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RESPONSIBILITY CENTRES' SYSTEM ESTABLISHMENT FOR A BETTER PERFORMANCE: THE BULGARIAN BANKS CASE

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Abstract:
Commercial banks in Bulgaria function in conditions of strong competition and quickly changing business environment, in which they should guarantee, but also meet the shareholders' expectations in terms of profitability of the invested funds. In the recent years, the negative processes in the internal and international business situation, mainly the economic crisis impact, have considerably influenced the financial results.

However in some cases, despite the consequences of crisis, internal issues stay behind the weak performance. Implementation of appropriate methodology could help in identifying of ineffective components of the organizational structure. Knowing them better would answer how to eliminate these sources of loss.

The author's research indicates that currently commercial banks in Bulgaria implement at first stage internal performance measurement systems at organizational unit level based on the responsibility centre concept. Units in the financial institution are grouped and classified in the following categories of responsibility centres: cost centres, revenue centres, profit centres and investment centres.

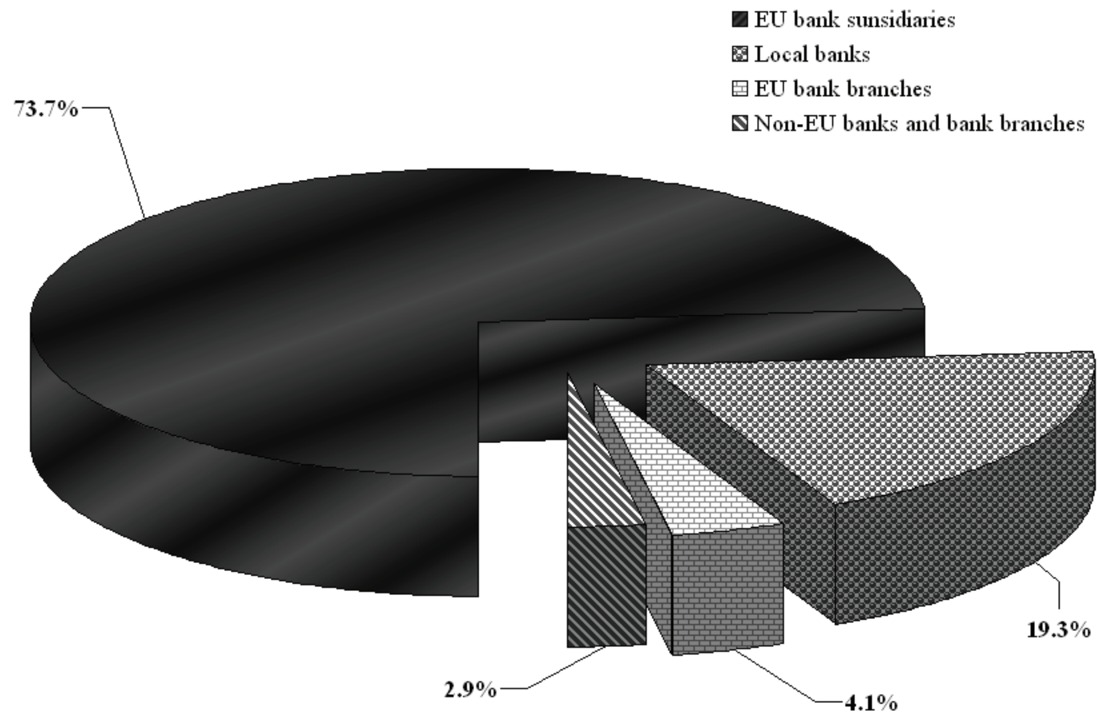
This paper concentrates on methodological aspects of the establishment of responsibility centres system from the perspectives in Bulgarian banks, which if properly addressed by bank managements could improve financial results. Attention is also paid to what should be reported in terms of financial measures, in order to better support the decision making. Incorporation of appropriate indicators in responsibility centre level reports, like net interest margins, contribution margins, centre revenue, etc. would contribute for more precise analyses of internal performance.

Keywords: bank management, commercial banks, responsibility centre, performance measurement.

1. BACKGROUND

In the last 15 years foreign banks have entered into the local market, while the state-owned Bulgarian banks were privatized. At the end of 2010 the subsidiaries of financial institutions from EU clearly hold the biggest share in the industry assets, followed by the domestic banks. Branches of banks from EU have occupied third place, while the last position, as per the same indicator, have belonged to banks and branches having headquarters outside EU (for details, see Picture 1). The penetration of banking institutions from foreign countries has been a precondition for modernization of the existing technologies and for development of new products and services, which have mostly provided to the citizens and companies a direct access to their money and to banking information almost free of time limitations.

