The Social Sciences 12 (2): 208-214, 2017
ISSN: 1818-5800

Methodological Aspects of Reserve Funds Accounting, Based on the Concept of Capital Maintenance in Joint Stock Companies

L.I. Kulikova, G.I. Khamidullina A.V. Goshunova and P.A. Aletkin
Economics and Finance, Institute of Management, Kazan Federal University, 420008 Kazan, Russia

Abstract: The study comprises a set of theoretical and methodological statements and practical suggestions about the development of corporate reserve system and its reflection in accounting system of entity. New accounting records on the accumulation and use of reserve fund, created with guaranteed provisions were proposed. As a result of the research, it was determined that presentation of reserve funds as an aggregate reserve system would provide better implementation of function of reservation, increase transparency and attractiveness of the financial statements.

Key words: Accounting, reserve funds, reserves, capital, bonds, shares

INTRODUCTION

Business activity of joint stock companies is associated with unforeseen situations which influence on company's performance in different ways (Basu, 2009; Cairns *et al*., 2011). It depends on ability of economic entity to predict the economic situation, to calculate expected return on investment projects, to select certain policy in building relationships with business partners, to respond quickly to the market changes and to take appropriate management decisions (Hodder *et al*., 2013; Macve, 2015). Nevertheless, it's almost impossible to predict an absolute result of chosen decision, so that some sort of risk always exists which can be considered as event with negative consequences.

Contemporary experts agree that the formation of company's reserves is one of the ways to protect equity against risks (Liao *et al*., 2013; Ruch and Taylor, 2015). Indeed, reserves formed through redistribution of profits, prevent outflow of liquid funds for payment of dividends. However, in our opinion, creation of reserves is not a mean of protection against risks. We believe that reserve system should be viewed in the context of the overall risk management system where reserve system is in charge of establishment of information environment for risk management (Hu *et al*., 2014; Webinger *et al*., 2013). In our view, accounting mechanisms of risk reflection, the measures taken to minimize them as well as the recognition of predictable losses in form of reserves are able to contribute to the achievement the objectives of risk management.

The target of the research is to formulate theories, methodologies and practical guidelines that contribute to the accounting system of reserve funds by the development and implementation of accounting tools for systematization of information on the reserve system in joint stock companies. The research rests on the historical and modern accounting approaches on reserve funds accounting. It also considers materials on the identification, structuring of the company's reserved capital, its formation and transformation.

There are some limitations to the study. The most serious limitation is that the study was conducted on the base of literature review. For validation of the results, research should be proved by empirical investigations based on financial reporting of companies in different sphere of economy. Despite this limitation, the results are reliable as they take into account the logic of inner economic processes and mechanisms of enterprise. The rest of study is organized as follows.

MATERIALS AND METHODS

Theory: On the base of study of economic substance of reserved capital we defined its functions and role in the system of corporate management. Results of investigation are depicted on Fig. 1.

Numerous definitions of reserves were advanced to account for economic essence and its function. We have made a brief survey of definitions made by most outstanding Russian and foreign scientists.

Weizman in the "course of science of balance preparation" gave the following definition of reserve: "the reserve is the amount of deductions from gross profit as a result of doubts in usefulness of a particular line item in assets of statement of financial position".

Corresponding Author: L.I. Kulikova, Economics and Finance, Institute of Management, Kazan Federal University, 420008 Kazan, Russia

