St. Petersburg State University Graduate School of Management Master in Management Program

## EARNINGS MANAGEMENT AROUND CEO TURNOVER: COMPARISON OF RUSSIAN AND CHILE

Master's Thesis by 2<sup>nd</sup> year student Concentration - International Business Juan Luis Leiva Urrea

Research advisor: Ph.D. Associate Professor, Tatiana A. Garanina

St. Petersburg 2016

#### ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ МАГИСТЕРСКОЙ ДИССЕРТАЦИИ

Я, Хуан Луис Леива Урреа, студент 2 курса магистратуры направления по направлению 38.04.02 «Менеджмент», заявляю, что в моей магистерской диссертации на тему «Управление прибылью и смена СЕО: сравнение России и Чили», представленной в ГАК для публичной защиты, не содержится элементов плагиата.

Все прямые заимствования из печатных и электронных источников, а также из защищенных ранее выпускных квалификационных работ, магистерских, кандидатских и докторских диссертаций имеют соответствующие ссылки.

Я ознакомлен с действующим в Высшей школе менеджмента СПбГУ регламентом учебного процесса, согласно которому обнаружение плагиата (прямых заимствований из других источников без соответствующих ссылок) является основанием для выставления за магистерскую диссертацию оценки «неудовлетворительно».

(Подпись студента)
(Дата)

## STATEMENT ABOUT THE INDEPENDENT CHARACTER OF THE MASTER THESIS

I, Juan Luis Leiva Urrea second year master student, Management program 38.04.02 «Management», state that my master thesis on the topic «EARNINGS MANAGEMENT AROUND CEO TURNOVER: COMPARISON OF RUSSIA AND CHILE », which was presented for the public defense, does not contain any elements of plagiarism.

All direct borrowings from printed and electronic sources, as well as from master theses, PhD and doctorate theses which were defended earlier, have appropriate references.

I am familiar with the study process regulations at Graduate School of Management of Saint-Petersburg State University, according to which finding of plagiarism (direct borrowings from other sources without appropriate references) can be the reason for master thesis to be evaluated as «unsatisfactory».

(Student's signature)
(Date)

#### Аннотация

ФИО студента	Хуан Луис Леива Урреа
Тема магистерской диссертации	Управление прибылью и смена СЕО: сравнение России
	и Чили
Факультет	Высшая школа менеджмента
Программа	Менеджмент
Год окончания	2016
ФИО научного руководителя	Гаранина Татьяна Александровна
Описание целей, задач и основных	В данном исследовании изучается вопрос управления
результатов исследования	прибылью при смене СЕО в таких странах, как Россия
	и Чили. Такая постановка является новой для
	развивающихся стран. В то же время, как показал
	обзор литературы, данный вопрос уже изучался в
	развитых странах. Целью данной магистерской
	диссертации является анализ того, существуют ли
	различия в управлении прибылью уходящими и
	новыми СЕО на таких рынках, как Россия и Чили. В
	работе также будут выявлены причины и побуждения,
	связанные с управлением прибылью. Существуют
	различные причины управления прибылью при смене
	СЕО, о чем свидетельствуют то, что вновь приходящие
	СЕО чаще склонны к занижению прибыли по
	сравнению со своими предшественниками. Данное
	поведение можно объяснить тем, что новые СЕО
	пытаются заявить о том, что их предшественники
	неэффективно управляли компанией и именно
	благодаря их приходу повысить темп роста прибыли.
	Последующее повышение прибыли приведет к более
	высокому уровню вознаграждения нового СЕО.
	В исследовании используется регрессионное
	моделирование для трех разных периодов в Чили и
	России. Проведенный анализ позволил сделать вывод о
	различиях в полученных результатах для двух рынков.
	Модели являются значимыми, что говорит о
	возможности их использования для оценки уровня
	управления прибылью в Чили и в России.
Ключевые слова	Управления прибылью в чили и в тоссии.  Управление прибылью; смена СЕО; перепроизводство;
Tono lebble chieba	издержки производства
	подоржки производотва

#### **Abstract**

Master Student's Name	Juan Luis Leiva Urrea
Master Thesis Title	Earnings management around CEO turnover:
	comparison of Russian and Chile
Faculty	Graduate School of Management
Program	Management
Year	2016
Academic Advisor's Name	Tatiana Garanina
Description of the goal, tasks and main	This study investigates earnings management around
results	CEO turnover in companies in Russia and Chile. This
	evidence is new and contributes to the on-going
	discussion of earnings management in emerging
	countries. This phenomenon is common in other
	countries given the literature studied. The task of this
	master thesis is intended to explain the importance
	whether new CEOs and outgoing CEOs manage
	earnings differently from established CEOs. Besides, we
	will show whether there exist differences in earnings
	management between Russia and Chile -and identify the
	connection between earnings management and
	incentives. There exist different incentives to study for
	Earning Management around CEO turnover that means
	how incoming CEOs in general tend to shape earnings
	downward relative to the predecessor CEO. This
	behavior appears when the new CEO wants to display
	that the company was mistreat by their antecessor and
	the following periods the company would improve its
	earnings growth. Thus, the new chairperson will get all
	the credits for improve earnings in the company, and this
	will be reflected with higher future bonuses and salary.
	The research presents the results of the multiple
	regression models for Chile and Russia for three
	different periods. It is shown the existence of
	significance of Earnings Management for each model
	finding different result in both markets. Besides, it is
	stated the ability of the different models to explain the
	Earnings management for the periods under study for
	Chile and Russia.
Key words	Earnings management; CEO turnover; overproduction;
	production costs.

#### **INDEX OF CONTENT**

INTRODUCTION.		8
Background	l of the research	8
Research ob	jectives and research method	9
Research Pr	oposal	9
Expected Fire	ndings and contributions	10
Organization	n of the research	11
CHAPTER I: STA	TE OF ART OF EARNINGS MANAGEMENT A	AROUND CEO's
TURNOVER		13
	s Management around CEO's Turnover	
	Earnings Management	
1.1.2	Earnings Management incentives CEO's Turnover	
	re Evidence	
	CEO's Turnover evidence	
	Performance evidence in CEO's turnover	
1.2.3	Earnings Management evidence	
	TA, METHODOLOGY, RESULT ANALYSIS AN OF EARNINGS MANAGEMENT	
	ection	
	Data sources.	
	Inclusion Dataset.	
	ology	
2.2.1	Accrual-based Earnings Management	31
2.2.2	Real Earnings Management	32
2.2.3	Variables description.	33
2.3 Data Ana	alysis and Results	37
2.3.1	Sample Statistics	37
2.3.2	Regression Model	38
	2.3.2.1 Results for Chile	40
	2.3.2.2 Results for Russia	43

2.4 Regression model results discussion	46
2.4.1 Analysis for first period of new CEO	46
2.4.2 Analysis for second period of new CEO	47
2.4.3 Analysis for last period of outgoing CEO	50
2.5 Implications of the results	52
2.6 Current Research Limitations	54
Chapter Summary	55
CONCLUSIONS	58
FURTHER INVESTIGATIONS	62
REFERENCES	63
APPENDIXES	67
APPENDIX 1: Descriptive Statistics, Russia	67
APPENDIX 2: Descriptive Statistics, Chile	67
APPENDIX 3: Pearson Correlation, Chile	
APPENDIX 4: Pearson Correlation, Russia	
APPENDIX 5: Regression summary, Chile	
APPENDIX 6: Regression summary, Russia	

#### INTRODUCTION

#### **Background of the research**

This Master Thesis investigates the contrast between Russian and Chilean companies using earnings management in times of CEO turnover. This issue is rather complicated, however is very interesting and useful.

At present the CEO has enough independency to manage the earnings of the company; some authors have shown evidence regarding behavioral patterns in CEOs. This behavior is formed as different incentives of CEOs, for instance, incentives to manipulate earnings downward relative to the predecessor CEO. On the other hand, they could manipulate real business upward by the established CEO.

The importance of the study of this manipulation of real business is aimed at explaining the differences, mismatches or inconsistencies that exist in the financial report, when CEOs manipulate the earnings of the company. In this way you can understand reasons and situations by delivering a statistical tool to check if this effect exists in other markets.

The problem of this investigation can be described as follows:

The research problem detected is very useful for improvement, where managers are aware of earnings management and can identify inefficiency of allocation of resources within the company in the different markets, but there is insufficient empirical evidence of studies analyzing the Earnings Management around CEO turnover in Emerging markets. We will contrast Russian companies with Chilean companies where this will be an important contribution to literature as there is no evidence at all. Finally, we will be able to conclude which of these CEOs (Russians or Chilean) tend to manipulate more their real business activities and based on the findings achieved in the research, propose recommendation and conclude providing more information for the topic of the research to the market.

In summary, this study is aimed to contribute to the understanding of Earnings Management around CEO turnover; Analysis of Russian and Chilean companies and comparison of the obtained results.

The overall goal and objectives are defined in the next part, as well as the methodology use in this research, in order to achieve the results and conclusions searched.

#### Research objectives and research method

#### **General Objective**

Analyze the existence of earnings management in times of CEO turnover in Russia and Chile.

#### **Specific Objectives**

- 1. Make literature review on the topic of earnings management.
- 2. Develop hypothesis on the base of literature review.
- 3. Collect required data for companies from Russia and Chilean market.
- 4. Apply regression analysis for testing the developed hypothesis.
- 5. Make managerial application of the obtained results.

In the paper the following issues will be studies in details:

Whether new CEOs and outgoing CEOs manage earnings differently from established CEOs?

Whether there exist differences between manipulation by Chilean CEOs and Russian CEOs in real business activities?

To identify the existence of earnings management in Russian and Chilean CEO's Turn-over we should first establish some key definitions of the study. Outgoing CEO: it is the CEO that leaves the company. The incoming CEO's: are those that are new CEO. The cut-off date means in theory the very last date where the earnings management can be manipulated. In the case of accruals earnings management, the date of cut-off is the date of earnings announcement. This approach is focus on the work of Geertsema, Lont and Lu (2013) with the paper *Earnings Management around CEO Turnovers*. The data for this part of the research will be collected by the Data-Base of GSOM virtually library (Thomson Reuters).

The first approach will be evaluating what is the best way to analyze real earnings management and contrast them with our findings, for example Geertsema, Lont and Lu (2013) established "...two business activities to estimate earnings management; one is the

overproduction and the second one is the delay of discretionary expenditures that inflate the earnings for a temporally period (or, in the other way around, *under production* and *front loading* discretionary expenditures that temporarily would decrease earnings)"

In case of finding strong evidence of manipulation in earnings business activities, the next step is to find the specific reasons of both markets (Russian and Chile) and suggest some actions to avoid this distortion in the accounting process of the companies.

In case of existence of earnings management in CEO's turn-over, we have some insights of what reason could motivate CEOs to manage earnings of the company such as CEO's salaries/bonuses/option programs, CEO's education, and previous experience. With these ideas we can start researching the specific reasons of the markets that we are studying, Russia and Chile.

#### Research Proposal

First, our study investigates real management around CEO turnover in Russia and companies in Chile. This evidence (if it exists) is new and contributes to the on-going discussion of earnings management in emerging countries. This phenomenon is common in other countries given the literature studied.

Second, it is important to establish whether new CEOs and outgoing CEOs manage earnings differently from established CEOs

Third, we want to find whether there exist differences in earnings management between Russia and Chile. Finally, we want to demonstrate the importance of controlling firm performing, regarding general measure of earnings management. Summarizing we want to answer the following questions about the markets of Russian and Chile:

- Does the manipulation in real business CEOs turnover exist?
- Do new CEO and outgoing CEO manage earnings differently?
- Does the earnings management differ between Russia and Chile?
- Are there measures to avoid this manipulation?

Given the research questions, it is important that in this stage we aim to investigate their truth through this study, sustained in studies and backgrounds of researchers that have solved this problem in the international market. Both departing and new CEOs may

have strong incentives to manage earnings. Thus, we can state a hypothesis that will help us to lead the research in this topic. The hypothesis for this study is:

"The fact of change of CEO does not influence the level of earnings management in a company"

#### **Expected Findings and Contributions**

Our study benefits from a much larger and more diverse information of CEO change firms in the Chilean market and Russian market. This new evidence will give us a better understanding of both markets, contrast them and learn of the differences. Besides, with these new findings, we will be able to advice companies how to control perverse movement of new and outgoing CEO, avoiding consequences of manipulation of real business operations because of selfish interests.

