



PROJECT TECHNICAL NOTE



By Mary Miller and Esther Nyauncho

> INTRODUCTION

Profitability of SME banking is calculated to determine the performance or relative performance of:

- A customer relationship or the client segment
- An SME product such as a loan or deposit service
- A single relationship manager, a branch or relationship management team
- The entire SME division

Banks reporting into the IFC's benchmarking project in 2007 showed a great range of results in their ability to calculate profitability for their SME lines of business.

These ranged from those able to create a full set of financial statements (balance sheet and profit and loss statement (P&L)), to those only able to create a P&L, through to those not able to calculate profitability at all. While more complex calculations are possible depending on the strength of the management information systems in the bank, it is useful to understand why profitability is calculated and why an SME department should measure its profitability as accurately as possible.

Banks often use surrogates for profitability in measuring performance. For example, individual relationship managers' targets are set for number of business calls, number of new accounts or loans opened, and volume of loans and accounts opened. In some cases the bank has goals that are better expressed in these terms, for instance, a target to increase share of market. Overall though, profitability is a universal goal and using

About GrowthCap

Over the past few years FSDK has been at the forefront of SME banking development through conducting market assessments and studies in areas such as trade finance and SME equity funds, as well as supporting development of the credit reference bureau. Through its partnerships with its Action Research Partners (ARPs), FSDK's GrowthCap initiative is supporting adoption of SME best practices by individual financialservice providers.

This paper is part of a series of Technical Notes and Resource kits that are being developed out of work with the ARPs. These provide detailed information about the best practices and are intended for use by financial service providers and those supporting such institutions which are entering the SME market.

Abstract

This Technical Note looks at the reasons for calculating profitability, the factors involved in doing so, and the common challenges faced in measuring and allocating profitability in the context of SME financial products and services.

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profitability for performance measurement means that a bank is evaluating specific outcomes, not trying to estimate the efficacy of surrogates.

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In the past banks have been unduly focused on the performance of their loans and loan portfolio — customers with the largest loans were deemed to be the most important, and relationship managers who could produce quality loans were assumed to be the most beneficial for the bank. One of the findings about SME banking, however, has been that profitability may come not from loan income (even if credit is the hurdle product to bring the customer into the bank) but more often from cross-selling. Best practice banks have gotten the message that SME banking is not all about lending, but is about seeking out income and profits from all sources.

This Technical Note looks at the reasons for calculating profitability, the factors involved in doing so, and the common challenges faced in measuring and allocating profitability in the context of SME financial products and services.

> MEASURING PROFITABILITY

2.1 THE BASIC PROFIT AND LOSS CALCULATION

The Profit and Loss (P&L) calculation, whether for an individual relationship, a relationship team, or for the entire SME division, is fundamentally the same, and includes the following components:

Income — includes interest income and fee income (pass-through fees such as collateral recording fees are excluded from profitability calculations). As is discussed below, there are also imputed sources of income from deposits, which save funding costs for the financial institution, thus are treated as revenue for the calculation of profitability of individual branches and of customer portfolios.

Expenses:

- Cost of funds funding for loans
- Direct costs costs that can be directly allocated to the P&L such as an RM's salary or branch rent
- Indirect costs other overhead costs of operating the bank

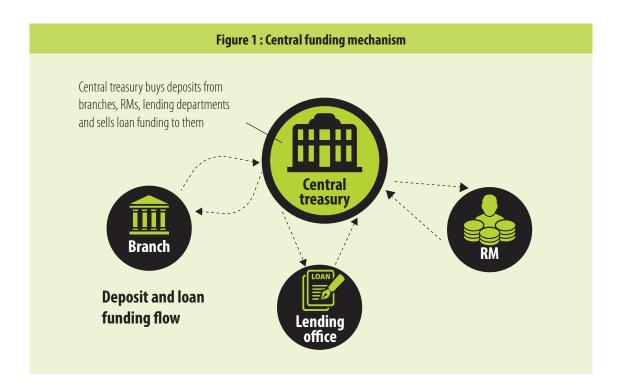
The P&L created will be similar to the P&L statement for the bank, although will also include a gross profit calculation, as described below. A mock-up of the P&L is below:

ltem	Explanation
Financial Income - Funding Cost	Interest income and fees For funded products
Net Financial Income - Direct Costs	Directly allocable costs
Gross Profit - Indirect Costs	Profit directly allocable to unit or product Other overhead costs
Net Income Before Tax	

