

## PERFORMANCE MANAGEMENT IN FUNCTION OF DETERMINING INCENTIVE SYSTEMS FOR MANAGERS

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**Summary:** Performance management, a very important process of human resource management (HRM), can be significant basis for creating the incentive systems for managers. Big enterprises usually reward their Chief Executive Officer (CEO) for success in business. In the past period the amounts of managers' rewards was not correlated with achieved performances of enterprises, so it was important to analyze amount of rewards given to the managers and methods that can be used to measure achieved managerial performances. Subject of this paper was the analysis of compensation systems for managers in ten most successful companies of the world and their relation with the business results presented through specific indicators of performances. In addition, paper was subjected to the analysis of several methods of measuring performances that can be used in determining realistic amounts and structures of CEO rewards and incentives. The aim of this study was the presentation of the relation between managers' rewards and business performances and more objective methods for determining these rewards so that compensation packages can meet the requirements of effectiveness and efficiency in terms of long-term goals and performances of business system.

**Keywords:** human resource management, compensations, incentives, performance management, methods for performance measurement

### 1. INTRODUCTION

Performance management implies an assessment of current or previous results or performance of the employee, team or the whole organization. On such assessments companies create its policies in many business areas related to HRM: the need for staff training, new recruitment, rewarding, etc. In the area of rewards, performance measurement can be significant basis for creating the incentive systems for managers. Namely, big enterprises usually reward their CEO for success in business. Companies were often very generous in the reward practice for managers. But, in the past period, the amounts of managers' rewards was not correlated with achieved performances of enterprises, so it was important to analyze amount of rewards given to the managers and methods that can be used to measure achieved managerial performances.

Subject of this paper was the analysis of compensation systems for managers in ten most successful companies in the USA and their relation with the business results presented through specific indicators of performances. The aim of this study was the presentation of the relation between managers' rewards and business performances and different objective methods for determining these rewards, so that compensation packages can meet the requirements of effectiveness and efficiency. The paper is consisted from three parts. In the first part, authors defined performance measurement and performance measurement system. Second part was related to the analysis of the performances in the 10 most successful companies from USA (according to the list of the magazine Fortune 500) and to the analysis of the compensations of the CEOs in those companies. Third part was dedicated to the presentation of the more

comprehensive measurement systems of performances that will be better solution for the determining and creation of the CEO compensations: BSC and EVA concept.

## **2. PERFORMANCE MANAGEMENT**

Performance measurement is an assessment of current or previous results of performance of the employee. According to Neely, Gregory and Platts (1995) performance measurement (PM) is defined as “the process of quantifying effectiveness and efficiency of actions”. One comprehensive definition is that PM is “the process of quantifying the efficiency and effectiveness of actions, in order to compare results against expectations, with the intent to motivate, guide and improve decision making” (Lardenoije, Van Raaij and Van Weele, 2005). Lebas (1995) characterizes performance management system (PMS) as “the philosophy supported by performance measurement. It is the organization-wide shared vision, teamwork, training, incentives, etc. that surround the performance measurement activity”. PMS is “the set of metrics used to quantify the efficiency and effectiveness of actions, and the corresponding guidelines for linking these metrics to strategy and improvement” (Lardenoije, Van Raaij and Van Weele, 2005). The performance measures should be relevant, balanced, based on financial and non-financial indicators and related to internal and external stakeholders.

It is important to notice some contemporary researches made in relation to the importance of PM in modern business. Nudurupati, Bititci, Kumar and Chan (2011) and Bititci, Garengo, Dörfler and Nudurupati (2011) have reviewed and tackled the evolution of the performance measurement field in the context of information systems and change management. Also, many other researches have been made to explain PM and its implementation in each area of business: profit, non-profit, public, private, etc. In this paper PM was analyzed as the base for managerial compensations.

