THE BALANCED SCORECARD IMPLEMENTATION IN FARM ENTERPRISE-A CASE STUDY FROM UKRAINE

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ABSTRACT:

This study exemplifies the first implementation experiences of Balanced Scorecard and the first results of them in Ukrainian agricultural enterprises. Essential prerequisites for the functioning of the BSC concept into practical agriculture will be discussed. Finally, some critical success factors to the BSC adoption by agricultural companies will be identified.

Key words: Balanced Scorecard, Strategic Management, and Ukraine

INTRODUCTION:

After the collapse of the former Soviet Union in 1991, Ukraine, according to the estimates of many experts, appeared to be in a favourable position – compared with other CIS states - for a positive economic development under the market conditions. Among the reasons for that opinion were: available natural resources, favourable natural conditions, high educational level of the population, an important politico-geographical position, and a developed infrastructure. Ten years after the changes in the system, disillusionment settled. A drastic decline in the agricultural production is a direct indication of the defective development in this sector. Several empirical studies that analyse agricultural developments in Ukraine highlight the drastic reduction in productivity in the sector since independence in 1991 (Koester 1999; Galushko et al . 2003). The primary cause of this reduction in productivity is declining efficiency. Interestingly, research indicates that efficiency is positively related to farm size in Ukraine, although heterogeneity is significant and the differences between more and less successful large farms have grown. Similar results have also been observed in Russia (Stange & Lissitsa, 2003). These findings are partly supported by the current trends particularly in Russia, but also in Ukraine to establish so-called agriholdings or vertically structured agro-industrial corporations with tens of thousands hectares of land and hundreds of employees. Comparable tendencies are observed not only in transition countries but also in the USA and Australia (Plummer & Rolfe, 2002; Miller et al., 1998; Boehlje, 2003 and 2004).

The explanations for the greater efficiency of large farms include, inter alia: ability to make better use of new technologies in agriculture; advantages on credit markets and in risk diffusion; and many central management aspects such as personnel and strategic management which have been and are still ignored on small farms, but which can successful implemented on large farms. Especially strategic management can play a noteworthy role in efficiency improvements in agribusiness (Boehlje, 2003). With continued emergence of agro-industrial corporations in Ukraine and Russia, the importance of clear management strategies will grow.

Strategic decisions are associated with such things as an enterprise's products mix, its marketing linkages and its financial structure. For example, the use of contract production increases the importance of carefully selecting partners, since payments for products will depend on the financial situation of the partner rather than the market. Agricultural enterprises in Ukraine could increase their efficiency in the long run if they were better able to choose appropriate strategies and organise their structures and operations to these strategies.

In this paper a strategic management tool called the Balanced Scorecard is presented. Ex-

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perience with and the first results of the implementation of this tool in Agrosoyuz, Ukrainian closed joint-stock agricultural enterprise are outlined and discussed.

The Balanced Scorecard approach - methodology

A Balanced Scorecard (BSC) is a management tool that provides senior executives with a periodic assessment of how well their organisation is progressing toward achieving its strategic goals and was first introduced in the early 1990s through the work of Robert Kaplan and David Norton of the Harvard Business School (Kaplan & Norton, 1992). Since then, the concept has become well known and its various forms widely adopted around the world. The original concept of the BSC was based on the assumption that the efficient use of investment capital is no longer the sole determinant for competitive advantage. Instead, flexible factors such as intellectual capital, knowledge creation or excellent customer orientation have become increasingly important. As a reaction Kaplan and Norton suggested a new performance measurement approach that focuses on four perspectives of corporate strategy. The BSC aims to make the contribution and the transformation of soft factors and intangible assets into long-termed financial success explicit and thus controllable. The four perspectives of original BSC are shown in figure 1 and can be briefly described as follow :

• The financial perspective indicates whether a strategy leads to improved economic success. Typical financial goals are profitability, growth and shareholder value. Relevant measures in agricultural sector may include return on investments, sales growth, operating income etc.

• The customer perspective asks the question "How do existing and new customers view and value us?" This perspective may not feature prominently in many farm business plans, yet it could be a key question to address to ensure that a farm business becomes a preferred supplier to its customer(s). The development of quality assurance systems on-farm would be a strategy aimed at improving the supplier-customer relationship. Similarly the development of some contractual arrangements and strategic alliances also addresses this perspective by exploring how a farm can develop and improve its relationships with customers.