The Net Financial Income is the same figure as calculated for the overall bank, and shows the immediate net financial benefit of selling a financial product. This mock-up may be elaborated further by including loan loss provisioning, and by separately showing service charges.

2.2 PROFITABILITY FOR FUNDED AND NON-FUNDED PRODUCTS

An important distinction in bank products from a profitability point of view is whether the product is funded or non-funded. Loans require funding that the bank has to pay for, thus the interest rate earned on the loan is not net financial income itself. The funding typically comes from deposits — current accounts, savings accounts, time deposits — or borrowed funds. Fee income, for example from foreign exchange services, wire fees, and letters of credit fees, is non-funded, because the bank is selling a service rather than funds. This type of revenue is net financial income itself, because no funding is required.



The entire bank the calculation of net financial income is straightforward, because financial cost is the interest paid out on deposit accounts and borrowed funds. For smaller units such as the SME banking department or individual branches, as well as individual customers, the unit on a net basis will either require funding for loans or will generate funding because it provides deposits. This is visually depicted in the figure 1.

The central funding mechanism will fund all loans in the bank at a centrally-determined rate that will be based on the rates that the bank is paying on deposits and borrowed funds. A bank that has a lot of current account funding will have a lower cost of funds than a bank that relies heavily on time deposits or loans for on-lending. The net interest spread (net financial income) from each loan will therefore be the interest rate charged on the loan minus the funding rate set by the central treasury. The only credits that will not be funded at this central rate will be loans with a funding pass-through, such as donor-funded loans for agriculture or microfinance, where the use of funds is specified and utilisation of the funding line is tracked.

This funding mechanism is also used to "buy" deposits. Conceptually, all deposits in the bank are transferred to the central treasury, which pays for them at a set rate, usually the same rate that it charges for funding loans. These deposit earnings are considered to be income for the purpose of creating a P&L for the provider of the funds, e.g. the customer or

the branch. An important concept that is inherent in this type of transfer pricing mechanism is that deposits are important and profitable for the bank, and a branch, for instance, that does not have loan business but mobilises deposits is a profit centre, not a cost centre, for the bank.

Example:

Bank pays 0% on current accounts and 4% on savings accounts

Reserves of 20% are required on current accounts and 5% on savings account — earnings credit is on net balances

Bank's internal funding rate for loans is 7%.

Customer has a current account with an average balance of KShs 1,000 and a savings account with an average balance of KShs 2,000. The profitability of this customer to the bank is:

KShs Income:

1,000 (1-.20) X 7% Earnings on current account2,000 (1-.05) X 7% Earnings on savings account

189 Total

KShs Expense:

80 2,000 X 4% Interest paid out to customer

KShs Profit:

109 Net financial income to bank from customer



Figure 2: Size of wallet and share of wallet



While this example shows the net financial profitability of a single customer, effectively the net financial income for another unit such as a single branch or relationship manager is calculated by aggregating all the loans, deposits, and fee income attributable to that unit.

From a lending point of view, the greater the interest rate spread between the lending rate and the funding rate, the more profitable it is to do lending. Assuming a constant demand for loans, hence a constant demand for funding for the loans; and assuming that the interest rate charged on the loans is constant, loans will be more attractive to the bank as products to sell if the sources of funding are relatively low cost, from demand deposits rather than from time deposits. Conversely, if the interest rate spread is narrow, fee-based income becomes more attractive.