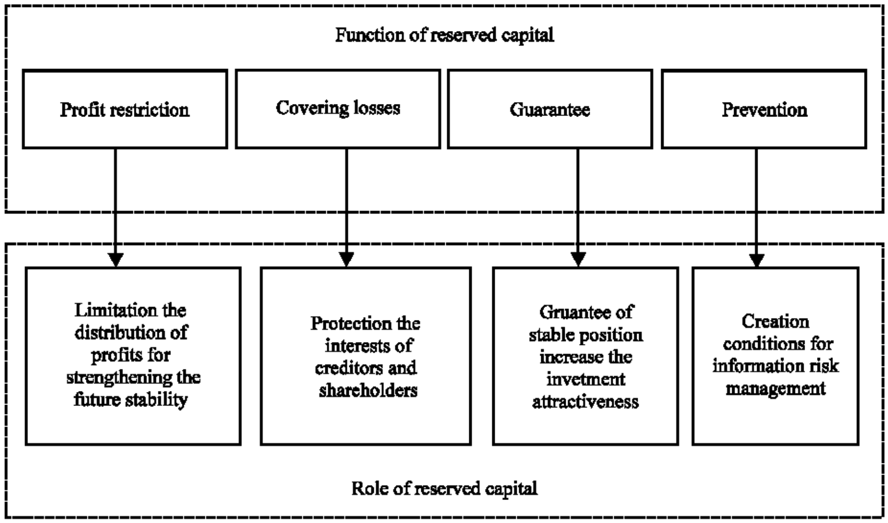

Fig. 1: Role and functions of reserved capital in the system of corporate management

According to him, reservation is "an act of precaution, a way to keep in balance an amount the correct assessment of which cannot be estimated now" (Kulikova and Goshunova, 2014). This definition better describes the essence of accounting estimates reservation. Galagan (1928) considered reserve as special provisions from savings, intended to cover future losses or expenses of entity (reserve for disputed debts, warranty reserve and reserve for future payments) (Kulikova and Goshunova, 2014). This point of view combines accounting estimates reserves and reserves for future expenses. The common goal of these reserves is to cover losses and expenses.

Sokolov believes that "in terms of content reserve is a de-capitalization of funds previously capitalized as assets". At the same time "from a purely accounting point of view, de-capitalization can be carried out either by the cost of manufactured products and services or from the profits of entity" (Kulikova *et al.*, 2015). In this interpretation, one can see two sources of reservation: cost of sales and profit.

Matthews and Perera considered reservation as a way of regulating financial results. They also mentioned the reserve for covering increase in the value of replacement of assets, reserve for guarantees and reserve for doubtful debts. Thus, the authors include revaluation reserve in the system of reservation.

Galperin defined method of reservation as a preliminary calculation of losses which are detected at the time of balance sheet preparation and appearance of which in future can be considered more or less likely. However, he denied registration of some possible costs such as a reserve for vacation payments for the repairing of equipment as they are not considered as losses (Kulikova and Goshunova, 2014). Such determination of reserve system excludes provisions for liabilities.

Bethge presented reserves as "passive line items for reflection the specific responsibilities of entity which may not be estimated in terms of value or content at the reporting date. Underlying costs should (or could) be attributed to the period of occurrence of these obligations". At the same time recognition of liabilities or reserves is related to the fulfillment of three conditions: an undeniable obligation to provide services to the third parties; quantitative certainty; economic burden. If all conditions are fulfilled in accounting obligation is recorded, otherwise-reserve (Kulikova and Goshunova, 2014).

Richard (2014) believes that reserves "are rather own funds of entity accumulated in case of price increasing or fluctuations of accumulated profits (investment reserves)" (Richard, 2014).

Dosamantes provides strong evidence that accounting fundamental signals in general and accounting information about reserve funds in particular can provide important insight information to investors individuals and institutions when making decisions about resource allocation.

Two fundamental scores were proposed by Dosmantes: F-score and L-score. F-score was based on the 9 fundamental signals of Piotroski while the L-score was based on 12 fundamental signals among which such type of reserves as provisions for doubtful receivable were used.

Using quarterly financial and market data from 196 stocks listed on Mexican Stock Market from 1991-2011, it is shown that the fundamental strategy provides value information relevant to investors. The relationship between the accounting fundamental signals proposed and the buy-and-hold market future return (1 and 2 year returns) is significant and positive considering the 1991-2011 period (Dorantes, 2013).

Further analysis shows that an investment strategy using accounting fundamental scores is stronger than a traditional market index investment strategy. In other words, Dorantes (2013) found evidence that accounting information about reserve funds can play serious role in the process of investment decision making in emerging stock markets.

