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#### A STUDY OF EARNINGS MANAGENT & FINANCIAL STATEMENT REPORTING ISSUES SURRODING PUBLIC TRADED CORPORATIONS

by

Juntao Wu

A thesis submitted to the faculty of The University of Mississippi in partial fulfillment of the requirements of the Sally McDonnell Barksdale Honors College.

Oxford

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Approved by

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## Abstract:

The purpose of this paper is to study some publicly traded companies' financial reporting systems. I chose four companies in different industries to conduct a series of analyses and evaluations. In Section One, the quality of these companies' financial reporting systems is carefully examined and evaluated. First, I discuss some potential earnings management strategies that managers from different departments tend to adopt. Next, some of the chosen companies' important policies, such as revenue recognition, are compared with industrial standards or relevant policies from competitors. In addition, earnings management and financial reporting issues that relate to income taxes are discussed separately. Three major perspectives are considered: 1. recognition of deferred tax asset and valuation allowance accounts; 2. the possible effects of changing valuation allowance on earnings; 3. disclosure of tax planning strategies in the financial report.

Section Two discusses corresponding internal control systems that can assist corporations in alleviating the adverse effects from inaccurate and inefficient financial reporting. First, COSO internal control framework is used as the guideline for developing the internal control process. Secondly, certain industrial factors are considered during the risk identification and assessment procedure. Next, a general audit plan is developed for each company. I discuss the budgeted work plan in terms of hours of effort for each task necessary to audit the internal control system. The deferred tax accounts are also discussed.

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# Section 1

#### Part 1: Overview of potential earnings management strategies

#### **Accrual Earnings quality**

The quality of accruals earnings affects the accuracy of the financial statements and the investment decisions of external investors. One of the most efficient and simplest approaches to measure a company's accrual earnings quality is to use the accrual ratio. This approach breaks down a company's accrual earnings into two separate components: cash earnings and aggregate accruals. While:

Accrual Basis Earnings = Cash Earnings + Aggregate Accruals

And:

Aggregate 
$$Accruals_t = NOA_t - NOA_{t-1}$$

\* NOA stands for Net Operating Assets for the current accounting period (t) and prior accounting period (t-1).

And:

Accruals Ratio<sub>t</sub> = 
$$(NOA_t - NOA_{t-1}) / [(NOA_t + NOA_{t-1})/2]$$

If the aggregate accruals components of earnings are the dominant factors of a company's earnings, the company's earnings are considered lower quality. It means that a

high Accruals Ratio indicates lower quality earnings. Base on the formulas above, Accrual Ratios for the four chosen companies are calculated in Table 1<sup>4</sup>.

Year of 2013	Aggregate accruals (in thousa	nds) Accruals Ratio (in thousands)
Salesforce.com, Inc.	\$ 632,377	7.64%
Netflix, Inc.	\$ 651,722	7.00%
Tesla Motors, Inc.	\$ 491,469	18.76%
Hilton Worldwide Holding Inc.	\$ -207,000	-0.22%

Table 1. Summary of four companies' accrual ratios

Although further discussions are necessary to better understand the reasonability behind these figures, the accruals ratios provide an overview of the companies' earnings quality. Withholding the overall ideas of these companies' earnings quality, it is necessary to break down the information on financial statements to deeply search the potential evidences for earnings manipulation.

#### **Potential earnings management detection**

In a complex business environment, it is necessary to evaluate earnings performance and detect earnings manipulation considering specific industry guidelines or common practices. This paper is to discuss and discover the potential for revenue manipulation and other accounts that managers may use to misstate earnings. I examine each company's financial reports and then develop a systematic approach for detecting potential earnings manipulation. Based on the financial statement analysis for the four companies mentioned

previously, possible strategies for detecting earnings manipulation in major accounts are concluded in Table 2.

Accounts	Potential manipulation	Detection strategies		
	strategies			
Accounts	1. Potential for misstating bad debts;	1. Information on the note of the		
receivable	2. Factoring or transfer the receivables	financial reports that disclosed the		
	to a special purpose entity (SPE) in order	factoring or SPE activates;		
	to "hide" the real receivables' balances	2. Relative level comparison with		
	and to reduce the receivables turnover	concern about trends		
Inventory	1. Utilizing inventory valuation method	1. LIFO reserve compare to the		
	from FIFO to LIFO to FIFO (change in	reported inventory under LIFO		
	accounting principle) based on the	2. Examine the inventory level over		
	changing prices.	time		
	2. Potential of overstate of inventory			
Reserve	"Cookie jar" reserves overstating	Evaluate amounts for doubtful		
accounts	multiple reserve account in company's	accounts and large changes in		
(contra-assets)	"good year", the excess reserves that can	percentages to receivables;		
	be tapped in "bad years" to smooth	information from notes and MD&A		
	earnings	section in financial report might be		
		helpful for the detection		
Deferred tax	Strategic changes to the valuation	Consider the trends of effective tax		
practices	allowance accounts for earnings	rate of the company over years;		
	management purpose	review notes on the income tax		
		section, collect information of the		
		reasonability of valuation allowance		
		account		