Companies will be beneficiated of our findings, being aware about the incentives of CEOs to manage earnings and how these practices could be prevented in order to avoid consequences.

Another point that is very important to highlight is that Russia and Chile are emerging countries with different factors that lead the way that companies behave, in case we compare with the literature studied (Mainly developed countries). The factors that could make the difference are such as the Russian/Chile culture, the principles of doing business in Russia/Chile and the earnings management when there is CEO turnover.

#### Organization of the research

This thesis is organized into three chapters described below:

The first chapter is intended to literature overview of the topic. Presentation of the main concepts involved in the research problem. Followed by the incentives of the CEO's to manage earnings in different companies, illustrate performance of the CEO turnover and the earnings management evidence in different markets.

The second chapter sets out the methodology used to achieve the objectives of the empirical research based in the literature review of the first chapter. Besides, it is described the variables involved in the research and the Regression model. Thus, get the output of the model for analysis.

In the last chapter, we discuss the results obtained and the interpretation of the data. Finally, the conclusions and the recommendations found in this investigation are set and showed in the last chapter.

## CHAPTER I: STATE OF ART OF EARNINGS MANAGEMENT AROUND CEO's TURNOVER

#### 1.1 EARNINGS MANAGEMENT AROUND CEO TURNOVER

#### 1.1.1 Earnings Management

Managers of the companies have the possibility to choose the accounting policy of the firm. Given, this accounting policy could arise two situations; first of all, the policy can maximize the benefit of the shareholders, but in the other case could maximize the benefit of the manager at the expenses of the owners (Wartfiled et al., 1995). Thus, if we expect that the manager act in a rational way, it is natural to expect that they choose the policy that maximizes their own benefit, objective that could crash with the maximization of the enterprise value that the shareholders demand. The situation described above is called Earnings Management that is the election of the accounting policy made by the managers, in order to achieve certain specific goals (Wartfiled et al., 1995).

There are many definitions of Earnings Management. One of the more famous definitions of Earnings Management is the intervention in the process of elaboration of the financial and accountable information, of course that the main goal is obtain some personal benefit (Schipper, 1989). Another definition is how the directors use their own criteria in a discretional way for the elaboration of the financial statements with the purpose to influence in the perception of the investors or creditors over the subjacent result or to influence in the results based in accounting numbers (Healy and Whalen, 1999).

The information related to Earnings Management and the wide number of articles about the topic, the researchers have seen that all the effort are limited because of the difficulty of measuring the incentives of managers, the process of taking decisions and phenomenon that are not observables (García et al., 2005). Moreover, the process of researching this issue, it is particularly difficult also because managers have more information; they have incentives to dissimulate any adjustment that could benefit them in the future.

There is a concept that is called accrual adjustment; this means the calculation between the difference of the accounting profit and cash flow of the operations. The key here is separate the *observable variable accrual adjusted* into two components not

observables that is the discretional and non-discretional parts. The changes of the discretional part are an attempt to alter the results (Poveda et al., 2001).

#### 1.1.2 Earnings Management Incentives

The problem to be addressed in this investigation is that there is not enough evidence from studies that focus on CEO turnover, occasion which creates an environment with strong stimulus of earnings management for both outgoing and incoming CEOs. Earnings Management around CEO turnover means how incoming CEOs in general tend to shape real business activities (but not accounting accruals) to manage earnings downward relative to the predecessor CEO. This behavior appears when the new CEO wants to display that the company was mistreat by their antecessor and the following periods the company would improve its earnings growth. Thus, the new chairperson will get all the credits for improve earnings in the company, and this will be reflected with higher future bonuses and salary (Income) (Reitenga and Tearney, 2003). Later in this chapter, it will be described in more details how managers could manage earnings in companies. In the case of the CEO that is departing, he/she would want to do the opposite as new CEO. Established CEO would trick real business activities upward to leave the charge and get the highest possible bonus. (Graham et al., 2005)

In this way we want to know if there is a real effect in Russian companies and contrast them with companies from Chile. This will be an important contribution to diminish the *literature gap*, in accordance with the existence of little researches in Russia and Chile. We will be able to conclude which of these CEOs (Russians or Chilean) tend to manage earnings in companies.

To develop the theoretical framework, it will be describe how different authors addressed this problem to determine the Earnings Management around CEO turnover and the different variables around this topic for a better understanding of the problem.

There are different studies that try to investigate how change the relation during different periods of CEO turnover, for instance, studying turnover of CEOs, for board driven (internal) and through takeover and bankruptcy (external).

#### 1.1.3 CEO's Turnover

Replacing a leader by other is a source of controversy and also of real conflict within the firm. In the enterprise, the Chief selection is one of the most important decisions that the board could take, but this controversial situation could be ended in the continuity or cracking of part of the company. This figure not only has a huge impact on the performance of the company, but the process of subsequence, on the one hand, profoundly influences the image of leadership for employees, investors, analysts, shareholders and other constituencies that have the organization. Secondly, there is a considerable pressure on the entire management team, most notably if the candidate comes from outside.

Generally, the CEO is aware that the last service he can make to the company is that someone better than him arrives. As we shall see, their cooperation in this task is, however, complicated in its design and in its implementation, since many circumstances come into play: the progress of the company's prospective strategies, the Chief himself, the board administration or similar frame in family businesses, the applicants and the management lineup. Thus, the consequences of success or failure in the election of the CEO, and its subsequent implementation are affecting the whole company.

#### 1.2 LITERATURE EVIDENCE

#### 1.2.1 CEO's Turnover evidence

In the research *How has CEO Turnover Change* of Kaplan and Minton (2012), the motivation of the authors to study CEO turnover was study a topic where directors are commonly criticized for paying exaggerated rents to CEOs and increasing the wages and bonuses of CEOs through the time. The main criticism is the role of the board of directors increasing CEO payment and auditing pay practices. While there was a lot of attention on this topic, changes in CEO turnover have been neglected receiving just little attention. In this point, the authors examine how the performance of different companies changes given CEO turnover.

Kaplan and Minton (2012) observed from a sample of large companies of U.S.A from 1992 to 2007, that the annual CEO turnover is higher in recent periods than earlier

periods estimated in previous investigations. This finding suggests that the average administration of a CEO is less than seven years for the total period of study, but in the more recent period, since 2000 this average tenure CEO turnover fall down to less than six years of administration. The research also establish that internal turnover is somewhat more related to three items of firm stock performance – *performance related to industry, industry related to the market, and performance of the entire stock market* -.

It was noticed that internal turnover over the period 2000 is more delicate related to the three factors named above of stock performance than the former periods. And the most interesting finding is that the board use to get more attentive to the stock performance when they have been reprobated in certain period.

This sensitive issue that drives turnovers could have some very important implications in the firm. First of all, CEO performance through the time has become more and more deficient. In the case of external takeovers that are included in the research, Chief remains less time in the firm than in the past reported in previous studies. Second point to highlight, the turnovers that are considered as "unforced", in fact, are not voluntary (Kaplan and Minton, 2012).

The third point, include the role of the board described in Kaplan and Minton, (2012). There is a discovery that shows that the board operates well to the different insufficient performance of the industry and external annexing. Fourth, the higher the CEO pays the shorter CEO tenure in the firm and sensitiveness to stock performance. As last point, the higher rent of CEO the higher the incentive to earnings management inside the firm.

Other interesting finding about CEOs turnover is the understanding how the independence of a board affects the CEO's competence to earn rents from the firm. This investigation assumes that the CEO has enclosed information about the company, where the board would have to take the decision whether to remove him/her or not. But, if the board is more active replacing underperforming CEOs, the Chief Executive Officer is better able to use the private information to get better results that would be translated in higher rent (Laux, 2007).

The model that Laux (2007) implemented shows a significant correlation between the board independence and CEO turnover. Thus, the more independent the board, the

more recurrent will be the CEO turnover. This paper takes a common market opinion about those boards that are controlled by external directors are more efficient controlling CEO's performance than boards that are monitored by internal directors. It is very interesting that the authors put special attention on cost/benefits of independent boards, in order to understand more variables (Empirical) involved in the CEO turnover concept. The first point for the board to discover is; the capabilities of the CEO of learning, understanding and whether the CEO had enough time to adapt, so with this information take the decision whether he/she should be replaced or not. The previous point is fundamental for the relation between Board and Shareholders, because the fact to expel a CEO is very expensive for the company (Severance pay) and the effort for educating an expert is eroded. If the board is considered that have fired in an inappropriate way, the communication link within the company is harmed. On the other hand, fire to low performance CEO has positive impact (Laux, 2007).

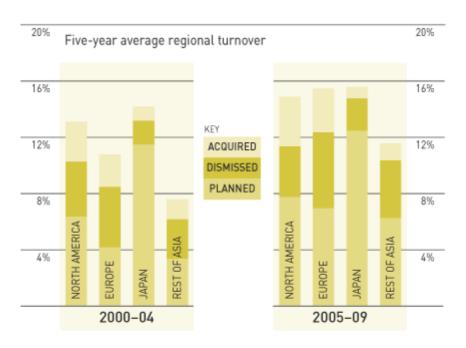
The previous paragraph defines dependency of the board in the case when the board has stimulus to keep the Chief as expense of the company. It is developed when the CEO's success is associated to the director's success. The consequence of this fact is that the board become passive and takes the role of an inactive player in the company. In contrast, an independent board would try to maximize the benefits of the shareholders. The research conclude that dependent boards fires less poor performing CEOs than independent boards, given this point the shareholders benefits from the dependency of the board, protecting shareholder interests within the firm (Laux, 2007). The topic helps to understand better some factors of CEO's turnover; nevertheless our research does not focus on the board independence variable.

Regarding to audit fees in turnover CEO companies, *CEO Turnover and Audit Pricing* article (Huang et al., 2014) has been found that the fees paid for CEOs that were force to leave were importantly higher than companies that were not force to remove the CEO. Besides, they did not find differences in audit fees between firms with voluntary turnover and firms without turnover. This topic helps to understand in a better way the topic, however the audit fees in CEO's turnover is not a variable for our research.

The paper wants to extend the literature of the link bounded by CEO's turnover and the audit fees. It is important to take in consideration that CEOs that are force to leave the managerial position are considered situations with higher risk than companies

with voluntary CEO turnover. The audit would claim for higher fees to forced turnovers because this required better performance management (higher risk), instead voluntary turnover that is recognized as a pure transition procedure in the company. The substitution of the CEO is a matter of risk because generates some uncertainty about the new leader and his/her capabilities within the firm as effectiveness and future strategy; all of this, it is interpreted as risk, given the responsibility of auditors to select the right candidate. Given this uncertainty the audit companies increase the audit fees as extra costs (Huang et al., 2014).

In order to give some statistical information about CEO's turnover and the trend of this concept, a continuation it is shown a breakdown of number of CEO's turnover in the different regions of the world and proportions as an aggregated analysis (Figure 1).

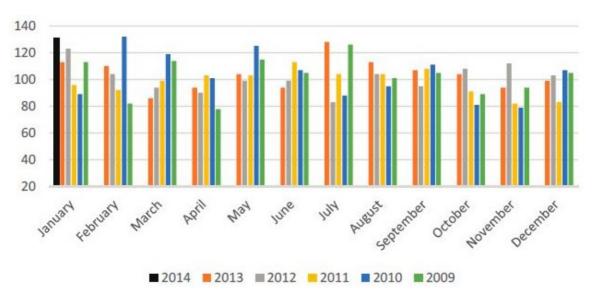


Source: Booz and Company

Figure 1 Regional CEO Breakdown

It can be seen clearly that the tendency of the market is converging across the globe in different industries. We can see that the proportion of Chief Executive Officers those are changed through the years in Europe, have been stabilizing to similar levels to the position of United State market and the Japanese market. In the specific case of the rest of Asia the tendency also is going to reach levels as Japan and U.S.

In the Figure 2 (U.S Turnover) is illustrated the tendency of CEO's Turnover through six consecutive years. This is an empirical example to have a better understanding of how CEO turnover have behaved in these years in the U.S market.



