UDC 336.719

THE CONCEPT OF THE FINANCIAL ENGINEERING IN THE FINANCIAL SCIENCE. THE TOOLS OF THE FINANCIAL ENGINEERING IN THE MANAGEMENT OF THE COMMERCIAL BANK RESOURCE BASE

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Financial engineering allows to optimize the flow of financial resources and to expand the horizons of financial policies in various fields of business entities. This article considers the promising forms of expanding the commercial banks resource base founded on the use of financial engineering instruments.

The need for financial engineering comes from the need to develop specific solutions to specific problems in a variety of risk management. Any risk needs proper management. Especially when it comes to managing large financial resources which are often characterized by high levels of risk prevention and neutralization is often accompanied by the development of unique methods and techniques.

Financial engineering is problem solving in order to improve the financial performance and reduce financial risks. It is aimed at new products design and efficient use of the existing financial instruments to achieve the objectives in the interests of financial relations. Subjects of the financial engineering are financial engineers and / or commands as creators and business entities of the economy as financial innovation end-users. Innovative financial instruments and processes, new financial technologies are the objects of financial engineering [1, p. 243].

Consider the way to increase the resource base (the securitization of assets). Securitization can become a profitable tool for expanding the resource base of Belarusian banks, may significantly improve the attractiveness of their loan products. The very concept of Asset Securiti - sation (asset securitization) means equipment financing, which is widely recognized initially in the US and then in Europe. The mechanism of asset securitization is in write-offs of certain assets of the bank, their separation from the rest of the property and transfer the balance to a specially created financial intermediary (Special Purpose Vehicle – SPV) for the refinancing of such assets at the local or international stock market [2, p. 51].

The basic structure of the securitization of assets is shown in Figure 1.

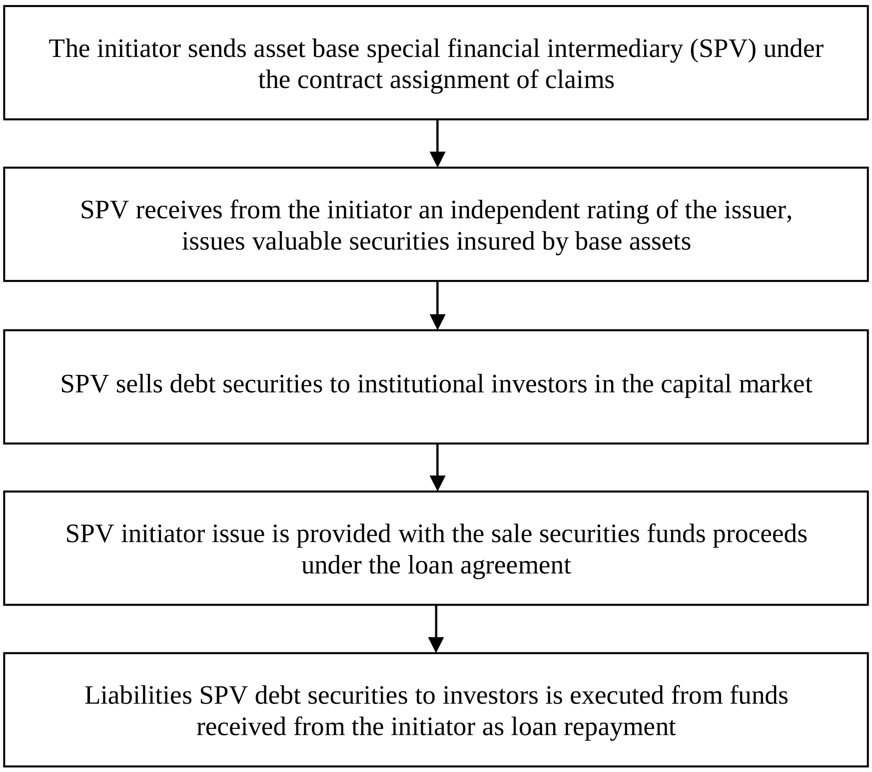

Fig. 1

Source: own research based on [2, p. 52].

When customers (both individuals and legal entities) place their funds in the bank there must be guarantee of their investments (investment) without the risk of the loss. To solve this problem, there are structured ("hybrid") deposits in modern banking business. In this case the client is provided psychological comfort and confidence in retaining the original investment, plus the probability of obtaining a profit higher than inflation rate and average rate on conventional, classical deposits. This structured deposit character creates association constant (stable) and variable (changeable) cash flow [3, p. 13].

Structured deposit is basically a product that combines deposit and investment where the return depends on the market valuation of the underlying assets that underlie this product. Typical financial instrument that may be associated with such deposits includes market indices, equities, interest rates, financial instruments that generate a fixed income, currency, or a combination thereof. As an example, let's consider structured product deposit + shares. The yield on the deposit is 32% per annum. The amount of investments is 200 million rubles. The risk of loss of deposit is 0% (capital must be maintained in any case), the risk of loss on the shares is 100%. What proportion should be placed on deposit to guarantee one year 100% return of capital? Risk capital share is calculated by formula 1

$$Srisk = (B + r) / (B + R) \cdot 100\%, \tag{1}$$

where B – guaranteed profit on the deposit;

R – the maximum possible losses on shares (in%);

r – allowable losses for the investor (in%).