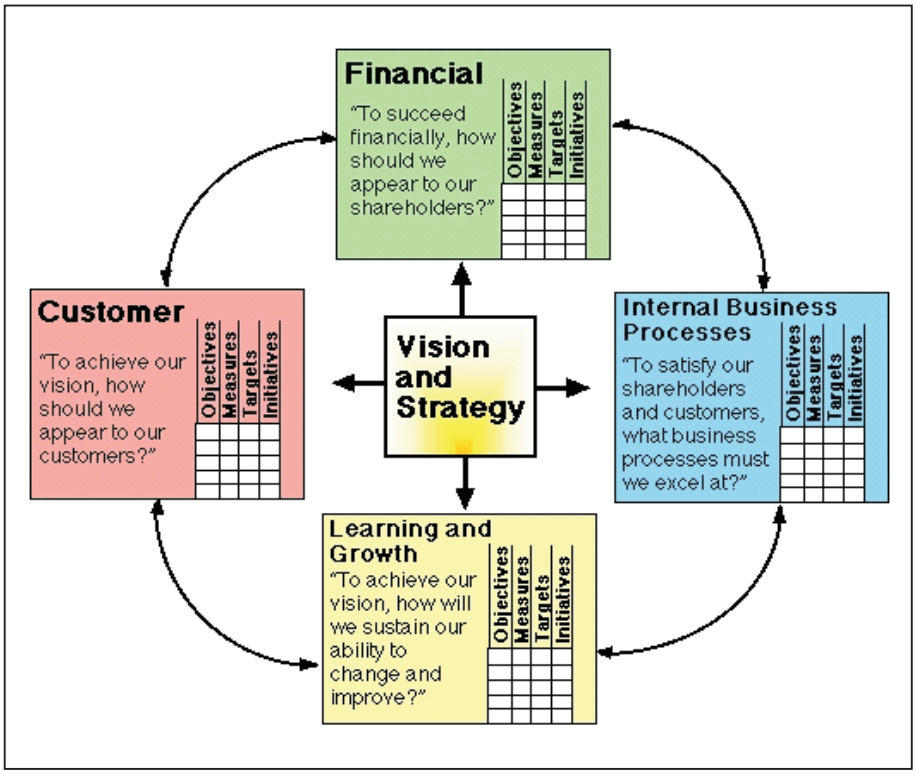
• The internal business perspective that asks the question "What must we excel at?" It focuses on the skills, competence and technology that matter in a particular business, and an enterprise's ability to meet the needs of its customers and its potential to add value to customers' businesses. This area is generally adequately covered in many farm business plans. It covers the farm's ability to deliver and produce to specification, thus concentrating on the production process.

• Finally, the learning and growth perspective describes the infrastructure that is necessary for the achievement of the objectives of the other three perspectives. It covers an enterprise's ability to change, improve and adapt its products and processes, as well as the ability to develop and introduce new improved products and services (Kaplan & Norton 1992). The goals in this area are non-financial and aimed at ensuring that an enterprise's greatest assets, its people, are being developed and nurtured to deliver the innovations that are crucial to success.

A core element of the BSC approach is the "linking together of the measures of the four areas in a causal chain which passes through all four perspectives" (Nörreklit, 2000, P.67). The causal relationship chain is assumed to commerce at the learning and growth perspective and flow upwards through the internal business perspective to the customer perspective and finally to the financial perspective (Kaplan & Norton, 1996). The performance measures in one perspective become the drivers of the measures in the next perspective in this chain (Nörreklit, 2000). A good BSC should have a mix of core outcome measures (lag indicators) and performance drivers (leading indicators) (Kaplan & Norton, 1996a).

Long-term strategic objectives and lag indicators are formulated for strategic core issues for each perspective based on an enterprise's strategy. Lag indicators signal whether the strategic objectives in each perspective have been achieved. In contrast to lag indicators, leading indicators tend to be very firm-specific. They express the specific competitive advantages of an enterprise (e.g. farm) and establish how the results reflected in the lag indicators should be reached. Based on an enterprise's specific strategy, the key performance drivers that have the greatest influence on the achievement of the core strategic objectives (measured by lag indicators) are identified for each perspective. The combination of the indicators in the four perspectives is achieved by defining goals and appropriate lag and leading indicators (Kaplan & Norman, 1996a). In this way, a BSC translates strategy into objectives, measures and targets in the four perspectives. Rather than representing strategy as a loose collection of indicators and measures, these are linked by cause and effect relationships. By formulating and defining the strategic targets and measures down to the financial perspective through the other perspectives, it becomes clear which influence factors have the greatest impact on the lag indicators and, thus, ultimately an enterprise's success. These strategy-specific influence patterns are mirrored through cause-effect chains which directly or indirectly link all the targets, indicators, and measures of the BSC perspectives hierarchically towards the financial perspective with its long-term financial goals.