Source: Challenger, Gray & Christmas, Inc.

Figure 2 CEO departure by month, Year in U.S.- based companies

The January of 2004 achieved the highest number of CEO that left the position. The percentage of turnover have increased 32,3% compared with the largest level of turnover in the previous four years. The number of CEOs that have departed was 131 in January 2014, corresponding to a report elaborated by the company Challenger, Gray & Christmas, Inc. Thus, with this information it is possible to show graphically the concept of CEO turnover in the US market.

It is very difficult to find information of this topic in emerging markets, in accordance to this the lack of information supports the idea of literature gap that our research is intended to study.

#### 1.2.2 Performance evidence in CEO's turnover

Performance evidence in CEO's turnover literature have found a very strong support in the idea that in the US market, companies with not habitual CEO turnover have better performance than those enterprises without a CEO change. In this case, a question that has received less attention is how CEO turnover impacts the performance of the company in the next periods. The CEO turnover is because of unsatisfactory performance of the incumbent, in this way it is important to understand how this adjustment in the management will impact the futures quarters in the U.S.A. market in the period of 1996-2004, whether they will improve or not. The other question that they wanted to address is identifying the different types of turnover, (voluntary or not voluntary) and studies the differences of how they impact the performance of the firms (He et al., 2001).

The contribution of this study relies on:

This investigation was the first research that used Efficient Frontier analysis in corporate governance studies. This approach has the advantage to incorporate to the analysis not only public companies, but private (Not only stocks for public firms) companies as well using measures as Cost Efficiency and Revenue Efficiency. Other advantage of this research is that they might measure performance through multidimensional enterprises' production process. The methodology was pioneer in this paper, showing advantages for subsequent investigations.

Secondly, the study has helped to get a better understanding in an industry that has had little research of the relationship between CEO turnover and the firm performance in the insurance industry. Besides, it helps to study turnover performances post the period of change of CEOs in insurer enterprises.

The main conclusion of the paper is that firms with not regular turnover show greatly better performance than those companies without CEO turnover. The positive impact of the performance of CEOs during the turnover is clear and statistical significant in this research. A deeper understanding of different competitive industries is needed for futures investigation (He et al., 2001).

Extending other aspects that stimulate CEO Turnover is the family firm's factor that accounts roughly one third of the S&P 500 market (Anderson and Reeb, 2003). Splitting ownership and control of the company would help to family firms to deal with some conflict of interest. In the research of Chen, Cheng and Dai (2013), they analyze how family ownership and control of the company affect CEO turnover decisions. They focus on CEO turnover decisions because this is one of the most important managerial decisions with long term implications, as operations, investments and financing decisions (Huson, Parrino and Starks, 2001). The findings of the paper are: in professional family member companies was found a higher sensitivity of Chief turnover-performance comparing to nonfamily firms. On the other hand, family CEO firms tend to protect the unsatisfactory performing CEO family member to be expelled from the company, thus showing a lower sensitivity of CEO turnover within the company.

The authors highlighted two situations that were very interesting for them prior to start the analysis. Agency Conflicts could be the main reason of the enterprise failing to discard poor performing CEO that at the same time it would imply a very costly agency conflict issue. On the other hand, the scholars summarized that Agency Conflicts are reflected by the low sensitivity CEO turnover performance. This implies that the bigger the conflict of the agent, the harder would be change the poor performing CEO (Chen et al., 2013).

The two main things to study are how family ownership and control are related with agency conflicts. Family participant in the company have long-term interest in the firm (Firm value). Consequently, this leads a stricter monitoring of managers, increasing the chances to remove underperforming CEOs, contrasting with nonfamily enterprises. Family shareholders have enough influence in the company generally because of concentrated equity of the company. In this case, family members could tend to run with their own interests, do not paying that much attention on the other shareholders. These two effects entail different things; the sensitiveness around CEO turnover depends whether there is a CEO family member or not. Whether the CEO is a family participant, the incentives to squeeze higher rents and stay longer as a CEO are much more attractive than the scenario where there is not a family member involved.

To solve this question, the study considers family CEO firms and Professional family CEO firms with data of U.S.A. companies during the period 1996-2005. It is

summarized the importance of separating professional CEO family firms from family CEO firms for a better and clearer understanding of the topic. The results suggest that family firms are less transparent at the moment to give managerial forecasting than non-family firms (Chen et al., 2013).

#### 1.2.3 Earnings Management evidence

Identifying the possible motivations of CEOs to manage earnings is a very important point to understand earnings management phenomenon. It is required an analysis to investigate whether the motivational factors apply for Russian and Chilean companies. In the investigation of Andersson & Lilja (2013), the authors present the following CEO motivations to earnings management in the Swedish market "...factors that have larger impact of the use behind earnings management. Suggestions for such additionally control variables are: CEO's salaries/bonuses/option programs, CEO's education, and previous experience as well as previous industry belonging to see whether different backgrounds and biases would be a reason". (Fredrik Andersson & Viktor Lilja, 2013)

An entity called SOX (2002) was created given the earnings management practices used by CEOs. The Sarbanes Oxley (SOX) acts in the United States and was developed to supervise public firms, with the purpose to prevent arguable behavior. The main goal of this entity is assure the investor interests using their capabilities to foreseen fraud and risk of bankruptcy.

In our study we want to find the effect in Chilean and Russian companies, thus we can find some previous evidence that have been shown that CEO's use two methods to manage earnings in companies around the world. The methods to manage earnings are the accruals management of the company and operational activities in the companies. The objective of the method is to achieve the required earnings targets, nevertheless, the earnings management has increased through the time, and in the meanwhile accruals earnings management has been decreasing. This tendency could be possible because real earnings management is harder to identify than accruals earnings management that was described in the research *Earnings Management around CEO Turnovers* (Geertsema Geertsema, Lont and Lu 2013).

The incentives of the CEO to manage earnings showed in the paper described above, says that the new CEO would manage earnings downward, in order to show that the company was mishandled and start a clear path of good performance. In contrast, we can observe the incentives for the departing CEO is exactly the opposite. The incumbent would want to manage earnings upward to get as much bonus as possible (or hide deficient performance).

The earnings management takes place in the period of transition quarter of both CEOs. The information was obtained from Audit Analytics. They compare earnings management in a quarter where there is a change of CEO and a normal quarter. The main finding is that the new CEO does not use accrual-based methods, but manages real activities, in order to decrease the company earnings for the previous period. This anomaly arises as soon as the transition period (quarter) takes place.

Analyzing nonroutine CEO turnover firms and routine CEO companies, it can be concluded that nonroutine CEO enterprises are smaller in size and smaller in the ratio ROA (Return on Assets) than companies those are already experienced on turnover. Moreover, nonroutine CEO turnover firms use to be much more traditional in financial reporting than the routine CEO turnover. Other important conclusion of the paper is that the new CEO manages earnings more actively than the departing CEO through unusual production cost and discretionary expenditures (Geertsema, Lont, Lu, 2013).

In order to reach a higher level of statistical power for the test, large number of data was needed in this investigation. Higher statistical power is very necessary, because earnings management is noisy data (Dechow et al. 2010).

The methodology that Geertsema, Lont and Lu (2013) use in their article *Earnings Management around CEO Turnovers* to determinate earnings management of real business activities is:

• Overproduction: The overproduction decrease the cost of the products that are ready to be sold (per unit basis), this effect would be translated as increase in earnings for that specific quarter. However, the storage of the goods is limited and the following periods this effect would be translated in underproduction for the

- next period. On the other hand, it is possible to under-produce in order to have the exact opposite effect for the next period.
- Delaying discretionary expenditures: The variable includes Research and Development, Advertising and Sell, General and Administrative Expenditures.
   The idea of delay discretionary expenditures would boost earnings for the following quarter (Geertsema, Lont and Lu, 2013).

In order two have a clearer and deeper understanding of what we are looking for, we will analyze two more cases about Earning Management and CEO turnover. We are going to present two cases, the evidence of Korea and the evidence of Indonesia.

Korea's case study placed four scenarios of CEO turnover, force or voluntary departure of the CEO, and whether the incoming incumbent is promoted or hire from outside. One interesting finding in this research is that the outgoing CEO in a "force" departing scenario, managed upward the company earnings, but only when the incoming CEO comes from inside of the company. In this specific case the new CEO also manage downward earnings through discretionary accrual and real activities. Another conclusion is that the external incoming CEO manages earnings upward in a voluntary CEO turnover (Choi, Kwak and Choe, 2014).

One of the objectives of this study is to add an extra variable in the research, differentiating whether the incoming CEO is from outside or developed his/her career within the firm. The new variables provide to the research a better insight of the earnings management around the CEO turnover. In a context where a routine departure of CEO is held, the incoming professional (Promoted) has less incentives to manage earnings downward to show previous poor performances in order to shine more in the firm. Also, the fact that whether the departing Chief Executive Officer will be on the board diminishes the probabilities for the new CEO to influence real business (Choi, Kwak and Choe, 2014).

For the four types of CEO turnover, the authors studied the link between Earnings Management and Turnover. The sample data collected includes 403 CEO turnover enterprises with data from 2001to 2010 listed in the Korean Stock Exchange Market.

Summarizing this paper, the main conclusions in the Korean market are the following; in a forced scenario the outgoing CEO manage earnings upward, but only is

significant when the new CEO have been promoted. The Earnings Management in this specific case is through discretionary accruals and not earnings management of real business activities. Second, the authors could not find enough evidence of earnings management in a context of peaceable departure of the CEOs. Again, in a "force" departure scenario, the promoted CEO use earnings management downward, but there is not enough evidence of earnings management in a "no forced" scenario. Finally, the external new CEO uses earnings management upward in a context of peaceful departure. This paper helps to understand the earnings management around CEO turnover in a country where many players of the market think that firm's accounting is not transparent enough, blaming this issue to the crisis of Korea at the end of the 1990's. Given the previous problem described, new reforms were developed in Korea after the crisis, focusing mainly in improving corporate governance (Choi, Kwak and Choe, 2014).

Evidence of Indonesia CEO turnover: The topic of this paper study accounting performance and earnings CEO turnover in an Asian country that have not been examined previously, Indonesia. The article uses data of Indonesian companies from 1998 to 2006. The incentives for the board to change the CEOs are in order to reach better company's performance. For example, Indonesian National bank had passed through some obstacles for three consecutive years of low revenues and also they were increasing the ratio Total Debt to Total Asset. The firm overcame the situation as soon as the decision of CEO turnover happened in the company. This is a very illustrative example where the company succeeded after a change of CEO (Lindrianasari and Hartono, 2011).

Coughlan and Schmidt (1985) study the relationship between accounting variables and CEO turnover. This approach will encourage to the board to put more attention in the financial reports at the moment to take managerial decisions. The case proves that accounting information and the CEO turnover are linked, the board will be more confident to take decisions about the data of revenues made by accounting than other information (Coughlan and Schmidt, 1985). Given the approach of Coughlan and Schmidt (1985), the main result of the Indonesian Market's study is provide information about the main accounting ratios as Total Assets, Total Sales, ROA, ROE and Earnings, and show how they have summarized that the accounting information is logical with the turnover of the Indonesian firm decisions (Lindrianasari and Hartono, 2011).

Given the literature presented above, we can have a clear overview of the importance of the main variables of our research (Figure 3). The Earnings Management around CEO turnover in Russian and Chilean companies will give us an understanding of how those companies is managed and whether the incoming and outgoing CEO manages earnings in different ways.



Source: Own elaboration.

Figure 3 Main aspects involved in the research

In companies, the CEO's could have different incentives for Earnings Management, it would depend whether the CEO is departing (They want higher bonuses or dissimulate low performance) from the company or is the new manager taking change in the company (Show a new beginning for the company with better numbers). Thus, we can state a hypothesis for the following question: Does there exist earnings management in a company at the moment of a change of CEO?

H1: The fact of change of CEO does not influence the level of earnings management in a company in Russia.

H2: The fact of change of CEO does not influence the level of earnings management in a company in Chile.

As we are studying the markets of Russian and Chile, and our goal is compare both markets in the context whether CEO's in Chile manage differently the earnings of the firms than in the Russian market.

