Customer-Centric Reporting: An Analysis of Banks to Outline the Decomposition of Customer Business and Non-Customer Business

Christian Schulze, Goethe University Frankfurt, email@christian-schulze.de
Manuel Bermes, Goethe University Frankfurt, bermes@wiwi.uni-frankfurt.de
Bernd Skiera, Goethe University Frankfurt, skiera@skiera.de

Abstract

Firms rely on two sources of profit: customer business and non-customer business. Though their share in profit can evoke serious implications, current reporting standards do not provide sufficient transparency about this share to the firms' stakeholders. We study this problem using a customer-centric reporting approach to analyze public information from over 200 of the world's largest banks. Our findings are highly unintuitive: The share of customer business amounts to 138% on average with large variations while non-customer business destroys value. As a remedy, we propose an extension to current reporting standards indicating customer business's share of profit to provide the transparency required by stakeholders and to help marketers, investors, regulators and customers make more informed and thus better decisions.

Keywords: Customer Business, Non-Customer Business, Financial Reporting, Banking

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1. Problem Definition and Aim of the Paper

The importance of customer business for a firm's well-being lies at the very heart of marketing. Quite a bit of well-known research examines how the value of customers (e.g., Gupta, Lehmann, and Stuart 2004; Kumar and Shah 2009; Rust, Lemon, and Zeithaml 2004; Rust, Zeithaml, and Lemon 2000) and a customer-centric management perspective (e.g., Rooney 2008; Shah et al. 2006) determine firms' success. Additionally, marketing researchers have recently emphasized the need for research regarding the inclusion of market-based assets on the balance sheet (Hanssens, Rust, and Srivastava 2009) and suggested that financial reporting should include customer metrics (Wiesel, Skiera, and Villanueva 2008). The underlying idea of these articles is that the value of a firm is mainly driven by the business a firm has with its customers. This customer business is usually more stable due to effects in the form of rather large carryover effects (e.g., Hanssens, Parsons, and Schultz 2001), retention rates (e.g., Gupta, Lehmann, and Stuart 2004), customer equity (e.g., Rust, Lemon, and Zeithaml 2004), or brand equity (e.g., Fischer, Voelckner, and Sattler 2010).

All firms rely on two sources of profit notwithstanding to very different degrees: customer business and non-customer business. Customer business refers to producing goods being sold to and delivering services mandated by customers. On the other hand, non-customer business comprises activities on the firm's own authority and for its own account without a mandate from its customers. Within this type of business, firms often use excess liquidity, independently from whether it stems from its equity or debt, not uncommonly to invest it in assets far away from their customer business operations. Firms thus allegedly manage to optimize their financial results. In extreme cases firms even try to leverage their results by increasing their debt factor, i.e. borrowing capital from banks or on financial markets and investing it in secondary businesses offsite their business model. However, a certain share of non-customer business is necessary in some cases to support customer business. E.g., foreign exchange hedges can help a manufacturer stabilize its sales to export markets in different currencies.

Indeed, a growing number of firms from various industries engage in non-customer businesses that display many similarities to trading activities in banks, especially when these firms are involved in own M&A transactions. An aspiring buyer could, e.g., creep up on a competitor by buying options on the target's shares to initiate a takeover of this competitor. Potentially large value fluctuations of the involved financial instruments can certainly influence the firms' overall financial results. Among the firms which have started non-customer business is famous German sports car manufacturer Porsche which intended to acquire its much larger competitor Volkswagen (Schäfer 2010). But despite the importance of transparency about customer and non-customer business, information is not readily available to a firm's stakeholders from reports following current standards such as US GAAP and IFRS (McCreevy 2008).

The aim of our research is to offer suggestions on how to improve the transparency of current reporting standards through a more customer-centric perspective and propose the mandatory disclosure of an audited ratio indicating customer business's share of profit. Such information would allow marketers, investors, even regulators and customers to make more informed and thus better decisions. In an empirical study we analyze the share of customer business for over 200 of the world's largest banks and investigate if there are large variations among the shares.

