THE DEVELOPMENT OF INTEGRATED ACCOUNTING IN SMALL AND MEDIUM-SIZED COMPANIES IN THE AGRI- AND FOODSECTOR F THE RUSSIAN FEDERATION

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Abstract: This paper focuses on the regulation of financial accounting in SMEs in the agri- and food sector in Russia. The paper presents the factors which influence the accounting system and the quality of the information it provides. The information and reports that are prepared according to international standards are not comparable with reports prepared by Russian standards. They do not facilitate external users in gathering relevant information on the current financial position. The present usage of different systems for procuring information to satisfy the needs of multiple stakeholder groups takes time, distorts information, and often does not provide a true and fair view on business performance.

One way to overcome this is the use of an integrated accounting system which allows, within the limits of Russian legislation, to provide a broad information base for external reporting. International standards could be used like IAS41 or those applied in the Farm Accountancy Data Network (FADN). The derived data could be used for attraction of investments, presentation of information to all interested users, comparison of results of activities in similar companies, and as a benchmark for the activities of companies in various regions and/or segments. They could be used to compare Russian companies with similar ones in the European Union. This paper describes the benefits and pitfalls which companies potentially experience from implementing an integrated accounting information system for company management and financial reporting purposes in the Russian Federation.

Keywords: accounting, Russian agri-food sector, IFRS, FADN financial report

The accounting process in Russian SMEs

The agri-and food sector of the Russian Federation (RF) is dominated by SMEs. Only companies that operate effectively are able to survive, compete and produce in the long run. Russian agro-holdings survive nowadays only with the help of subsidies. There is no strong competition between them. Also, no effective use of the land is made. The SMEs can solve these problems only if they are able to use the land and assets more effectively, produce on a larger scale and quickly operate in the market. It is the aim of reforms in the Russian Federation to improve family businesses in the agrifood sector. But these reforms have failed one by one, and have not produced the expected outcomes. The problem is that it is very hard to understand how and where the problems originate. One barrier lies in the deficiencies of the present accounting rules and systems which are applied.

The Russian Federation aims to achieve accession to the World Trade Organization. An important obstacle to this is the poor measurement of the effectiveness of foreign investments in Russian companies. A second problem is vested in the fact that nobody is able to compare SME-companies in the RF with those in the EU or other regions, and understand what causes the differences in effectiveness.

Russian SME-companies have land as property. Foreign companies could invest in companies and/or production. They could invest by means of partnerships with or buy-outs of Russian companies. But when these have to provide a balance sheet and income statement the information is uncertain and not comparable. The employment of specialists that can make the information comparable leads to additional costs. Even if companies wish to provide information according to the International Financial Reporting Standards (IFRS) which are applied in the EU, it costs a lot of effort and money, since the locally accepted accounting principles are very different from the European standards. In such a situation investors lose control over the costs and benefits of a company. It accelerates business risk which is experienced in extreme quantities.

A first step to solving information problems is through data collection. The source of these data is the accounting

information system. An important problem in Russian accounting regulation is that it allows companies to avoid publishing financial reports, except for tax purposes. The legal system was designed in this way to give SMEs more opportunity to create their own individual accounting system. Another reason was that the official accounting system is very complicated for SMEs and raises their costs and increases the risks of mistakes in financial reports. The lack of financial and statistical reporting of data (or availability at a low level) and the existence of tax accounting does not stimulate solid information provision to multiple stakeholders: to owners, workers, investors and the government.

To improve this situation, research will be carried out that enables improved financial reporting by incorporating international accounting principles and requirements into the Russian accounting methodology. The quality of reporting should be raised and broadened, to meet the needs of financial as well as tax stakeholder groups. One problem to be overcome is that tax accounting and financial accounting use different standards and rules. Financial accounting uses generally accepted accounting principles [gaaps] -especially on an accrual basis, while tax accounting uses cash as a basis. The lack of clear and consistent rules has created the possibility of acting opportunistically. Four ways to deal with accounting information – especially with respect to taxeshave developed in practice in the RF:

- Use the granted freedom to provide no financial information at all;
- Simplify accounting to a low level this hardly meets international standards and the information which remains cannot be used for decision making;
- Provide accounting information only partially (for instance cash accounts, credit accounts, liabilities);
- Apply double accounting standards: one for internal purposes and another for external purposes.

