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THE RELEVANCE AND EFFECTS OF THE EXECUTIVE-TO-WORKER PAY RATIO' DISCLOSURE

Sabina Lacmanović[a]

[a] Senior Teaching Assistant, PhD, Juraj Dobrila University of Pula, Faculty of Economics and Tourism "Dr. Mijo Mirković", Preradovićeva 1/1, Pula, Croatia, sgrgor@unipu.hr

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ABSTRACT

The purpose of this conceptual paper is to analyze the say-on-pay policies and practices in 5 different countries: UK, USA, Switzerland, Germany and Australia. The focus of the research is on the disclosure of the executive-to-worker pay ratio. The author discusses about the relevance and effects of such practice on firm performance and employee motivation, loyalty and productivity, as well as on the investors' decisions. This article addresses those issues through a comparative approach, by selecting pay ratio-relevant theoretical and empirical studies. The results indicate that the disclosure of pay ratio improves the firm's and individuals' performance and therefore it should be introduced as an obligatory part of the yearly remuneration report.

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I. INTRODUCTION

The global financial crisis has fostered the introduction of say-on-pay policies in many different legal environments but also accelerated their implementation in companies' reporting practices. Because of the executives' self-oriented misbehavior which has led to many short-term oriented high-risk decisions the debate about disclosing their pays and the compensation policies is in the focus of law and economics' specialist over the last few years. The pressure of public expectations toward executives' accountability has paved the road to new regulatory provisions.

The purpose of this conceptual paper is to analyze the say-on-pay policies and practices in 5 different countries: UK, USA, Switzerland, Germany and Australia, with the focus on the executive-to-worker pay ratio' disclosure. The relevance of the disclosure is analyzed through its effects on the companies' performance and on the motivation, loyalty and productivity of their employees, as well as on the investors' decisions.

The paper is divided in seven chapters. After a brief introduction an insight in the say-on-pay' legal framework in chosen 5 countries is given in chapter II. Chapter III shows the history and trends of the executive-to-worker pay ratio. The author presents the available comparative data of the executive-to-worker pay ratios in different countries which are commented within the historical background and within different economic and cultural environments in which they were created[1]. Chapter IV deals with the effects of the pay ratio' disclosure and is a theoretical framework for chapter V in which the methodology, results and findings of the research are presented. In chapter VI the conclusions and implications are summarized, and the list of references can be found in chapter VII.

The author addresses the research questions through a comparative approach, by selecting pay ratio-relevant theoretical and empirical studies (a desk research method was used). The availability of data for the Republic of Croatia has limited the scope of the research. However, the author comments the presumed ratios in the Croatian companies and makes a comparison to the situation in the period of socialism. The lack of comparable empirical data for chosen 5 countries has directed the research to the combination of selected pay ratio-relevant theoretical and empirical studies and variables. The results of comparative research and interpretive analysis show that the disclosure of pay ratio improves the firm's and individuals' performance and therefore it should be introduced as an obligatory part of the yearly remuneration report.

II. THE SAY-ON-PAY' LEGAL FRAMEWORK

The comparative analysis of chosen 5 countries begins with the comparison of the legal framework for executive-to-worker pay ratio' disclosure[2]. The 5 countries were chosen because of the changes in company laws which have enabled executive-to-worker pay ratio' disclosure, i.e., because of the newly undertaken initiatives which call for disclosure. By the executive-to-worker pay ratio' disclosure it is meant a requirement for companies to disclose the ratio of the annual compensation of its chief executive officer (CEO) to the median annual compensation of its employees.

The United Kingdom was the first country in which a mandatory, yet non-binding or

[1] Grennes, T.: The Impact of National Culture on CEO Compensation and Salary Gaps Between CEOs and Manufacturing Workers, Compensation and Benefits Review, Vol. 43, No. 2, 2011, p. 100-108.

[2] Lieder, J., Fischer, Ph.: The Say-on-Pay Movement – Evidence From a Comparative Perspective, European Company and Financial Law Review, No. 3, 2011, p. 376-421.

advisory say-on-pay vote was introduced through the Companies Act in 2002. The debate now moved on to whether the vote should become binding, and if the data on executive-to-worker pay ratio should also be disclosed, i.e., included in the Remuneration Report. The Trades Union Congress, the UK national labor federation, declared in March 2013, that they will be voting the shares their pension funds hold in UK corporations against any corporate pay plans that top the 20:1 ratio.[3]

In the USA the Dodd-Frank Wall Street Reform and Consumer Protection Act (July 2010) has introduced a new say-on-pay provisions, which have been applied for the first time in the 2011 proxy season. The rules on submission of pay ratios are included under Section 953 (b) and still waiting to be specified, but there are strong initiatives which are aimed at accelerating the implementation of these provisions[4]. Recently a petition campaign to the United States Congress was created to pass legislation to limit the pay ratio to 50:1.[5] But, as expected, the corporate lobbyists are fighting against the implementation of pay ratio' disclosure. Their arguments are biased on the costs of disclosure for companies and no real benefits for investors (both arguments are discussed in chapter V). In March 2013 representative Bill Huizenga has introduced the Burdensome Data Collection Relief Act in order to repeal the pay level' and pay ratio' disclosure requirements, i.e. to propose elimination of Dodd-Frank Pay Disclosure. The committee assigned to this bill (The House Financial Services Committee) sent it to the House or Senate as a whole for consideration on June 19, 2013. Although the chance of being enacted is low (prognosis is about 20 %)[6], it is interesting to see such a negative business reaction to the disclosure requirements. This is of course not truth for all American companies. Some of them are already reporting their pay ratios and it is the part of their compensation policy and philosophy (e.g. Whole Foods Market).