Research and	1. Boosting short-term performance by	1. Review company's accounting	
development	reducing R&D expenses	policy for R&D cost and benchmark	
expenses	2. Capitalize R&D costs that are not	with industry common practice	
	classified as software development costs	2. Evaluate the trend of R&D cost as a	
	(violate of GAAP) <sup>1</sup>	percent of sales over time	
	3. Aggressively extend the amortization		
	period of capitalized R&D cost		
Operating	Capitalization of operating costs to	WorldCom and Enron have become	
expense	understating current expenses in order to	one of the most flagrant examples of	
	increasing earnings	recent accounting abuse <sup>7</sup>	
		Ratios and trends analysis with	
		comparison of market expectation	
Depreciation	1. Lengthen the estimated useful lives of	1. Evaluate PPE notes and compare	
	PPE or other assets	with relative accounting policies	
	2. Potential of overstating the residual	2. expense ratios and useful life	
	(salvage) value of the assets	averages calculations and comparison	

Table 2. Summary of potential earnings manipulation strategies and their detection methods

Besides the potential strategies and detection suggestions mentioned in Table 2, the topic of revenue recognition is also related to the earnings management activities. Earning restatements from 1997 to 2002 occurred for almost 10 percent of the listed companies on the three major exchanges, and revenue recognition was the most common category of violations.<sup>2</sup> Revenue is recognized when it is 1) realized or realizable and 2) earned. Realizable means assets received are convertible into cash. Revenue is earned when

<sup>&</sup>lt;sup>1</sup> Statement of Financial Accounting Standards No 86: Accounting for the Cost of Computer Software to be sold, Leased, or Otherwise Marketed

<sup>&</sup>lt;sup>2</sup> Giroux, Gary. 2004. Detecting Earnings Management 1st edition: p.114-153

exchange transactions (the earning process) are substantially completed, usually by the time the product is delivered or service rendered.<sup>3</sup>According to Staff Accounting Bulletin (SAB) 101, *Revenue Recognition in Financial Statements* (1999):

The accounting literature on revenue recognition includes both broad conceptual discussions as well as certain industry-specific guidance. (Topic 13, A.1)

Thus, most practical strategies for earnings management arise from aggressively following or violating the industry guidance. Among the companies this paper evaluates, Salesforce.com, Inc.'s position of revenue recognition is defensible as realizable and earned. Salesforce.com is a company that provides enterprise cloud computing solutions. The company offers platform services as a major revenue generator. Salesforce.com, Inc.'s revenue recognition policies are contains three perspectives: 1) revenue related to subscription and support; 2) revenue related to professional services; 3) revenue related to multiple-deliverable arrangements. For subscription and support:

Revenues are recognized ratably over the contract terms beginning on the commencement date of each contract, which is the date our service is made available to customers. Amounts that have been invoiced are recorded in accounts receivable and in deferred revenue or revenue, depending on whether the revenue recognition criteria have been met. (Salesforce.com 2013 10-K p. 36)

For professional services and other revenues, the policies are:

<sup>&</sup>lt;sup>3</sup>Accounting Standard Codification Sec 605-10-25: Revenue Recognition: Overall Recognition

When the services are not combined with subscription revenues as a single unit of accounting, as discussed below, these revenues are recognized as the services are rendered for time and material contracts, and when the milestones are achieved and accepted by the customer for fixed price contracts. Training revenues are recognized after the services are performed. (Salesforce.com 2013 10-K p.36)

In October 2009, Accounting Standards Update No. 2009-13, "*Revenue Recognition* (*Topic 605*), *Multiple-Deliverable Revenue Arrangement----a consensus of the FASB Emerging Issues Task Force*" (ASU 2009-13), objective and realizable evidence of fair value of the deliverables to be delivered is no longer required in order to account for deliverables in a multiple-deliverable arrangement separately. Instead, arrangement consideration is allocated to deliverables based on their relative selling price. This change has been adopted and showed on Salesforce.com, Inc.'s 10-K:

When multiple-deliverables included in a arrangement are separated into different units of accounting, the arrangement consideration is allocated to the identified separate units based on ta relative selling price hierarchy. We determine the relative selling price for a deliverable based on its vendor-specific objective evidence of selling price ("VSOE"), if available, or our best estimate of selling price alternative due to differences in our service offerings compared to other parties and the availability of relevant third-party pricing information.