2. Importance of Transparency about Customer Business and Non-Customer Business

Transparency about customer and non-customer business is essential for marketers, investors, and other stakeholders of a firm. Success and value of customer business largely depend on customer equity, brand equity or a combination of both. Much marketing research has been published on this connection which is the foundation of marketing's claim to importance in the boardroom (e.g., Fischer, Voelckner, and Sattler 2010; Rust, Lemon, and Zeithaml 2004; Verhoef and Leeflang 2009). However, marketing is only able to operate in and affect customer business while non-customer business is out of scope for marketers. So, to settle the claim of calculating customer and brand equity appropriately and thus determining marketing's contribution to firm success, marketing and general management have to be aware of the share of customer business. Actually, marketing's relevance and direct influence on firm value stand and fall with the fact that customer business accounts for the majority of a firm's profits.

External stakeholders such as investors and similar must be able to use publicly available information to reliably differentiate a customer business oriented firm from a non-customer business heavy one. They ought to know which share of the firm's financial success stems from customer rather than from non-customer business to assess customer and brand equity's significance and evaluate the sustainability of financial results in the light of default and market risks. E.g., above-mentioned Porsche's brand and technology leadership have built competitive advantages within its customer business. In contrast, its non-customer business engagement can easily be copied. In the case of a high share of non-customer business, Porsche's stakeholders could not count on the customer business's competitive advantages anymore but were exposed to non-customer business's market risk (Schäfer 2010).

Customer business may equal the firm's core business, i.e. the business the firm has been established and is accomplishing its mission for, in most cases. However, think of some kinds of private equity or hedge funds running sole non-customer business. And there are business models targeting at a mixture of both as virtually all banks usually have a stake in both. But no matter which a firm defines as its core business, the source of business can still evoke serious implications. Notwithstanding, we would like to point out that our paper is not about favoring or blaming one or another business model. Instead we focus on the importance of transparency about the source of profit and on advancing a customer-centric reporting.

In our study, we concentrate on banking because of its great importance, systemic relevance and topicality while banks have received a lot of public attention of late. The multi-trillion dollar bail-out packages which governments all over the world devoted to saving the banking industry highlight its importance for the economy as a whole. The discussion even went as far as governments in the US and the UK, historically not known as overly fervent regulators, suggesting legislation to prohibit banks from engaging in so-called proprietary (prop) trading, which is part of non-customer business, despite its important role in functioning financial markets (Bloomberg 2010; Johnston and Goldman 2010).

In banking, customer business is conducted in various divisions. Customer business in commercial banking on the one hand encompasses income from the balance sheet's assets side by issuing loans to customers as well as on the liabilities side when taking in deposits from customers. Commissions and fee income are generated in commercial and in investment banking where they typically stem from services on behalf of a bank's customers who then pay a provision or an issue surcharge to the bank. Non-customer business in banking mainly comprises trading activities and treasury management (e.g., Morrison and Wilhelm 2008; Rahi and Zigrand 2009). The bank on its own invests money from deposits or other refinancing sources in targets other than customer business because, e.g., issuing loans to their customers is not possible due to economic or regulative considerations, or because non-customer business offers better conditions for maximizing profits. However, non-customer business investments, especially if their target is to receive returns over and above those of investments in customer business, not uncommonly come along with a larger risk exposure and higher volatilities. All these non-customer business activities are a standard and useful part of banking, and to some extent even required to optimally fulfill customer demand. Yet, they are often subject to risky activities strongly resembling those of a hedge fund which the stakeholders should know about (Boehmer, Jones, and Zhang 2008; Shen and Chih 2009).

Governments and customers might indicate an even higher interest in transparency about the share of customer business in banking than in other industries. E.g., governments need to know whether banks they consider supporting through additional liquidity are in fact banks with a profitable customer base worth being protected rather than high-risk hedge funds with a strong focus on non-customer business and virtually no customer business. In the light of a bank's default risk, customers should be aware of their bank's business model: Deposits with banks in bankruptcy are easily lost (at least in part), as the financial crisis has shown.

3. Method to Decompose Customer Business and Non-Customer Business

Following current reporting standards such as US GAAP and IFRS, banks' income statements only display aggregated information about interest income and expense, commissions and fee income, trading income, other income, administrative expense and other expense which make up total net income. A direct representation of net income from customer business and net income from non-customer business however is missing in current reporting standards.

