positive attitude towards the products of a company has positive influence on the individual's attitude towards the company itself, which in turn leads to increased willingness and predisposition to invest in the company's stocks.

There are, again, three complementary explanations to the above suggestions. First, an individual's positive attitudinal loyalty towards a company and its services – liking them – may lead the individual to reason that because she likes the company and its services, others will like them too, and the company will therefore succeed financially.[8] Consequently, she may have increased interest to invest in and own the company's stock. Second, according to a common psychological notion, an individual's positive attitude towards an object or idea – in this case a company – will manifest in the individual's predisposition to behave in a consistently favorable way with respect to the object.[8] Therefore, an individual can be expected, also when making investment decisions, to favor a company towards which she has positive attitudinal loyalty. Third, positive affect implicated in one's attitudinal loyalty towards a company may lead to some degree of outright 'desire to possess' the company by owning its stock, even beyond the financial interests.[5] This suggestion derives from research that addresses the psychology related to people's collections (such as stamp collections): people's need and motivation to own and surround themselves with objects for which they have special affect.[30,31] Specifically, collection researchers emphasize the close relationship between one's affection for an object, on the one hand, and will to possess the object, on the other.[30] Thus, a special positive affect for a company and its services may lead the individual desiring to possess this object of affect – by way of investing in and owning its stock.

In other words, a person's positive attitudinal loyalty towards a company may actually result not only in greater customer relationship volume – as assumed in relationship marketing literature (and in Hypothesis 2) – but also in the person's predisposition to invest in the stock of the company. Empirically, this would mean that customer relationship volume and stock ownership should appear to be positively related to each other (insofar as loyalty towards the company is a common determinant of both).

Hypothesis 2: An individual customer's relationship volume is positively related to her stock ownership of a company.

METHOD

Empirical context

We test our hypotheses on a large data set from a retail banking company, which is a good context for our empirical analyses for several reasons. Retail banks have been at the forefront of developing relationship marketing practices towards consumers[32] and, more specifically, segmentation of customers according to their relationship volume (and profitability).[27,33] Accordingly, relationship marketing studies have often had individual retail banks as studied cases.[33–37]

The particular bank whose customers we study is a leading retail bank in one of the larger Nordic countries. To its company form, the bank is a corporation, and it is publicly listed on the Nasdaq OMX Nordic

Stock Exchange list. The bank has hundreds of thousands of customers in the focal country, as well as tens of thousands of stockowners. From the perspective of the study's focus on attitudinal loyalties, it is relevant to note that the bank's customers have multiple competing banks to choose from in the market, meaning that the customers are generally not committed to the bank because of lack of alternatives. Moreover, as the focal bank's service offerings (nor service price levels) do not, either, remarkably differ from the offerings of other banks in the market, many a customer's potential commitment to the bank is likely to be, indeed, to a significant degree attitudinal (rather than based on any superior offering quality of the bank, or lower prices).

On the other hand, the bank's customers have also multiple stock investment alternatives to choose from in the focal country and wider Nordic area – even when it comes to the banking sector. Thus, the customers would not necessarily 'need' to invest in the focal bank, should they want to invest in the stock of a banking sector company. Yet, as the results come to show, many of them have indeed invested in the focal bank's stock. Note also that the customers' stock investment decisions can mostly be considered to have occurred owing to their own will. The bank registers (stock accounts) analyzed for the present study register only customers' personal stock ownerships in companies – indirect ownerships through, for example, mutual funds are not registered. The use of private wealth management services among the customers is also very rare, meaning that stock investments decided by someone else (for example a wealth manager) on the customer's behalf should be almost non-existent within the studied population. Finally, note that the bank has not actively 'marketed' its stock for its customers to purchase. Most importantly for the present analysis, it has not made its stock differentially available to its high-volume customers versus low-volume customers.