#### **CHAPTER SUMMARY**

In this chapter the state of art of the investigation of Earnings Management around CEO Turnover is described. The definitions of the main concepts involved in the research and literature analysis are represented. Besides, it is shown some tendencies of CEO's turnover breakdown in the world and it is illustrated the specific example of North American companies.

It is possible to identify a literature gap of Earnings Management and CEO Turnover in Russia and Chile. The Research Proposal is devoted to extend this topic to the Russian and Chilean market to find the importance of Earnings Management in these two locations and the effects and consequences in Chile and Russian companies (First Latin-American country under study and Russia).

The evidence illustrated in this chapter provides an empirical and practical overview of the Earnings Management and CEO Turnover concepts. It is very important to highlight that Russia and Chile are emerging countries with different factors that lead the way that companies behave, in case we compare with the literature studied (Mainly developed countries). The factors that could make the difference are such as the Russian/Chile culture, the principles of doing business in Russia/Chile and the earnings management incentives where there is CEO turnover.

Finally, the background presented of previous studies in this chapter is the first approach defining the expected findings of our paper.

# CHAPTER II: DATA, METHODOLOGY, RESULT ANALYSIS AND IMPLICATIONS OF EARNINGS MANAGEMENT

This research is going to be conducted as a **Quantitative Research**. Thus, the empirical investigation is going to look for the answer of Earnings Management around CEO turnover via statistical technique. In contrast, it exist the Qualitative Research where the research asks broad questions and the nature of the collecting information itself is word data. The main objective at this stage is to develop a Regression Model to estimate the existence and impact (if there is any) of companies under this topic.

The idea of developing a Regression Model is to connect the empirical information taken from the financial statements and mathematical expressions (Regression Models) searching for the relation among the variables involved in Earnings Management.

#### 2.1 DATA SELECTION

#### 2.1.1 Data sources

International Financial Reporting Standards (IFRS) are standards of financial accounting character, governing how to prepare and present information on the accounting facts of firms to interact with their environment. The adoption of this financial standard took place in Russia in the year 2012. IFRS are part of the Russian legislative framework (Federal Law 208-FZ) to consolidate the financial statements of all the companies that are listed in The Moscow Interbank Currency Exchange or MICEX. MICEX is one of the largest entities of universal values in the Russian Federation and Eastern Europe. MICEX opened in 1992 and is the leading stock exchange in Russia.

The Chilean market had adopted the International Financial Reporting Standards since 2008. In this sense and for the analysis of our research we are going to take the data from 2008, where all the companies from Chile are shown with IFRS standards. Regarding the Russian market we also are going to take data from 2008 to set the CEO

turnover, but in the case, the companies that report before 2012 (date when was adopted IFRS in Russia) are going to be consider only those ones that report with IFRS standards.

Thus, in our study we want to be consistent with the data, so we took as for Chilean and Russian companies within the same period of time for turnover selection data (2008 - 2014). Besides, the companies that are part of the financial industries are excluded from the studied sample.

Given the nature of the research the type of data required in the investigation is described as **Secondary Data**. The data for the investigations is going to be collected from the Database of GSOM Virtual Library. The data required for measure Accrual-based and real Earnings Management is collected from the financial statements and annual reports from Datastream database of Thomson Reuters. Later in order to determinate the regression model, we use the financial statement prepared by the companies (IFRS standard) for the regulators of the different countries.

The number of companies to analyze whether they had turnover in the studied period is 484 firms for the Russian market and 433 companies for the Chilean market.

Table 1 Russian companies' selection

Initial sample	484 companies
(-) Financial firms are excluded	28 companies
Final sample	456 companies

**Table 2 Chilean companies selection** 

Initial sample	433 companies
(-) Financial firms are excluded	38 companies
Final sample	395 companies

#### 2.1.2 Inclusion of Dataset

The second part of the data selection is identifying the CEO turnover within the studied period for the Russian and Chilean markets. This information is collected manually from the Database Thomson One in the *Officers & Directors* field. We consider all the companies described in the previous section and identify the exact dates of CEO turnover and the names of the new manager.

Companies with CEO turnover events are considered in our dataset only whether they are not in the following scenarios:

- CEO with less than 12 months in the company
- Financial institution are not considered
- Two (or more) consecutive turnovers are not considered

The summary of the number of companies considered per country as a sample are the following:

Table 3 Summary of Russian turnover selection

Initial sample (w/o financial firms)	456 companies
(-) companies without turnover in the selected period or information	370 companies
Final sample	76 companies

**Table 4 Summary of Chilean turnover selection** 

Initial sample (w/o financial firms)	395 companies
(-) companies without turnover in the selected period or information	311 companies
Final sample	74 companies

#### 2.2 METHODOLOGY

For measuring *Earnings Management* the literature reviewed presented three main methods: Accrual-based Earnings Management, Real Management through Overproduction and Real Management through Delaying discretionary expenditures. The three options will be described below; it is going to be explained each one and afterward selected one of the options for our investigation.

#### 2.2.1 Accrual-based Earnings Management

The Accrual-based Earnings Management is one of the three ways we are going to study Earnings Management. Discretional accruals is how could be managed the earnings in the company as Accrual-based.

We are going to define the Discretional accrual concept as the difference between the total accrual of the company in the required period, and the normal level of accrual. For this process we have to define how to calculate the normal level of accruals and we are going to follow the methodology of Dechow et al. (1995).

The model for each industry-quarter is the following one (Cross-sectional model):

$$\frac{Total\ Accrual_t}{A_{t-1}} = \alpha_0 + \alpha_1 \frac{1}{A_{t-1}} + \alpha_2 \frac{\Delta S_t}{A_{t-1}} + \alpha_3 \frac{PPE_t}{A_{t-1}} + \varepsilon_t[1]$$

The Total Accruals<sub>t</sub> is earnings before extraordinary items and discontinued operations minus the operating cash flow in the period t. In the denominator we have  $A_{t-1}$  that is the Total Assets in the previous quarter (t-1).  $\Delta S_t$  reflect the change of the revenue of both periods and finally the PPE<sub>t</sub> is the gross property, plant and equipment of the company.

In order to calculate the normal level of accruals we can use the following regression:

$$Norm_{accrualt} = \hat{\alpha}_0 + \hat{\alpha}_1 \frac{1}{A_{t-1}} + \hat{\alpha}_2 \frac{\Delta S_t - \Delta AR_t}{A_{t-1}} + \hat{\alpha}_3 \frac{PPE_t}{A_{t-1}} [2]$$

In this part  $\Delta AR_t$  is showing the change in account receivables and the  $DA_t$  reflect the change between total accruals and the normal level of accruals.

Geertsema, Lont and Lu (2013) found a contrast between accruals earnings management and real earnings management. In the first one, it is more pronounced for non-routine CEO turnovers. In contrast, real earnings management is significant following both routine and non-routine CEO turnovers. Thus, we decided to focus better in real earnings management, instead of accrual earnings management.

In other words, the earnings management has increased through the time, and in the meanwhile accruals earnings management has been decreasing (Geertsema, Lont and Lu 2013).

#### 2.2.2 "Real" Earnings Management

The methodology described a continuation is devoted to determinate the CEO turnover and earnings management using the methods of Geertsema, Lont and Lu (2013) in the article *Earnings Management around CEO Turnovers*. The variables to measure real activities are:

• Overproduction: The overproduction decrease the cost of the products that are ready to be sold (per unit basis), this effect would be translated as increase in earnings for that specific quarter. However, the storage of the goods is limited and the following periods this effect would be translated in underproduction for the next period. On the other hand, it is possible to under-produce in order to have the exact opposite effect for the next period.

The normal level of production cost could be defined as the following regression model (establish relation between the variables to find the normal level):

$$\frac{\prod_{i=1}^{l} \frac{\delta_{t}}{A_{t-1}} = \alpha_{0} + \alpha_{1} \frac{1}{A_{t-1}} + \alpha_{2} \frac{S_{t}}{A_{t-1}} + \alpha_{3} \frac{\Delta S_{t}}{A_{t-1}} + \alpha_{4} \frac{\Delta S_{t-1}}{A_{t-1}} + \varepsilon_{t}[3]$$

The production costs can be described as  $PROD_{it} = COGS_{it} + \Delta INV_{it}$ , where COGS is the cost of goods sold and  $\Delta INV_{it}$  is the changes in inventory in two period of time.  $S_t$  Is the revenue in the period t and  $A_t$  is the amount of

Total Assets in t. Thus, we are able now to find the normal level of production costs.

 Delaying discretionary expenditures: The variable includes Research and Development, Advertising and Sell, General and Administrative Expenditures.
 The idea of delay discretionary expenditures would boost earnings for the following quarter (Geertsema, Lont and Lu, 2013). The equation is the following:

$$\frac{DiscExp_t}{A_{t-1}} = \alpha_0 + \alpha_1 \frac{1}{A_{t-1}} + \alpha_2 \frac{S_t}{A_{t-1}} + \varepsilon_t [4]$$

Discretionary expenditure (**DE**) in quarter t could be defined as the **sum of R&D** and **SG&A**. Abnormal discretionary expenditure in t  $(Ab\_DiscExp_t)$  is the regression residual from the equation (difference of actual value and normal value), with an negative sign for make easier the interpretation. Thus, a low level of abnormal discretionary expenditure means that the CEO manages downward earnings through an increase in discretionary expenditure for that period.

Now analyzing a bit further these two options for real earnings management, Roychowdhury (2006) found a problem in modeling the current discretionary expense. Current sales leads a mechanical problem if companies manage sales upwards to increase earnings in a certain period, resulting in an important lower residuals (the difference between the variables observed and the predicted ones) from running the regression model even though when they do not decrease discretionary expenses as the methodology says (Roychowdhury, 2006).

Finally, the methodology selected to identify earnings management around CEO turnover in Chile and Russia is Real Earnings Management through overproduction.

#### 2.2.3 Variables description

As in our investigation we decided to study Earnings Management through Overproduction, we are going to describe all the variables involved to develop our Regression Analysis.

The dates that we are aware for our research are the Cut-off date, this date means that is the last date that it is possible for managers to manage earnings in the company. For real earnings management, it will be the cut-off date in the balance sheet.

The first part is identify the normal level of production where is involved COGS and change in Inventory;

$$PROD_{it} = COGS_{it} + \Delta INV_{it}$$
 [5]

COGS is the cost of goods sold and  $\Delta INV_{it}$  is the changes in inventory in two period of time.

In the literature investigated, Geertsema, Lont and Lu (2013) and Hazarika et al. (2012) as in the majority of the literature reviewed stated that exist other factors that could influence the earnings management and that are correlated with the measure error in Earnings Management. Given the previous reason, we study some control variables and check if they fit in our model. These variables are the following; ROA, Leverage, Revenues and ROE.

Return on Assets (ROA) is a measure of performance that could be obtained from the ratio of earnings before interest and taxes to total asset. It will be interesting to analyze when the ROA ratio is higher, whether prior change in CEO turnover or after. In this direction we can also identify whether managers try to capitalize more to show a better performance. However, this variable is already included in our production model, thus the variable cannot be included as a control variable for the correlation with the model.

$$ROA = \frac{Operating\ Income}{Total\ Assets}[6]$$

*Revenues*, as an alternative measure of size has the same problem that the control variable ROA. For the previous reason was considered exclude it from the analysis of our research.

The third control variable analyzed is *Return on Equity (ROE)*, this variable is a performance indicator that it is an assessment for the success of the company in its management for equity restoration. The calculation of the value of ROE is obtained from

the ratio of company earnings divided by total equity. This variable is believed to have a negative relationship with turnovers, in that the failure in the return of capital would contribute as one reason for a turnover in the company (Lindrianasari and Hartono 2011). We include this variable in our model and it was significant.

Finally, we analyzed the variable *Leverage*, Jensen (1986) stated in his research that high level of leverage reduces the chances of opportunistic behavior of earnings management of CEOs. On the other hand, some other empirical studies as Press and Weintrop (1990), Sweeney (1994) and DeFond and Jiambalvo (1994) imply that companies with high level of leverage are more incline to manage companies' earnings. We consider this variable in our model, but it did not explain it properly, it was decided that the leverage variable is excluded from our research.

In the next table we are going to summarize the variables involved in this research and give the definition of each one.