Picture 1: Market share of local and foreign banks based on banking assets as of 31.12.2010



Source: BNB, quarterly bulletin “Banks in Bulgaria”, October – December 2010.

At the same time, the banks in our country function in conditions of strong competition and quickly changing business environment, in which they should guarantee, but also meet the shareholders’ expectations in terms of profitability of the invested funds. In the recent years, the negative processes in the internal and international business situation, mainly the economic crisis impact, have considerably influenced the financial results achieved by commercial banks in Bulgaria.

This paper concentrates on methodological aspects of internal performance measurement of organizational units from the perspectives in Bulgarian banks, which if properly addressed by bank managements could improve financial outcomes. In some cases, despite the consequences of crisis, internal issues stay behind the weak performance. Implementation of appropriate methodology could help in identifying of ineffective components of the organizational structure. Knowing them better would answer how to eliminate these sources of loss.

Is there a need in Bulgarian banking industry about such an approach?
Assets of the banking system increase by 2.2 % or BGN[1] +1.6 billion up to BGN 73.7 billion in the last quarter of 2010. Growth of domestic sources of debt capital has continued. Lending activity has remained limited because of simultaneous effect of wary demand and more strict requirements in creditworthiness evaluation. The existing free funds and increased investments in securities have improved the liquidity within the industry.

In addition, official data published by the Bulgarian National Bank (BNB) indicate a general tendency of shrinking profits in the period 2008–2010 (see Table 1).

Table 1: Evolution of profits of commercial bank in Bulgaria, 2008–2010

Bank	Profit amount, BGN ths.		
	2008	**2009**	**2010**
UniCredit Bulbank AD	288 705	193 002	158 744
DSK Bank EAD	265 620	172 202	130 579
Corporate Commercial Bank AD	40 298	60 382	74 367
United Bulgarian Bank AD	208 685	100 145	73 647
Raiffeisenbank (Bulgaria) EAD	132 346	50 150	44 214
Piraeus Bank Bulgaria AD	58 472	45 901	44 053
Eurobank EFG Bulgaria AD	97 587	20 401	34 942
First Investment Bank AD	50 931	32 019	30 838
Societe Generale Expressbank AD	37 219	22 635	30 064
Bulgarian Development Bank AD	6 818	17 350	28 740
Central Cooperative Bank AD	21 453	22 342	23 245
Citibank N.A. - Sofia Branch	14 825	21 023	21 237
ING Bank N.V. – Sofia Branch	19 663	15 144	6 566
International Asset Bank AD	5 696	13 523	4 418
MKB Unionbank AD	13 264	4 542	4 382
Allianz Bank Bulgaria AD	20 849	5 015	3 740
ProCredit Bank (Bulgaria) AD	12 909	12 973	3 378
D Commerce Bank AD	5 215	4 798	2 813
BNP Paribas S.A. - Sofia Branch	12 555	4 803	2 415
CIBANK JSC	19 012	4 414	2 337
Municipal Bank AD	10 455	2 248	1 824
Investbank AD	11 257	7 751	1 744
Texim Private Enterpreneurial Bank AD	932	1 704	433
Tokuda Bank AD	2 654	1 514	354
T.C. Ziraat Bankasi - Sofia Branch	799	256	- 689
Emporiki Bank- Bulgaria EAD	-3 674	-7 024	-7 368
Bulgarian-American Credit Bank AD	53 166	24 020	-14 376
NLB Bank Sofia AD	3 145	-3 921	-14 420
ALPHA Bank S.A. – Bulgaria Branch	-23 063	-68 947	-74 863

Source: BNB, http://www.bnb.bg

[1] Based on the effective legislation, the Bulgarian lev (BGN) has a fixed exchange rate against the euro, as follows: 1 EUR = 1.95583 BGN.