## **3. PERFORMANCE MANAGEMENT AS THE BASE FOR CREATING MANAGERIAL INCETIVE COMPENSATIONS**

When it comes to the compensation for managers, performance management gets even bigger role. The current bureaucratic models of determining these systems had the impact on their low motivational force as well as on problems between the owners and managers in terms of high agency costs. Jensen and Murphy (2010) considered that there is a major misalignment between corporate performance and compensation paid to executives, especially CEOs. Adequate systems of compensation for managers should be structured on the basis of actual performance. In addition, it would be necessary to determine the controllable and non controllable factors (in the sense of those factors that are in the power of manager). If the long and short-term incentives for managers are in the question, a very interesting attitude was expressed by Malinić (2007) where he stated that short-term compensation should be based on standard financial indicators, such as profit (with variations to make it after tax, profit before tax and profit before interest and taxes), rate of return, cash flow, earnings per share and the like; and long-term compensation should be tied to several criteria that respect the long-term profitability; long-term position of the company and movement of the total shareholder returns (dividends and capital gains). The criteria for achieving long-term compensation imposed are the market value of companies, economic value added EVA, market value added MVA, the total shareholder return TSR, etc. For the more comprehensive view of the performance measures and indicators in Table 1 there are summarized the indicators for the evaluation of the performance of the organization.

**Table 1: Performance management tools and indicators**

<b>PERFORMANCE MANAGEMENT TOOLS</b>	
<b>FINANCIAL INDICATORS</b>	<b>INDICATORS OF TOTAL PERFORMANCES</b>
Return on Investment (ROI)	Balanced scorecard (BSC)
Return on Assets (ROA)	
Return on Equity (ROE)	Tableau du Board (TdB)
Earnings per Share (EPS)	
Cash flow (CF)	Performance Prism (PPR)
Revenue (I)	
Profit (P)	Performance Pyramid System (PPS)
Total Shareholder return (TSR)	
Market Value Added (MVA)	Productivity Measurement and Enhancement System (ProMES)
Economic Value Added (EVA)	

Source: Malinić, 2007; Lardenoije, Van Raaij, Van Weele, 2005.

In order to show the level of compensation, their structure and relation to the performance, it has been made the analysis of performances of the top ten USA companies (according to Fortune 500 <http://money.cnn.com>, table 2) and it's managerial reward packages (Hay Group for 2010, <http://www.haygroup.com>, table 3). According tables, it can be concluded next:

- Each company from table 2, except Bank of America and Fannie Mae, had a profitable business 2010 year. There has been noticed the growth of revenues and profits, accompanied with the growth of earning per share (EPS) from 2009 to 2010. For example, the growth of the revenue is between 3.3 and 32.6 % (Fannie Mae reached even 429.2% higher revenue than in 2009), the growth of profit is between 5.6 and 141.5%. EPS growth was from 20.8 to 135.2%. Also, each company, except Bank of America and Fannie Mae, had positive indicators of ROA, ROE and ROI, which means that those companies have created return on assets, investments and equity. This can be explained as short-term gain for the company since all those indicators are related to the annual business and financial operations.
- Main elements of CEO compensations are: base salary; annual incentives; long term incentives – stock options grants, restricted stock grants, performance-based grants in equity and cash; all other compensations (perquisites, personal benefits) and change in nonqualified deferred compensation earnings plus change in pension value.
- Basic salary is the smallest part of the total compensations, and it estimates from 6.97% (in Wall Mart) to 16.8% (in General Electric) of total compensations. In companies that did not create long and short-term incentives, salary is the biggest or even the only element of the compensations (Berkshire Hathaway and General Motors). Basic salary is determined by the working contract between managers and companies, and it is fixed amount that is paid with no relation to the performances.