Thus, the study of definitions of reserve system indicates the absence of a single point of view on the nature and value of the reserves.

RESULTS AND DISCUSSION

In our opinion, the most complete determination of the process of reservation was contained in Russian GAAP. In accordance with previous version of Regulations on accounting and reporting in the Russian Federation, reserves were formed for the purpose of inclusion of future expenses in production and selling costs as well as to cover costs which can be predicted. In addition, reserves are formed due to retained earnings. The purpose of their accumulation is to limit the distribution of profits in order to keep profit for coverage future costs or asset impairment. Accumulation of reserves prevents outflow of liquid funds, usually being distributed among shareholders. Reserves have special assignment and can be used only under certain conditions in accordance with the objectives of their creation.

In our opinion reserved capital of entity is a complex of reserves: reserve fund, revaluation reserves, provisions for estimated liabilities, accounting estimates reserves. We believe that presentation of reserve funds as an aggregate reserve system would provide better implementation of function of reservation, increase transparency and attractiveness of the financial statements. In order to systematize information about reserve system in accounting we have identified the following groups of provisions:

- Reserve fund
- Reserves to cover certain expenses and losses (provisions for estimated liabilities)
- Revaluation reserves (revaluation reserves of fixed assets, provision for the maintenance of capital)

Accounting estimates reserves (reserves, adjusting the valuation of current assets as a result of their impairment; reserves, adjusting valuation of unused fixed assets).

Much has been said and written about the most appropriate valuation measures for assets and liabilities and how changes in such measures should be reported in financial statements (Gwilliam and Jackson, 2008).

Gwilliam and Jackson (2008) demonstrated that numerous empirical studies have added to the knowledge of relationships between market valuations for entities and valuations of specific assets and liabilities in the financial statements of those entities. They make clear that fair valuations tend to link more closely with capital market valuations than do historical cost valuations and that income reported on a mark to market basis is more volatile than that reported on an historical cost basis or an amended historical cost basis (Gwilliam and Jackson, 2008).

Herrmann *et al*. (2006) share the same position. They argue that fair values for fixed assets are more relevant to decision makers. Academic research has shown that upward revaluations of fixed assets are correlated with stock prices and are helpful in predicting future earnings. Fair values also provide relevant information regarding dividend restrictions. In addition to improved predictive value, fair values provide greater feedback value and more timely financial information than historical cost measures of property, plant and equipment (Herrmann *et al*., 2006) Thus, the importance of revaluation reserves were highlighted.

The main issue, related to the time of reserve funds accumulation, concerns with choice of basic principle of formation the principle of differentiation according to content and time or the parity principle. Taking into account current procedure of reservation and allocation of profit, the following steps of formation of reserve system should be distinguished:

- During the reporting period before final determination of profit for the reporting period
- At the end of the reporting period before determination of profit for the reporting period to be distributed
- After estimation of retained earnings for the reporting period to be distributed
- After estimation of retained earnings for the previous years

During the reporting period reserves of second and fourth groups are accumulated. At the end of the reporting period before determination of retained earnings reserves of third group are established. After determination of retained earnings for the reporting period