**Table 5 Summary of variables** 

Variable	Definition
$PROD_{it}$	Production Cost is a dependent variable in the regressions specified as
	the sum of Cost of Goods sold (COGS) and the change of the inventory
	$(\Delta INV_{it})$ in two consecutive periods.
$A_t$	Dependent variable in the regression model that shows the Total Assets
	of the companies
$S_t$	Dependent variable in the regression model that shows Revenues of the
	companies
ROE	Control variable that is obtained from the ratio of company earnings
	divided by total equity

After the selection of all these variables, it is important to define the periods of the study in more detail. The moment of the CEO turnover will be denoted by t=0, this means the first year where the outgoing CEO has not power to influence in the company financial statements anymore. At the same time, it is the year that the incoming CEO take control over the financial statements of the company. The last year of the outgoing CEO in charge it is going to be denoted by t=-1.

For the earnings management metrics, we will examine three periods. First, we study the last year period of the outgoing CEO in charge in the company (t = -1). Second, the first year of the incoming CEO (t = 0). Finally, we are going to include the following period of the new CEO (t = +1), in order to analyze if the earnings management is concentrated in the turnover period per se or if the earnings management is persisting through the next year.

Consolidating the Database of our research, all the companies that have no shown the necessary information of the investigation have been excluded of the dataset. For example, the turnovers that occurred in 2014 are not considered, because there are no two periods of the new CEO for analysis. Other reason for excluding some data was that some income statements did not show some key data for some companies.

The final number of companies considered per country as a final sample is the following:

Table 6 Summary of Russian final sample selection

Previous sample	76 companies
(-) companies without necessary information	36 companies
Final sample	40 companies

Table 7 Summary of Chilean final sample selection

Previous sample	74 companies
(-) companies without necessary information	24 companies
Final sample	50 companies

#### 2.3 DATA ANALYSIS AND RESULTS

#### 2.3.1 Sample statistics

The statistics of Chile and Russia are described in the section, in order to compare characteristics of both, the Russian and Chilean markets.

As a size measure we can see that the average value of Total Assets of Russian companies is about ten times the size of the Chilean companies with an average of 15,390 and 1,595 million US dollars respectively. The case of Revenues as could be intuitive follow the same direction as Total Assets (9,216 million dollars for Russia and 845 million dollars for Chile). If we put attention on ROA ratio, we can see that Russian and Chilean markets have similar returns, being slightly higher in Chile (5,9% in Chile and 5,2% in Russia).

As a indicator of performance (Return on Equity), the Russian companies showed to be more efficient with an average of 11,15% in the meanwhile Chile showed an average of 7,46%. A significant difference of almost 3,5% of efficiency of ROE.

Regarding the level of Leverage of both markets, Chile has 45,7% of average leverage and in the Russian market has a level of leverage located in 51,6%.

The following table is showing a comparison of Chile and Russia on the dimensions we were describing above.

**Table 8 Sample Statistics** 

		Assets on USD)		enue n USD)	ROA	(%)	ROE	(%)	LEVER	AGE (%)
Country	Chile	Russia	Chile	Russia	Chile	Russi a	Chile	Russia	Chile	Russia
Mean	1595	15391	845	9217	6%	5%	7%	11%	46%	52%
Minimum Maximu	1	20	0	10	-25%	-11%	-188%	-20%	7%	18%
m	16040	240372	10804	108992	103%	22%	144%	43%	94%	88%

The full descriptive analysis of Russia and Chile is presented in the appendix 3 and 4.

Correlation tables are presented in the Annexes 5 - 6. This table presents the correlation between variables for the Russian and the Chilean sample. As we excluded ROA and LEVERAGE from the model we do not consider it in our analysis of correlations. There is a strong correlation between Revenues and Total Assets (TA) as could it be intuitive. In general all the rest of the variables have little correlation.

#### 2.3.2 Regression Model

The model of earnings management through overproduction shows how a decrease (or vice versa) in cost of products would be translated into earnings management for a certain period. The model selected for this analysis is multiple regression model, this is a statistical process that explain the relation among the variables. Multiple Regression Model explains how a dependent variable (Production costs) is related with different independent variables, included the control variable.

The equation is showed as followed:

$$\frac{\prod_{i} i_{t}}{A_{t-1}} = \alpha_{0} + \alpha_{1} \frac{1}{A_{t-1}} + \alpha_{2} \frac{S_{t}}{A_{t-1}} + \alpha_{3} \frac{\Delta S_{t}}{A_{t-1}} + \alpha_{4} \frac{\Delta S_{t-1}}{A_{t-1}} + \alpha_{5} ROE + \varepsilon_{t} [7]$$

This equation was run in each company in Russia and in Chile of the sample for the period *t*. The model presented by Geertsema, Lont and Lu (2013) shows the performance of the manager within the company. On the other hand the control variable ROE is intended to show the performance of the shareholders within the company, in accordance that for them is important earnings management within the company as well.

The multiple regression model was run on SPSS statistic software for the three periods of analysis in the Chilean market and Russia market, where t=0 is the first year of new CEO in charge, t=-1 is the last period of the outgoing CEO in and finally t=+1 is the second year of the incoming CEO in the company. In this way we were be able to

analyze the Earnings Management in these markets for several periods in the process of CEO turnover.

These different models explains for different periods of times how is managed the earnings within the company through over production (Production costs).

The results of ANOVA, Significance of the model and Model summary of each country for each period is presented in Annexes 7 - 8.

#### 2.3.2.1 Results for Chile

We present in the next table, the result of the model of Chile for the first period of the new CEO in the company.

Table 9 Regression Model Chile t = 0

	Coefficients <sup>a</sup>							
Mod	el	Unstan	dardized	Standardized	t	<i>P</i> - Value <sup>♭</sup>		
		Coef	ficients	Coefficients				
		В	Std. Error	Beta				
	(Constant)	,047	,017		2,695	,010 (***)		
	1/At-1	,254	,035	,656	7,343	,000(***)		
	St/At-1	,079	,023	,383	3,503	,001(***)		
1	∆ St1/At	,180	,074	,263	2,417	,020(**)		
	-1							
	∆ St-	-,014	,066	-,020	-,204	,839		
	1/At-1							
	ROE	-,107	,043	-,248	-2,491	,017(**)		

- a. Dependent Variable: Prod/At-1
- b. \* significant at 10%, \*\* significant at 5%, \*\*\* significant at 1%

The model is statistically significant at a level of 1%, explaining 66,2% of the variance of the Production Costs (Dependent Variable) around its mean, through R Square analysis.

The dependent variables have a positive relation with the independent variable and the variables are statistically significant, with the exception of one variable that is not significant in this model. The theory says that incoming CEO is willing to decrease cost production through over production to show that the company was mishandled. The results are consistent with the theoretical background. (Reitenga and Tearney, 2003)

Regarding the control variable ROE has a negative relation with the production costs and is statically significant at 5%. The correlation of this control variable has a positive magnitude with the dependent variable (Production Costs).

The hypothesis of our research established "The fact of change of CEO does not influence the level of earnings management in a company in Chile" Thus, for this model the hypothesis is rejected given the significance of the model where it exists Earnings

Management for the first period of the incoming CEO in the direction that the theory stated.

The model illustrates the result of Chile for the period of the departing CEO is presented in the next table.

P- Value<sup>b</sup>

Table 10 Regression Model Chile t = -1

Coefficients<sup>a</sup>

# Unstandardized Standardized t Coefficients Coefficients B Std. Error Beta

							1
		В	Std. Error	Beta			
	(Constant)	,043	,021		2,057	,046 (**)	
	1/At-1	,168	,043	,474	3,918	,000 (***)	
	St/At-1	,077	,035	,437	2,238	,030 (**)	
	∆ St1/	-,063	,061	-,139	-1,041	,303	
'	At-1						
	∆ St-	-,023	,071	-,062	-,319	,751	
	1/At-1						
	ROE	-,004	,040	-,013	-,097	,923	

a. Dependent Variable: Prod/At-1

Model

The model is statistically significant at a level of 1%, explaining 40,0% of the variance of the Production Costs (Dependent Variable) around its mean, through R Square analysis.

All the variables that are statistically significant are positively related NOT being consistent with the theory presented in the second chapter. As Graham et al,. (2005) presented in his research, the CEO that is departing is inclined to do the opposite as new CEO. Departing CEO would trick real business activities upward to leave the charge and get the highest possible bonus. The analysis of the control variable is not applicable in this model for a lack of significance.

Finally, for the hypothesis we can say that it is rejected for the significance of the model and the Earnings Management is not aligned with the background theory.

b. \* - significant at 10%, \*\* - significant at 5%, \*\*\* - significant at 1%

The following regression model illustrates the result of Chile for the second period of the new CEO.

Table 11 Regression Model Chile t = +1

#### Coefficients<sup>a</sup>

Mode	el		dardized	Standardized Coefficients	t	P- Value <sup>b</sup>	
		В	Std. Error	Beta			
	(Constant)	,078	,023		3,334	,002 (***)	
	1/At-1	,218	,036	,653	6,043	,000 (***)	
	St/At-1	,032	,029	,352	1,102	,277	
	Δ St1/	-,057	,032	-,628	-1,795	,080 (*)	
	At-1 $\Delta$ St-1/At-1	-,111	,066	-,271	-1,688	,098 (*)	
	ROE	,011	,013	,090	,820	,417	

- a. Dependent Variable: Prod/At-1
- b. \* significant at 10%, \*\* significant at 5%, \*\*\* significant at 1%

The model is statistically significant at a level of 1%, explaining 49,3% of the variance of the Production Costs (Dependent Variable) around its mean, through R Square analysis.

There are two variables statistically significant with positive relation with the dependent variable and other two as well significant, but with negative relation.

For the hypothesis of the investigation, we can say that it is rejected for the significance of the model and the existence of Earnings Management is present in this period for the Chilean market.

There is no conclusion about the control variable again, given that it is not statistically significant in this model.

#### 2.3.2.2 Results for Russia

In this section we present the result for the Russian market. In the next table, the result of the model of Russia for the first period of the new CEO in the company is showed.

Table 12 Regression Model Russia t = 0

#### Coefficients<sup>a</sup>

Mode	el	Unstand Coeffi		Standardized Coefficients	t	<i>P</i> - Value⁵
		В	Std. Error	Beta		
	(Constant)	,069	,146		,472	,640
	1/At-1	-19,410	16,506	-,434	-1,176	,248
	St/At-1	,187	,065	,765	2,879	,007 (***)
	∆ St1/	-,011	,266	-,011	-,041	,968
1	At-1					
	∆ St-	,080	,318	,051	,251	,804
	1/At-1					
	ROE	-,010	,662	-,003	-,016	,988

a. Dependent Variable: Prod/At-1

The model is NOT statistically significant (Significance of 10,5%), it means that the result is likely due randomness. It is not possible to verify the hypothesis, where the CEOs do not influence the level of earnings management in a company.

The model is not able to determinate the existence of Earnings Management for this period in the Russian market.

b. \* - significant at 10%, \*\* - significant at 5%, \*\*\* - significant at 1%

In the next table, the result of the model of Russia for the last period of the departing CEO in the company is presented

Table 13 Regression Model Russia t = -1

#### Coefficients<sup>a</sup>

Model		Unstand	dardized	Standardized	t	<i>P</i> - Value⁵	
		Coeffi	cients	Coefficients			
		В	Std. Error	Beta			
	(Constant)	,167	,107		1,564	,127	
	1/At-1	-41,737	18,541	-,771	-2,251	,031 (**)	
	St/At-1	,253	,069	1,061	3,676	,001 (***)	
1	∆ St1/	,176	,263	,112	,669	,508	
'	At-1						
	∆ St-	-,136	,087	-,310	-1,558	,128	
	1/At-1						
	ROE	-1,082	,272	-,491	-3,983	,000 (***)	

a. Dependent Variable: Prod/At-1

The model is statistically significant at a level of 1%, explaining 51,1% of the variance of the Production Costs (Dependent Variable) around its mean, through R Square analysis.

Regarding the independent variables, there are only two variables that are statistically significant and with mixed relationships (Positive and Negative). The hypothesis of the model is rejected given the significance of the model where there exists Earnings Management for the first period of the incoming CEO.