In all of these cases we can see that the quality of accounting is low, and that the accounting system does not provide information to support decision making and managerial control. In the first case the company has no accounting system at all, or applies its own rules. The accounting system mainly serves internal purposes. In second and third cases the system cannot provide information for financial decision making, because it is built to a large extent on rules for tax accounting. To avoid the costs of double information, the financial report is often just a copy of the tax report. In this case the company lacks data for decision-making and ranking investment proposals. As in the first strategy, instruments are used to reduce the taxation of company income. This opportunity exists because Russian accounting law is rule-based, and not concept-based: companies will not show the real economic result of transactions, but make statements which are more convenient to them and lower the tax burdens to the company.

The topic of providing high-quality accounting information needs to be discussed, because the absence of it

creates difficulties for the government in supporting companies and understanding the economic situation of SMEs in the agro-food sector. The problem to be addressed is how to create an integrated, effective accounting system, that provides data for multiple purposes: taxation, decision making and company control.

Possible methodologies for integrated accounting

According to *Tidstrom* (2010), the information to be provided should address economic, social as well as financial issues in an integrated manner (IFAC conference in Malaysia, November 2010; minutes, speech of president of IFAC, Goran Tidstrom). This can be accomplished in two ways:

- 1. by preparing a new methodology for integrated accounting and reporting;
- 2. by widening the data set for one that underpins the present accounting systems.

The accounting information system will have to be based on Russian accounting rules, but in such way that it will be possible to provide the information in accordance with GAAP, FADN and/or IFRS. The first option seems to be preferable, because it uses the same registers as already are available, and prepares data for multiple purposes. The methodology could be handed over to accounting software developers and large agri- and food holdings, which are able to invest in it. Also, this option can be used partially in SMEs to collect information in concordance with international rules in certain activities. The second option is more suitable for individual use. It can be used by SMEs, because the SMEs apply Russian rules in accounting information; results could be evaluated periodically with international standards (FADN or IFRS).

The plan of carrying out research to develop a new integrated accounting information system follows a "step down" approach. First the focus is on the development of a methodology for integrated accounting and reporting, and this, in turn, is gradually applied to SMEs. So the main question of the research is how the accounting methodology should be constructed to be able to provide information for multiple purposes, using international accounting rules, in one single system.

The problem to be solved

The present state of Russian financial accounting is that the accounting rules are neither providing companies nor stakeholders with relevant and high-quality information. This causes the following additional problems:

1. Difference of International Finance Reporting Standards (IFRS) and Russian Financial Reporting Standards (RFRS), and of IFRS accounting rules and the principles underlying FADN.

As already stated, Russian SMEs have the opportunity to avoid publishing accounting information, although information for benchmarking is needed to be able to understand business problems and to compare companies internationally. Russian SMEs have no opportunity or are not motivated to collect and provide information systematically and continuously. In providing accounting information the company pays more attention to reporting by rules and not to supporting the decision making process. Russian accounting is rule-based. In general, rulebased accounting systems do not provide high quality and relevant information for decision making, because transactions are reflected in accounting reports according to their legal content, but not by economic substance. It can be easily proven by regulations (Letters) of the Ministry of Finance and the Ministry of Taxation that an obligation exists to disclose a transaction in a certain way in the accounts. Moreover, from year to year transactions can be stated differently, although they have the same economic substance.

- 2. Russian added value taxation has many gaps. The value added tax is computed on the documents (invoices), but is not included in the accounting information. In this case a rule-based accounting system is a disadvantage. The reason for this is that companies often use accounting data to avoid taxation and mask operations. This distorts the content of financial reports and thus does not reveal reliable financial information.
- Low knowledge of IFRS and accounting standards by Russian accountants.
- 4. Ecological information is not stored and provided. Data on the removal of side-products like manure is not collected and, as previously stated, no report for environmental purposes can be composed using accounting information.
- 5. Russian Financial Reporting Standards (RFRS) represent a mix of managerial and financial accounting in one system. The concept of fair value is absent. This causes yet another main problem for SMEs: the losses are hidden in assets and will only be revealed if assets are sold. Losses can therefore be hidden for a long time and cause even bigger problems in the future.
- 6. Standardization of accounting (such as IAS41) in the agri-food sector is absent. Another problem lies in the fact that it cannot be collected systematically from small firms. Scientific agricultural economic research fails, because non-comparable data are presented. Research that can support public decisions in whether to participate in the WTO (costs and benefits) as well as the regulation of food markets is highly desired.