**Table 2: The performances of the 10 most successful companies from the list of Fortune in 2010**

R	Company	Key financial elements in millions of \$							Pr (%)	ROA (%)	ROE (%)	EPS			ROI	
		Revenues	% change from 2009	Profits	% change from 2009	Assets	Stockholders' equity	Market value (3/25/2011)				2000-2010 Annual growth (%)	2010 \$	% change from 2009	2000-2010 Annual rate (%)	2010 (%)
1	Wal-Mart Stores	421,849	3.3	16,389	14.3	180,663	68,542	182,764	3.9	9.1	23.9	12.3	4.47	20.8	1.4	3.2
2	Exxon Mobil	354,674	24.6	30,460	58	302,510	146,839	414,638	8.6	10.1	20.7	9.5	6.22	56.3	7.7	10.1
3	Chevron	196,337	20.1	19,024	81.5	184,769	105,081	214,355.5	9.7	10.3	18.1	9.1	9.48	80.9	11.6	22.9
4	ConocoPhillips	184,966	32.6	11,358	133.8	156,314	68,562	116,812.3	6.1	7.3	16.6	7.7	7.62	135.2	12.2	38.8
5	Fannie Mae	153,825	429.2	-14,014	N.A.	3,221,972	-2,599	447.9	-9.1	-0.4	N.A.	N.A.	-3.81	N.A.	-42.1	-74.6
6	General Electric	151,628	-3.3	11,644	5.6	751,216	118,936	209,715.2	7.7	1.6	9.8	-1.8	1.06	5.0	-6.3	23.9
7	Berkshire Hathaway	136,185	21.1	12,967	61	372,229	157,318	210,787.5	9.5	3.5	8.2	13.8	7.0	52.7	5.4	21.4
8	General Motors	135,592	29.6	6,172	N.A.	138,898	36,180	49,116.6	4.6	4.4	17.1	N.A.	2.89	N.A.	N.A.	N.A.
9	Bank of America	134,194	-10.8	-2,238	-135.7	2,264,909	228,248	135,016.2	-1.7	-0.1	-1.0	N.A.	-0.37	N.A.	-1.7	-11.2
10	Ford Motor	128,954	9	6,561	141.5	164,687	-673	55,715	5.1	4.0	N.A.	-3.2	1.66	93.0	-1.2	67.9

**Table 3: CEO compensations of the 10 most successful companies from the list of Fortune in 2010**

R	Company	Elements of total compensations for CEO in (000 \$)											
		Salary	An. incentives	Long term incentives (000\$) - LTI				Total direct compensations	Change in Nonqualified Deferred Compensation + Change in Pension Value	All Other Compensation	Total Compensation	Total Realized LTI	3-Year Realized Total Direct Compensation
				Stock option grants	Restricted stock grants	Performance Based Grant Equity	Performance Based Grant Cash						
1	Wal-Mart Stores	1,232.7	3,852.1	0	3,347.5	9,304.9	0	17,737.1	499.1	476.6	18,712.7	17,592.8	N.A. <sup>16</sup>
2	Exxon Mobil	2,207.0	3,360.0	0	15,465.4	0	0	21,032.4	7,476.3	443.9	28,952.6	7,989.7	33,000.2
3	Chevron	1,479.2	3,000.0	5,535.2	0	3,752.4	0	13,776.8	2,273.3	220.5	16,260.5	3,101.7	N.A.
4	ConocoPhillips	1,500.0	4,252.5	5,737.7	0	6,148.6	0	17,638.8	0	294.1	17,932.9	9,566.3	36,299.1
5	Fannie Mae	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
6	General Electric	3,300.0	4,000.0	7,400.0	0	0	4,950.0	19,650.0	6,339.0	389.8	26,378.8	1,933.1	25,093.6
7	Berkshire Hathaway	100.0	0	0	0	0	0	100.0	0	429.9	524.9	0	300.0
8	General Motors	2,333.3	0	0	666.7	0	0	3,000.0	0	194.1	3,194.1	0	N.A.
9	Bank of America	950.0	0	0	9,050.0	0	0	10,000.0	719.8	270.2	10,990.1	1,039.3	N.A.
10	Ford Motor	1,400.0	9,450.0	7,500.0	0	7,492.5	0	25,842.5	0	678.0	26,520.5	9,298.0	25,888.0