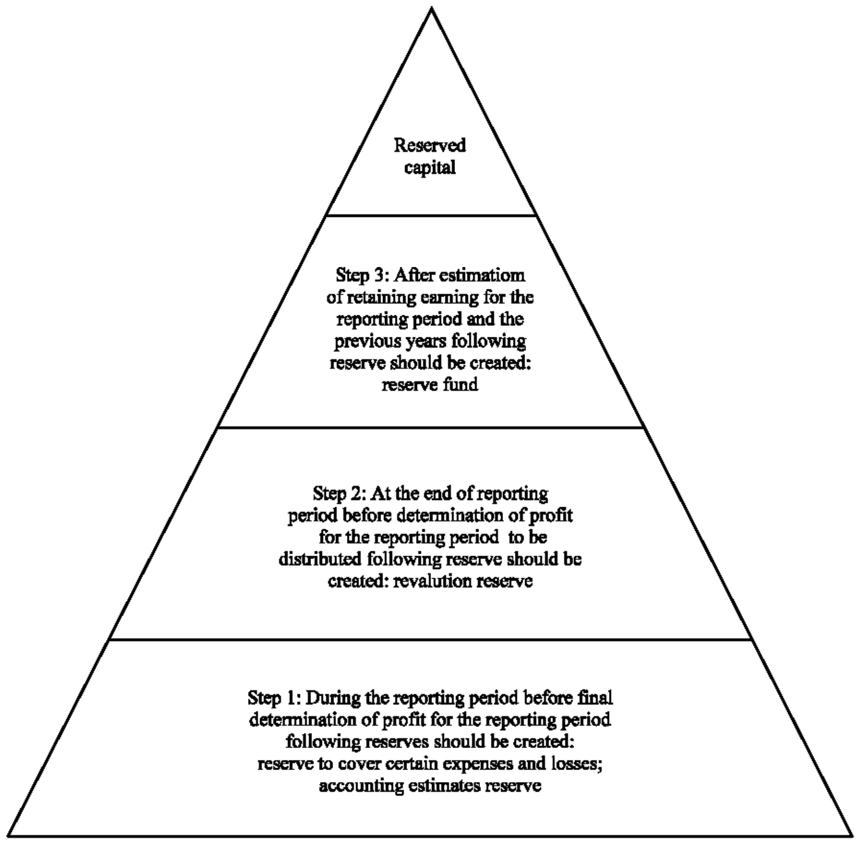

Fig. 2: The implementation of the parity principle within the accumulation of reserves as a necessary condition for sustainability of reserve system (researcher approach)

Table 1: Purpose of each group of reserves is depicted on

	Reserve system			
Purpose of reserves	Reserve fund	Provisions for estimated liabilities	Accounting estimates reserves	Revaluation reserves
Distribution of income and expenses between reporting periods		x		
Reservation of funds to cover expenses		x		x
Reservation of funds to cover the total loss				
Reservation of funds to cover certain losses	x			
Preliminary calculation of losses		x	x	
Clarification of balance estimates			x	x
Formation conditions for information risk management	x	x	x	x

and previous years reserves of first group are found. In our opinion, this principle of priority in the establishment of certain reserve funds provides the efficiency and stability of the entire reserve system of entity. The implementation of the parity principle within the accumulation of reserves is depicted on Table 1.

Figure 2 shown the implementation of the parity principle within the accumulation of reserves as a necessary condition for sustainability of reserve system (author's approach). Firstly, entity reserves the funds for the predictable expenses and losses (reserve funds of the second, third and fourth groups) and then, if the profit still remains, forms a reserve fund for unforeseen losses (reserve funds of the first group).

The study of reserve system of entity raises several interesting problems such as problems of reserve accounting, mainly related to the objectives and conditions of their formation, methods of evaluation, depending on risk level, time period of accumulation and reserves reflection in financial reporting (Vetoshkina and Tukhvatullin, 2015). According to Russian Corporate Law reserve fund in joint stock companies is created to cover general losses that may occur as a result of worsening economic conditions. Normative size of reserve fund should not be <5% of the amount of share capital. The reserve fund is formed from retained earnings. The amount of annual deductions from profit cannot be <5% of the profits. Although, a number of issues have been analyzed and discussed much remains to be done in the field of reflection of reserve funds consumption.

A modern approach to this problem consists in impossibility to use reserve fund for the repayment of bonds and buy back of shares in accounting system. Such point of view is based on the idea that reserve fund does not guarantee the existence of free cash.