On the 3rd of March 2013 the Swiss voted by 68 per cent for the introduction of a binding say on executive pay and an annual right to vet board appointments. The so called «peoples' initiative against fat-cat pay» is now to be written into the Swiss constitution and translated in the company law. The results of the Swiss referendum also initiated a debate about executive-to-worker pay ratios (a ratio of 12:1 has been proposed[7]) and the need for its disclosure.

After Swiss referendum the say-on-pay initiatives gained force in other European countries such as Spain, Belgium, France, Portugal and Denmark, and the European Union is also to propose shareholder say on manager's pay including the disclosure of executive-to-worker pay ratio by the end of the year 2013. The Commission will propose in 2013 an initiative, possibly through a modification of the shareholders' rights Directive, to improve transparency on remuneration policies and individual remuneration of directors, as well as to grant shareholders the right to vote on remuneration policy and the remuneration report.[8] It will be interesting to observe the effects

[3] A New Labor Goal for the CEO-Worker Pay Gap, March 30, 2013, available at http://inequality.org/labor-goal-ceoworker-pay-gap/ (accessed 29 Aug 2013).
[3] The AFL-CIO's White Paper: Dodd-Frank Section 953 (b): Why CEO-to-Worker Pay Ratios Matter to Investors, available at: http://www.aflcio.org/content/download/1090/9807/version/1/file/Why-CEO-to-Worker-Pay-Ratios-Matter-For-Investors.pdf (accessed 29 Aug 2013).
[5] Congress: Cap CEO Pay at 50X Salary of the Average Worker, available at: http://www.credomobilize.com/petitions/congress-cap-ceo-pay-at-50x-salary-of-the-average-worker (accessed 29 Aug 2013).
[6] H.R. 1135: Burdensome Data Collection Relief Act, available at: http://www.govtrack.us/congress/bills/113/hr1135#overview (accessed 29 Aug 2013).
[7] Executive Pay: Fixing the Fat Cats, March 9th, 2013, available at: http://www.economist.com/news/business/21573169-switzerland-votes-curb-executive-pay-fixing-fat-cats (accessed 29 Aug 2013).
[8] Communication from the Commission Action Plan: European Company Law and Corporate Governance - A Modern Legal Framework for More Engaged Shareholders and Sustainable Companies, COM (2012) 740 final, p. 9.

of these changes on the companies in the Republic of Croatia, which has joined the European Union in July 2013.

The optional or mandatory say-on-pay provisions were earlier adopted in Netherlands (in 2004), Sweden (in 2006) and Norway (in 2007). In Germany the optional and non-binding say on pay provisions were introduced through the Act on the Adequacy of Executive Compensation under German Stock Corporation Act in 2009. After the Swiss referendum there are now strong initiatives for the introduction of binding shareholder vote on directors pay and of the obligatory executive-to-worker pay ratio' disclosure.

Australia has had a mandatory nonbinding shareholder vote on the remuneration report since 2005. However, in July 2011, with the Corporations Amendment Act 2011, a binding vote was introduced, the so-called "two-strikes" regime. Under this regime, if 25 % or more of shareholders vote against a company's remuneration report at two consecutive annual general meetings, the board is subject to a so-called «spill» motion. If the spill motion receives the support of 50 % or more of the company's shareholders, then a separate general meeting must be called within 90 days at which all directors except for executive directors must stand for re-election. The company directors see only costs in the implementation of such a say-on-pay policy (a huge additional workload for boards, possibly distracting them from other value-adding activities; logistical challenges and financial costs for companies planning for a spill meeting; the risk that a small minority of shareholders holds a board to ransom by seeking changes often unrelated to remuneration; boards forced to improve their shareholder communications and engagement), but the fact is that the second reporting season since the introduction of the "two-strikes" rule left over 20 companies with two strikes and three recovering from spill meetings.[9] And there are now new proposed changes to executive remuneration legislation. The proposed reforms in the Exposure Draft of the Corporations Legislation Amendment (Remuneration Disclosures and Other Measures) Bill 2012 include: requiring listed companies to disclose in the remuneration report whether any overpaid remuneration has been "clawed back", and if not, an explanation of why; requiring more transparent disclosure of termination payments or "golden handshake" payments; relieving certain unlisted entities from the obligation to prepare a remuneration report.[10]

All the above mentioned changes in the legal framework[11] enabled the shareholder revolt against CEOs pay. However, this new right was not abused, as some business representatives were announcing. Among approximately 2,700 U.S. companies that put their executive compensation plans before shareholders for a vote in 2011, only 41 (or 1.5 percent) failed to receive majority approval. During 2012, results have been similar, with fewer than 2 percent of companies failing to receive majority approval.[12] While only a small percentage of public companies received a shareholder vote of "no" in 2011 and 2012, negative recommendations by shareholder advisory firms can adversely affect how a company's governance is perceived. And what is interesting is that

[9] New Executive Pay Worries, Company Director Magazine, April 2013, available at: http://www.companydirectors.com.au/Director-Resource-Centre/Publications/Company-Director-magazine/2013-back-editions/April/Feature-New-executive-pay-worries (accessed 29 Aug 2013).
[10] Ibid.
[11] For rewiev of executive pay reforms (passed/proposed) and of principles for economic fairness and stability (narrower CEO-worker pay gaps and others ...) see in: Anderson, S. et al.: CEO Pay and the Great Recession, Institute for Policy Studies, 2010.
[12] Larcker, D. F. et al., 2012: Ten Myths of «Say on Pay», Stanford Graduate Shool of Business, available at: http://www.ieseinsight.com/doc.aspx?id=1378&ar=3 (accessed 29 Aug 2013).

those cases where shareholders voted against the executive pay package "mostly have to do with a perceived disconnect between pay and performance."[13]

Similar results are also for the UK companies. Using data on about 50,000 resolutions over the period 2002 to 2007 the researchers have found that less than 10% of shareholders abstain or vote against the mandated Directors' Remuneration Report (DRR) resolution. Also, investors are more likely to vote against DRR resolutions compared to non-pay resolutions. Third, shareholders are more likely to vote against general executive pay resolutions, such as stock options, long-term incentive plans and bonus resolutions compared to non-pay resolutions. Forth, firms with higher CEO pay attract greater voting dissent.[14]

III. THE HISTORY AND TRENDS OF THE EXECUTIVE-TO-WORKER PAY RATIO

The discussion about the relevance of the executive-to-worker pay ratio' disclosure is focused on its implications for the companies' success, but also on its impact on the country's economy (theories of justice). This paper deals with the effects on the micro-level (equity theory).