Figure 1. Four main perspectives of BSC



Source: Kaplan & Norton, 1996

It is significant that the causal linking of leading and lag indicators not only occurs within individual perspectives, but also by constructing effect chains through the four perspectives of the BSC. This means that lag indicators of lower-level BSC perspective act as leading indicators or performance drivers for indicators at higher-level perspective. Proceeding in this

way results in a situation in which the lag (financial) indicators are combined with the leading indicators/performance drivers through the four perspectives leading to a hierarchical cause-effect network which reflects the fundamental assumptions for successful translation of the strategy (Kaplan & Norton, 1996a, 2001, 2004). This strategy-focused hierarchical approach ensures the identification of the major strategic issues of a farm business and assigns them their particular strategic relevance – as strategic core issue or performance drivers. This enables an orientation of all business resources and activities towards the implementation and communication of the strategy.

To date, thousands of firms around the world have implemented the BSC, and there are many case studies describing the BSC as an effective method of strategic management. The most famous examples of the successful use of the BSC approach are firms such as Mobil, British Airways and Volvo (Kaplan & Norton, 2001, 2004; Olve ET AL., 2001). In the agri-food sector the following companies have successful implemented the BSC: Nordzucker in Germany (Deppe-Lleikel, 2003); agricultural grain marketing cooperatives in Australia (Plummer& Rolfe, 2002), Zeneca Ag Products in the USA (Kaplan & Norton, 2001), and Farm Credit Canada .

Developing a balanced scorecard is not a quick and easy task. It requires a significant amount of time and requires everyone in the business to understand the business strategy. Summarised, the BSC is by far not an easy-to-develop management accounting tool. A number of authors and even the originators of the concept have pointed out that successful implementation in specific, real settings requires needs significant adaptations and modifications. Frequently repeated points of criticism include the following (Nörreklit, 2000; Noell & Lund, 2002):

• The assumption of cause-effect relationships across the four major perspectives is problematic. Often the links between the performance variables are ambivalent (e.g. the relation between customer satisfaction and financial success), merely statistical (covariance, but no clear causality), purely logical (e.g. relationships developed from neoclassical reasoning) or simply nonexistent.

• The assumption of a hierarchical relationship among the four major perspectives is also questioned. For example, management development might lead to increased profits, but sufficient profits are needed to finance management development. Thus, interdependence rather than unidirectional relationships among the measurement variables are suggested.

This list could be continued. For a comprehensive discussion of the strengths and weaknesses of the BSC approach, see among others Olve et al. (2001). Nevertheless it should also be mentioned that some criticism of the approach is misleading. First, performance and scope of the original BSC concept are often overtaxed. Second, it is sometimes forgotten that any application of the BSC to a real enterprise is part of a comprehensive and repeated process of strategy development, implementation and controlling (Noell & Lund, 2002). The BSC, like any major change, must be constantly nurtured for a significant period before it takes root in an enterprise's culture and ongoing management practices.

They're only few examples of BSC implementation in the agri-food sector. This could be due to the fact that agriculture in most industrialised countries is primarily based on family businesses. However, even though the literature on BSCs focuses on the corporate sector, this does not preclude its application to agriculture. Furthermore, due to the increasing complexity of the business of farming that is resulting from increasing farm sizes and the specialisation of production, the need for strategic management at the farm level is increasing. This has led in recent years to an increased interest in the BSB approach on the part of agricultural economists, managers and consultants (Plummer& ROLFE, 2002; Noell &

Lund, 2002; Fritz, 2003; Pietrzak, 2003; Hernández et al., 2003 and 2004, Lissitsa, 2004). However, these applications mostly deal with the theoretical possibilities of applying the BSC approach in the agri-food sector.

While the literature on balanced scorecards is focused on the corporate sector it does not exclude it as a valuable tool for the family farming business. If anything its value to the family business is at least as great as it is to the corporate world. The balanced scorecard is a framework for integrating measures derived from strategy thereby offering the family business not only a measurement system but also a management system.

3. A case study from the closed join-stock company Agrosoyuz

As mentioned above, the heterogeneity of the efficiency of production on large farms in Ukraine has grown considerably in the course of transition. Some farms have survived the transition process relatively successfully, although not to the extent expected by many. The closed joint-stock company Agrosoyuz used the reserves initially at its disposal for structural adjustments in the first transition phase to establish itself as an agribusiness enterprise. The agricultural primary production division of Agrosoyuz, locagted in the village Mayskoe, was established on the basis of the former collective agricultural enterprise (kolkhoz) 'Drushba' in 1997. In contrast to most Ukrainian agricultural enterprises, which still concentrate on surviving through low-intensity agricultural production, Agrosoyuz has consequently searched for new technologies and management strategies in order to increase efficiency.

The managers of Agrosoyuz knew that they needed to transform the way in which they strategically thought about, measured, and managed their business. After considerable research and also by the use of participation in the EFQM management quality network , they decided that using a Balanced Scorecard approach would be the best way to develop and implement their enterprise's strategy. However, this belief was not founded on experience with the BSC approach in other agricultural enterprises in transition countries. This lack of experience made the implementation process more difficult than initially assumed.