Data and sample

The study data were based on a survey that the bank had conducted on two subpopulations of its individual customers in 2002, especially such adult (18 years or older) customers whose business with the bank was moderate or high. The bank had categorized these two subpopulations – originally for marketing purposes, not for the purpose of the present study – as 'base' customers (~moderate volume) and 'key' customers (~high volume).

The population of interest of the present study consisted of the aforementioned 'base' and 'key' customers. Excluded from this population was a customer group with very small or non-existing volume of current business with the bank. The exclusion of the smallest accounts from the population of interest was to improve the internal validity of the analysis, as a relatively high proportion of those accounts was likely to be 'sleeping' accounts as well as accounts of disproportionately young people.

For the present study's data, a stratified random sample was drawn from the groups (subpopulations) of 'base' and 'key' customers. The sample followed a proportional allocation, that is, the sizes of the samples drawn from the groups corresponded proportionally to the respective sizes of the groups (approximately half and half).

A survey questionnaire was administered among the sampled subjects. The survey had originally been designed as a customer satisfaction survey, but ideally for the purpose of testing our hypothesis, the bank registers also included information of whether or not the respondent-customer owned the stock of the bank. In total, the survey sample consisted of 145 125 individual customers of the bank. The effective response rate was 32 per cent, leaving 46 440 usable questionnaires. Demographically, the respondents represented fairly well the country's population – being customers of different offices of the extensive, countrywide branch office network of the bank.

Measures and study design

As implied above, there was wide representation, among the respondents, of two types of customers of the bank, differing in terms of their customer relationship volume from the bank's perspective. Specifically, the customers were readily characterized as 'base customers' or 'key customers' by the bank, on the very basis of their volume of business with the bank. This basis of segmentation or division by the bank highly corresponded to the measure of relationship volume used, for example, by Leverin and Liljander[27] and Storbacka:[35] the sum of the customer's yearly average deposit and loan balances. High-volume customers were therefore equated with 'key customers' indicated by the bank, whereas 'base customers' were considered moderate-volume customers.

For the purposes of testing the Hypothesis 1, we assumed that stock-owning customers and non-stock-owning customers were different populations. The research method, then, involved calculating the proportion of high-volume customers for both groups, in order to apply a simple statistical z-test for the two proportions. The test was performed as one-tailed test to determine whether the proportion of high-volume customers would be higher among stock-owning customers than non-stock-owning customers.

For the purposes of testing the Hypothesis 2, in turn, we assumed the customers of the bank to represent one population. The research method involved cross-tabulating the research subjects according to the following classification variables:

- Stock ownership (yes versus no): whether the bank registers indicated that the customer owned the bank's stock
- Customer relationship volume (high versus moderate): whether the subject was indicated by the bank to belong to the 'key customer' or 'base customer' group.

A simple Pearson's chi-square test for independence would be performed to determine whether stock ownership and customer relationship volume were (in)dependent on each other. Note that this test for independence was conducted separately for customers with high wealth versus low wealth, identified through median split on a wealth proxy – so as to control for the possibility that the relationship would be moderated by the customers' wealth. Specifically, the wealth proxy reflected the customer's total savings (and investments) and was calculated as follows:

$$\text{wealth proxy} = \frac{\text{the amount of the customer's savings and investments in the focal bank}}{\text{the share of savings and investments that the customer holds in the focal bank, as a proposition of her total savings and investments}}$$

The numerator was obtained from the bank database, whereas the denominator was self-reported by the customers on a scale of 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, and 100 per cent. Note that individuals who reported having 0 per cent of their savings/investments in the focal bank were excluded from those analyses that involved the wealth control (as the wealth proxy could not be calculated for such customers due to 0 in denominator).

RESULTS

Tests of Hypothesis 1

In Hypothesis 1, we expected that the proportion of high-volume customers is higher among stock-owning customers of the company than among non-stock-owning customers. Consistently, with our case bank, the proportion of high-volume customers resulted to be 67.2 per cent among stock-owning customers while being only 48.0 per cent among non-stock-owning customers (Table 1). A one-tailed z-test for two proportions shows that a null hypothesis, assuming that the proportions do *not* differ, can be rejected ($z = 25.7$, $p < 0.001$). Thus, the proportion of high-relationship-volume customers is significantly greater among the stock-owning customers of the bank than among its non-stock-owning customers. This finding supports Hypothesis 1.