All these problems inform the capability of the accounting information system to provide relevant

information. Integrated accounting can be helpful for companies that wish to get more than they already have out of their accounting information, and wish to make managerial and investment decisions based on it. Russian and regional governments would also like to receive information for making financial and regulation decisions with respect to family farms and SMEs in the agri- and food sector, but at present this is virtually impossible.

Scientific significance of integrated accounting

Accounting systems were developed in the past to show the economic result of companies. Accounting information systems should store and provide precise, objective, timely and understandable business information (Merchant, 1998). The present method of disclosing financial accounting information is mainly output (profit)-based (Bremmers, 2001). It has traditional, classical economic theory as a basis. Classical economic market conditions include the availability of homogeneous products, the absence of influence on prices of individual firms and the existence of many suppliers and consumers. Performance-measurement instruments are therefore output-oriented and profit-related (Gerlowski, 1996). Under classical economic circumstances, even technological differences between companies are anomalies (Bremmers, 2004). Business efforts are primarily concerned with the adjustment and control of production levels and costs. A definition of a business strategy is not necessary, since individual companies have no economic power. The focus is on ex post profit and output measurement.

Profit measurement in a classical way (profit meaning the increase in assets to liabilities in a past period has major efficiencies (see among others Kaplan & Atkinson 1998, Morse & Zimmerman, 1997). It is a retrospective activity. So, only past events are included in profit figures. It lacks the inclusion of the risk which is taken by a business as a significant part of business evaluation (cf Hardaker & Huirne, 1997). However, risk assessment has gained in importance because of a change in consumer perceptions due to food crises like BSE, swine fever and foot and mouth disease. Profit measurement is normally based on accounting data. Accounting data, like the valuation of assets on a balance sheet, are easily influenced (see Helfert, 1994). The precision of profit measurement is questioned when it comes to the costing of specific products. As business activities become more and more complex and differentiated, overhead costs take a larger part of total business costs (Drury, 1992). It should be clear that profit as a sole performance criterion and base for decision making lacks managerial significance (see Noori & Radford, 1995).

After the second world war, countries started to develop their own accounting systems, but experienced problems with benchmarking. International capital movements strengthened the quest for harmonisation of accounting rules. Companies perceived that qualitative reporting information plays an important role in decision-making (*Martin* 1971) and efforts were put into improving it. Countries had different views on how a report should be composed. A study in 1993 showed that relevant decision-making of annual reporting still mainly depends on retrospective accounting information (Alford et al., 1993). Harmonisation of reporting was also heavily desired to reduce transaction costs for users of information. Later, when studies on the quality of accounting practices were made, it was discovered that the quality of accounting information affects the cost of capital of a firm (Lambert et al., 2005). However, harmonization of accounting reporting standards in the Russian Federation shows big gaps in comparison with international benchmarks in using IFRS for financial purposes (Dukov, 2007; Starovoitova, 2007; Savin, 2008; Shihatov, 2011; Belskih, 2011) and managerial aims (Kazora 200; Slobodnyak, 2011). Academics in the Russian Federation are reluctant to advise the use of IFRS because the standard is rather young and should be tried out in practice in European countries (Serova, 2008). But well-known international academics that are influencing accounting reforms in Russia are entirely supportive of adopting IFRS for SMEs (Rozhnov et al., 2010), to boost competitiveness by means of using a high-quality information basis for reporting. In practice, many companies in Germany facing the choice of adopting US GAAP or IFRS, implemented IFRS rather that US GAAP (Van der Meulen et al., 2005). We need to take in account that Russia in the long run will be oriented on European capital markets as the nearest ones, and thus IFRS is preferable. The accounting standard also influences the quality of the earnings forecast positively, which is highly needed for investors (*Hope*, 2002).

Adopting IFRS does not provide a solution for all the problems of providing qualitative and comparable information. The reason for this is that IFRS in Russia is more investment-oriented. Adopting it will only be done if the goals of attracting international capital can be achieved without causing a shift in accounting education and theory, as happened in Poland (*Dobija and Klimczak*, 2008). It can be done only if individuals support it or for reasons of expanding international cooperation.