The history of the executive-to-worker pay ratio shows that the gap between the executive' and worker's pay has significantly deepened, especially from the 1980's. This is especially evident in the U.S. companies, where today's pay ratio is 17.7 times greater than the pay ratio in the 1960's.[15] The rise of the pay ratio in the U.S. companies from 1965 was as follows[16]:

- in 1965 - 20:1
- in 1982 - 42:1
- in 1992 - 201:1
- in 2002 - 281:1
- in 2012 - 354:1.

The Economic Policy Institute (USA) has calculated that the average CEO compensation increased between 1978 and 2011 by 725 %. In the same period the average worker's compensation increased by only 5.7 % despite increases in productivity.[17]

According to the Boston-based United for a Fair Economy (UFE)[18], from 1990 to 2003, CEO pay jumped 313 percent, while corporate profits climbed 128 percent. During the same

[13] Miller, S.: Executive Pay: How Much is Too Much?, Growing Pay Disparity Between Top Executives and Average Workers Threatens Morale, available at: http://www.shrm.org/hrdisciplines/compensation/articles/pages/executive-pay-how-much.aspx (accessed 29 Aug 2013).

[14] Cavanagh, M. J., Sadler, G. V.: Shareholder Voting and Directors' Remuneration Report Legislation: Say on Pay in the U.K., Cornell University ILR School, Compensation Research Initative, August 2009, available at: http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1003&context=cri (accessed 29 Aug 2013).

[15] In determining the pay ratio the median annual employee compensation is used as an adequate measure of average worker pay.

[16] The data presented here include the CEO's pay of S&P 500 Index companies. The worker pay is the average non-supervisory employee's pay. CEO Pay and You, available at: http://www.aflcio.org/Corporate-Watch/CEO-Pay-and-You (accessed 29 Aug 2013).

[17] Mishel, L., Sabadish, N.: CEO Pay and the Top 1 %: How Executive Compensation and Financial-Sector Pay Have Fueled Income Inequality, May 2, 2012, available at: http://www.epi.org/publication/ib331-ceo-pay-top-1-percent/ (accessed 29 Aug 2013).

[18] Available at: http://faireconomy.org/ (accessed 29 Aug 2013).

period, average worker pay rose 49 percent, just above inflation, which rose 41 percent. If the U.S. minimum wage had increased as quickly as CEO pay since 1990, according to UFE, it would today be $ 15.71 per hour, more than three times the current minimum wage of $ 5.15 an hour. While workers are increasingly anxious about their job security and how they will pay the rising costs of everything from health insurance to housing, from college to gasoline, says UFE's Scott Klinger, corporate executives continue to distance themselves from the cares and worries of those they lead. It sends a poor message to demand cost cutting from the factory floor, while costs in the executive suits are left to soar.[19]

There are of course significant differences in pay ratio between countries and between companies in the same country, but the trend is similar. In the analysis of causes of the current financial crisis greed has certainly earned its place. The central question is what was the motivation for such high salaries and how were they approved? The short term orientation which dominated in many companies before the financial crisis could be one of the key reasons for compensation models that were linked to the realization of the company's short term goals.

The 20th anniversary Executive Excess report examines the performance of the 241 corporate chief executives who have ranked among America's 25 highest-paid CEOs in one or more of the past 20 years. The report's key finding is that nearly 40 percent of the CEOs on these highest-paid lists were eventually "bailed out, booted, or busted." The bailed out CEOs whose firms either ceased to exist or received taxpayer bailouts after the 2008 financial crash held 22 percent of the slots in the sample. Richard Fuld of Lehman Brothers enjoyed one of Corporate America's largest 25 paychecks for eight consecutive years — until his firm went belly up in 2008. Not counting those on the bailed out list, another 8 percent of the sample was made up of CEOs who wound up losing their jobs involuntarily. Despite their poor performance, the "booted" CEOs jumped out the escape hatch with golden parachutes valued at $48 million on average. The busted CEOs who led corporations that ended up paying significant fraud-related fines or settlements comprised an additional 8 percent of the sample. One CEO had to pay a penalty out of his own pocket for stock option back-dating. The other companies shelled out payments that totaled over $100 million per firm.[20]

In the table 1 a comparative set of pay ratios' data is given for the chosen countries around the world. The differences in pay ratios are evident and could be explained through different economic environments and cultural values in which they were developed, but also through the recent changes in the legal framework (e.g. UK). As expected, in countries which praise individual success (e.g. USA) the pay gap is much bigger then in countries whose values are more connected to the collective (e.g. Japan), i. e., in countries with developed well-being state (e.g. Sweden).

[19] Gaping Pay Gap Grows, Multinational Monitor, April 2004, Vol. 25, No. 4.
[20] Anderson, S. et al.: Executive Excess 2013: Bailed Out, Booted and Busted, A 20-year Review of America's Top Paid CEOs, Institute for Policy Studies, Washington, 2013, available at: http://www.ips-dc.org/reports/executive-excess-2013 (accessed 29 Aug 2013).