We also conducted additional analyses to further examine the chain of effects suggested in connection with Hypothesis 1. As the presumption underpinning the hypothesis was that stock ownership has a positive effect on attitudinal loyalty towards the company, which in turn has positive effect on customer relationship volume, a relevant additional analysis involved a two-step examination. First, we would analyze if stock ownership had a positive effect on loyalty, and second, if loyalty had a positive effect on customer relationship volume.

Although we did not have a direct measure of attitudinal loyalty at our disposal, we used a proxy: the longevity of the customer's relationship with the bank, as measured by the length of her customer relationship. An analogous indicator was used by Barnes[38] for a banking customer's loyalty. Indeed, the years that the person has continuously remained banking at the focal bank is likely to be roughly correlated with the strength of her current attitudinal loyalty towards the bank.

In the first step of the additional analysis, we performed a simple analysis of variance (ANOVA) with stock ownership as the independent variable and the attitudinal loyalty proxy as the dependent variable. The analysis revealed a significant main effect of stock ownership on loyalty ($F(1, 45179) = 995.1$, $p < 0.001$). Specifically, as expected, stock-owning customers of the bank have higher mean loyalty proxy value ($M_{\text{stockowners}} = 22.0$) than its non-stock-owning customers ($M_{\text{non-stockowners}} = 18.7$; $p < 0.001$). This supports the notion that stock ownership in the bank increases attitudinal loyalty towards it.

In the second step, we performed a binary logistic regression analysis with the outcome variable customer relationship volume (= high versus moderate), and with the attitudinal loyalty proxy as the predictor variable. Note that we also included, in the model, a measure of current customer satisfaction as a predictor/control variable, in order to control that any found effects on customer relationship volume would not be due to mere current customer satisfaction (rather than attitudinal loyalty).[39] The results of the logistic regression (Table 2) show that loyalty has, as expected, a positive effect on the probability that an individual customer has high customer relationship volume ($\beta = +0.052$; $\exp[\beta] = 1.053$). This effect is highly significant ($p < 0.001$). Also the control variable, customer satisfaction, has a significant positive effect on the probability that an individual customer has high customer relationship volume ($\beta = +0.070$, $\exp[\beta] = 1.072$; $p < 0.001$), as presumed – yet this effect does not render the effect of

Table 1: Proportions of high-relationship volume customers among stock-owning customers versus non-stock-owning customers

		Stock-owning customers	*Non-stock-owning customers*
Total	*N*	4999	41 441
High-relationship-volume customers	*n*	3360	19 881
	% of Total	67.2	48.0

Table 2: Logistic regression results: Probability that an individual's customer relationship volume=high

	β	(exp[β])	Z/Waldχ^2	p
Intercept	−0.728	0.483	179.228	<0.0001
Attitudinal loyalty proxy	+0.052	1.053	69.959	<0.0001
Control: Customer satisfaction	+0.070	1.072	127.698	<0.0001

loyalty non-significant (suggesting that the two variables have independent effects).

In sum, the above two-step analyses provide further support to the proposed mechanism underlying Hypothesis 1. That is, an individual's stock ownership in a company increases her attitudinal loyalty to the company, which in turn increases the likelihood of her being or becoming a high-volume customer. Finally, this total chain of effects was tested with one more analysis: a binary logistic regression with stock ownership as predictor variable and customer relationship volume (=high) as the outcome variable. Into this analysis, we also included the control variables of wealth, age, and sex. Consistent with our expectations, the effect of stock ownership results, in this final model (Table 3), positive and highly significant ($\beta = +0.422$, exp[β]$=1.525$; $p<0.001$). The fact that this effect is highly significant even in the presence of the control variables wealth, age, and sex implies that stock ownership has independent effect on the likelihood that a customer becomes a high-volume customer. Effectively – as indicated by the exp[β] figure – a stock-owning customer's odds to have high customer relationship volume are over 1.5 times higher as compared to a non-stock-owning customer.