The benefit of using IFRS is that it can provide better information for benchmarking (cf *Ding et al.*, 2007). But here we need to be aware that the adoption of IFRS is not the only key factor of success to qualitative accounting information. Legal enforcement systems, competition rules, market access conditions, and the effectiveness of the legal system should also be taken into account (Jeanjean and *Stolowy*, 2008).

The idea of using FADN in post-Soviet countries firstly appeared in the Ukraine (*Gubeny*, 2010). In Russia it is hard to find papers that include any reference to FADN. The only papers that are available are translations of international researchers. So as a conclusion we can say that FADN does not exist in Russia and is not known. Most interesting is that FADN and IFRS are broadly structured in the same way. IFRS is financially oriented while FADN stresses managerial decision making. This creates opportunities for further integration.

A scientific framework for integrated accounting information for Russian SMEs in the food sector is lacking. The scientific challenge for the future of our research is to provide such a framework and use it to design a practical accounting instrument. The first understanding of integrated accounting was founded on the problem of separating tax and finance accounting. Scientists that worked on this problem provided a basis and methods of integrated accounting that can be effectively used. In this respect, Russian scientists can be divided into three groups:

- The first group aims to simplify the accounting processes in SMEs (*Novodvorskyi*, 2003; *Kojinov et al.*, 2001-2003). For these scientists accounting should solve only operational problems such as the protection of property rights, the effective use of resources, calculation of financial results and tax reporting. Strategic business problems are not addressed.
- 2. The second group proposes that the government should change the rule system for SMEs, so they can use a simple accounting system for taxation and reporting to the government. The proposal is inconsistent, because taxation is based on a cash method of recognition of incomes, while financial accounting is based on an accrual base for accounting (*Endovichkiy* 2004).
- 3. The third group of scientists insists on the development of new methods of preparing information reports. The main requirements are that they should be easy to use and understandable. The focus should be on accounting of areas that are different for tax and financial accounting purposes (Murzina, 2005), or by integrating accounting systems by means of additional charts (mirrors) (Zayceva, 2004; Burykin, 2008). A number of Russian scientists support this opinion because from their point of view the existence of separate accounting methodologies side by side does not respect the main purposes of accounting (Bakaev, 2004). Another reason of integrating systems of accounting is vested in the fact that tax accounting [according to present rules] is based on the cash result of the companies. The use of the IFRS system can facilitate integration (Burykin, 2009). Information can be made comparable to company data in other countries. Finally, preparing a methodology for the use of integrated information can support managerial decision making. Adopting an integrated accounting system can bring about high quality cooperation and induce investments in SMEs from international sources.

Existence of methods for integrated accounting

The basic accounting methods that were provided by Russian scientists, as indicated earlier, can help to develop integrated accounting and be used in ways to collect data for different needs and accountancy policies. These facilitating instruments for integration are:

minimizing the differences in financial accounting policy.
 This implies the use of the same principles, approaches,

- and accounts that are already available (the same depreciation method, inventory valuation methods etc.).
- calculation of deviations and temporary differences (as in IAS 12). This method is most likely to reflect the differences on the off-balance accounts.
- adding additional prerequisites to the documents. In this case companies develop a new flow of documentation, which contains information for different purposes.
- add on-balance and off-balance accounts for separating the losses, profits and costs by different accounting systems. This method proposes to add more quantitative information that splits up the data into separate information carriers. They provide detailed information, and counts-mirrors prepare information in a specific way (the debits have information based on rules of one accounting system and the credits on another).

Conclusions and suggestions for future research

In this paper, we described the challenges that should be overcome to reform accounting practices so that integrated reporting can be performed, not only according to Russian accounting rules but also IFRS and FADN. The IFRS and FADN appear to be similar accounting systems, so the possibility occurs to develop a system that can provide information for financial as well as managerial accounting.

Our main future aim is integrate the two methodologies of accounting:

- (1) provide ways to adopt IFRS for stakeholder investments and evaluating financing decisions;
- (2) and provide ways to collect data with the FADN-methodology for managerial decisions.