<sup>16</sup> Data not available

- Annual incentives are usually double or even several times bigger than salary. These incentives are paid in almost each company where have been created positive business result, profit and performance indicators of ROA, ROE, ROI and EPS. In Bank of America annual incentives were not paid since that corporation realized loss in 2010 of \$-2,238 millions. Annual incentives are usually paid for the short time period.
- Long-term incentives have reached level from 58% to 74% of total compensations, with the exception of General Electric Company (LTI are only 22% of total compensations). Long-term incentives are differently used in each company. The most used are stock options, restricted stocks and performance based equity grants. The performance based cash grants were used only by one company. In addition, five companies form the table 3 used two LTI elements in rewarding its CEO - stock options and performance based equity grants. Last five companies decided to give to the CEOs only one LTI incentive - restricted stock grant.
- Related to the long term incentives is also the tendency of rewarding CEO with more deferred compensations. Namely, performance based cash grants were used only in General Electric Company. All other companies gave to the CEOs compensations in form of capital – equity and stocks. For example, restricted stocks were given as compensation in four out of ten companies. Stock options were used in four cases.
- Since the economic crisis had affected the business and economy in many world countries, wastefully CEO compensation models became untenable. HR managers are trying to create models that will be enough motivating but also sustainable in means of real business performances. The goal of any compensation system should be to attract, motivate and retain the best managers, while at the same time being fair to the shareholders.

After the discussion of Tables 2 and 3, it can be concluded that there are many issues related to the amount and structure of CEO compensation. These remunerations should be based on outcomes and total business performances of the company. Since only financial indicators are not suitable for the total compensation system, it should be mentioned some other performance measurement model in practice that could be linked to this problem. From all models presented in Table 1, BSC and EVA were found as the performance measurement models that can be used in function of efficient and effective CEO compensation systems.

#### **4. PERFORMANCE MEASUREMENT SYSTEMS FOR CEO INCENTIVE COMPENSATIONS IN PRACTICE**

##### **4.1. THE BALANCED SCORECARD (BSC)**

One of the best known performance measurement system is the balanced scorecard (BSC), developed by Kaplan and Norton (1992; 1996; 1996a). Kaplan and Norton (1996a) define the BSC as “a multidimensional framework for describing, implementing and managing strategy at all levels of an enterprise by linking, through a logical structure, objectives, initiatives, and measures to an organization’s strategy”. BSC complements the traditional financial performance measures with three non-financial key performance indicators (KPIs): financial perspective; customer perspective; internal processes; learning and growth.

Pollanen and Xi (2011) had investigated the use of BSC measures in executive compensation plans, particularly its performance consequences, and the fit between the use of BSC and firm characteristics. The findings underscored the importance of firm characteristics in the design and use of performance measurement and reward systems. Creamer and Freund (2010) analyzed the BSC and one of the most important parts of its dataset was CEO compensations.

They demonstrated how the boosting approach can be used to define a data driven board BSC with applications to 500 biggest USA companies. Without further literature analysis, in table 4 it has been presented the example of CEO incentive compensation designed according to BSC. Jones (2009) claimed that CEO paid bonus percentage should be tied to the percentage of exceeding performance targets.

*Table 4: Executive compensation systems according BSC dimensions*

<i>Category</i>	<i>Measure</i>	<i>Weighting</i>
Financial (60%)	EVA	25%
	Unit Profit	20%
	Market Growth	15%
Customer (20%)	Customer satisfaction survey	10%
	Dealer satisfaction survey	10%
Internal Process (10%)	Above average rank on industry quality survey	5%
	Decrease in dealer delivery cycle time	5%
Innovation and Learning (10%)	Suggestions/employee	5%
	Emp. satisfaction survey	5%

Source: Jones (2009).