Note, though, that the results also indicate that higher-wealth customers and male customers have increased likelihood of being high-volume customers. Especially the additional positive effect of wealth is somewhat intuitive, considering that higher overall wealth (that is, the total amount of a customer's savings/investments, wherever they are) makes it possible for her to deposit/invest, on average, larger amount of wealth at the focal bank, too. This, in turn, will render wealthier customers' average customer relationship volume with the bank higher – apparently so even though the relationship volume also includes the amount of the customer's loans (which would be negatively affected by wealth). Nevertheless, note also that the scaling of the wealth proxy ran in millions (of the local currency unit at the time of study) – meaning that an increase in the customer's wealth (exp[β]$=1.716$) that would have a similar-sized effect as stock ownership (exp[β]$=1.525$) on the odds of her being a high-volume customer, would need to be fairly large, equivalent of about 100 000 euros.

All in all, then, stock ownership is found to have significant and substantial positive effect on the probability that a customer has high relationship volume (as proposed in Hypothesis 1) – and there is indication that this effect is at least partially owing to the positive effect that stock ownership has on attitudinal loyalty towards the company and its services.

Tests of Hypothesis 2

In Hypothesis 2, we expected that an individual customer's stock ownership in the company is positively related to her customer relationship volume. As the individual's wealth is a possible confounding factor (that is, it may be a common determinant of both stock ownership and customer relationship volume), the relationship was analyzed respectively for high-wealth customers and low-wealth customers. Table 4 represents the contingency table formed by the variables 'stock ownership' and 'customer relationship volume' for low-wealth customers, and Table 5 for high-wealth customers.

Table 3: Logistic regression results: Probability that an individual's customer relationship volume=high

	β	$(exp[\beta])$	$Z/Wald\chi^2$	p
Intercept	−4.041	0.018	658.34	<0.0001
Stock ownership	+0.422	1.525	110.58	<0.0001
Control: Customer satisfaction	+0.129	1.137	199.90	<0.0001
Control: Wealth	+0.540	1.716	2248.38	<0.0001
Control: Sex	+0.319	1.375	141.98	<0.0001
Control: Age	+0.101	1.106	280.89	<0.0001

Table 4: Contingency table, low-wealth customers: Stock ownership and customer relationship volume

Stock-ownership	*Customer relationship volume*		*Total*
	Moderate	*High*	*N*
No	8108	5287	13395
Yes	910	780	1690
Total	9018	6067	15085

Table 5: Contingency table, high-wealth customers: Stock ownership and customer relationship volume

Stock-ownership	*Customer relationship volume*		*Total*
	Moderate	*High*	*N*
No	3275	9481	12756
Yes	431	2317	2748
Total	3706	11798	15504

Pearson's chi-square test for independence was conducted to test a null hypothesis – inverse to Hypothesis 2 – assuming that stock ownership is *in*dependent from customer relationship volume. Specifically, Yate's correction for continuity was used, which compensates for overestimate of the chi-square value in the case of a 2 by 2 table. In this test for independence, the null hypothesis can be rejected for both low-wealth (corrected $\chi^2=27.61$; $p<0.001$) and high-wealth customers (corrected $\chi^2=123.50$; $p<0.001$). Thus, there is a positive relationship between an individual's customer relationship volume and her stock ownership – in both low-wealth and high-wealth conditions. This finding supports Hypothesis 2, and further manifests in the proportion of stockowners being higher among high-volume customers (12.9 per cent among low-wealth, high-volume customers; 19.6 per cent among high-wealth, high-volume customers) than among moderate-volume customers (10.1 per cent among low-wealth, moderate-volume customers; 11.6 per cent among high-wealth, moderate-volume customers). It also shows in the proportion of high-volume customers being higher among stockowners (46.2 per cent among low-wealth stockowners; 84.3 per cent among high-wealth stockowners) than among non-stockowners (39.5 per cent among low-wealth non-stockowners; 74.3 per cent among high-wealth non-stockowners).