TABLE 1 - CEO-TO-WORKER PAY RATIOS AROUND THE WORLD

Continent	*Country*	*Pay ratio*
America	USA	354:1
	Canada	206:1
Asia	Japan	67:1
Australia	Australia	93:1
Europe	Switzerland	148:1
	Germany	147:1
	Spain	127:1
	Czech Republic	110:1
	France	104:1
	Sweden	89:1
	UK	84:1
	Netherlands	76:1
	Norway	58:1
	Portugal	53:1
	Denmark	48:1
	Austria	36:1
	Poland	28:1

Source: CEO-to-Worker Pay Ratios around the World, available at: http://www.aflcio.org/Corporate-Watch/CEO-Pay-and-You/CEO-to-Worker-Pay-Gap-in-the-United-States/Pay-Gaps-in-the-World (accessed 29 Aug 2013)

The data in the table 1 represent an average pay ratio in the given country (the data are for 2011 and 2012). By further analysis of any specific country great differences in pay ratio between different companies could be detected. They are result of the different organization philosophy and compensation policy from company to company. As an example a list of highest and lowest pay ratios in the USA is given in the table 2 (the data are for 2012). For comparison purposes the employee satisfaction data (as percentage of high job satisfaction) are given next to the pay ratio.[21] Many companies, as Whole Foods Market for example, clearly stated that "their compensation philosophy emphasizes internal pay equity and fair treatment of all stakeholders".[22]

[21] The employee satisfaction data should be taken with caution, because as the theory and practice is proving, there are numbers of different variables whose influence on job satisfaction is significant. CEO Pay in Perspective, available at: http://www.payscale.com/data-packages/ceo-income/fortune-100 (accessed 29 Aug 2013).

[22] Whole Foods Market is in organic food business. The company's pay ratio in 2012 was 19:1. CEO-to-Worker Pay Gap in the United States, available at: http://www.aflcio.org/Corporate-Watch/CEO-Pay-and-You/CEO-to-Worker-Pay-Gap-in-the-United-States (accessed 29 Aug 2013).

TABLE 2 - FIVE HIGHEST AND FIVE LOWEST PAY RATIOS IN THE U.S. FORTUNE'S TOP COMPANIES

Company	*CEO pay to median employee pay ratio*	*% High job satisfaction*
Wal-Mart Stores	1034:1	53 %
Target	597:1	59 %
Walt Disney	557:1	73 %
Honeywell	440:1	71 %
McDonald's	435:1	56 %
...		
Amazon.com	18:1	71 %
Sunoco	15:1	88 %
Microsoft	12:1	69 %
Berkshire Hathaway	9:1	63 %
Google	0:1[23]	83 %

Source: CEO Pay in Perspective, available at: http://www.payscale.com/data-packages/ceo-income/fortune-100 (accessed 29 Aug 2013).

The pay ratio in Croatian publicly listed companies is estimated as 7:1 - 10:1.[24] There are still no available empirical data which could confirm or deny the estimation made in 2005 (there is a great need for empirical research of this topic). However, what can be traced from the statements given to the local media are the existent differences in pay ratio between companies.[25] During the period of socialism the pay ratio between director's wage and minimum wage was set from 5:1 to 9:1 in statutes of many companies. It is interesting to observe that the compensation policy which was then oriented to fair pay for all employees has set the ratio not to the average worker pay but to the minimum wage. The Republic of Croatia has joined the EU in July 2013 and it will be interesting to follow the reflection of changes in the European legal environment regarding pay ratio' disclosure on the Croatian companies.

The question about the need for pay ratio' disclosure is followed by the question of its effects on the employees' morale, productivity and motivation. Next to that the relevance of pay ratio' disclosure for investors and company performance should be analyzed. Those and other effects are discussed in the chapter IV.

[23] The pay ratio is calculated by dividing CEO annual cash compensation with median annual employee pay. The annual cash compensation of Larry Page in 2012 was 1 $.

[24] Račić, D., Cvijanović, V.: Kvaliteta korporativnog upravljanja u javnim dioničkim društvima, Ekonomski institut, Zagreb, 2005.

[25] For example see in: Daskalović, Z.: Hrvatski menadžeri plaćeniji od slovenskih, April 2008, available at: http://www.poslovni.hr/after5/hrvatski-menadzeri-placeniji-od-slovenskih-76774#, or Radusinović D.: Tko su najbolje plaćeni menadžeri u Hrvatskoj: Zarađuju i do 16 prosječnih plaća mjesečno!, May 2011, available at: http://www.jutarnji.hr/tko-su-najbolje-placeni-menadzeri-u-hrvatskoj/946201/ (accessed 29 Aug 2013).

IV. THE EFFECTS OF THE PAY RATIO' DISCLOSURE - A THEORETICAL FRAMEWORK

The effects of the pay ratio' disclosure are most often analyzed through its impact on the individuals' performance (supervisory and non-supervisory employees) and on the companies' performance.

The arguments for/against pay ratio' disclosure are based on theoretical and empirical research. The researchers can be classified in two groups: one group is focused on the influence of pay ratio' disclosure on employee's motivation, morale, behavior, loyalty and productivity. i.e. performance, as well as on the executive compensation level; the other group is focused on the effects of the pay ratio' disclosure on the companies' financial results, total effectiveness, image in public and similar. Both are arguing the arguments for high/low pay ratios.