The control variable ROE has a negative relation with the production costs and it is statically significant at 1%.

b. \* - significant at 10%, \*\* - significant at 5%, \*\*\* - significant at 1%

As a final model we present in the following table the results of Russia for the second period of the new CEO.

Table 14 Regression Model Russia t = +1

#### Coefficients<sup>a</sup>

Mode	el		dardized	Standardized Coefficients	t	<i>P</i> - Value⁵	
		В	Std. Error	Beta			
	(Constant)	,052	,118		,438	,664	
	1/At-1	-17,521	22,145	-,283	-,791	,434	
	St/At-1	,203	,076	,745	2,678	,011 (**)	
1	∆ St1/At	-,100	,218	-,090	-,456	,651	
'	-1						
	∆ St-	,013	,283	,010	,045	,964	
	1/At-1						
	ROE	-,273	,480	-,101	-,569	,573	

- a. Dependent Variable: Prod/At-1
- b. \* significant at 10%, \*\* significant at 5%, \*\*\* significant at 1%

The model is statistically significant at a level of 5%, explaining 26,8% of the variance of the Production Costs (Dependent Variable) around its mean, through R Square analysis.

There is only one variable statistically significant with positive relation with the dependent variable. There is no conclusion about the control variable (ROE), given that it is not statistically significant.

For the hypothesis of the investigation, we can say that is rejected for the significance of the model and the existence of Earnings Management is present in this period for Russia.

#### 2.4 REGRESSION MODEL RESULT DISCUSSION

In the next sections are presented the result of the Chilean and Russian markets, in order to interpret and compare the results obtained.

#### 2.4.1 Analysis for first period of new CEO

The following table presents a comparison of the results for the period t = 0, first period of the new CEO.

Table 15 Comparative results t = 0

Model t = 0	Chi	le	Russia	
	В	P- Valueª	В	<i>P</i> - Value <sup>a</sup>
Model significance	,662	,000(***)	,226	,105
(Constant)	,047	,010 (***)	,069	,640
1/At-1	,254	,000(***)	-19,410	,248
St/At-1	,079	,001(***)	,187	,007 (***)
∆ St1/At-1	,180	,020(**)	-,011	,968
<u>∆</u> St-1/At-1	-,014	,839	,080,	,804
ROE	-,107	,017(**)	-,010	,988

a. \* - significant at 10%, \*\* - significant at 5%, \*\*\* - significant at 1%

As a first analysis we can see that there are mixed results for the model significance. For the Russian sample, the model is NOT statistically significant (*P-Value* > 10%), it means that the result is likely due randomness. The model developed is not able to verify the hypothesis, where the CEOs do or do not influence the level of earnings management in a company. In other words, the model is not able to determine whether the new CEO in Russia does Earnings Management in his/her first period in charge.

The model for Chile is statistically significant at a level of 1 %, explaining in 66,2% the variance of Production Costs, that means that the hypothesis of the research stated that Earnings Management exist and reported that the amount of Production Costs is positively related for the first period of the new CEO. Rephrasing, Chilean managers

do Earnings management around CEO turnover through over production for the first period of the incoming CEOs.

The second part of the analysis is to study the relation of the variables between each other, in order to analyze the direction of the Earnings Management and to check the consistency of the results with the theory. The analysis for this period is going to be possible only for the sample of Chile.

The Chilean dependent variable has a positive relation with the independent variable. The literature analysis proves that the new CEO in charge is inclined to do underproduction, in order to increase cost of production to show that the company was mishandled. The results are consistent with the theoretical background (Reitenga and Tearney, 2003).

The Chilean market does underproduction practices to increase the cost of goods sold to show earnings downward. The manager wants to be perceived that he received the company in not very good and healthy stage, and it will be his duty to show that the company will be manage better in the next periods. The idea is supported by existing studies that find downward earnings management by the new CEO (Dechow and Sloan, 1991; Pourciau, 1993; Brickley et al. 1999; Reitenga and Tearney, 2003; Conyon and Florou, 2004).

Unfortunately, it is not possible to compare the market under study. We know that in the Chilean market exists Earnings Management in line with the theory, but the model proposed for Russia in this period was not able to explain whether exist or not Earnings Management. Comparison between the countries is not possible for this period.

#### 2.4.2 Analysis for second period of new CEO

The results presented in this section are devoted to the second period of the new CEO for both markets, the Chilean and Russian. The reason for studying this period is because we wanted to analyze whether earnings management are concentrated in the turnover period per se or the earnings management is persisting through the next year. This idea was presented in the research of Choi, Kwak and Choe 2014. Nevertheless, for overproduction earning management the storage of the goods is limited and the following

periods the earnings management effect would be translated in underproduction for the next period.

The following table presents the comparison of the two samples for the second period after the turnover.

Table 16 Comparative results t = +1

Model t = +1	Chi	le	Russia	
	В	<i>P</i> - Value <sup>b</sup>	В	<i>P</i> - Value <sup>b</sup>
Model significance	,493	,000 (***)	,268	,050 (*)
(Constant)	,078	,002 (***)	,052	,664
1/At-1	,218	,000 (***)	-17,521	,434
St/At-1	,032	,277	,203	,011 (**)
∆ St1/At-1	-,057	,080 (*)	-,100	,651
<u>∧</u> St-1/At-1	-,111	,098 (*)	,013	,964
ROE	,011	,417	-,273	,573

b. \* - significant at 10%, \*\* - significant at 5%, \*\*\* - significant at 1%

The model for Chile is statistically significant at a level of 1%, explaining 49,3% of the variance of the Production Costs (Dependent Variable) around its mean, through R Square analysis. On the other hand we have the model of Russia that is also statistically significant, but at a level of 5%, explaining 26,8% of the variance of the Production Costs. In other words, the hypothesis of the research is rejected and managers of both markets do Earnings management around CEO turnover through over production in the second period of the new CEOs.

The control variable is not significant in both samples, thus we could not conclude neither analyze the results of this aspect of the models.

The model of Chile has two variables statistically significant with positive relation with the dependent variable and other two as well significant, but with negative relation. Taking into account that the independent variables are the result of rearranging the model variables that predict the unit production cost for predicting earnings management through real activities, the independent variables are going to be analyzed as a whole.

Assuming that the *numerical values* (value that join to the coefficients of the models) are the same (for comparison purposes), the sum of the coefficient magnitudes will lead the direction of the model. In this specific case (Chile), the sum of positive coefficients is higher that the absolute value of the negative coefficients. The result leads to the conclusion that in the Chilean market for the second year of the new CEO, managers tend to manage earnings downwards.

Analyzing the persistency of earnings management after the turnover transition period, we can see that earnings management for this period persists over, intensifying the idea of blame poor performance of the previous CEO.

The model of Russia has only one variable statistically significant with positive relation with the dependent variable. Thus, the model implies that managers do Earnings Management downwards. Managers go through underproduction, increasing the cost of unit goods sold managing the earnings downwards. The result in this model is contrary to what the literature stated. Managers are inclining to show poor performance in the second period, instead to show resiliency.

This result could be explained by some assumptions. In the first period of the new CEO in charge our model was unable to determine the relation between the variables in the model. In case of existing earnings management in the first period the contrary effect happens in the second one. Overproduction earnings management has the limitation of inventory where storage of the goods is limited and the contrary effect in the next periods the earnings management effect would be translated in underproduction for the next period.

As second possible reason, we will see in the next section the last period of the outgoing CEO, the CEOs are managing earnings upwards, and as the limitation of inventory of goods the contrary effect is expected for the next period or periods, it would depends how intensive is the earnings management in this period. As we cannot conclude about the period t=0, conclusions are only under scenarios. The new CEOs are worried about audit companies that could lag the decision of earnings management for the next periods.

#### 2.4.3 Analysis for last period of outgoing CEO

Finally, we analyzed the last period of the outgoing CEO. In the next table is presented the result of the Chilean and Russian markets, in order to interpret and compare the results obtained.

Table 17 Comparative results t = -1

Model t = -1	Chi	hile Russia		ssia
	В	<i>P</i> - Value <sup>c</sup>	В	<i>P</i> - Value <sup>c</sup>
Model significance	,400	,000 (***)	,511	,000 (***)
(Constant)	,043	,046 (**)	,167	,127
1/At-1	,168	,000 (***)	-41,737	,031 (**)
St/At-1	,077	,030 (**)	,253	,001 (***)
∆ St1/At-1	-,063	,303	,176	,508
∆ St-1/At-1	-,023	,751	-,136	,128
ROE	-,004	,923	-1,082	,000 (***)

c. \* - significant at 10%, \*\* - significant at 5%, \*\*\* - significant at 1%

The models in this final analysis are both statistically significant at a level of 1%, explaining 40,0% and 51,1% of the variance of the Dependent Variable for Chile and Russia respectively. As in the previous section, managers of both markets do Earnings management around CEO turnover through over production in the last period of the outgoing CEOs.

In the analysis of the Chilean model, all the variables that are statistically significant are positively related with the dependent variable. The result of this model is not consistent with the theory presented in the second chapter. Departing CEO would trick real business activities upward to leave the charge and get the highest possible bonus as Graham et al., (2005) stated. The lack of earnings management upward in this scenario could be explained by a turnover in peaceful terms and the departing CEO's desire to meet the expectations of the board and shareholders. Inconsistency with the theory was also founded in Geertsema, Lont and Lu (2013).

Regarding the independent variables for the Russian model, there are only two variables that are statistically significant and those have different directions (Positive and Negative). Following the same logic of the second period in the Chilean market, the sum of the significant coefficient magnitudes will lead the direction of the model. In this case (Russia), the sum of positive coefficients is lower that the absolute value of the negative coefficients. The result leads to the conclusion that in the Russian market for the last year of the outgoing CEO, managers tend to manage earnings upwards. The results are translated into upward earnings management for this period (significant). The result is aligned with the theory, where CEOs want to leave the company with good results or disguising bad previous performance.

#### 2.5 IMPLICATION OF THE RESULTS

The research results derive in useful implications that can be used by different stakeholders of the companies.

Earnings management around CEO turnover is a field not very explored and with lack of evidence. This topic helps stakeholders to be aware about these earnings management practices in Russian and Chilean companies. Besides, they could understand the incentives that outgoing / incoming could have to manage earnings within the company. The existence of earnings management in a company could imply the inefficient allocation of resources (Overproduction/Underproduction affecting inventory capacity). Stakeholders that are aware of these practices can take decisions for diminishing or avoid completely the earnings management by overproduction (underproduction). For example, increasing transparency of the financial statement (increase periodicity of financial statements as an internal purpose or incorporate a specific part of production costs as a key variable), give incentives for keep production cost indicators as COGS or Inventory, internal audit in the specific periods of transitional turnover, etc.

More specifically, the existence of managerial opportunism in Russia and in Chile could damage the image and attractiveness of investors. The earnings management has several implications of how investors see the company.

The case of Chile earnings management is present in three years around the change of CEOs. Investors and analysts have to be more meticulous analyzing the company. Three consecutive years of earnings management could imply a very wrong perception of the company which could show numbers out of the reality. A bad or bias investment decision could lead to a loss of money. For this particular case, we recommend to stakeholders not only pay attention on financial statements, but also in overproduction/underproduction practices through production costs.

For example, for the first period of the new CEO in Chile, those investors and analysts that are aware of the overproduction (under) techniques will put attention of the increasing unit production cost (Downward overproduction). As soon as they see any increase in amount of the production costs, it could be a signal of earnings management

practice. For the reason described above, stakeholders should not put attention only in financial statements, in order to have a better picture of the company.

In the case of Russia we also recommend to analyze the same indicators described in the paragraph above. Even though, we did not find Earnings Management techniques for the first period of the new CEO, we found these practices in the second period and the last period of the outgoing CEO. The directions are exactly the opposite as the Chilean ones, but the way to alert investors is through the same variable (Production unit cost). Companies that are able to avoid this practices, will experience more stable performance, less volatility in their results, indicators as inventory not stressed (normal levels) and all of these factors will lead a company with less risk. Thus, the value of the company increases.

The findings of existence of overproduction (under) as earnings management practices contribute to understand how should be the treatment of the production cost when there is a CEO turnover. Besides, the role of motivation that CEOs have when they manage earnings within the company, for all different periods. Accounting practices in Chile and Russia are similar. Both countries use IFRS to develop the financial statements, however the findings were different. We conclude that incentives for earnings management are not defined by accounting standards, but by contextual factors as for example, peaceful CEO turnover or force turnover. Identification of these contextual factors will lead to a fair treatment of production cost in the companies.