Note that the above figures (as well as test statistics) also indicate that both stock ownership and high-volume customer relationships are more common among high-wealth customers than among low-wealth customers. This is intuitive, considering that high-wealth customers have greater means and opportunities to engage in stock investments (in general) as well as have greater overall savings/investments (of which the savings/investments deposited at the focal bank will give rise to customer relationship

Table 6: Logistic regression results: Probability that the individual is stockowner

	β	$(exp[\beta])$	$Z/Wald\chi^2$	P
Intercept	−1.830	0.160	106.53	<0.0001
Attitudinal loyalty proxy	+0.051	1.053	524.69	<0.0001
Control: Wealth	+0.012	1.012	30.46	<0.0001
Control: Sex	0.102	1.107	9.00	0.003
Control: Age	−0.058	0.943	59.588	<0.0001

volume). However, the relationship between stock ownership and customer relationship volume is, notably, positive and significant among low-wealth customers, as well. This reduces the probability that the amount of wealth, simply, would explain both stock ownership and customer relationship volume.

To further analyze whether the relationship between stock ownership and customer relationship volume was caused by attitudinal loyalty (rather than only wealth) being a common source of both stock ownership and customer relationship volume, we conducted additional analyses as follows.

Notably, the fact that a person's attitudinal loyalty towards a company leads to increased probability of her being a high-volume customer was already supported by the results of the above logistic regression (Table 2). What remains, therefore, to be examined is whether a person's attitudinal loyalty towards the company will lead to increased probability of her becoming or being a stockowner. Like with customer relationship volume, we performed a binary logistic regression analysis with the outcome variable stock ownership, and with the loyalty proxy as the predictor variable. Moreover, we included wealth as a control variable, in order to control that any found effects on stock ownership would not be simply due to wealth (rather than loyalty). In addition, age and sex were also included as control variables, again.

As to the results (Table 6), the control variable wealth resulted to have a significant positive effect on the probability that an individual was stockowner ($\beta = +0.012$, $\exp[\beta] = 1.012$; $p < 0.001$). This is intuitive, considering that higher-wealth customers have more commonly the general means to engage in stock investing. Nevertheless, the loyalty proxy has also, as expected with Hypothesis 2, a positive effect on the probability that an individual owns the bank's stock ($\beta = +0.051$; $\exp[\beta] = 1.053$; $p < 0.001$). When it comes to the additional control variables, age and sex had significant effects on the probability that a customer owns the bank's stock, as well: age negative effect ($\beta = -0.058$; $\exp[\beta] = 0.943$) and male sex positive effect ($\beta = 0.102$; $\exp[\beta] = 1.107$).

All in all, these additional analyses provide further support to the proposed mechanism underpinning Hypothesis 2. That is, an individual's stock ownership and customer relationship volume seem to be positively related partly due to the fact that *both* one's predisposition to both invest in the company *and* one's predisposition to become a high-volume customer are in part determined by a common factor: one's attitudinal loyalty to the company and its services. What is notable is that while one's wealth also has positive effect on customer relationship volume and stock ownership, the role of attitudinal loyalty seems to be reasonably independent from that of wealth.

DISCUSSION

Contributions to research

On the one hand, there have been emerging suggestions that an individual's stock ownership in a company may be related to her attitudinal (brand) loyalty towards the company and its products and services.[1,3–9] On the other hand, it has been widely acknowledged in relationship marketing literature that customer loyalty is related to the sales volume of a customer relationship. Yet, the interrelationship between stock ownership and customer relationship volume has neither been directly studied in a banking context nor elsewhere. In this article, we addressed this research gap with an empirical study. The results contribute to various streams of research.