Critics of the disclosure and advocates of high pay ratios are saying that managers of today are working in a very complex, unstable and global environment and therefore CEOs earn high salaries when they successfully manage the companies in such turbulent circumstances. The problem with these arguments is connected with the definition of the term success, i. e. successfully: how do we measure success (realization of short-term or long-term goals?; profit at any costs or profit with taking in consideration the broad area of interests of different stakeholders?) and who is responsible (creator) of success - only supervisors or all employees and other stakeholders? If we consider company success as a result of a team work, then we have many who deserve a fair compensation for their contribution to the creation of value/wealth. "Astronomical CEO pay is based on the false idea that the success of a corporation is due to one CEO genius. In reality, all employees create value, and CEO pay levels should be more in line with the rest of their company's employee pay structure. CEOs should be paid as a member of a team, not as a superstar," said AFL-CIO President Richard Trumka.[26]

If we, on the other side, focus on the individual's performance then is the key question: does CEO's high pays motivate other employees to work harder to get promotion (and which is the percentage of employees who have the potential and thrive to get promoted) or is such a big pay gap a negative factor for employees morale, motivation and productivity (which is the case when employee perceive their compensation as unfair comparing to that of their supervisors). Some of the researchers found that after a certain point larger pay differences can create feelings of injustice that can diminish cooperation, quality and commitment to long-term success.[27]

In discussing the role of disclosure one thing should be stressed: it is not the disclosure by itself that improves the companies' performance (through effective shareholder oversight), but how detailed the disclosure is. If it doesn't include detailed information about the compensation structure and policy, it contributes much lower. In particular, aggregate disclosure concerning total firm executive pay which does not explain remuneration policy and the often highly complex performance conditions applicable or set out the specific components of the pay packages of particular and named senior executives will not allow shareholders to assess pay policy effectively.[28]

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[26] Garofalo, P.: Average Fortune 500 CEO Now Paid 380 Times As Much As The Average Worker, April 2012, available at: http://thinkprogress.org/economy/2012/04/19/467516/ceo-pay-gap-2011/?mobile=nc (accessed 29 Aug 2013).
[27] Bloom, M.: The Performance Effects of Pay Dispersion on Individuals and Organizations, Academy of Management Journal, 42, 1999, p. 25-50.
[28] Ferrarini , G., Moloney, N.: Executive Remuneration in the EU: The Context for Reform, Oxford Review of Economic Policy, Vol. 21, No. 2, (2005), p. 311.

The focus of this paper is on the effects of pay ratio' disclosure, by considering the possible influence of disclosure on lowering the executive-to-worker pay ratio. However, it should be said that the disclosure is not the only variable that affects pay ratio. Some other variables, as empirical data are showing, are also significant. High performance human resource practices are, for example, associated with lower manager-to-worker pay differentials.[29]

With respect to the materiality of the information, ratios have particular importance in the era of "say on pay." An advisory vote on compensation gives shareholders an opportunity to comment on the reasonableness of CEO pay. Reasonableness, however, requires context. Metrics that allow for a comparison of pay practices among public companies can assist in providing the requisite context. Moreover, the ratios provide a mechanism for assessing the reasonableness of the compensation within each particular company. Variations in the ratio that arise from differences in business models or geographic reach can be addressed through accompanying disclosure. Companies can explain the relevant differences through the use of narrative and additional ratios. Moreover, such information will likely have the benefit of providing shareholders with additional insight into the calculation of CEO compensation and the company's employment practices. The most significant impact of the ratio may, however, be on the board of directors. The disclosure requirement effectively increases the information available to boards when setting executive pay. Some boards already take ratios into account when determining compensation. Because a bad ratio may be embarrassing, the board has an incentive to alter compensation in order to avoid adverse disclosure. Disclosure of the ratio may, therefore, impact the amount of compensation paid to employees and the CEO.[30]

One consequence of increasing disparities between executive compensation and average worker pay is lower morale, said Eleanor Bloxham, founder and CEO of the Value Alliance, a board and senior executive advisory firm. At the largest U.S. firms, "People feel disconnected from the CEO. They are not willing to share with management what could be fixed or improved. The people on the ground don't feel that top management understands them," she said. Big pay disparities also impact the effectiveness of the CEOs themselves, because "they become disconnected, not understanding what their employees have to deal with or what their customers are going through. They're in a protective bubble," she noted. Bloxham was critical of the use of both stock options and restricted stock shares as a large portion of executive compensation packages. Rather than tying pay more closely to executive performance, as they are intended to do, she argued, "You have managers cutting costs to increases the stock price because their pay is tied to stock. And then they cut costs some more. That's what we're experiencing now."[31]

The Institute for Policy Studies in their comments to the Securities and Exchange Commission lay out three reasons why extreme pay differentials tend to undermine enterprise effectiveness[32]:

- they lead to lower morale and higher turnover rates that undermine productivity

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[29] Colvin A. J. S. et al.: How High Performance Human Resource Practices and Workforce Unionization Affect Managerial Pay, Personnel Psychology, 54 (2001), p. 903-934.

[30] Brown, Jr., J. R.: Dodd-Frank, Compensation Ratios, and the Expanding Role of Shareholders in the Governance Process, 2 Harvard Business Law Review Online 91 (2011), available at: http://www.hblr.org/?p=1751 (accessed 29 Aug 2013).

[31] Miller, S.: Executive Pay: How Much is Too Much?, Growing Pay Disparity Between Top Executives and Average Workers Threatens Morale, available at: http://www.shrm.org/hrdisciplines/compensation/articles/pages/executive-pay-how-much.aspx (accessed 29 Aug 2013).

[32] The pay ratio is calculated by dividing CEO annual cash compensation with median annual employee pay. The annual cash compensation of Larry Page in 2012 was 1 $.

John Mackey, CEO of Whole Foods, limits his cash compensation to no more than 19 times the average for workers at his firm. "Because of the yawning gap between the leaders and the led, employee morale is suffering, talented performers' loyalty is evaporating, and strategy and execution is suffering at American companies," Mackey wrote for the Harvard Business Review. "Employees really do care about this issue, and a smaller gap makes for greater solidarity, and as a result better performance, throughout the workplace." A Notre Dame report found that senior executives at companies with wide management pay gaps are twice as likely to exit as senior executives at companies where pay was more equally distributed.