Substituting the values into the formula yields

$$Srisk = (32 + 0) / (32 + 100) \cdot 100\% \approx 24{,}2\%.$$

Approximately 24.2% or 200 mln. rubles · 24.2% = 48.4 million rubles can be invested in stocks (or other risky instruments), so that in case of a failure the original amount will not be lost.

Risk-free: part of the funds is invested in the most reliable financial fixed income instruments such as bank deposits and bonds. This part of the investment brings a steady income, forming a "financial cushion" that provides the investor with the return of all assets at the end of the investment period, regardless of the results of investment in the second revenue part.

Income: part of the funds is invested into more profitable, but at the same time more risky instruments, such as options. Options are financial tools for buying or selling the selected assets and bringing significant profit under favorable circumstances. The practice of structured deposits design allows the bank to increase the level of financial engineering sufficiently. That will naturally influence the acquisition of additional competitive advantages. These products can attract the attention of a certain group of investors, as well as strengthen their loyalty in the future. Financial innovation as one of the driving forces of modern banking is perfectly reflected in the establishment and operation of structured deposits with the use of simple technology and option strategies at this time. The conclusion is that the development of the bank structured deposits programs is a profitable business at present [3, p. 17]. Structured deposits are generally less risky than direct investments in other financial instruments, such as stocks or bonds, because the bank is obliged to pay the invested capital back. However they are more risky than the ordinary deposits, because their profitability depends on the assessment of the other financial instruments in the market. In some cases the investor can get the invested money back without any additional income.

International syndicated loans are loans provided by several lenders to one borrower. They do not require obtaining any rating; although rating is desirable as it helps to reduce the interest rates and increase the number of creditors. Compared with the assistance of a standard bilateral loan all the conditions of the syndicated loan are uniform for each lender and allow the borrower to reduce labor costs for debt service.

Syndicated loan is used in case when a borrower requests too large loan amounts. This concentration risk loan portfolio is undesirable for one bank.

Disadvantages of the syndicated loan: restrictions on the bank's activities in connection with the signing of the syndicated loan contract. There may be increased requirements to adhere the capital adequacy, limitations connected with the acquisition or sale of assets, provision of audited financial statements according to international requirements etc. [4, p. 90].

The implementation of the planned activities will not only enhance the ability of commercial banks, but give a powerful impetus to the development of the whole domestic financial market, its tools, infrastructure and institutions that enhance the efficiency of capital allocation and create favorable conditions for the modernization and growth of the national economy.

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UDC 658.8.012.12

IMPROVEMENT OF THE ENTERPRISE COMPETITIVE STRATEGY

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The article deals with the theoretical aspects of the "products competitiveness" concept, key factors that influence it. "Novopolotsk bakery plant" (the branch office of "VitebskHlebProm") is the object of research in practical part. The work identifies the existing strategies weak sides in order to improve the competitiveness of products and suggest ways of improvement.

Nowadays Belarusian business entities have faced the problem of increasing the products competitiveness to survive in today's difficult economic conditions. There is a large amount of competitors on the local and foreign markets. It is difficult for some companies to take leading positions in their field. To take leading positions on the market it's necessary to improve manufactured products. That is why the subject of our research has actual importance.

The term "*competitiveness*" has several meanings. Having analyzed the research work of foreign and native scientists, we can conclude that each author highlights the characteristics of products that, in his opinion, affect the competitiveness.

Products competitiveness is a complex characteristic. It is determined by the totality of specific product properties that are useful for the consumers and ensure their needs. Having studied several classifications of the factors affecting the competitiveness of the products, it should be noted that the main factors of competitiveness are:

- effectiveness of competitor companies communication policy;
- practice of developing new products and assignment of trademarks;
- attractiveness of the products packages;
- sales figures and its competition organization;
- efficiency of competitors product distribution channels.

Evaluation of products competitiveness can be accomplished by differential, integral and mixed techniques [1].

Strategic management has an important role in creating competitive advantages. It is important to choose the right development strategy of the organization, which promotes the competitiveness of its products.

The object of research is «Novopolotsk bakery plant" (the branch office of "VitebskHlebProm"). It specializes in bakery and confectionery production.

Novopolotsk bakery plant was founded in 1990. It is a branch office of open joint-stock company "VitebskHlebProm."

The main activities of the "Novopolotsk Bakery plant" are:

- bread and bakery production;
- confectionery;
- trade activities, mainly own-produced [2].

The situational analysis of the organization was carried out in three directions: SWOT-analysis, market segments analysis and competition analysis.

SWOT-analysis showed the strengths and weaknesses of the organization, as well as the opportunities and threats that can entail consequences.

Market segments analysis revealed that the largest share of the production strategic areas takes bread – 69%. The second place is occupied by bakery products – 24%, the third place is confectionery products – 7%.