First, the findings of the present study suggest that an individual's stock ownership in a bank, when it occurs, is a factor that likely enhances the individual's customer relationship volume with the bank, too. Specifically, we found that such customers of the bank, who currently own the stock of the bank, fall more often to the class of high-volume customers than customers who do not own the stock of the bank. This finding supports those of Schoenbachler *et al*[1] and Aspara,[7] suggesting that individuals who own stock in a company are generally likely to prefer products and services of that company (over those of competitors'). Nevertheless, the findings of the present study extend even further by suggesting that stockowners are predisposed to fall towards the higher-volume customers of the company.

Second, the results allow us to address another situation and chain of influence: one which does not start from an individual's stock ownership but instead from an individual who (first) has attitudinal loyalty to a company and its products and services (in the form of special liking/affinity for them, for instance). In such a situation, the individual's attitudinal loyalty may lead not only to her heightened customer relationship volume with the company – as usually assumed – but also to her increased predisposition to invest in the company's stock and, thus, her becoming the company's stockowner in the first place. This implication is specifically supported by the finding that customer relationship volume and stock ownership were not independent but positively related variables among the customers of the studied bank. In other words, an individual's customer relationship volume and stock ownership of a (publicly listed) company may actually have common antecedents such as the individual's attitudinal loyalty towards the company's products/services. This is an extension of Schoenbachler *et al*'s[1] suggestion: individuals may buy stocks of a company because they have good experiences with its products/services. With regard to finance research, the finding significantly adds to the emerging evidence of the fact that individuals may make decisions to invest in companies' stocks partly based on their perceptions of, and attitudes towards, the companies and their products, services and brands.[1,8,9,40]

All in all, the results have significant implications for the interface of marketing and finance (and investor relations). On the one hand, it is highlighted that individual current stockowners of a publicly listed corporation may simultaneously act as its customers and, further, relatively often fall to the customer group characterized by high relationship volume. On the other hand, it is implied that a company can attract its individual (loyal) customers to invest in the company (become new stockowners) and yet simultaneously achieve high customer relationship volume with regards to these customers. As high customer relationship volume is often further related – at least potentially – to high contribution by the customer to the profits of the company,[33,35] individual (loyal) customers may invest in and own the company and yet simultaneously represent high customer profitability. By pointing out these concrete direct links between firm presence in the customer/consumption markets and financial markets, as well as providing empirical evidence of them, the present article advances the emerging work interested in exploring the relationships between marketing performance within/across the two markets.[41] At the same time, our findings essentially question the traditional finance paradigm that assumes that individuals' investment and consumption choices would be isolated from each other. According to the results, consumption and investment patterns may be interrelated more often than not, through attitudinal brand loyalties for companies and their products and services (besides wealth).

Implications for practice

The results of the study also have important managerial implications. Traditionally, customers (current and potential) and stockowners (current and potential) have been considered in isolation in banks by marketing and finance departments, respectively. Nevertheless, insofar as customers can act as stockowners and vice versa and insofar as attitudinal loyalty, customer relationship volume and stock ownership are interrelated, new kinds of managerial practices and coordination are needed.

With regard to customer or consumption market strategy: insofar as part of the individuals who own the stocks of a bank are predisposed to simultaneously act as high-volume loyal customers to the bank, the stock-owning individuals should be paid attention to as a special customer group or segment.[11] Note that as publicly listed corporations often have tens of thousands or even hundreds of thousands of individual stockowners, the corresponding customer group or segment has indeed potential. Assuming the loyalty predisposition of stockowners, a bank may be able to fairly effectively and inexpensively promote its products/services to its individual stockowners – both in absolute terms and when compared to other customers. It may be that in many cases, stockowners will only have to be reminded of the current products/services of the company (bank) and provided with opportunity to conveniently purchase them – or shift their accounts to the company (bank) whose stock they own. New product or service introductions can also be promoted actively to the individual stockowners for them to try. A further opportunity is to provide encouraging incentives to stockowners for them to engage in positive word-of-mouth about the company's products and services and to recruit new customers for the company.[42]