Another potential strategies related to revenue recognition is known as "overly conservative revenue recognition". Microsoft has a history of overly conservative revenue

recognition----various reserve accounts (contra assets accounts) has been used to reduce revenue recognized for current year in order to smooth income for the future period.<sup>4</sup> Revenue recognition policies for Salesforce.com, Inc. are defensible because they are match with the industry standards (both Oracle Corporation and SAP AG have similar policies). No obvious earnings management from aggressive revenue recognition. Salesforce.com, Inc.'s revenue recognition policy is conservative. It is defensible under the FASB criteria of realizable and earned, also, is consistent with industry common practices. Same conclusion can be made after the financial reports for Netflix, Inc., Tesla Motor, Inc. and Hilton Worldwide Holding Inc. been evaluated. The revenue recognition policies for the four companies are all pretty match to the industrial standard.

<sup>&</sup>lt;sup>4</sup> General Accounting Office. *Financial Statement Restatements: Trends, Market Impacts, Regulatory Responses, and Remaining Challenges*, Washington: GAO, October 2002.

# Part 2: Potential earnings strategies associate with deferred tax asset and valuation allowance

Statement of Financial Accounting Standards No. 109, *Accounting for Income Tax* (SFAS 109) requires recognition of deferred tax assets for temporary differences resulting in deductible amounts in future years and for tax carryforwards. These deferred tax assets must be reduced by a valuation allowance if, based upon the weight of available evidence, there is a likelihood of more than 50 percent that same portion or all of the deferred tax assets will not be realized.<sup>5</sup> As both the need for a valuation allowance and its dollar amount are based primarily on managerial judgment instead of observable criteria, SFAS 109 has been criticized as providing a vehicle for earnings management through strategic changes to the valuation allowance.<sup>6</sup>

Valuation allowance shows some significant impact for company's earnings and financial reporting. As Hilton Worldwide Holding Inc. indicated in its 2013 annual report:

A change in these assumptions may increase or decrease our valuation allowance resulting in an increase or decrease in our effective tax rate, which could materially affect our consolidated financial statements. (Hilton Worldwide Holding Inc. 2013 10-K p. 69)

 <sup>&</sup>lt;sup>5</sup> Accounting Principles Board (APB): Accounting for Income Taxes, Opinions of the APB No.11. 1967
 <sup>6</sup> Bauman, C.C. and M.P. Bauman. 2002. The Deferred Tax Asset Valuation Allowance As a Strategic Accounting Choice

The key requirement for the realization of deferred tax assets is future taxable income. In the absence of future taxable income, future tax deductions provide no tax savings to the firm. The source of taxable income includes

a. Future reversals of existing taxable temporary differences.

- b. Future taxable income exclusive of reversing temporary differences and carryforwards.
- c. Taxable income in prior carryback year(s) if carryback is permitted under the tax law.

d. Tax-planning strategies that would, if necessary, be implemented to, for example:

1. Accelerate taxable amounts to utilize expiring carryforwards.

2. Change the character of taxable or deductible amounts from ordinary income or loss to capital gain or loss.

3. Switch from tax-exempt to taxable investments. Evidence available about each of those possible sources of taxable income will vary for different tax jurisdictions and possibly, from year to year.<sup>7</sup>

An example of the category "a" source would be the reversal of depreciation temporary differences. If a company use straight-line depreciation on the books but accelerated depreciation on its tax return, income from the financial statement will initially exceed taxable income shows on the tax return. Over time, however as accelerated depreciation declines, the depreciation on the financial statement will eventually exceed the one reported on the tax return. All taxable income produced by the operations of the firm is potentially under the category "b", except for income resulting from the reversal of taxable temporary

<sup>&</sup>lt;sup>7</sup> Accounting Standard Codification 740-10-30-18. *Income Taxes--- initial measurement* 

differences. A deferred tax asset can be realized with taxable income earned in a preceding carryback period. Item "c" refers to taxable income earned within a carryback period. An appropriate matching for loss and income would be: a capital gain to offset against a capital loss; a net operating profit to offset a net operating loss.

For category "d", ASC Topic 740 provides an example of tax-planning strategies and other sources of taxable income:

A qualifying tax-planning strategy is an action that:

1. Is prudent and feasible. Management must have the ability to implement the strategy and expect to do so unless the need is eliminated in future years. For example, management would not have to apply the strategy if income earned in a later year uses the entire amount of carryforward from the current year.