**4.2. ECONOMIC VALUE ADDED (EVA)**

EVA is defined as the change in the NOPAT (Net Operating Profit after Taxes) minus the change in the Cost of the Capital used to generate this NOPAT (Kumar and Kaura, 2002; Sharma and Kumar, 2010). EVA can provide investors with a normal return on the company’s shares—that is important not only for securities analysts in evaluating stocks, but also for corporate compensation committees in setting performance standards for management incentive compensation plans (O’Byrne, 1996). Namely, EVA bonus plan measures excess EVA improvement as opposed to simply EVA growth over prior periods. It provides a more direct link to the true measure of shareholder wealth creation – returns above market expectations (Young and O’Byrne, 2001). Following formula can be used to calculate CEO bonus in each year:

$$Current\ Year\ Bonus = Target\ Bonus + y\% (\Delta EVA - E_i) \tag{1}$$

Target bonus is “the bonus earned by a manager for delivering the EVA improvement that is expected by investors. This expected EVA improvement should be equivalent to the EVA that will provide shareholders with a cost of capital return on the market value of their investment in the business” (Balsley, 2005). If EVA is below this level, bonuses will be reduced while returns of shareholders do not fall to zero. At this level, there will be no bonuses for managers.  $\Delta EVA - E_i$  represents “the change in EVA less expected EVA improvement. This is meant to capture the incremental EVA that a manager has delivered above and beyond the EVA growth that investors expect and have already paid for. The percentage of the incremental performance that is returned to management (y) is established by the compensation committee” (Balsley, 2005).

Additional incentives beyond the level of the target bonus are provided for increasing the EVA above the level provided by covering the total cost of capital and only the part of EVA that is increased above the expected level. In this way it will be prevented the excessive increase of compensation costs. If the criteria for bonuses was any increase in EVA, then there will be situations in which one reached EVA (above the level that provides target bonus) is decreasing, which is usually accompanied by a decline in value of shares and

managers will still exercise bonuses over target level (Malinić, 2007). Because of this, Stern Stewart & Co proposed the use of a “bonus bank” designed to base a manager’s annual bonus payout on multi-period EVA delivery. In every year, the “current year bonus” is calculated using the formula described above and based on the manager’s performance during that year. That “current year bonus” is then placed in a “bonus bank” that also holds the deferred (or unpaid portion of) bonuses from prior years. The bonus bank balance (after the current year bonus has been included), rather than the current year bonus, then determines the amount of bonus actually earned by a manager each year. The amount earned is determined in two steps: first, 100% of the bonus bank (if possible) is paid up to the amount of the target bonus; second, plus 1/3 of the remaining bonus bank (after the target bonus) (Balsley, 2005).

## 5. CONCLUSION

Incentive systems for managers are very complex area of HRM. A mixture of compensations elements, importance of short and long – term incentives for managers and problem of rewarding in the past make this issue more sophisticated. Usually, executive compensations was weakly correlated or even no correlated with the achieved performances. Because of these issues and problems, there is a need for improvement in the design of managerial compensations. Main conclusions of this paper are:

- Main elements of CEO compensations are: base salary, annual incentives, long term incentives, all other compensations, change in nonqualified deferred compensation earnings plus change in pension value.
- Basic salary is the smallest part of the total compensations in companies that rewarded its managers with diversified compensation package, and it estimates from 6.97% to 16.8%.
- Annual incentives are usually double or even several times bigger than salary. These incentives are paid in almost each company where have been created positive business result and performance indicators of ROA, ROE, ROI and EPS.
- Long-term incentives have reached level from 58% to 74% of total compensations. The most used are stock options, restricted stocks and performance based equity grants. Related to the long term incentives is also the tendency of rewarding CEO with more deferred compensations.
- One of the best known performance measurement systems is the balanced scorecard that provides an enterprise view of an organization’s overall performance. According to BSC, CEO paid bonus percentage should be tied to the percentage of exceeding performance targets – financial, commercial, internal processes and learning and innovation.
- EVA incentive compensations are based not only on the year increase in EVA, but on the increase that is above expected EVA improvement. Bonus bank is usually used to motivate managers to make decisions that will create superior performances and value for the shareholders continuously. This method will connect results of managers to the deferred bonus payout.

## REFERENCES

1. Balsley, H., 2005. Using EVA to Align Management Incentives with Shareholders Interests. *Harvard Business School*, (<http://people.hbs.edu/mdesai/IFM05/HBalsley.pdf>)
2. Bititci, U., Garengo, P., Dörfler, V. and Nudurupati, S., 2011. Performance Measurement: Challenges for Tomorrow. *International Journal of Management Reviews*, doi: 10.1111/j.1468-2370.2011.00318.x.