- they reinforce rigid corporate hierarchies that discourage workers from being creative contributors to enterprise success

Peter Drucker, the father of modern management theory, pointed out in the early 1980s that in any hierarchy, every level of bureaucracy must be compensated at a higher rate than the level below. The more levels, the higher the pay at the top. This gives CEOs a personal interest in maintaining rigid hierarchies that are disempowering for workers. During the 1970s, Peter Drucker recommended that 20 times average worker pay was an appropriate upside ceiling for top executive compensation. A landmark Brookings Institution report by David Levine supported this general view, stating "large differences in status can inhibit participation."

- they reinforce a "celebrity CEO" culture that is not conducive to high executive performance

Jim Collins, a former scholar at the Stanford Graduate School of Business, spent five years trying to determine "what it takes" to turn an average company into a "great" one. He eventually identified 11 firms that had successfully generated off-the-charts stock returns over 15 years. Not a single one had a high-paid CEO. A celebrity CEO, Collins wrote, turns a company into "one genius with 1,000 helpers."

The Institute concludes in their comments about Dodd-Frank Act that American's long-term economic health will depend, in large part, on the productivity of their enterprises. The new CEO-worker pay ratio requirement, if allowed to go into force, could significantly enhance that productivity — and, as a result, U. S. competitive capacity.[33]

The analysis of pay ratio' disclosure effects should take into account the hidden costs of excessive executive compensation. If we take, for example, the turnover rates, some human experts "place the cost of a single turnover at between 100 and 300 percent of the employee's annual wages or salary."[34] These are real financial facts that corporations should consider when making decisions about their compensation policy.

In the end, in order to help companies, the real question is: how to measure the fairness of executive pay? Some authors have tried to give the answer.[35] Bowers and Whittlesey, for example, give following recommendations: focus on job size when scrutinizing pay levels, integrate external competitiveness into notions of fairness, consider pay mix and performance as a tool for assessing

[33] Anderson, S.: CEO-Worker Pay Ratio Rule Under Attack, May 2011, available at: http://csrwiretalkback.tumblr.com/post/5371011123/ceo-worker-pay-ratio-rule-under-attack (accessed 29 Aug 2013).

[34] Cavanagh, J., op. cit. note 32.

[35] Venkatasubramanian, V.: What is Fair Pay For Executives?: An Information Theoretic Analysis of Wage Distributions, Entropy, 11, 2009.

fairness, take a long-term view of long-term incentives and use ratios cautiously. As was discussed, when comparing ratios across organizations, one must consider organization size, organization structure, governance, business complexity, total compensation design and a host of other factors.[36]

It is worth noting that in May 2013 a new Global Reporting Initiative Guidelines were introduced (G4). The new guidelines include new disclosures on the ratio of executive compensation to median compensation, the ratio of executive compensation to lowest compensation and the ratio of executive compensation increase to median compensation.[37]

The NEF organization (New Economic Forum) has proposed the introduction of the Charter of Responsible Pay, which can be endorsed by investors and employers organizations, and will need to be drafted partly by them – because it will be pressure from investors that will force companies to sign up to the precepts of the charter. A situation should be encouraged whereby companies that do not sign up are asked difficult questions by investors about why they have not. The charter might include a maximum acceptable bottom-to-top pay, aware that there may be reasonable exceptions to this, but which can be explained by the companies and organizations themselves. It could also include: transparent executive pay processes, binding provisions for shareholders to have a 'say on pay' for CEOs and directors, non-inflationary pay (companies need to be responsible for the social and inflationary effects of their executive pay), employee representatives on the remuneration committee, bonuses linked to environmental, social and other risk factors, the possibility of pay claw back for failure to balance bonuses for success, no hiring bonuses or golden parachutes (if new CEOs are not committed to the future, they should not be hired), stock options must be available to all staff at the same price.[38]

V. RESULTS AND FINDINGS

This conceptual paper is intended to identify and understand the effects of the executive-to-worker pay ratio disclosure. Therefore, the research questions for this paper were created as follows:

1. How the pay ratio' disclosure affects firm performance, employee motivation, loyalty and productivity, and the investors' decisions?
2. Does the pay ratio disclosure lead to lower pay ratio, i.e. fair compensation for all employees, and consequently enhance employee's morale, individual and company's performance, as well as attract investors?

The answers to the research questions were based on an extended review and interpretive analysis of literature. The research was based on comparison of the executive-to-worker pay ratio disclosure policies and practices in 5 chosen countries, by taking in consideration the regulatory differences, the corporate structure differences[39] and ratio differences. Minimal biased methods were used in collecting literature for the paper. In order to minimize bias related to this research

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[36] Bowers, J., Whittlesey, F.: Understanding Executive Pay Equity and Fairness: Ratios and Rationality, World at Work Journal, Third Quarter, 2010.
[37] G4 Sustainability Reporting Guidelines, Global Reporting Initiative, 2013, available at: https://www.globalreporting.org/resourcelibrary/GRIG4-Part1-Reporting-Principles-and-Standard-Disclosures.pdf (accessed 29 Aug 2013).
[38] Simms, A., Boyle, D.: The Ratio – Common Sense Controls for Executive Pay and Revitalising UK Business, NEF, July, 2011, available at: http://s.bsd.net/nefoundation/default/page/-/files/The_Ratio.pdf (accessed 29 Aug 2013).
[39] He, L.: Do Founders Matter? A Study of Executive Compensation, Governance Structure and Firm Performance, Journal of Business Venturing, Vol. 23, No. 3, 2008, p. 257-279.

a number of aspects to the topic was explored before writing the article. A number of databases in fields such as economics, psychology, sociology and law were used, and topics related to the pay ratio that consistently showed up in literature were included in the paper. In that way the author has not limited the research to the areas of his own interest. The author presents both the arguments for and against the disclosure of executive-to-worker pay ratio, i.e. the positive and the negative effects of disclosure. The results of the research, a review of pay ratio-relevant theoretical and empirical studies, have been presented in the table 3. Because of the lack of the data not only disclosure effects are given, but the different effects of pay ratio and CEO compensation level.