The customer-centric approach (CCA) helps decompose customer and non-customer business. We will set an illustrative example to briefly explain this approach and the required calculations (for applications of similar approaches in research, see e.g., Krasnikov, Jayachandran, and Kumar 2009; Nagar and Rajan 2005). For ease of exposition, we neglect all non-interest costs except loan loss provisions (LLP). Costs are traditionally reported only at a high aggregation level which makes a fair distribution to customer and non-customer business impossible. Besides, we allocate commissions and fee income to customer business. Trading income (*TI*) which includes income from differences of buying and selling rates is allocated to non-customer business. The distribution of interest income to customer and non-customer business is more complex while in financial reports they are not separated by their source, i.e. customer vs. non-customer business. However, balance sheets provide information about loan and deposit volumes separated into loans to customers (L_{cust}) and to other parties (L_{other}) as well as deposits from customers (D_{cust}) and from other parties (D_{other}). Loans to and deposits from others (each including other third-party banks) are valued with a market interest rate (i_{market}) matching underlying risks and maturities. Loans to customers come along with a loan interest rate (i_{loan}) usually higher than the market interest rate. For the sake of readability, we assume i_{loan} to include LLP. Likewise, deposits from customers are linked to a deposit interest rate ($i_{deposit}$) typically lower than the market interest rate. With this information we can calculate the respective interest income and expense from customer and non-customer business.

We subsequently present the customer-centric approach (CCA). The value of customer business in the customer-centric approach (VCB_{CCA}) stems from provisional income (*PI*), the volume of customer deposits times the margin between market and customer deposit interest rate and the volume of customer loans times the margin between customer loan and market interest rate: $VCB_{CCA} = PI + D_{cust} \cdot \left(i_{market} - i_{deposit}\right) + L_{cust}\left(i_{loan} - i_{market}\right)$, rewriting then yields: $VCB_{CCA} = PI + II_{cust} - IE_{cust} + \left(D_{cust} - L_{cust}\right) \cdot i_{market}$. Thus, in case of customer deposit excess, customer business is credited with the market interest rate for this excess volume. Likewise, in case of customer loan excess, customer business must pay the market interest rate for this excess to non-customer business. Thus, the value of non-customer business in the customer-centric approach ($VNCB_{CCA}$) is: $VNCB_{CCA} = TI + II_{other} - IE_{other} - (D_{cust} - L_{cust}) \cdot i_{market}$. The share of customer business according to the customer-centric approach (α_{CCA}) equals:

$$\alpha_{CCA} = \frac{VCB_{CCA}}{VCB_{CCA} + VNCB_{CCA}} = \frac{PI + II_{cust} - IE_{cust} + (D_{cust} - L_{cust}) \cdot i_{market}}{PI + II_{cust} - IE_{cust} + TI + II_{other} - IE_{other}}$$

We apply our customer-centric approach to an illustrative example (Table 1). The net interest income from customer loans of \$10,000 results from the loan volume to customers of \$1 million times the loan interest margin of 4.0% - 3.0% = 1.0%. Customer deposits contribute to the net interest income with \$30,000 (customer deposit volume of \$3 million times 1.0% deposit interest margin). In total, customer business is responsible for a net interest income of \$40,000. Non-customer business on the other hand is charged with a negative net interest income of \$-30,000. Therein, non-customer business generates interest income of \$30,000 from the difference between its deposits and loans ((\$2 million - \$1 million) times 3.0%), but has to bear an interest expense for the usage of the deposit volume excess from customer business (\$2 million times -3.0% = \$-60,000). The total net interest income of \$10,000 equals the amount when decomposing under current reporting standards. The remaining positions such as commissions and fee income and trading income remain constant as the customer-centric approach does not affect the allocation of these positions. Also, total income remains at \$90,000 with a distinct distribution between customer business and non-customer business. Customer business contributes \$70,000 (equal to 78%) while non-customer business trails behind with only \$20,000 (equal to 22%) of generated income.