#### 2.6 CURRENT RESEARCH LIMITATIONS

The main objective of this paper was to understand Earning Management in two markets and compare them for different periods around CEO's turnover. Nevertheless, the contribution of Earning Management in these markets is not free of limitations.

First, the "reasons" of CEO's turnover is a variable unattended in this investigation. For instance, the scenarios of a routine CEO turnover would be less incline to intervene earnings upward in the company compared with a manager that was removed by, for example -poor performance, candidates that succeed their predecessors (Peaceful turnover), CEOs that remain in the board, death, retirement, etc-. The limitation of our study is that we did not consider these variables into consideration for a sharper analysis and results.

Second, in our research was used firm-annual data for identifying earnings management. We know that it is possible to reduce the misclassification of annual financial data for departing and incoming CEOs by using quarterly data. In other words, we could find incoming CEO's managing real operations downward as soon as the turnover occurs. The idea of quarterly data is supported by Geertsema, Lont and Lu (2013) that found that earnings bath happen as soon as the transition quarter. This would allow to future researchers to make a sharper distinction among types of CEOs (incoming and departing) increasing the power of the statistical tests.

Third, the research conducted did not study the institutions in charge of surveillance earnings management in the two samples. The strength and transparency of the institutions could incentive more or less earnings management through the turnover transit period. A better understanding of the different institutions would lead a better comparison of the obtained results between Russia and Chile.

The previous limitations described in this section are not diminishing the reliability of this work. The results can be used for different stakeholders, being aware about the incentives of CEOs to manage real business earnings and how these practices could be prevented in order to avoid consequences. As we found earnings management in Russia and Chile, our results and analysis are useful for stakeholders of both markets.

#### **CHAPTER SUMMARY**

In this chapter the data and methodology of the investigation are presented. It is presented the selection of companies, the criteria for selection, the period selection and all the factors involved for the Dataset selection of the investigation in both markets. The final result gave as a sample of 90 companies for analysis (40 Russian companies and 50 Chilean companies).

On the other hand, different types of methodologies were considered for the study of Earnings Management around CEO turnover. Nevertheless, only one of the methodologies was selected, as the best one that fit for the research. The methodology selected was the Over-Production through the analysis of the dependent variable of Production Cost. The Over-production methodology was applied for three specific periods, the last year in the company for the outgoing CEO (t = -1) and the first and second year of the new CEO in charge (t = 0 & t = +1 respectively).

Besides, in the majority of the literature reviewed stated that exist other factors that could influence the earnings management and that are correlated with the measure error in Earnings Management. Given this reason it was decided to include ROE as a control variable in the research.

The part devoted to Data Analysis and Results was presented. The sample statistics of both markets Russian and Chilean, in order to compare by size, performance and leverage. Finally, it is presented the results of the multiple regression models for Chile and Russia for the three different periods. It was presented the relation of the independent variables with the dependent variable and the control variable (ROE), determining the existence of significance of Earnings Management for each model and rejecting or not the hypothesis suggested in this investigation. Besides, it was stated the ability of the different models to explain the Earnings management for the periods under study for Chile and Russia.

The next part of this chapter is presenting the analysis of the results and its implications of the investigation. The data was presented in comparison tables for better understanding and analysis. The analysis was made separately by the different stages of CEO's turnover

The information showed in the tables allows us to identify the existence and the directions of the earnings management of Chile and Russia.

Based on the analysis of the three periods for Russia and Chile, it can be concluded that both countries are acquainted with Earnings Management practices in all the periods for Chile and for two out of three periods in Russia. The incentives differ of depending the country and the period under study. The differences of size of the markets (Russia is about 10x bigger than Chile) could be the reason of higher earnings management practices in Chile than Russia. The bigger the size of the companies, the more probably is the supervision of audit entities. (Miller, 1991; Cannella and Lubatkin, 1993; Zajac and Westphal, 1996; Finkelstein and Hambrick, 1996)

The results of Chile showed that departing CEOs manage earnings differently as the theory stated. It could be explained by a turnover in peaceful terms and the departing CEO's desire to meet the expectations of the board and shareholders. Downward earnings management was found in the first period of the incoming CEO. The incentives in this case are different, for example, they would like to show that the company was mishandled and now they have a brand new beginning to start to perform. In the process of analysis of persistency of earnings management over the transitional period, we found that earnings management downwards persists intensifying the idea of blame poor performance of the previous CEO.

In case of Russia, an analysis is more complicated, given that there is no significant model for the first period of the incoming CEO. Upward earnings management is significant for the last year of outgoing CEO. The result is aligned with the theory. Nevertheless it was presented in the previous sections some scenarios of this possible behavior.

Even though, the research was conducted meticulously and the results are useful for the different stakeholders, we identified some improvements and limitations that could be considered for next researches. For instance, use quarterly data instead annual data for sharper results; consider the reasons of the CEO turnover for a better understanding of the incentives of earnings management; and a study of the strength of audit companies that could impact earnings management decisions.

As implication the existence of earnings management in a company could imply the inefficient allocation of resources (Overproduction/Underproduction affecting inventory capacity). In the case of underproduction practices, the following periods could be forecasted high demand, and the speed of supply could not fit the demand of the customers. The impact of this scenario would lead to a loss of money in cost opportunity, loss of image of customers that could lead in decreasing number of contracts. Stakeholders that are aware of these practices can take decisions for diminishing or avoid completely the earnings management by overproduction (underproduction).

The second implication is about accounting practices in Chile and Russia. Both countries use IFRS to develop the financial statements. We conclude that incentives for earnings management are not defined by accounting standards, but by contextual factors as for example, peaceful CEO turnover or force turnover. Identification of these contextual factors will lead to a fair treatment of production cost in companies.

### **CONCLUSIONS**

Different authors study the concepts of Earnings Management and CEO Turnover in different parts of the worlds, but just a few merge this two concepts. As we studied the markets of Russian and Chile, our goal is compare both markets in the context whether CEO's in Chile manage differently the earnings of the firms than in the Russian market. We presented the following hypothesis: "The fact of change of CEO does not influence the level of earnings management in a company".

It is possible identify a literature gap of Earnings Management and CEO Turnover in Russia and Chile. The research extended the topic to the Russian and Chilean market to find the importance of Earnings Management in these two locations and the effects and consequences in Chile and Russian companies. The research is devoted to extend the literature in the first Latin-American country under study of this topic and Russia (Both emerging markets).

Different types of methodologies were considered for the study of Earnings Management around CEO turnover. Nevertheless, only one of the methodologies was selected, as the best one that fit for the research. The methodology selected was the Over-Production through the analysis of the dependent variable of Unit Production Cost. The Over-production methodology was applied for three specific periods, the last year in the company for the outgoing CEO (t = -1) and the first and second year of the new CEO in charge (t = 0 & t = +1 respectively). The two first periods (t = -1 & t = 0) selected were mainly devoted to compare practices of outgoing and incoming CEOs. The second period of the new CEO (t = +1) was intended to show whether there was any persistency in earnings management after the transitional period of turnover.

Besides, in the majority of the literature reviewed stated that exist other factors that could influence the earnings management and that are correlated with the measure error in Earnings Management. Given this reason was decided to include ROE in the models as a control variable in the research.

Based on the analysis of the three periods for Russia and Chile, it can be concluded that both countries are acquainted with Earnings Management practices in all

the periods for Chile and for two out of three periods in Russia. The incentives differ of depending the country and the period under study.

The results of Chile showed that departing CEOs manage earnings differently as the theory stated. It could be explained by a turnover in peaceful terms and the departing CEO's desire to meet the expectations of the board and shareholders. Downward earnings management was found in the first period of the incoming CEO. The incentives in this case are different, for example, they would like to show that the company was mishandled and now they have a brand new beginning to start to perform. In the process of analysis of persistency of earnings management over the transitional period, we found that earnings management downwards persists intensifying the idea of blame poor performance of the previous CEO.

In case of Russia, an analysis is more complicated, given that there is no significant model for the first period of the incoming CEO. Upward earnings management is significant for the last year of outgoing CEO. The result is aligned with the theory. As we do not have information of the next period, it is difficult to link the reasons why in the second period of new CEO exist downward earnings management. We as well can conclude that Chile and Russia manage earnings differently, even though both countries are developing markets, but with very different sizes.

Even though, the research was conducted meticulously and the results are useful for the different stakeholders, we identified some improvements that could be considered for next researches. For instance, use quarterly data instead annual data for sharper results. Other limitation of our work was that we did not consider the reasons of the CEO turnover. A better understanding of the incentives of earnings management, for example considering the variables of a peaceful turnover or a force turnover would make our analysis sharper. Studying how strength are audit companies could impact the understanding of how strong (Whether exist or not these practices) earnings management is in the companies.

The investigation suggests to next researchers focus mainly on what we consider the more important unattended variable -the incentives of earnings management as next step of the study for both markets (Chile and Russia)-.

The research results derive useful implications that can be used by different stakeholders of the companies. Stakeholders could understand the incentives that outgoing / incoming could have to manage earnings within the company. The existence of earnings management in a company could imply the inefficient allocation of resources (Overproduction/Underproduction affecting inventory capacity). The decision taken against earnings management through real activities would increase efficiency in the operations. For example, in the case of underproduction practices, the following periods could be forecasted high demand, and the speed of supply could not fit the demand of the customers. The impact of this scenario would lead to a loss of money in cost opportunity.

The actions that stakeholders could use for diminishing or avoid completely the earnings management by overproduction (underproduction) are: transparency of specific part of production costs as a key variable, give incentives to CEOs for keep production cost indicators as COGS or Inventory in normal levels, internal audit in the specific periods of transitional turnover, etc.

More specifically, the existence of managerial opportunism in Russia and in Chile could damage the image and attractiveness of investors. The earnings management has several implications of how investors asses companies.

Investors and analysts have to be more meticulous analyzing the company. Three consecutive years of earnings management (Chile) could imply a very wrong perception of the company which could show unreal financial numbers. Consequently, bad or bias investment decision could be held impacting directly in the economic situation of the company. For this particular case, we recommend to stakeholders not only pay attention to financial statements, but also in overproduction/underproduction practices through production costs. For example, for the first period of the new CEO in Chile, those investors and analysts that are aware of the overproduction (under) techniques will put attention of the increasing unit production cost (Downward overproduction). As soon as they see any increase in amount of the production costs, it could be a signal of earnings management practice.

In the case of Russia we also recommend to analyze the same indicators described in the paragraph above. Even though, we did not find Earnings Management techniques for the first period of the new CEO, but for the rest, we did.

Companies that are able to avoid earnings management practices, will experience more stable performance, less volatility in their results, indicators as inventory not stressed (normal levels) and all of these factors will lead a company with less risk. Thus, the value of the company increases.

Accounting practices in Chile and Russia are similar. Both countries use IFRS to develop the financial statements, however the findings were different. We conclude that incentives for earnings management are not defined by accounting standards, but by contextual factors as for example, peaceful CEO turnover or force turnover. Identification of these contextual factors will lead to a fair treatment of production cost in the companies.

### **FURTHER INVESTIGATIONS**

The investigation suggests that next researchers should focus on the incentives of earnings management as next step of the study for both markets (Chile and Russia). Define and classify types of turnover by peaceful, forced, routine and non-routine is important for a sharper analysis. These contextual factors impact the decisions of managers for earnings management and we believe that will strength the statistical tests.

#### REFERENCES

**Anderson and Reeb (2003).** "Founding-Family Ownership and Firm Performance: Evidence from the S&P 500". The Journal of Finance <u>Volume 58, Issue 3, pages 1301–1327</u>, June 2003.

Andersson and Lilja (2013). "Earning Management in Times of CEO Turnover". Uppsala University Department of Business Studies.

**Cannella, Albert, and Lubatkin (1993).** "Succession as a sociopolitical process: Internal impediments to outsider selection". Academy of Management Journal 36(4): 763-793.