2.3 CALCULATING CUSTOMER PROFITABILITY -**WALLET SIZE AND SHARE OF WALLET**

Banks are for-profit service businesses, and even if they are providing certain products or serving certain markets as a corporate social responsibility obligation, they should be aware of the costs of doing this. The depth of the profitability measures may vary, however, depending on the reasons for measuring profitability.

The reasons for measuring the profitability of a customer relationship are typically to be able to segment customers so that more profitable relationships are given more attention, usually a better level of service, e.g. a relationship manager vs. more mass-market handling through a call centre. This is graphically represented by comparing the Size of Wallet – how much a customer spends on financial services — and the Share of Wallet — what portion of that is spent in a single financial institution — as shown in figure 2.

For an individual customer and for classes of customers, the Size of Wallet/Share of Wallet concept is helpful, as it can be used to segment customers more accurately in terms of the level of service that the bank wants to provide to them. In all cases the bank wants to get as much of a share of wallet as possible,

Figure 3: Wallet characteristics and strategy



Low/High

- Small SME, most or all services are purchased from the bank
- Typically have bundled products
- Considered core customers
- Provided strong standardised service

Low/Low

- · Small SME, takes few services from the bank
- · Bank may reach low/high with SME by offering good standard product bundle
- Mass market approach

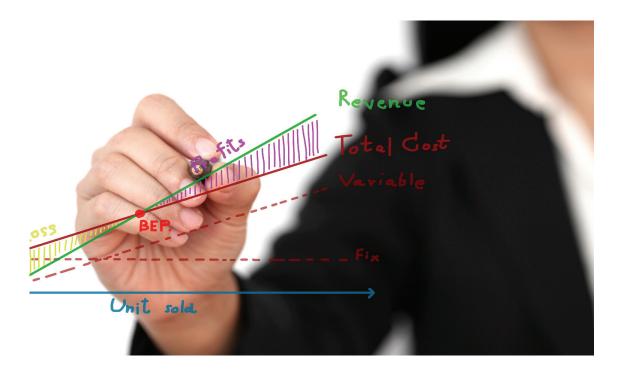
High/High

- Large SME, spends a lot on financial services and takes most or all financial services from the bank
- · Customers will merit individual RMs
- Most important for retention; following 20/80 adage (80% of profits come 20% of customers), these are the "20"

High/Low

- Large SME, spends a lot on financial services but takes most financial services from other banks and FIs
- Banks will target increasing the number of services, usually customised to the customer needs

Size of wallet



usually achieved through cross-selling. For this analysis the SME is considered to be the business itself and all related business such as the owner, his or her family, employees, and other businesses of the owner.

A bank will determine where the customer falls on the graph by calculating the customer's current profitability and estimating its potential profitability. The group of greatest interest, of course, is the high wallet size/low share of wallet, as these are probably the customers that could bring the most new revenue and profit to the bank. An important marketing/calling question is to decide how much, and how long, to reach out, if they are not responsive.

2.4 BREAKEVEN CALCULATIONS

Profitability needs to be measured to the gross profit level, to do these size/share calculations. The bank will need to have some knowledge of the cost of providing a relationship manager and other direct costs of service, because the gross profit or contribution margin will need to be high enough to cover the cost of the relationship manager.

Conceptually this is breakeven analysis, which is mathematically shown as follows:

 VC = variable costs: cost of funding and loan loss provision, also direct costs such as the relationship manager's salary, allocated to the transaction or customer

- S = sales (interest income plus fee income)
- **FC** = fixed costs: overhead costs
- **CM** = contribution margin

Translated to a P&L, this is:

- S Interest Income + Fee Income
- VC- Cost of Funding, Direct CostsCMContribution Margin or Gross Profit
- FC Fixed Costs0 Net Profit

Re–arranging the equation components shows the contribution margin must be greater than the fixed costs for a profit to be realised on the customer relationship.