The results are grouped by focus of the research and by the category of effects. Due to the limited length of this paper only the key results are presented. This summary's purpose was not to present all available researchers' work but to give insight in some key aspects of their valuable results and conclusions. Because of the lack of comparable empirical data (for the chosen 5 countries) the comparative analysis of pay ratio' disclosure effects couldn't have been possible and it will be the subject of author's future research work. Many authors mentioned here have given their theoretical contribution to the analysis of disclosure effects, and the empirical data are most for UK and USA. What is evident in the here presented results is the lack of proof for strong link between pay ratio' disclosure and company performance. Perhaps with a more sophisticated econometric model, e. g. structural equation modeling, an indirect link (lower employee's morale brings to lower company performance) could be proved. With such a quantitative approach a more exact answer to the second research question could be possible.

TABLE 3 - THE EXECUTIVE COMPENSATION, PAY RATIO AND ITS DISCLOSURE' EFFECTS

Author	*Focus of the research*	*Effects*
Brick et. al., 2002	CEO compensation and firm performance	"excessive compensation are associated with firm underperformance; excessive compensation may be associated with an environment of ineffective monitoring (cronyism)"
Bebchuk and Grinstein, 2005	The growth of executive pay, 1993 - 2003	"during this period, pay has grown much beyond the increase that could be explained by changes in firm size, performance, and industry classification; equity-based compensation has increased considerably but this growth has not been accompanied by a substitution effect - a reduction in non-equity compensation "
Eichholtz et al., 2008	The drivers of executive compensation	"company size is the most important variable in explaining the level of executive compensation (relation between company size and compensation is nonlinear); using alternative monitory mechanisms (institutional investors, debt holders, and outside directors) leads to higher levels of long-term incentives; executive shareholdings are much more powerful incentive than executive compensation"
Jensen and Murphy, 1990	CEO's incentives - it's not how much you pay, but how	"incentives provide safeguards against "looting" by managers in collusion with "captive" directors; compensation committees typically react to the agitation over pay levels by capping - explicitly or implicitly - the amount of money the CEO earns"
Artz, 2008	Performance pay and job satisfaction	"performance pay increases job satisfaction (largely among union workers and males) only in larger firms - only in big firms the performance pay is able to decrease the distance between workers and decision makers"

continued table

Ozkan, 2011	CEO compensation and firm performance	"larger firms pay their CEOs larger compensation; firms with larger board size pay their CEOs higher levels of total compensation; firms with a higher proportion of non-executive directors on board pay their CEOs more; non-executive directors do not seem to provide monitoring in determining CEO compensation; non-executive directors' share ownership has a negative and significant impact on CEO compensation level - ownership can provide incentives for non-executive directors to be more active in monitoring CEO compensation packages; institutional and block-holder ownership have a significant and negative impact on the level of total CEO and cash compensation - shows the existence of active monitoring by block-holders and institutional shareholders; institutional share ownership has a positive and significant impact on CEO pay-performance sensitivity of option grants; longer CEO tenure is associated with lower pay-for-performance sensitivity of option grants "
He, 2008	Do founders matter?	"founder CEOs tend to earn smaller incentive compensation and smaller total compensation than professional CEOs; founder-managed firms are associated with higher financial performance and are more likely to survive than professional managed firms; firms with founder-CEOs are associated with even higher financial performance when the position of CEO and chairperson of the board is combined "
Cronqvist et al., 2009	Do entrenched managers pay their workers more?	"CEOs with more control pay their workers more; entrenched CEOs pay more to employees closer to them in the corporate hierarchy, geographically closer to the headquarters and associated with conflict-inclined unions; financial incentives through cash flow rights ownership by a CEO are negatively related to employee compensation"
Lin et al., 2013	Fat cat CEOs' compensation - the determinants	"there is a substitution effect between CEO compensation and the level of CEO ownership; tenure and firm size are significantly positively associated with CEO compensation; firm size appears to be the most important determinant of CEO compensation; there is a general lack of linkage between pay and performance "
Miles and Miles, 2013	The link between corporate social responsibility and executive compensation	"companies identified as good corporate social performers have lower levels of executive compensation; positive relationship between social and financial performance"
Neeley and Boyd, 2010	The influence of executive compensation on employee behaviors	"it depends on justice perception; a precipitating event, such as a large pay increase or bonus for a CEO when employees are facing layoffs or pay and benefit cuts, may call attention to the gap and create injustice perceptions – this may lead to counterproductive workplace behaviors that may be detrimental to organizational effectiveness"

continued table

Faleye et al., 2013	The determinants and effects of CEO-employee pay ratios	"CEO–employee pay ratios depend on the balance of power between the CEO (relative to the board) and ordinary employees (relative to management); ordinary employees appear to perceive an opportunity in higher pay ratios but the extent to which such perception incentivizes them depends on the likelihood of success in a series of sequential promotion tournaments; the ratio of executive compensation to ordinary employee pay has no significant effect on employee productivity on average; productivity increases with relative pay when the firm has fewer employees who are well-informed on executive pay or are not unionized, and when promotion decisions are predominantly merit-based"
Ferri and Maber, 2013	Say on Pay votes and CEO compensation	"UK firms responded to negative say on pay voting outcomes by removing controversial CEO pay practices criticized as rewards for failure (e.g., generous severance contracts) and increasing the sensitivity of pay to poor realizations of performance"
Balsam and Yin, 2012	The impact of Say-on-Pay on executive compensation	"affected firms reduced compensation and made it more performance-based, with that decrease being greater for firms that previously overpaid their CEOs; the percentage of votes cast against executive pay is lower when the firm reduced executive compensation in advance of the initial say-on-pay vote, but higher when the firm pays higher total compensation, has a large increase in compensation, has a larger amount of compensation that cannot be explained by economic factors, or has a higher amount of other compensation (e.g. private jets, country club memberships, tax gross ups)
Iacobucci, 1998	The effects of disclosure on executive compensation	Positive effects: "sensitivity of pay to performance (desirable transition to variable pay with a similar risk-adjusted decrease in fixed pay); increase shareholder control over the way executives are paid; lowers the shareholders' cost of monitoring the setting of executive compensation; publicizes the results of shareholder activism; encouraging shareholder supervision; a social benefit - provision of additional information to the managerial labor market" Negative effects: "may have an inflationary effect on compensation level (additional variable pay package/pay-for-performance without a similar decrease in fixed pay); by potentially conveying information about the executives' ability disclosure may have a direct impact on pay levels (executives wishing to indicate superior ability will seek higher compensation)"