2. An entity ordinarily might not take, but would take to prevent an operating loss or tax credit carryforward from expiring unused. All of the various strategies that are expected to be employed for business or tax purposes other than utilization of carryforwards that would otherwise expire unused are, for purposes of this Subtopic, implicit in management's estimate of future taxable income and, therefore, are not taxplanning strategies as that term is used in this Topic.

3. Would result in realization of deferred tax assets. The effect of qualifying taxplanning strategies must be recognized in the determination of the amount of a valuation allowance. Tax-planning strategies need not be considered, however, if positive evidence available from other sources is sufficient to support a conclusion that a valuation allowance is not necessary. <sup>8</sup>

However, the evidence for whether the tax planning strategies have been adopted is seldom disclosed under corporations' financial reports. In most cases, including the four companies this paper evaluate, the companies only state the fact that corresponding tax planning strategies have been used to utilize future taxable income in order to recognize benefits from future deductible amounts. Some common examples from annual reports include:

In evaluating our ability to recover our deferred tax assets, in full or in part, we consider all available positive and negative evidence, including our past operating results, and our forecast of future earnings, future taxable income and prudent and feasible tax planning strategies. (Netflix, Inc. 2012 10-K p.38)

In contrast, consider the example provided by Regeneron Pharmaceuticals found below:

"During 2008, the Company implemented a tax planning strategy to utilize net operating loss carry-forwards (which were otherwise due to expire in 2008 through 2012) on its 2007 U.S. federal and New York State income tax returns that were filed in September 2008. The tax planning strategy included electing, for tax purposes only, to capitalize \$142.1 million of 2007 research and development ("R&D") costs and amortize these costs over ten years for tax purposes. By capitalizing these R&D costs, the

<sup>&</sup>lt;sup>8</sup> Accounting Standard Codification, 740-10-55-39. *Tax Planning Strategies* 

Company was able to generate taxable income for tax year 2007 and utilize

the net operating loss carry-forwards to offset this taxable income."9

Indicated by the previous research, one noticeable thing is that the generation of deferred tax assets deemed unrealizable and the concurrent increase in the valuation allowance have no net effect on earnings. <sup>10</sup>SFAS 109 defines income tax expense as:

Income tax Expense= Income tax payable + increase in deferred tax liability (decrease in deferred tax asset) – increase in deferred tax asset (increase in deferred tax liability)

When deferred tax assets are recognized and reserved in the same accounting period, there is no net impact on income tax expense as the decrease or increase in income tax expense associated with the increase in deferred asset. Therefore, it is important to realize that not all changes in the recorded valuation allowance affect income taxes on continuing operations.

#### Salesforce.com, Inc.

Table 3 shows the relative information about the company's valuation allowance and deferred tax asset account.

<sup>&</sup>lt;sup>9</sup> Georgia Tech Financial Analysis Lab. 2011. Deferred Tax Assets and the Disclosure of Tax-planning Strategies. December 2011

<sup>&</sup>lt;sup>10</sup> Bauman, Christine, Bauman, Mark, and Halsey, Robert F. Do Firms Use the Deferred Tax Asset Valuation Allowance to Manage Earnings? August 2000

 Table 3. Summary of Salesforce.com, Inc.'s valuation allowance and deferred tax asset

 in 2013

Salesforce.com, Inc.	2013	2012
Valuation allowance (VA)	-192,682.00	-4,624.00
Increases (decreases) in VA	188,058.00	
Income before the effect of VA	-83,639.00	-11,572.00
Income tax expense effect	-186,806.00	
Income (loss) from continues operation	-270,445.00	-11,572.00
Deferred Tax Asset (DTA)	348,213.00	229,217.00
Percentage of DTA	55%	2%

In 2013, Salesforce.com, Inc. increased 188 million over the valuation allowance account. This caused its income tax expense to increase 186.8 million and brings the company's loss from operation down to 270.4 million. "Income tax expense effect" refers to the increase or decrease in income tax expense that arise from changing in valuation allowance. <sup>11</sup> Since the income tax expense has been increased, it is unlikely to say that mangers have utilized the valuation allowance account to boost earnings and avoid losses. One thing that should be noticed, however, is the percentage of DTA over the year. "Percentage of DTA" refers to the proportion of valuation allowance to deferred tax asset in a certain year. Salesforce.com, Inc.'s valuation allowance increased 78.34 times more than deferred tax asset in 2013, resulting in a change in percentage of DTA of 53%. This might be a signal