The following common trends could be noticed based on the soon reported 2010 figures:

- Slowdown to 20 % in the reduction of the achieved profits compared to 2009, when the highest profit decrease, 44 %, was reported.
- Eight banks operating in Bulgaria have increased their profits in 2010.
- The strongest growth have been attained by Eurobank EFG Bulgaria AD: +71.3 % up to 34.94 mln.lv., and by Bulgarian Development Bank AD: +65.7 % up to 28.74 mln.lv.
- Two financial institutions with significant positive results in 2010, each exceeding 100 mln.lv.
- These are Unicredit Bulbank and DSK Bank. The latter had a profit of 130.58 mln.lv. after a reduction of 26.5 %. In 2008 three banks had profits each exceeding 200 mln.lv. and in 2009 three banks had surpassed 100 mln.lv. each. The leading position of UniCredit Bulbank was confirmed through a profit of 158.74 mln.lv. The bank had experienced profit decrease of 17.8 % in 2010. However, its share in the total profit of bank system continues to go up: 25.7 % (2010) versus 20.8 % (2008).
- New member has joined the top three list based on the profit amount: Corporate Commercial Bank (CCB).
- This bank occupied position eight in 2008 and position four in 2009. CCB has achieved 23.2 % growth of profit, which reached 74.4 mln.lv. CCB has taken in 2010 the place of United Bulgarian Bank (UBB).
- Five banks have registered losses: Alpha Bank S.A.–Bulgaria Branch, NLB Bank Sofia AD, Bulgarian-American Credit Bank AD, Emporiki Bank-Bulgaria EAD, T.C. Ziraat Bankasi –Sofia Branch[2].
- Only three financial institutions showed negative results in the prior year: Alpha Bank S.A.–Bulgaria Branch, NLB Bank Sofia AD, Emporiki Bank-Bulgaria EAD. As seen, their disappointing presentation has also continued in 2010.
- Five more banks have experienced noticeable lowering of profits in 2008–2010, on average greater than 50 %.

Hence, the reasons about persistency of the cited losses and the profits leaning towards zero, are likely not related with the financial crisis.

Adequate administration of the bank challenges the management to be well-acquainted with the financial situation of the institution, as a whole, but also to know how to plan and control better the operative processes, and to decide about an effective allocation and utilization of the available resources. Prime starting point here is the system for internal performance measurement, reporting and monitoring**,** which could support an informed decision making.

As stated in previous researches of the author, the performance measurement, as a whole, may be broken down into the following phases:

1. Budgeting and responsibility reporting,
2. Expense allocation,
3. Organizational profitability measurement and analysis,
4. Product profitability measurement and analysis,
5. Customer profitability measurement and analysis,
6. Product modelling,
7. Establishment of an integrated Management Information System (MIS).

[2] Bank Leumi and Regional Investment Bank are excluded from the calculations because the former discontinued activity in Bulgaria, while the latter has still minimal activity.

2. METHODOLOGICAL ASPECTS OF RESPONSIBILITY CENTRES SYSTEM ESTABLISHMENT FROM THE PERSPECTIVES IN BULGARIAN BANKS

Our focus on organizational performance measurement in this paper lays on the fact that currently commercial banks in Bulgaria implement at first stage such systems at organizational unit level based on the responsibility centre concept. Introduction of reporting lines at this level is linked with the selection of the positions accountable about the results, but also with the powers of those centres' managers to affect upon the ultimate outcomes via their decision making. In practice, more authority is delegated to those managers to control incomes and costs, as well as the staff. On the other hand, the very managers are subject of assessment and control by the superior management positions and bodies, for instance the commercial bank's management and the supervisory boards.

The following problems are resolved through the establishment of responsibility centres:

- Efficient control system is set up.
- Contribution of separate units is increased towards achievement of the bank's common targets.
- Incentives are created both for the managers and the regular staff to work better.

Responsibility centres are structured on a functional or geographical principle or based on similarity of costs. If the functional principle is used, one category of such centres might be for example the business responsibility centre, which is involved in selling of bank products and servicing of customers. According to the geographical principle, smaller or larger bank structures built to work at certain territory might be set up as responsibility centres, like regional branches, regular branches, agencies, etc. Application of similarity of costs principle means that all units in the bank that incur the same type of costs, e.g. overhead costs, could be placed in one unique centre. However, it is also possible each division or department to be set up as a single responsibility centre.

In practice, the considered three principles are used in combination, with the prevalence of the functional one. This allows personalizing the duties and the responsibilities of the centre managers. At this stage, the centre's category could be specified on the basis of managerial powers to influence expenses and results through respective decisions.

An overall systematization of responsibilities of centre managers, by centre categories, can be seen in Table 2.

Table 2: Managerial responsibilities allocated by centre categories.