We suppose that the issue under consideration is a result of misunderstanding the main purpose and functions of reserve system. In fact reserve fund and reserve system in general are able to provide their functions on conditions if a part of funds would be released from maintenance of the main operating activity. Moreover, if free cash flow would not be withdrawn, they would be deposited at different stages of capital movement in form of excess working capital. Thus, reserve fund as a main component of the reserve system, should be not just presented by property or other material subject but it should be specially organized as a part of funds intended for specific purposes. We have developed a new approach to the phenomena under consideration. We suppose that account "reserve fund" should contain following separate subaccounts:

- Reserve fund with guaranteed provisions
- Reserve fund without guaranteed provisions
- Reserve fund for covering losses
- Reserve fund for the repayment of bonds
- Reserve fund for buy back of shares

In order to demonstrate provisions for reserve fund, guaranteed by cash or short term financial instruments, we suggest using separate accounts:

- Cash at bank for reserve fund's guaranteed provisions
- Short term financial instruments for reserve fund's guaranteed provisions

Proposed accounting records on the accumulation and use of reserve fund, created with guaranteed provisions are presented in Appendix 1.

Since, repayment of bonds (share buyback) reduces total assets only by the amount of accrued interest payments (the difference between buyout price of shares and their nominal value), reserve fund is reduced only by the same amount of interest payments (difference mentioned before). However, repayment of bonds (buyback of shares) at the same time means the use of special funds (short-term financial instruments or cash) allocated for maintenance of guarantee for the reserve fund.

Sums used can be analyzed on the base of information allocated on accounts "reserve fund for the repayment of bonds" and "reserve fund for buy back of shares".

The balance of these accounts is to be written off to the account "reserve fund without guaranteed provisions" or to the account "reserve fund with guaranteed provisions" in case of refill resources for reserve fund's guaranteed provisions.

CONCLUSION

Summing up the results of our research we would like to say that proposed system of accounting records on the accumulation and use of reserve fund, created with guaranteed provisions will strengthen control of accumulation and use of corporate reserve funds and will provide the basis for drawing up transparent financial reporting.

APPENDIX

Appendix 1: Accounting records on the accumulation and use of reserve fund, created with guaranteed provisions

		Correspondence of accounts	
Date	The content of business operations and (or) economic activity	Debit	Credit
The accumulation of reserve fund with guaranteed provisions			
Date of general meeting of shareholders	On base of the protocol of General Meeting of Shareholders provisions to the reserve fund are made	Profit for the year	Reserve fund with guaranteed provisions
Date of money payments or acquisition	Money payments are made for accumulation of reserve fund with guaranteed provisions on special bank accounts of financial instruments or	Bank*	Bank
	Short-term financial investments are purchased for accumulation of reserve fund with guaranteed provisions on special bank accounts	Financial instruments*	Bank

Appendix 1: Continue

		Correspondence of accounts	
Date	The content of business operations and (or) economic activity	Debit	Credit
The use of reserve fund with guaranteed provisions			
Effective date of reserve fund to cover losses	On base of the protocol of general meeting of shareholders reserve fund is used to cover losses	Reserve fund with guaranteed provisions Reserve fund for covering losses	Reserve fund for covering losses Loss for the year
Date of money payments or converting financial instruments into cash	Reserve fund is used to refill working capital: Cash at special bank accounts is transferred to the current bank accounts Short term financial instruments are converted into cash	Cash at bank Cash at bank	Cash at bank Financial instruments *
Repayment of bonds at the expense of reserve fund			
Effective date of reserve fund for the repayment of bonds	On base of the protocol of general meeting of share holders reserve fund is used for the repayment of bonds (interests) Interest payments on bonds are accrued	Reserve fund with guaranteed provisions Reserve fund for the repayment of bonds	Reserve fund for the repayment of bonds Short term/long term liabilities
Date of convertation of financial instruments into cash	Short term financial instruments are converted into cash	Cash at bank	Financial instruments*
Date of money payments to repay the debt on the bonds	Cash at special bank accounts and (or) current bank accounts are transferred to repay the debt on the bonds	Short term/long term liabilities	Cash at bank* (Cash at bank)
Date of requalification of reserve fund repayment of bonds at the expense of reserve fund	Rest of reserve fund for repayment of bonds is debited to the reserve fund, formed without guaranteed provisions	Reserve fund without guaranteed provisions	Reserve fund for the Buy back of shares
Effective date of reserve fund to be back of shares	On base of the protocol of general meeting of share holders reserve fund is used for buy back of shares used for buy	Reserve fund with guaranteed provisions	Reserve fund for buy back of shares
Date of convertation of financial instruments into cash	Short term financial instruments are converted into cash	Cash at bank	Financial instruments*
Date of shares buy back accounts are transferred to buy back shares	Cash at special bank accounts and (or) current bank and (or) current bank asccounts are transferred to buy back shares	Settlements with shareholders in connection with share's buy back	Cash at bank* (Cash at bank)
Date of transfer of ownership on shares	Shares are transferred from personal accounts of registered persons(shareholders, nominees) to the account of the issuer (company) According to nominal value of shares	Outstanding share capital	Got back share capital
	On the difference between buyout price of shares and their nominal value	Reserve fund for buy back of shares	Settlements with shareholder in connection with share's buy back
Date of requalification of reserve funds	Rest of reserve fund for buy back of shares is debited to the reserve fund, formed without guaranteed provisions	Reserve fund for buy back of shares	Reserve fund without guaranteed provisions