<sup>&</sup>lt;sup>11</sup> Salesforce.com, Inc. Annual Report 2013 p. 95: A reconciliation of income taxes at the statutory federal income tax rate to the provision for (benefit from)income taxes

of using the "big bath" technique. The "big bath" earnings manipulation strategies is often implemented in a bad year to artificially enhance next year's earnings. I concluded several criteria must be met in order to confirm the company has adopted this strategies. 1. If the valuation allowance that increased in the current year did not result eventually in future losses (i.e. income next year increase significantly or disproportionally). 2. If the valuation allowance was continually decreasing in subsequent years. 3. If the company's predicted effective tax rate in subsequent years would be inaccurate without the valuation allowance decrease. If all the criteria are met, it is likely that Salesforce.com, Inc. has write-off too much valuation allowance in 2013 in order to enhance future income.

#### Part 3: Real activity earnings management concept

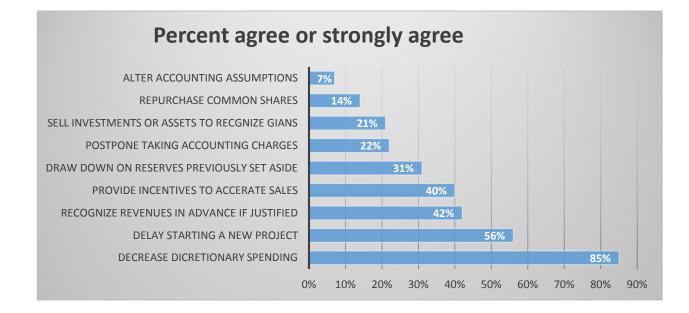
Real activities earnings manipulation is defined as departures from normal operational practices, motivated by managers' desire to mislead at least some stakeholders into believing certain financial reporting goals have been met in the normal course of operations.<sup>12</sup> Unlike accrual manipulation, which manage earnings through manipulation of accruals, real activities earnings manipulation generate direct cash flow consequences to produce or improve "real" earnings.

Prior research indicates that the available earnings management methods to managers could be discounting prices to temporarily increase and accelerate sales, alterations in shipment schedules, decreases in research and development (R&D) and maintenance expenses, and overproduction to report lower cost of goods sold (COGS) on the income statement.<sup>13</sup> Adoption of the method depends on the company's financial situation, manager's preference, and industry-specific guideline. Among those methods, decrease discretionary spending (R&D and maintenance) are most commonly adopted by companies' management. Figure 1 shows the most common technique a company would consider to use to hit certain desired earnings target.

<sup>&</sup>lt;sup>12</sup> Roychowdhury, Sugata. 2006. Earnings management through real activities manipulation, Journal of Accounting and Economics 42, 2006

<sup>&</sup>lt;sup>13</sup> Dechow, P.M., Skinner D.J. 2000. *Earnings management: reconciling the views of Accounting academics, parishioners and regulators.* Accounting Horizons 14, 235-250.

Figure 1. Summary of common earnings boost strategies that managers tend to choose<sup>14</sup>



Other researches also provide evidence that the most common approach CEOs are willing to use to increase short-term earnings is to reduce R&D costs. Because R&D cost are immediate expenses (not subject to amortization), companies can reduce expenses by reducing R&D cost, which will boost earnings consequently. Reducing R&D may be an effective approach to boost a company's short-term performance, however, long-term performance for the company might be influenced by this approach.

One of the strategies to accelerate sales in a short period of time is by using "Channel stuffing". Channel stuffing is the shipment of products at deep discounts to get customers (mostly wholesalers) to accept these goods especially at the end of a period. Once the products left the loading dock, revenue would be recorded. In consequence, marketing channels will be filled with product but the earnings will be boosted up in a short time.

<sup>&</sup>lt;sup>14</sup> Based on the question of "within a permitted by GAAP, what choice might you make if your company come in below the desired earnings target this quarter?" Based on a survey of 401 financial executives

Channel stuffing is a classic example of booking tomorrow's revenue today. In order to lower the misleading of the external financial community, when managers use this strategy, reasonable and appropriate allowance for sales returns should be established. Although compared to real activities earnings management, accrual-based earnings management is more costly.<sup>15</sup> Most Firms tend to mix use of both approaches to meet certain earnings target or market's expectation.