continued table

Ferrarini and Moloney, 2005	The role of disclosure	Positive effects: "enhance the accountability and visibility of the remuneration committee; sharpens shareholder monitoring - induces institutional shareholders to play a more activist role; lowers the cost of monitoring; facilitates communication between institutional investors and with management; enables the adoption of effective incentive contracts - it can manage the agency costs of executive pay, across dispersed and blockholding systems, without intervening in governance choices and structures" Negative effects: "costs of disclosure: popular and political reaction/pressures (media, labor unions, political activist) - remuneration committee may adopt suboptimal remuneration structures which are not sufficiently sensitive to performance; disclosure may result in an increase in pay due to a ratcheting effect"

Source: Research results

The results have shown positive impact of the pay ratio' disclosure on the employee motivation, moral[40], behavior[41] and productivity, as well as on the company performance[42]. Such empirical results are especially important if we are considering the necessity to foster a relational psychological contract with employees in order to encourage them (including directors) to perform trust-generating and trust-based behaviors.[43]

The arguments about the costs of disclosure are not holding. Companies are already required to collect and maintain their employees' compensation data for accounting and tax purposes. And the costs of disclosure are very often greatly surpassed by hidden costs of high pay ratio (officially disclosed or not). The disclosure could actually help corporate decision makers to get more informed before deciding about compensation plans and levels.

The disclosure also helps investors. Disclosure of the median annual total compensation for all employees will help investors compare compensation structures between peer companies. High median employee compensation may indicate that a company pays high wages to attract the most qualified employees and to ensure high productivity. High employee compensation may also indicate a highly skilled workforce. The ratio of CEO to worker pay shows wage dispersion within a company, such as flat versus pyramid compensation structures. Pyramid compensation structures can have a negative effect on employee morale and productivity.[44] And lower pay ratio could indicate lower turnover rates.

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[40] Miller, S.: Executive Pay: How Much Is Too Much?, Growing Pay Disparity Between Top Executives and Average Workers Threatens Morale, February 2012, available at:, http://www.shrm.org/hrdisciplines/compensation/articles/pages/executive-pay-how-much.aspx (accessed 29 Aug 2013).
[41] Neely, C. R., Boyd, N. G.: The Influence of Executive Compensation on Employee Behaviors Through Precipitation Events, Journal of Managerial Issues, Vol. 22, No. 4, 2010.
[42] Brick, I. E., Palmon, O., Wald, J. K.: CEO Compensation, Director Compensation, and Firm Performance: Evidence or Cronysm?, Journal of Corporate Finance, 12, 2006, p. 403-423.
[43] Kidder, D. L., Buchholtz, A. K.: Can Excess Bring Success? CEO Compensation and the Psychological Contract, Human Resource Management Review, 12, 2002, p. 599 – 617.
[44] Available at: http://www.workerscapital.org/images/uploads/AFL-CIO%20Pay-ratio%20disclosure%20-%20Information%20for%20Investors.pdf (accessed 29 Aug 2013).

The research was limited by the availability of data. The empirical study of the introduction of say-on-pay provisions regarding pay ratio' disclosure in the Republic of Croatia will give new evidence and arguments on the paper's topic. And the comparative data for the chosen 5 countries will give an empirical support to the arguments presented in the paper.

VI. CONCLUSION

The central question in the debate over disclosure policies is whether the compensation of the directors/executives is in line with their contribution to the company success. The compensation policies in practice are often used to reinforce the elitist position of CEOs instead of rewarding all who contributed to the creation of value/wealth (the company success is always the result of a team work, i.e., of capital, infrastructure and labor' investors). Some critics of the disclosure defend high executive-to-worker pay ratios with the following argument: managers of today are working in a very complex, unstable and global environment which asks for greater skills and responsibility level. However, the studies presented in this paper indicate that the high pay dispersion may result in overall lower levels of individual and organizational performance. The reason to this is that after a certain point larger pay differences can create feelings of injustice that can diminish cooperation, quality and commitment to long-term success.

As empirical research results are showing the disclosure of executive-to-worker pay ratio is not only beneficial to the company financial results, but also to the investors who are seeking for long-term oriented companies. Fundamentally, higher wages suggest that a company is making strategic investments in human capital and the investors could biased on that and more equitable pay structure assume decreased turnover.

This paper has given a broader perspective on the pay ratio disclosure effects. The list of pay ratio-relevant variables identified through literature review could be used as a valuable source for future quantitative research, i.e. for creating a valid instrument that measures the effects of pay ratio disclosure on firm's and individuals' performance, and on investors' decisions. The findings of the conducted research have shown that the pay ratio disclosure improves the firm's and individuals' performance which lead us to conclusion that the pay ratio disclosure requirement should be introduced as an obligatory part of the yearly remuneration report. In countries where such disclosure requirement is not yet introduced, we strongly recommend that companies start to disclose their pay ratio voluntarily. The research was limited by the availability of data (only secondary data were used) but gives a thorough theoretical base for future primary quantitative research.

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