With regard to financial/stock market strategy: insofar as individuals' willingness to invest in and own the stocks of a company (bank) is positively related to their attitudinal loyalty towards the company and its products and services, the loyal customers should be seen as a special group of potential investors that can be targeted in share issues or with the aim of reinforcing the market valuation of the company. Assuming the loyal customers' positive affect/attitude towards the company, as well as their familiarity with it,[5,9] a company may be able to fairly effectively and inexpensively promote its stock to its individual loyal customers – both in absolute terms and when compared to other potential investors.

Even more radically, as a truly hybrid strategy, a company (bank) should be able to render its current or new customers more loyal towards the company's products and services and, therefore, more voluminous in terms of sales through offering them stocks of the company, potentially at discount. So, instead of, for example, eliminating own shares bought back in the market – as is currently a common practice for many companies – a company might reissue buy-back shares to its own customers in order to render them stockowners and thus more loyal and voluminous customers over the coming years. Note that even just a few shares owned by a customer may have a significant psychological–attitudinal loyalty effect.

However, in order to advance the development and implementation of innovative marketing strategies within/across customers and investors, some hindrances still have to be fought. Notably, the traditional isolation of marketing and finance functions being clearly a major hindrance, measures should be taken to bring the functions and their strategists closer together. Finally, it must be noted that there is a risk related to hybrid strategies whereby individual stockowners are rendered customers and/or vice versa. Namely, if an individual acts both as a customer and a stockowner of a company, the evident risk is that in case of dissatisfaction with the company in either of the roles, the individual both ceases to purchase the products and services of the company and wants to sell its stocks.[3] This dual effect is potentially considerable: the market valuation of the company will be undermined both (a) due to lost current and future sales and cash flow and (b) due to stocks offered on the sell-side in the stock market. Thus, ensuring customer satisfaction is particularly important in the case of stockowners who are simultaneously customers.

Limitations and further research

With regard to the interpretation of the results, it must be noted that the sample size of the study was exceptionally large, rendering the statistical power high with potential, in principle, to make even small differences in proportions statistically significant. However, this seems not to constitute any serious problem for the validity of the present findings, for the differences between the stock-owning customers and non-stock-owning customers were not only statistically significant but also substantial in absolute terms (for example, 67 per cent versus 48 per cent). Another concern is the potential non-response bias: although the response rate was fairly high, it is possible that the non-respondents differed from the respondents in terms of the constructs under study. For instance, respondents might exhibit higher attitudinal loyalty towards the studied company than the non-respondents, manifesting in their willingness to respond.

Another limitation that must be taken into account is that we cannot be absolutely sure of the causal direction of the found effects, nor of the exact role of (attitudinal) customer loyalty therein. This is particularly the case because we did not have data on any direct measure of attitudinal loyalty and because we did not have data on the temporal order of a studied individual's (a) becoming customer of the bank, (b) exhibiting increased attitudinal loyalty, (c) manifesting increased customer relationship volume, and (d) becoming stockowner of the bank. Thus, at this point it is safest to satisfy with concluding, as we did, that an individual customer's relationship volume is often positively *related* to his/her stock ownership in the company. Further research should continue to study the causal direction and magnitude of the effects with different and more sophisticated data and methods, both qualitative and quantitative.

A final limitation relates to the use of data on a sample of customers of a single company. While the statistical significance of the results provides confidence in the generalizability of the results to all the customers of the studied retail bank, full generalizability to other kinds of (financial service) companies is not established in the present study. Thus, other kind of companies should be studied in further research. In any case, further research should also take a more managerial perspective and study the effectiveness of different, innovative marketing strategies across consumption and financial markets. Most of all, this research should pay attention to the fact that an individual may simultaneously represent a current/potential customer with high purchase/sales volume and a current/potential stockowner.

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