<sup>&</sup>lt;sup>15</sup> Cohen, Daniel, and Zarowin, Paul. 2008. Accrual-Based and Real Earnings Management Activities around Seasoned Equity Offerings, January 2008

# Part 4: Strategies to accomplish earnings management in terms of different functional areas in business entities

#### Research and development (R&D)

Under the ASC 985-20<sup>16</sup>, companies in software the industry are allowed to capitalize certain R&D costs like software development costs once technological feasibility has occurred. <sup>17</sup>Two major perspectives related to the software development cost thus could be utilized if the managers from research and development functional area were asked to provide ways to improve earnings. Firstly, in part on the basis of determining feasibility, companies capitalize between zero and close to 100 percent of all development cost. The capitalize range can vary among companies in the same industry. Salesforce.com, Inc. capitalized \$59,647,000 software development costs for 2013 and \$ 41,442 in 2012. (Slaesforce.com, Inc. Annual report 2013 P<sub>90</sub>) While the company's major competitor Oracle Corporation's capitalized software development cost amount were not material to its consolidated financial statements. (Oracle Corporation Annual report 2013 *Notes to consolidated financial statements*) Secondly, the amortization for capitalized software development cost can vary from eighteen months or so to about five years. This provides managers from R&D department another opportunity to conduct earnings management.

#### **Sales and Marketing**

Most sales-related earnings management strategies arise from revenue recognition issues. As discussed in the previous part of this paper, revenue recognition issues primarily involve

<sup>&</sup>lt;sup>16</sup> Accounting Standard Codification 985-20: Cost of Software to be Sold, Leased or Marketed

<sup>&</sup>lt;sup>17</sup> Accounting Standard Codification 350-40: Internal-Use Software

manipulating the timing of recognizing sales. Early revenue recognition techniques like bill-and hold, channel stuffing, and out-of-period sales are always considered as potential earnings management vehicle by managers from the sales and marketing department. Under real activities earnings management perspective, sales incentives such as discounts are commonly used by managers to boost end-of-period sales to achieve sales targets. As a matter of fact, based on the information on Figure 1, offering sales incentives to accelerate sales is one of the top five choices that a manager would make to boost sales in a short-term period. Sales-related issues may be a concern in some industries in particular, such as mail order businesses. Charges like shipping, handling, and insurance may be included as part of revenue in which case the actual costs would be picked up in cost of sales. <sup>18</sup>

#### Production

Earnings strategies related to the production functional area commonly associate with inventory and cost of goods sold (COGS). Inventory levels vary by company and industry. The method of inventory can be considered a potential earnings management decision. Considering the trends of changing inventory costs, managers from production department could utilize different inventory measuring method to lowering the COGS. LIFO method (last in last out) usually used with considering of lower the tax payment under inventory costs falling situation. This will cause LIFO inventory stated much below current inventory costs and thus brings huge tax savings. Because lower taxes are paid, "real economic effect" (in this case is cash flow) will be created.<sup>19</sup> Cost of goods sold has a close relationship with the inventory cost and inventory valuation method adopted. Reserve accounts

<sup>&</sup>lt;sup>18</sup> Giroux, Gary. 2004. Detecting Earnings Management 1st edition, p.118

<sup>&</sup>lt;sup>19</sup> Giroux, Gary. 2004. Detecting Earnings Management 1<sup>st</sup> edition, p.82

associated with COGS are commonplace and subject to abuse. In 2000, Rite Aid, a drugstore chain, restated earnings from 1997-1999 because it made a number of adjustment to COGS to understate COGS and increase earnings.<sup>20</sup> These included recording vendor allowances as reduction to COGS and using other methods to keep costs in inventory rather than COGS.

#### **Facilities management**

The role of facilities management in accomplishing financial reporting or real activity earnings management is also important. Potential opportunities for managers may come from depreciation or disposition of assets. Depreciation involves allocating expenses based on estimation and certain assumptions. Residual values, useful life, and the depreciating method are all subject to managers' judgment in some degree. Thus, alternative techniques usually exist between straight-line and various accelerated methods, estimated useful life, and estimated residual value. Expenses associating with equipment or fixed assets depreciations could be lengthened.

<sup>&</sup>lt;sup>20</sup> General Accounting Office. 2002. *Financial Statement Restatements: Trends, Market Impacts, Regulatory Responses, and Remaining Challenges*. Washington. October 2002.

## **Section 2**

# Part 1: Internal controls system development to circumvent the

### opportunities for misreporting financial reporting.

Internal control includes all of the processes and procedures that management puts in place to help make sure that its assets are protected and that the company activities are conducted in accordance with the organization's policies and procedures.<sup>21</sup> According to the COSO framework, internal control must contain five components: control environment, risk assessment, control activities, information and communication, and monitoring. The internal control systems' development process in this paper will follow the basic COSO framework. Developing the internal controls procedure that specifically relates the opportunity for misreporting financial statements for each company that this paper evaluates will be the purpose of this section. The conclusions from the previous section related to specific industry guidelines, common financial statement misreporting or earnings management will be considered through the development process.