2.5 MEASURING NON-FINANCIAL DIRECT COSTS AND INDIRECT COSTS

Non-financial direct costs of providing SME banking services include any costs that can be directly attributable to SME banking, including relationship manager salaries, office rent, marketing for the SME department, and SME department management. Indirect costs would be a shared portion of management overhead. (Note: allocation of these costs is discussed in greater depth in the Technical Note on Pricing and costing SME products and services.)





In practice, collecting and allocating these costs is difficult, and in general profitability can be more accurately measured for a bigger base than for individual units, e.g., identification of direct costs attributable to the SME banking department is more meaningful for the entire department than for a single branch or customer relationship. Even banks with very good information systems, therefore, are likely to only measure profitability to a meaningful informational level: there is no point to citing cost allocations if they are garbage-in, garbage-out figures.

> REASONS FOR MEASURING PROFITABILITY

There is a range of reasons for measuring profitability, and these also inform as to the level of profitability that needs to be measured. Shown below are some choices:

Customer relationship — it is meaningful for profitability to be measured to the level of net financial income or gross profit. Measurement is done to determine level of service that can be provided; profitability projections may also be done to determine the amount of effort that should be devoted to securing or expanding the customer relationship.

Client segment or sub-segment — this may be measured to net financial cost (with a particular eye to pricing and loan loss provisioning) particularly on a projected basis to prioritise niche market selection and marketing efforts; non-financial direct costs should also be estimated if these are likely to vary greatly for different client sub-segments (e.g., operational

costs of invoice discounting are likely to be greater than more conventional lending). Since banks have a limited amount of capital to devote to different departments, including the SME department, a bank is likely to first go after the subsegment it expects to be the most profitable, then after the second-ranked sub-segment, and so forth. Factors other than estimated profitability that will be considered include legacy business, market potential in the branch areas, risk appetite, and competitor focus.

SME product or service — this would be measured down to the gross profit level, i.e., non-financial direct costs should be determined as these may vary substantially. For instance, issuance of a letter of credit for foreign purchases would have the attached costs of document preparation, which are expected to be higher than the confirmation costs associated with a customer being the beneficiary of a letter of credit (as the seller rather than the purchaser of goods). Measurement of the total profitability of the single product (i.e., a review of costs and numbers sold) is important as a part of determining whether a product should be offered — many banks find that they are trying to offer too broad a product line, to the point that the products are undistinguishable from each other. Generally banks find that they perform better by offering a limited number of standardised products to SMEs.

Relationship manager – RM performance can be measured to the net financial income level for performance and incentive assessments. Direct and indirect costs past that level are likely to be the same for any RM, so do not need to be measured for this purpose.

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Branch — Direct costs of operating the branch should be measured as much as possible. This is also a big enough unit that whole costs can easily be assigned, e.g., branch manager's salary, teller salaries, building operation costs.

SME Division — Indirect costs should be allocated so that the entire division is measured as a mini-bank. This profitability estimate would be done to facilitate performance comparison to the other profit centre divisions of the bank.

What if the Customer or Product is Unprofitable?

If the customer or product does not cover the direct costs of providing the service, the gross profit will be negative, in other words, the bank is losing money on the customer or product, on the current terms. This is a clear cut indication that the price should be raised or the business lost.

A customer or product with a negative net profit, that is, allocated indirect costs are not covered, is a trickier question. The bank is getting direct costs covered, so is better off to keep the customer rather than lose the "contribution" that the customer is making to cover the indirect costs. For a product class this situation argues for an increase in pricing. While some customers or product volume usage will be lost, overall the benefit of the price increase should outweigh this. This decision would be made in light of competitor pricing and of pricing sensitivity of the customers or products. Products and customers that generate a net profit for the bank should be considered the model — the bank wants more customers of this type, and wants to sell more of these products.