Cash at Bank*: Cash at Bank for reserve fund's guaranteed provisions, Financial Instruments*: Short term Financial Instruments for reserve fund's guaranteed provisions

REFERENCES

Basu, S., 2009. Conservatism research: Historical development and future prospects. China J. Accounting Res., 2: 1-20.

Cairns, D., D. Massoudi, R. Taplin and A. Tarca, 2011. IFRS fair value measurement and accounting policy choice in the United Kingdom and Australia. Br. Accounting Rev., 43: 1-21.

Dorantes, C.A., 2013. The relevance of using accounting fundamentals in the Mexican Stock Market. J. Econ. Finance Administrative Sci., 18: 2-10.

Gwilliam, D. and R.H. Jackson, 2008. Fair value in financial reporting: Problems and pitfalls in practice; A case study analysis of the use of fair valuation at Enron. Accounting Forum, 32: 240-259.

Herrmann, D., S.M. Saudagaran and W.B. Thomas, 2006. The quality of fair value measures for property, plant and equipment. Accounting Forum, 30: 43-59.

Hodder, L., P. Hopkins and K. Schipper, 2013. Fair value measurement in financial reporting. Found. Trends Accounting, 8: 143-270.

Hu, J., A.Y. Li and F.F. Zhang, 2014. Does accounting conservatism improve the corporate information environment?. J. Intl. Accounting, Auditing Taxation, 23: 32-43.

Kulikova, L.I. and A.V. Goshunova, 2014. Science of balance preparation: Substance and stages of development in Russia. Mediterr. J. Social Sci., 5: 49-51.

Kulikova, L.I., A.G. Garyncev and A.V. Goshunova, 2015. Doubtful debts allowance develoment: Stages and methods of calculation. Mediterr. J. Soc. Sci., 6: 448-452.

Liao, L., H. Kang, R.D. Morris and Q. Tang, 2013. Information asymmetry of fair value accounting during the financial crisis. J. Contemp. Accounting Econ., 9: 221-236.

Macve, R.H., 2015. Fair value vs conservatism? Aspects of the history of accounting, auditing, business and finance from ancient Mesopotamia to modern China. Br. Accounting Rev., 47: 124-141.

Richard, J., 2014. The dangerous dynamics of modern capitalism: From static to IFRS futuristic accounting. Crit. Perspect. Accounting, 30: 1-26.

Ruch, G.W. and G. Taylor, 2015. Accounting conservatism: A review of the literature. J. Accounting Lit., 34: 17-38.

Vetoshkina, E.Y. and R.S. Tukhvatullin, 2015. Economic efficiency estimation of intangible assets use. Mediterr. J. Soc. Sci., 6: 440-443.

Webinger, M., M. Comer and R. Bloom, 2013. The effect of additional guidance on fair value measurement and disclosure in illiquid or inactive markets. Res. Accounting Regul., 25: 220-229.