#### **Control environment**

The COSO framework suggests that the foundation of an effective system of internal control is a strong control environment. Thus, ethic values among the management level become essentially important to set the "tone at the top". From organization's governing body such like board of directors to specific business functional areas like sales and

<sup>&</sup>lt;sup>21</sup> Committee of Sponsoring Organizations of the Treadway Commission (COSO). Internal Control----Integrated Framework: Executive Summary, exposure draft. September 2012

marketing department, management should committed to competence, integrity, and valuing the assignment of responsibility over internal control.<sup>22</sup> Inside the application software industry, companies like Salesforce.com, Inc. often face sophisticated decisions associated with financial reporting. For instance, estimation and assumptions for warranties liabilities often are made based on previous years' experience and likelihood of future events' occurrence. Although controls cannot remove the need for judgment or eliminate the variations in reporting inherent from situations, controls can be designed and implemented to address the process to help provide reasonable assurance that the financial reports are presented in an accurate and efficient way. High level of management should be aware the goal and scope behind the overall control environment in order to strengthen certain policies or procedures in the organization.

#### **Risk assessment**

Risk assessment is the identification and analysis of relevant risks to achievement of the objectives, forming a basis for determining how the risks should be managed.<sup>23</sup> Conducting risk assessment interviews with specific finance and business unit personnel is necessary to identify and determine the significant accounts and disclosures and relevant assertions, and the selection of controls to test. The auditor should focus more attention on the areas of highest risk. A direct relationship exists between the degree of risk that a material weakness could exist in a particular area of the entity's internal control and the amount of attention that would be devoted to that area.<sup>24</sup> The scale for risk assessment and

 <sup>&</sup>lt;sup>22</sup> COSO. 2010. "Internal Control---- Integrated Framework." Retrieved October 6, 2010. Web. 28 Mar.
 2014

<sup>&</sup>lt;sup>23</sup> Center For Audit Quality: Guide to Internal Control Over Financial Reporting, 2012

<sup>&</sup>lt;sup>24</sup> AICPA Professional Standards AU-C section 315: to reflect conforming changes necessary due to the issuance of SAS Nos. 122-126, Dec. 2012

examination determined by the size and complexity of the entity. Also business processes and business functional units, in some degree, affect company's internal controls objectives. Thus, it is necessary to examine an entity's business process, business operational lines, and financial reporting systems. It is extremely difficult, for external financial report user, to scaling the risks examination or addressing the risk of fraud based on public resources. However, a general audit blue print for financial reporting audit could be discussed and implemented over the observations on common industrial business process and specific financial reporting disclosures. Figure 2 is a sample business process of software development in application software industry.<sup>25</sup>



Figure 2. Sample development process of application software

<sup>&</sup>lt;sup>25</sup> HTGSOFT. "Our Software Development Process". Web. 12 April 2014.

In the annual report of Salesforce.com, Inc., commons for specific risk consideration of the business process could be found

In addition, our exposure to risks associated with various claims, including the use of intellectual property, may be increased as a result of acquisitions of other companies. For example, we may have a lower level of visibility into the development process with respect to intellectual property or the care taken to safeguard against infringement risks with respect to the acquired company or technology. In addition, third parties may make infringement and similar or related claims after we have acquired technology that had not been asserted prior to our acquisition. (Salesforce.com, Inc. 2013 10-K, p. 23)

For Netflix, Inc., intellectual property rights related to the internet technology is the main area that risk assessment procedure should focus. In annual report of 2012, Board of Directors pointed out the necessity of assessing intellectual property rights risk:

Our intellectual property rights extend to our technology, business processes and the content on our Web site. We use the intellectual property of third parties in merchandising our products and marketing our service through contractual and other rights. Intellectual property claims against us could be costly and result in the loss of significant rights related to, among other things, our Web site, streaming technology, our

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recommendation and merchandising technology, title selection processes and marketing activities. (Netflix, Inc. 2012 10-K p.15)

On the other hand, the key control tone inside the business for Tesla Motor, Inc. recent year is clearly surrounding its new Model S product. As described in its Annual report of 2013:

We have limited experience in the high volume delivery of our Model S vehicles... our ability to sustain and grow volume production and deliveries for Model S is subject to certain uncertainties that we will be able to complete any necessary adjustments to the vehicle design or manufacturing processes of Model S in a timely manner that meets our production plan and allows for high quality vehicles. (Tesla Motor, Inc. 2013 10-K p.23-24)