COMMON MEASUREMENT PROBLEMS

The most common measurement problem for calculating profitability is the lack of good quality data on which to base the measurements. This can be addressed with a good MIS system, and as appropriate, close studies of performance activities, i.e. the amount of time needed to perform specific function. Other inherent problems that are common in trying to determine profitability, especially for an emerging SME department, include:

New products — As products to meet customer needs are being developed and modified, the issue arises as to how development costs should be allocated, and whether these costs should be captured in direct costs or indirect costs.

Bundled products – A limitation of profitability analysis that many banks have found is that it becomes very difficult to allocate costs among all the products in a product bundle or among the products cross-sold to the same customer. While the financial cost of each individual product can be determined, allocation of even direct costs such as the relationship manager's salary is difficult. (This is not an issue if overall profitability for a customer, RM, branch, or the SME division is being analysed). There are products that the bank is effectively willing to give away, including current accounts and payroll, as both are very "sticky" products that are difficult to move to another bank, thus provide more assurance that the customer will remain with the bank. Other guidelines on bundled products include not bundling in high margin services that can always be sold on an independent basis, and not cannibalising sales of stand-alone products in composing the bundles.

Overlap with retail – profitability measures become confused when more than one department covers the costs of providing a product or service, and this overlap usually comes with the Retail department. The most common example is a customer who "belongs" to the SME department, but uses branch services. There are reports from banks that deposits are not solicited, because the branch does not have sufficient motivation to give attention, much less cross-sell, to customers whose business will be coded elsewhere. Perhaps the best way to address this is to recognise that there can be more than one way to measure profitability; that the parts do not need to sum to the whole if profitability is being measured for different reasons. Possible solutions here might include coding all personal accounts except for the SME owner himself to the branch rather than to the SME department, or developing a transfer price fee that the branch receives for handling SME clients.

> IN SUMMARY

Profitability is the primary goal for any business venture; a business that is not profitable will not survive. Conversely, a business that is highly profitable has the ability to reward its customers. It is important to remember that revenue does not equal profitability.

The performance of SME relationships, products, and the SME line of business should be measured to the extent possible, and this is facilitated by a strong IT/MIS system. Measuring profitability is important for understanding that SME banking





Measuring profitability is important for understanding that SME banking contributes to the bank's overall profitability.

contributes to the bank's overall profitability. Though credit products are often the opener for customer-bank relationships, profitable SME banking requires finding ways to cross-sell multiple products, not just booking loans. It is also important for a SME department to recognise and acknowledge those customers who are currently providing high profitability as well as those who have the potential to become profitable to the bank. Profitability calculations, both actual and projected, can also suggest the appropriate level of service that should be expended in soliciting and managing a customer relationship. In sum, any business, including banks, must break even and meet costs required in providing SME banking services.

> REFERENCES

Cracknell, David, Henry Sempangi, and Graham A.N. Wright, *Costing and Pricing of Financial Services, A Toolkit, Microsave, Version 4*, March 2004.

International Finance Corporation, *Customer Management in SME Banking, a Best-In-Class Guide, IFC Advisory Services/Access to Finance in partnership with OeCB*, 2012.

International Finance Corporation, SME Banking Knowledge Guide, IFC Advisory Services/Access to Finance, Second Edition, 2010.

Stanley, Neil, and Julia Hernandez, *Profiting from Customer Profitability Analysis, Bank Performance Strategies, BAI Banking Strategies,* 17 September 2014.

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The Kenya Financial Sector Deepening (FSD) programme was established in early 2005 to support the development of financial markets in Kenya as a means to stimulate wealth creation and reduce poverty. Working in partnership with the financial services industry, the programme's goal is to expand access to financial services among lower income households and smaller enterprises. It operates as an independent trust under the supervision of professional trustees, KPMG Kenya, with policy guidance from a Programme Investment Committee (PIC). In addition to the Government of Kenya, funders include the UK's Department for International Development (DFID), the World Bank, the Swedish International Development Agency (SIDA), Agence Française de Développement (AFD) and the Bill and Melinda Gates Foundation.











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