Centre category / ***Responsibility***	**COST CENTRE**	**INCOME CENTRE**	**PROFIT CENTRE**	**INVESTMENT CENTRE**
Expenses				
Income				
Financial result				
Return on assets				

It was found that certain preconditions influence creation of an analytic and reporting system by responsibility centres in the commercial bank: well-established organizational structure;

existence of geographically developed branch network; set up of positions and persons that are responsible for the attained results. Formation of different categories of responsibility centres, namely cost centres, revenue centres, profit centres and investment centres, allows to identify on time and more precisely what is behind the results of a specific bank unit. The variations between indicator planned and actual values could be revealed, including their impact on the overall profit or loss of the bank. Factors that affect the work and motivation of bank employees can also be examined.

Commercial banks usually establish the responsibility centre system by carrying out the following activities:

1. Definition of organizational units' responsibilities according to the authorities of managers and bank staff to control costs, incomes, profit and investments.
2. Determination of budgets to detail the planned business results at centre level.
3. Analysis of results by comparing actual values of indicators to the budgeted ones.
4. Implementation of an incentive system based on the targets achieved.

Some rules are additionally observed:

- indicators are developed and introduced, by which it is possible to measure the work performed and to allocate the expenses;
- responsible position is specified for each centre;
- sufficient level of detail in defining the centres, which is related to the needs of analysis and does not hamper the reporting;
- a centre always exists for every type of cost, for which this cost is direct;
- only direct costs are allocated to cost centres, while indirect costs are accounted at a higher level;
- social and psychological factors are considered since the creation of responsibility centres could strongly affect the motivation of centre managers.

The process of definition of responsibilities of organizational units has characteristics related with the distinct centre categories.

With regard to the *cost centre*, the authorities of its manager are limited to the decisions about minimizing the expenses incurred at a certain volume of business activity. This manager is required to plan, control and report the expenses that are spent by his/her subordinates. Therefore, responsibility centres mainly in the commercial bank's head-office are set up as cost centres. For instance, the units or the division, to which they belong, that is responsible about the evaluation of the risk, is established as cost centre. The respective managers therein control and approve the amounts of provisions determined by the risk analysts to cover expected losses from risky exposures. The head of the division is normally appointed as manager of this cost centre.

Units from the organizational structure of commercial bank, whose managers are in charge with the obtained incomes and their maximization at a specific level of expenses, are established as *income centres*. These managers are usually unable to control the costs, including staff costs that are constant in short run (although these costs are controlled at higher level). However, accomplishment of particular income part of the budget is fully under their authority. Some commercial units involved in selling of bank products and belonging to the bank's head-office, like Lending to corporate customers and Lending to small and medium enterprises, are selected as income centres.

Profit centres are distinctive because their managers are accountable for and can control both incomes and costs that are related to the activity of the centre. In fact, all elements of the bank structure that are designed to service certain territory are established as profit centres. These are regional and local branches, and sometimes even smaller units similar to agencies. This classification is possible mostly because of the powers delegated to the branch managers. They are typically responsible about achievement of branch targets in terms of budgeted volumes and incomes from different bank products, but in the same time have control over the costs to maintain the office, etc. As a result, the heads of structures built on the geographical principle become also profit centre managers and assume the responsibility about the financial results of these centres.

Investment centre is created in a bank whenever it is possible to delegate to its manager authorities to decide about incomes, costs and investments altogether. Considering the peculiarity of bank activity, it is normal to set up one investment centre in the bank head-office, because this activity is usually centralized and because the responsibility for the incomes and costs related to investing of the accumulated resources is also placed there.

3. FINANCIAL MEASURES FOR MORE PRECISE ANALYSES OF PERFORMANCE OF RESPONSIBILITY CENTRES

Building of the reporting component of the system for internal performance measurement by responsibility centres is based on an approach, in which the following is defined: desired information; level of detail of the reports; precision of the data therein; reports format and frequency; reporting procedures, including the levels of reporting. Afterwards the usual process of development, testing and implementation is performed.

Major step of the design phase is the selection of the indicators that will be included in the reports. Considering the overall aim to understand the internal performance, bank management's attention is focused mostly on several measures and concepts:

- Interest income and margin,
- Incurred expenses,
- Profitability,
- Structure and volume of the business,
- Variation of actual values from the budgeted ones,
- Comparison between different reporting periods,
- Staff efficiency.

Bank management is also interested in additional details about key factors that have impact on the results and in extraordinary events, if any happened.

Our paper concentrates on the first measures representing the basic financial indicators that are also used in large banks in Bulgaria.