**Chen, Cheng and Dai (2013).** "Family Ownership and CEO Turnover. Contemporary Accounting Research Vol. 30 No. 3 (Fall 2013) pp. 1166–1190

**Choi, Kwak and Choe (2014)**. "Earnings Management Surrounding CEO Turnover: Evidence from Korea". ABACUS, Vol. 50, No. 1, 2014

**Coughlan, and Schmidt. (1985).** "Executive compensation, managerial turnover, and firm performance: An empirical investigation". Journal of Accounting and Economics 7: 43-66.

**Dechow, Ge, and Schrand (2010).** "Understanding earnings quality: A review of the proxies, their determinants and their consequences". Journal of Accounting and Economics 50 (2–3):344-401.

**DeFond and Jiambalvo (1994).** "Debt covenant violation and manipulation of accruals." Journal of Accounting & Economics 17(1/2): 145176.

**He, Sommer, Xie (2001).** "The Impact of CEO Turnover on Property–Liability Insurer Performance". The Journal of Risk and Insurance, 2011, Vol. 78, No. 3, 583-608

Finkelstein & Hambrick (1996). "Strategic leadership". New York: West.

Geertsema, Lont and Lu (2013). "Earnings Management around CEO Turnovers". Journal of Economic Literature.

**Graham, Harvey and Rajgopal (2005).** "The economic implications of corporate financial Reporting". Journal of accounting and Economics 40 (1):3-73.

**Hazarika et al. (2012).** "How Effective is Board Independence to the Monitoring of Earnings Manipulation?", International Accounting and Business Conference 2015, IABC 2015

**Healy and Wahlen (1999).** "A review of the earnings management literature and its implications for standard setting", Accounting Horizons, vol.13, núm.4: 365-383.

**Huang et al., (2014)**. "CEO Turnover and Audit Pricing". Accounting Horizons American Accounting Association Vol. 28, No. 2 DOI: 10.2308/acch-50706 2014 pp. 297–312

**Huson, Parrino and Starks (2001).** "Internal Monitoring Mechanisms and CEO Turnover: A Long-Term Perspective". The Journal of Finance Vol. 56, No. 6 (Dec., 2001), pp. 2265-2297

**Jensen (1986).** "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers." American Economic Review 76(2): 323

**Kaplan and Minton (2012).** "How Has CEO Turnover Changed?" International Review of Finance, 12:1, 2012: pp. 57–87

Laux (2007). "Board Independence and CEOTurnover". Journal of Accounting Research Vol. 46 No. 1

**Lindrianasari and Hartono (2011).** "The relationship between Accounting Performance and CEO Turnover: Evidence from Indonesia". Accounting & Taxation, Vol. 3, No. 2, pp. 97-107, 2011

**Miller (1991).** "Stale in the saddle: CEO tenure and the match between organization and environment". Management Science 37: 34-52.

**Opler et al. (1999).** "The determinants and implications of corporate cash holdings". Journal of Financial Economics, 52: 3-46.

**Parrino (1996).** "CEO turnover and outside succession a cross-sectional analysis". Journal of Financial Economics Volume 46, Issue 2, November 1997, Pages 165–197

**Poveda (2001).** "Cuestiones estadísticas sobre modelos y contrastes de ajustes por devengo anormales", Working Paper of Instituto Valenciano de Investigaciones Económicas (IVIE), Serie EC. 2001-16.

**Press and Weintrop (1990).** "Accounting Based Constraints in Public and Private Debt Agreements." Journal of Accounting & Economics 12(13): 6595.

**Reitenga and Tearney (2003).** "Mandatory CEO retirements, discretionary accruals, and corporate governance mechanisms". Journal of Accounting, Auditing & Finance 18 (2):255-280.

**Roychowdhury (2006).** "Earnings management through real activities manipulation." Journal of Accounting and Economics 42 (3):335-370.

**Schipper (1989).** "Commentary on earnings management, Accounting Horizons". Journal of Accounting and Economics 3: 91-102.

**Sweeney (1994).** "Debt covenant violations and managers' accounting responses." Journal of Accounting & Economics 17(3): 281308.

**Wartfiled, Wild, Wild (1995).** "Managerial ownership, accounting choices, and informativeness of earnings", Journal of Accounting and Economics, vol.20, núm.1: 61-91.

**Zajac and Westphal (1996)**. "Who shall succeed? How CEO/board preferences and power affect the choice of new CEOs". Academy of Management Journal 39: 64-90.

### **APPENDIXES**

#### **APPENDIX 1:**

### **Descriptive Statistics, Russia**

	Total Assets (Million USD)	Revenue (Million USD)	ROA	ROE	LEVERAGE
Country	Russia	Russia	Russia	Russia	Russia
Mean	15390,90908	9216,73238	0,0521004	0,1115106	0,5166021
Standard Error	6892,429631	3536,7941	0,009517	0,0203572	0,0265136
Median	1727,206667	1747,64	0,0546365	0,1271387	0,5168246
Mode	#N/A	#N/A	#N/A	#N/A	#N/A
Standard Deviation	43591,55249	22368,6499	0,0601908	0,1287504	0,1676865
Sample Viarance	1900223449	500356500	0,0036229	0,0165767	0,0281188
Kurtosis	20,20034865	15,0000293	0,9074177	0,6437001	-0,275532
Skewness	4,375222388	3,87905672	-0,0309	-0,345271	0,0127153
Range	240351,7917	108981,917	0,3248973	0,6320314	0,6964951
Minimum	19,70833333	10,4833333	-0,108005	-0,202266	0,1837575
Maximum	240371,5	108992,4	0,2168922	0,4297657	0,8802526
Sum	615636,3633	368669,295	2,0840173	4,4604255	20,664082
Count	40	40	40	40	40

# APPENDIX 2: Descriptive Statistics, Chile

	Total Assets (Million USD)	Revenue (Million USD)	ROA	ROE	LEVERAGE
Country	Chile	Chile	Chile	Chile	Chile
Mean	1594,605727	845,21562	0,0593543	0,0746361	0,4576285
Standard Error	488,1272038	280,013863	0,0224327	0,0518785	0,0317149
Median	343,18	166,058333	0,0428048	0,0783046	0,4065848
Mode	#N/A	#N/A	#N/A	#N/A	#N/A
Standard Deviation	3451,580559	1979,99701	0,1586229	0,3668362	0,2242581
Sample Viarance	11913408,36	3920388,17	0,0251612	0,1345688	0,0502917
Kurtosis	10,59284759	15,8613408	29,91816	20,254124	-0,641099
Skewness	3,300106456	3,83952646	4,7326119	-2,047731	0,425254
Range	16039,13667	10803,9533	1,2786636	3,3275075	0,8703142
Minimum	0,53	0,0466667	-0,24689	-1,884359	0,072473
Maximum	16039,66667	10804	1,0317732	1,4431482	0,9427872
Sum	79730,28633	42260,781	2,9677149	3,7318069	22,881427
Count	50	50	50	50	50

**APPENDIX 3:** 

### **Pearson Correlation, Chile**

#### **Correlations Chile**

		Prod	TA	Rev	ROE	ROA	LEV
Pearson	Prod	1,000					
Correlation	TA	-,003	1,000				
	Rev	,054	,952	1,000			
	ROE	,162	,037	,026	1,000		
	ROA	,086	-,038	-,042	,769	1,000	
	LEV	,086	,294	,311	-,208	-,221	1,000

### APPENDIX 4: Pearson Correlation, Russia

#### **Correlations Russia**

		Prod	TA	Rev	ROE	ROA	LEV
Pearson	Prod	1,000					
Correlation	TA	-,131	1,000				
	Rev	-,122	,934	1,000			
	ROE	-,136	,116	,196	1,000		
	ROA	,013	,197	,284	,883,	1,000	
	LEV	,341	-,159	-,118	,140	-,049	1,000

#### **APPENDIX 5:**

#### Regression summary, Chile (t = 0)

**Model Summary** 

Model	R R Square Adjusted R		Std. Error of the	
			Square	Estimate
1	,813ª	,662	,623	,078150986235770

a. Predictors: (Constant), ROE, 1/At-1,  $\quad \underline{\Lambda} \quad \text{St1/At-1}, \quad \underline{\Lambda} \quad \text{S-t/At-1}, \; \text{St/At-}$ 

1

Mode	el	Sum of Squares	df	Mean Square	F	Sig.
	Regression	,526	5	,105	17,213	,000 <sup>b</sup>
1	Residual	,269	44	,006		
	Total	,794	49			

a. Dependent Variable: Prod/At-1

b. Predictors: (Constant), ROE, 1/At-1,  $\Delta$  St1/At-1,  $\Delta$  S-t/At-1, St/At-1

#### Regression summary, Chile (t = -1)

**Model Summary** 

Model	R	R Square	Adjusted R	Std. Error of the
			Square	Estimate
1	,632ª	,400	,332	,086964866949280

a. Predictors: (Constant), ROE, 1/At-1,  $\quad \Delta \quad$  St1/At-1,  $\quad \Delta \quad$  S-t/At-1,

St/At-1

#### $\textbf{ANOVA}^{\textbf{a}}$

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	,222	5	,044	5,866	,000b
1	Residual	,333	44	,008		
	Total	,555	49			

a. Dependent Variable: Prod/At-1

b. Predictors: (Constant), ROE, 1/At-1,  $\Delta$  St1/At-1,  $\Delta$  S-t/At-1, St/At-1

### Regression summary, Chile (t = +1)

**Model Summary** 

Model	R	R Square	Adjusted R	Std. Error of the
			Square	Estimate
1	,702ª	,493	,435	,101059928071775

a. Predictors: (Constant), ROE, 1/At-1,  $\Delta$  St1/At-1,  $\Delta$  S-t/At-1, St/At-1

#### **ANOVA**<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	,437	5	,087	8,549	,000 <sup>b</sup>
1	Residual	,449	44	,010		
	Total	,886	49			

a. Dependent Variable: Prod/At-1

b. Predictors: (Constant), ROE, 1/At-1,  $\Delta$  St1/At-1,  $\Delta$  S-t/At-1, St/At-1

#### **APPENDIX 6:**

#### Regression summary, Russia (t = 0)

**Model Summary** 

Model	R	R Square	Adjusted R	Std. Error of the
			Square	Estimate
1	,476ª	,226	,113	,588560822009331

a. Predictors: (Constant), ROE, 1/At-1,  $\Delta$  St1/At-1,  $\Delta$  S-t/At-1, St/At-1

#### **ANOVA**<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	3,445	5	,689	1,989	,105⁵
1	Residual	11,778	34	,346		
	Total	15,223	39			

- a. Dependent Variable: Prod/At-1
- b. Predictors: (Constant), ROE, 1/At-1,  $\Delta$  St1/At-1,  $\Delta$  S-t/At-1, St/At-1

#### Regression summary, Russia (t = -1)

**Model Summary** 

Model	R	R Square	Adjusted R	Std. Error of the
			Square	Estimate
1	,715ª	,511	,439	,475670668001979

a. Predictors: (Constant), ROE, 1/At-1,  $\Delta$  St1/At-1,  $\Delta$  S-t/At-1, St/At-1

#### **ANOVA**<sup>a</sup>

Mode	el	Sum of Squares	df	Mean Square	F	Sig.
	Regression	8,035	5	1,607	7,103	,000 <sup>b</sup>
1	Residual	7,693	34	,226		
	Total	15,728	39			

- a. Dependent Variable: Prod/At-1
- b. Predictors: (Constant), ROE, 1/At-1,  $\Delta$  St1/At-1,  $\Delta$  S-t/At-1, St/At-1

### Regression summary, Russia (t = +1)

#### **Model Summary**

Model	R	R Square	Adjusted R	Std. Error of the
			Square	Estimate
1	,517ª	,268	,160	,529325717360735

a. Predictors: (Constant), ROE, 1/At-1,  $\Delta$  St1/At-1,  $\Delta$  S-t/At-1, St/At-1

#### **ANOVA**<sup>a</sup>

Mode	el	Sum of Squares	df	Mean Square	F	Sig.
	Regression	3,482	5	,696	2,486	,050 <sup>b</sup>
1	Residual	9,526	34	,280		
	Total	13,008	39			

a. Dependent Variable: Prod/At-1

b. Predictors: (Constant), ROE, 1/At-1,  $\Delta$  St1/At-1,  $\Delta$  S-t/At-1, St/At-1