3. Creamer, G. and Freund, Y., 2010. Learning a board Balanced Scorecard to improve corporate performance. *Decision Support Systems*, 49(4), pp. 365-385.
4. Fortune 500. (2011). <http://money.cnn.com/magazines/fortune/fortune500/2011/>, (Retrieved 15/04/2012).
5. Hay Group. (2011). *The Wall Street Journal/Hay Group 2010 CEO Compensation Study*.  
[http://www.haygroup.com/downloads/ww/misc/wsj\\_2010\\_ceo\\_compensation\\_study\\_5-17-11\\_web.pdf](http://www.haygroup.com/downloads/ww/misc/wsj_2010_ceo_compensation_study_5-17-11_web.pdf) (Retrieved 21/02/2012).
6. Jensen, M.C. and Murphy, K.J., 2010. CEO incentives – It’s not how much you pay, but how. *Journal of Applied Corporate Finance*, 22(1), pp. 64 – 76.
7. Jones, M., 2009. *Executive Compensation: A Guide to the Board of Directors*. Executive Action Learning Seminars, International Institute of Management.  
[http://www.iim-edu.org/executiveseminars/executiveseminars\\_executivecompensationbestpractices.pdf](http://www.iim-edu.org/executiveseminars/executiveseminars_executivecompensationbestpractices.pdf) (Retrieved 02/05/2012).
8. Kaplan, R.S. and Norton, D.P., 1992. The Balanced Scorecard – Measures that drive Performance. *Harvard Business Review*, 70(1), pp. 71-79.
9. Kaplan, R.S. and Norton, D.P., 1996. Using the Balanced Scorecard as a strategic management system. *Harvard Business Review*, 74(1), pp. 75–85.
10. Kaplan, R.S. and Norton, D.P., 1996a. *The Balanced Scorecard: translating strategy into action*. Boston, MA: Harvard Business School Press.
11. Kumar, A.V. and Kaura, M.N., 2002. Executive Compensations and Corporate Performance: An EVA Approach. *South Asian Journal of Management*, 9(3), pp. 12-20.
12. Lardenoije, E.J.H., Van Raaij, E.M., and Van Weele, A.J., 2005. *Performance management models and purchasing: Relevance still lost*. Researches in purchasing and supply management, Proceedings of the 14th IPSERA Conference, Archamps, France, pp. 687 – 697.
13. Lebas, M.J., 1995. Performance measurement and performance management. *International Journal of Production Economics*, 41(1-3), pp. 23-35.
14. Malinić, D., 2007. *Kompenzacione šeme za menadžere*. Zbornik radova: Korporativno i javno upravljanju u funkciji razvoja konkurentnosti. Miločerski ekonomski forum. Beograd: Savez ekonomista Srbije.
15. Neely, A.D., Gregory, M. and Platts, K., 1995. Performance measurement system design: A literature review and research agenda. *International Journal of Operations & Production Management*, 15(4), pp. 80-116.
16. Nudurupati, S.S., Bi0titci, U.S., Kumar, V. and Chan, F.T.S., 2011. State of the art literature review on performance measurement. *Computers and Industrial Engineering*, 60(2), pp. 279-290.
17. O’Byrne, S.F., 1996. EVA and Market Value. *Journal of Applied Corporate Finance*, 9 (1), pp. 116-125.
18. Pollanen, R. and Xi, K.K., 2011. The Use of Balanced Scorecard Measures in Executive Incentives and Firm Performance. *CAAA Annual Conference 2011*.
19. Sharma, A.K. & Kumar, S., 2010. Economic Value Added (EVA) – Literate Review and Relevant Issues. *International Journal of Economics and Finance*, 2(2), pp. 200-220.
20. Young, S. D. and O’Byrne, S.F., 2001. *EVA and Value-Based Management: A Practical Guide to Implementation*. New York: McGraw Hill.