Table 1: Illustrative example of decomposition of customer business and non-customer business under customer-centric approach

P&L statement (according to customer-centric approach)			
Net interest income from customer loans	(1)	10,000	
Net interest income from customer deposits	(2)	30,000	
Net interest income from customer business	(3)=(1)+(2)	40,000	
Net interest income from non-customer business	(4)	-30,000	
Net interest income	(5)=(3)+(4)	10,000	
Commissions and fee income	(6)	30,000	
Trading income	(7)	50,000	
Total income	**(8)=(5)+(6)+(7)**	**90,000**	**100%**
Thereof from customer business (net interest income and commissions and fee income)	(9)=(3)+(6)	70,000	78%
Thereof from non-customer business (net interest income and trading income)	(10)=(4)+(7)	20,000	22%

4. Empirical Study: Share of Customer Business from over 200 Banks

In our empirical study (Table 2) we analyze the share of customer business for 216 of the world's largest banks with home markets in North America, Europe and Oceania. These banks display a wide range in income and market capitalization; while large institutions are included, smaller banks are more representative of this relatively large sample.

As we take the position of an external stakeholder, we rely in our study on publicly available information only. Data from banks' public reports for 2004 and 2005 is taken from the BankScope database. We carefully investigated potential data issues: Errors from data categorization across countries and reporting standards in the database were addressed by a thorough inspection of the data on a case-by-case basis. Also, the selected time-frame poses a compromise between recent data and minimal influence of the factors which led to the financial crisis. We analyzed all banks according to the customer-centric approach. As banks' interest income and expense are accrued during the year while deposit and loan volumes are reported as a snapshot at year-end, we used the mean year-end volumes of 2004 and 2005 where available to account for potential developments between years. On average, however, the calculated means differed from year-end values in 2005 by less than 4%.

Table 2: Results of decomposition (all numbers except shares in million USD)

		Customer-Centric Approach		
		Mean	**Minimum**	**Maximum**
Customer Business	**Interest Income**			
	Interest Expense			
	Net Interest Income Deposits	$1,347	-$12,016	$36,068
	Net Interest Income Loans (incl. LLP)	$2,684	-$4,029	$40,997
	Net Provisions and Fees	$1,042	$0	$17,143
	Total Income from Customer Business	**$5,073**	**$45**	**$77,337**
Non-Customer Business	**Interest Income**			
	Interest Expense			
	Net Interest Income	-$1,931	-$34,652	$162
	Net Trading Income	$380	-$371	$16,010
	Total Income from Non-Customer Business	**-$1,550**	**-$28,778**	**$11,313**
	Total Income	$3,523	$33	$48,559
	Share of Customer Business (α)	*138%*	*19%*	*532%*
	Share of Non-Customer Business	*-38%*	*-432%*	*81%*

Table 2 contains the detailed results of the decomposition with the customer-centric approach. The income from non-customer business amounts to -38% on average: The cost of trading capital exceeds the generated net trading income for most banks. As a result, the share of customer business α_{CCA} is 138%. This outcome is surprising while one might have expected at least a reasonable positive share of non-customer business in banking. The analyzed non-customer business's shares additionally come along with a large variation ranging from -432% to 81% emphasizing the need for transparency. For about 60% of the banks in our sample, the volume of customer loans exceeds customer deposit volume. The additional cost of this loan volume excess is attributed to customer business. Non-customer business benefits accordingly; still, the average bank in our sample lost more than $1.5 billion through non-customer business. The distribution of the shares shows that the share of customer business exceeds 100% for most of the banks (99%) in our sample. In contrast, non-customer business can make a positive contribution in only 14 cases which corresponds to 1% of the sample.

5. Implications

As shown, our findings are highly unintuitive: The mean of the share of customer business amounts to 138% while non-customer business on average cannot contribute positively to the banks' total net income but instead destroys value on average (-38%) for our sample of over 200 of the world's largest banks. Non-customer business has come under scrutiny by legislators which are not willing to repeatedly bail out banks and even firms from other industries that rely much more on non-customer business and especially prop trading rather than on a profitable customer business for their income (Bloomberg 2010). But also other stakeholders like investors and customers must know which share of a firm's financial success stems from customer rather than non-customer business to evaluate the sustainability of financial results and safeguard against lost claims against firms and lost deposits in banks. As a remedy to the missing transparency in current financial reporting about the decomposition of customer and non-customer business in firms, we suggest a customer-centric extension of firms' publicized information, e.g. in the supplements of financial reports. As presented above, we suggest reporting income and expense from customer business and non-customer business separately.

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