A BSC project team, comprised of members from key areas of the enterprise, worked with consultants to develop a customised BSC for the company to translate its business strategy into specific strategic objectives. Agrosoyuz's mission has been formulated as combining „a constructive influence on society with the satisfaction of the intellectual and material needs of its own personnel and partners using implementation and distribution of innovations in production, agriculture and service". Essentially, a BSC strategy map provided the management team with a high-level depiction of what needs to be done if the corporation is to live up to this mission. The strategy map achieved this by tracing the cause and effect relationships between the various strategic objectives contained within the scorecard segments. In contrast to Kaplan & Norton's approach, Agrosoyuz found it more appropriate to consider six company-specific perspectives instead of the four traditional perspectives: financial; customer; internal business; learning and growth or human resources; innovations; and society. The formulation of the two additional perspectives 'innovations' and 'society' was connected with Agrosoyuz's specific objective of being the most innovative agricultural enterprises in the country. It was also related to the fact that agricultural enterprises traditionally play an important role in rural development in Ukraine and are expected to provide a variety of services under the heading 'social sphere' (Lissitsa, 2002; Lissitsa, 2004). With formulation of the 'society' perspective, Agrosoyuz underlined its commitment to contributing to the positive development of the sector and country as a whole using new technologies.

Monthly management meetings were organised according to the six BSC perspectives. At

these meetings the managers discuss written summaries of what has happened during the last period, and the progress of each measure is discussed.

The first results of the implementation of the BSC approach in Agrosoyuz are:

• A balanced and more efficient use of available resources;

• The introducing of new monitoring and measurement system which helps to control and to manage the achievement or objectives;

• The simplification of management and organisation systems in the enterprises; and

• A situation in which every employee understands his/her role in achieving business success. Significant insights gained by implementing the BSC approach in Agrosoyuz include:

• The BSC is used to communicate strategic objectives to employees, not to order them what to do. Everyone understands the enterprise's strategy and helps to achieve its strategic objectives;

•The BSC is a strategic management tool that could not be adopted one-to-one in the classical form proposed by Kaplan & Norton. Rather it could be adjusted to the specific conditions in agriculture in transition countries such as Ukraine; and

• The BSC management process is a continuous process. It is not directly concerned with an enterprise's specific mission, but rather with its internal processes and external outcomes. This process is based on performance metrics that are tracked continuously over time to identify trends, best and worst practices, and areas for improvement. It delivers information to managers that can help to guide their decisions.

4. Conclusions and perspectives for the BSC approach in agricultural sector of transition countries

The BSC can assist the farm business as it enables the business to identify those measures (both core outcome and performance drivers) that are essential to goal achievement and so provides a focus to subsequent benchmarking that will speed up the adoption of 'best practices'. Where identification of a difference between actual and desired performance occurs this is the trigger to return to and review the business plan and to develop strategies to close the gap, again.

The BSC is essentially a 'network' of linked indicators that articulates an enterprise's strategy around a set of cause-effect relationships. A well-built scorecard reflects the intrinsic connections between each aspect of the strategy and each of the measures chosen to assess it. Also, the BSC has the advantage that it provides managers with both leading indicators and lag indicators about their companies. Hence the term BSC: it balances and links financial and non-financial indicators, tangible and intangible measures, internal and external aspects, performance drivers and outcomes.

The successful development of farms plays a significant role in the economic and social stability of rural areas in transition countries. The combination of financial and non-financial indicators in BSCs allows farms to develop enterprise-specific strategies that are adjusted to the business environment in agricultural sector. The implementing of the BSC approach can help farms to develop, implement and monitor their restructuring strategies.

The following points should be considered when implementing the BSC approach in transition economics' agriculture:

• The BSC approach can help an enterprise to implement its strategy, but is not designed to create such strategies. This is the task of the management team. Successful BSC implementation is impossible without a well-defined strategy;

• Farm accounting practices should be adapted to the needs of strategic management

and the BSC;

- It is usually not sufficient simply to copy the measurement system used by other successful firms. Each agricultural company should make the effort to identify the measures that are appropriate for its own strategy and competitive position; and
- The first steps in implementing the BSC approach should be done with a help of a consulting firm or research institution.

The implementation of the BSC approach in many countries has demonstrated that competent advisory service is required. Consultants in existing agriculture advisory services in Ukraine do not have the necessary competence and methods to provide farmers with feedback on their strategies and to help them test the assumptions and expectations that their strategy is based on. Another point is that most agricultural enterprises in Ukraine are not able to pay for consulting services. Summarising, the BSC approach can be adjusted to the special business environment in Ukrainian agriculture and broadened to incorporate a number of factors that go beyond the purely financial.

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