Since the primary activity of the bank is financial intermediation, a significant portion of the profit comes from the difference between the borrowing and the lending rates, which, in fact, is the net interest margin (NIM). However, in order to compute the NIM it is needed first to determine the funds transfer pricing (FTP) rate of an asset or a liability. The FTP rate is an evaluation of the price of funds used to finance an asset or the one obtained from investing the amount of a liability. In practice, the FTP rate is set up on the basis of interest rate yield curve at the time of asset/liability origination, the amortization of the principal and the existence of options, like prepayment. Therefore, NIM is represented by the following formulae:

$$\text{Assets: } NIM_A = <\text{Lending Rate}> - <\text{FTP Rate}>$$
$$\text{Liabilities: } NIM_L = <\text{FTP Rate}> - <\text{Borrowing Rate}>$$

Net interest income (NII) of an asset or liability is further defined, as follows:

$$NII = NIM_{A/L} * B_{A/L}$$

where $B_{A/L}$ is the balance of the asset or liability.

The NII at responsibility centre level (NII_{RC}) is based on the identification of all assets A_i and liabilities L_j that are managed by the unit, i.e.:

$$NII_{RC} = \sum NIM_{Ai} * B_{Ai} + \sum NIM_{Lj} * B_{Lj}$$

Most frequently the responsibility centres in commercial banks generate considerable income in the form of fee and commissions. Hence, the total revenue would be computed, as follows:

$$Revenue_{RC} = NII_{RC} + Fee_{RC}$$

A typical measure of the responsibility centre's performance is the contribution margin (CM_{RC}), which is usually calculated separately for the assets and the liabilities. CM_{RC} reflects also the basic concept of the FTP that a portion of the funds financing the assets originates from bank's equity, i.e. the debt portion is $B_{Di} = B_{Ai} - E_i$, where E_i is the equity portion. Direct expenses (DE), as well as the incurred losses (L) are taken into account in CM_{RC}. Therefore, the contribution margin of the assets in the organizational unit is represented:

$$CM_{RC\text{-}A} = \sum [<\text{Lending Rate}>_i - <\text{FTP Rate}>_i*(1 - E_i / B_{Ai})] * B_{Ai} + Fee_{RC\text{-}A} - DE_{RC\text{-}A} - L_{RC\text{-}A}$$

Debt portion is irrelevant in determining the contribution margin of the liabilities in the responsibility centre, hence:

$$CM_{RC\text{-}L} = \sum [<\text{FTP Rate}>_j - <\text{Borrowing Rate}>_j] * B_{Lj} + Fee_{RC\text{-}L} - DE_{RC\text{-}L} - L_{RC\text{-}L}$$

In our opinion, incorporation of the above financial indicators in responsibility centre level reports would contribute for more precise analyses of internal performance. Picture 2 represents an example of an overall report that could be used to capture the results of a branch, division or department in the commercial bank.

Picture 2: Performance report at responsibility centre level

<name of the bank> **Responsibility Centre Level Performance Report** <currency type> ıonth> <year> YTD

<responsibility centre's name>

	ACTUAL	BUDGETED	BUDGET ACHIEVEMENT Rate of Change	Target Attainment
Net Interest Income			-	-
Fee & Commissions Income			-	-
REVENUES			-	-
Net Interest Income on Assets (equity adjusted)			-	-
Fee & Commissions Income from Assets			-	-
Direct Expenses on Assets				
Losses related to Assets			-	-
CONTRIBUTION MARGIN OF ASSETS			-	-
Net Interest Income on Liabilities			-	-
Fee & Commissions Income from Liabilities			-	-
Direct Expenses on Liabilities			-	-
Losses related to Liabilities			-	-
CONTRIBUTION MARGIN OF LIABILITIES			-	-

4. CONCLUSION

In summary, although implemented in big banks in Bulgaria, the system for internal performance measurement by responsibility centres should be considered as a foundation of the overall measurement, reporting and monitoring system that supports informed and rational decision making by the management. This building block allows developing and introducing in a consistent manner the other dimensions of the internal performance measurement, i.e. bank products and bank customers. Reasons about the results of a certain organizational unit, as well as their sources, could be identified more precisely and timely via such system. Showing the variations of actual versus planned values can help in revealing the potential impact on the profit of the entire bank. Moreover, taking responsibility about the results of a centre additionally motivates the managers towards improvement of financial indicators, at least of the units they manage. At the end, each manager would contribute much more to increasing the value of shareholder's equity of the bank.

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