#### **Control activities**

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.<sup>26</sup> A company's internal control over financial reporting should include those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally

<sup>&</sup>lt;sup>26</sup> PCAOB Staff Views, An Audit of Internal Control over Financial Reporting That is Integrated with an Audit of Financial Statements: Guidance for Auditors of Smaller Public Companies, January 2009

accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Control activities related to "Big bath" write-offs. "Big bath" write offs occurs when managers know the current bonuses will be zero and will have incentives to take large losses in current period. The additional losses accrued in current year will not affect current compensation but may boost future compensation.

# Conclusion

This study investigates financial reporting quality by assessing potential earnings manipulation strategies that managers might adopt. Meantime, the study deeply looks at impact from the deferred tax asset and valuation allowance to company's earnings. A general internal control audit and financial reporting audit framework is also be designed to mitigate potential earnings misstatements. The study contributes to accounting research in three ways. First, I conclude some potential earnings management strategies associate with different accounts. In particular, by examining sample companies' financial statements and evaluating certain industrial guidelines, I find some specific functional areas inside the companies that external financial statement users could pay attention to. Through examining financial statements and other available public resources of the four chosen companies. I conclude that all of the four companies follow general guidelines in their own industry, Compared to their competitors in the industries, all four companies' financial reports do not contain recognition policies that are significantly unacceptable. Secondly, I find out that most companies lack the financial statement disclosures of tax planning strategies. Even though the disclosures is critical for determining valuation allowance of deferred tax asset. Additionally, I investigates the change of valuation allowance over year for each of the four company and discover some signals that indicate possible earnings management activities. Third, I conclude a general internal control systems with special concern of financial reporting quality and accuracy.

## References

- Accounting Principles Board (APB): Accounting for Income Taxes, Opinions of the APB No.11. 1967
- Accounting Standard Codification (ASC). 605-10-25: Revenue Recognition: Overall Recognition
- Accounting Standard Codification (ASC). 740-10-30-18: Income Taxes--- initial measurement

Accounting Standard Codification (ASC). 740-10-55-39: Tax Planning Strategies

Accounting Standard Codification (ASC) 985-20: Cost of Software to be Sold, Leased or Marketed

Accounting Standard Codification (ASC) 350-40: Internal-Use Software

AICPA Professional Standards AU-C section 315: to reflect conforming changes necessary due to the issuance of SAS Nos. 122-126, Dec. 2012

- Bauman, C.C. and M.P. Bauman. 2002. The Deferred Tax Asset Valuation Allowance as a Strategic Accounting Choice: 43-46
- Bauman, Christine, Bauman, Mark, and Halsey, Robert F. Do Firms Use the Deferred Tax Asset Valuation Allowance to Manage Earnings? August 2000. 7-21
- Committee of Sponsoring Organizations of the Treadway Commission (COSO). Internal Control---- Integrated Framework: Executive Summary, exposure draft. September 2012. 13-76

Center For Audit Quality. Guide to Internal Control Over Financial Reporting. Dec. 2012.

- Cohen, Daniel, and Zarowin, Paul. 2008. Accrual-Based and Real Earnings Management Activities around Seasoned Equity Offerings, January 2008. 22-24
- Decho w, P.M., Skinner D.J. 2000. *Earnings management: reconciling the views of Accounting academics, parishioners and regulators*. Accounting Horizons 14, 235-250.
- General Accounting Office. 2002. Financial Statement Restatements: Trends, Market Impacts, Regulatory Responses, and Remaining Challenges. Washington. October 2002.

- Giroux, Gary. 2004. Detecting Earnings Management 1st edition. Wily & Son, Inc. 31-419
- Georgia Tech Financial Analysis Lab. 2011. Deferred Tax Assets and the Disclosure of Tax-planning Strategies. December 2011
- Garham, John R, Harvey, Campbell, and Rajgopal, Shiva. 2008. Value Destruction and Financial Reporting Decisions. June 2008. 19-22
- Statement of Financial Accounting Standards No 86. 1999. Accounting for the Cost of Computer Software to be sold, Leased, or Otherwise Marketed
- Roychowdhury, Sugata. 2006. *Earnings management through real activities manipulation*, Journal of Accounting and Economics 42, 2006
- PCAOB Staff Views. An Audit of Internal Control over Financial Reporting That is Integrated with an Audit of Financial Statements: Guidance for Auditors of Smaller Public Companies. January 2009