Realization of an integrated accounting information system provides companies with new opportunities, and gives them competitive advantages as sound managerial and financial decisions can be made. This is especially crucial at present, when competition in agricultural and food markets is fierce.

References

Alvin, Martin. [1971]. An Empirical Test of the Relevance of Accounting Information for Investment Decisions. *Journal of Accounting Research*. 9: 1-31

Alford, A., Jones, J., Leftwich, R., Zmijewski, M. [1993]. The relative informativeness of accounting disclosures in different countries. *Journal of Accounting Research 31, 183–223.*

Argilés, J.M., Slof, E.J. [2001]. New opportunities for farm accounting. *European Accounting Review, 10(2), 361–383.*

Argilés, J. M. [2001]. Accounting information and the prediction of farm non-viability. *European Accounting Review 10(1), 73–105.*

Ashiq Ali, A., Hwang, L. [2000]. Country-Specific Factors Related to Financial Reporting and the Value Relevance of Accounting Data. *Journal of Accounting Research.* 38: (1), 1-2.

Bremmers, H.J. [2001]. Towards a new information system for farm management. *Paper presented at the IFMA conference, Wageningen, Netherlands, Paependal.*

Bremmers, H.J. [2004]. Accounting standards for supply chains. In: Quantifying the agri-food supply chain (Springer/Wageningen UR, Frontis Series, Chr. Ondersteijn, H.M. Wijnands, R.B.M Huirne, O. van Kooten eds.). Ch. 3, 27-38.

Burykin Y. M. [2009] Developing of integrated accounting for SME, Kazan SAU ublisher, vol 11, 2009, 13-17.

Dobija, D., Klimczak, K. [2010]. Development of accounting in Poland: Market efficiency and the value relevance of reported earnings. *The International Journal of Accounting 45:*, 356–374.

Drury, C. [1992]. *Management and Cost Accounting*. Chapman & Hall, London, 3-rd edition.

Gerlowski A.C.S. [1996]. Managerial economics and organization. Prentice Hall, New York, 64-84.

Gubeny,Y. [2010] Actual statistic – as part of successful agrisector. – Den.- September. No. 155.

Hardaker J.B., Huirne, R.B.M., Anderson, J. [1997]. Coping with risk in agriculture. New York.

Helfert, E.A [1994]. *Techniques of financial analysis.* Irwin, Sydney.

Schierenbeck, H. [2005]. The Economy of Enterprise (Grundzüge der Betriebswirtschaftslehre) – *in Russian translation, ISBN 5-469-00193-8, 3-486-25297-6, Piter Publisher,* 848 p..

Kaplan, R.S., Atkinson, A.A. [1998]. Advanced Management Accounting; Prentice Hall, New Jersey.

Lambert R., Leuz, Chr., Verrecchia, R.E. [2007]. Accounting Information, Disclosure, and the Cost of Capital. *Journal of Accounting Research* 45:(issue 2), 385-420 p.

Mechant, K.A. [1995]. Modern management control systems. Prentice Hall, New Jersey.

Morse, D.C., Zimmerman, J.L. [1997]. *Managerial Accounting*. Irwin McGraw Hill, Boston.

Noori, H.. Radford, R. [1995]. *Production and operations management.* McGraw-Hill, New York.

Hope, O. [2003]. Disclosure Practices, Enforcement of Accounting Standards, and Analysts' Forecast Accuracy: An International Study. *Journal of Accounting Research* 41(2), 235-272.

Meulen, S. van der, Gaeremynck, A., Willekens, M. [2007]. Attribute differences between U.S. GAAP and IFRS earnings: An exploratory study. *The International Journal of Accounting 42, 123–142*.

Jeanjean, Th., Stolowy, H. [2008]. Do accounting standards matter? An exploratory analysis of earnings management before and after IFRS adoption. *Account. Public Policy* 27:, 480–494.

Van der Meulen, S., Gaeremynck, A., Willekens, M. [2005]. The influence of specific accounting differences on the choice between IFRS and U.S. GAAP. KU Leuven Working Paper Series.

Ding, Y., Hope, O-K, Jeanjean, Th., Stolowy, H. [2005]. Differences between domestic accounting standards and IAS: Measurement, determinants and implications. *Journal of Accounting and Public Policy* 26:, 1–38