## Financial Measures to Identify Financial Distress Risk of Corporations

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The prospect of economic failure is of grave concern for an on-going business. Using empirical evidence, many researchers promote ad hoc approaches to identify potential financial distress. In this study, we evaluate and then advocate financial measures based on sound financial theory of a firm. In addition, we examine a major corporate bankruptcy using these measures and find that these measures in combination with the traditional financial ratios do provide insights into a firm's deteriorating financial position.

#### INTRODUCTION

The prospect of economic failure is of grave concern for an on-going business, however successful it has been in the past. These concerns vary among the stakeholders: (1) the investors may change the directions of their current investments in the firms and in any future investment decisions; (2) the lenders may reevaluate the credit worthiness of the firm; (3) the employees may lower or elevate their concerns about their employment, and (4) financial managers may need to address additional issues related to current and future funding needs of the enterprise.

Publicly traded firms disclose the quarterly financial and other information and it is a widespread practice to analyze financial statements to examine financial performance of a firm. But such on-going monitoring and reporting can be evasive if there are unforeseen circumstances or deliberate attempts on the part of management to hide or avoid negative information.

The purpose of our study, therefore, is 1) conduct research to identify studies that utilize sound financial theory of a firm to asses financial distress, 2) examine the pros and cons of a financial model that utilizes a comprehensive valuation approach rather than an ad hoc approach to predict bankruptcy, 3) select a set of measures, which should help educators and practitioners to conduct studies related to financial distress, 4) utilize a case study-approach to apply the recommended measures to a major bankrupt firm, and 5) finally bind together academic theory of finance and applied research in finance.

#### LITERATURE REVIEW

Altman (1968); Altman, Haldeman and Narayanan (1977); Collins (1980); Ohlson (1980); Platt and Platt (1991) have used financial ratios and developed financial models to assess financial performance, and specifically potential for a bankruptcy. These ratios now routinely employed by auditors and security analysts, and are generally grouped into 5 categories: 1) liquidity ratios, which include current and quick ratios, 2) asset management ratios such as total asset turnover, fixed asset turnover, inventory turnover and days sales outstanding, 3) debt management ratios, which includes total debt ratio and times interest

earned, 4) profitability ratios such as profit margin, return on assets and return on equity, and finally 5) market value ratios such as market to book and price to earnings or cash flow ratios. The Altman Z model and Altman et al Zeta models are popular among the financial analysts.

Beaver (1968) suggests that based on the market efficiency, equity returns can predict financial distress earlier than the financial ratios. Clark and Weinstein (1983) have also conducted research on equity returns and prediction period for anticipating bankruptcy. Altman and Brenner (1981) conclude that bankrupt firms experience deteriorating capital market returns for at least a year prior to bankruptcy. Aharony, Jones, and Swary (1980) recommend a financial distress prediction model utilizing the deviations in market returns.

Aziz, Emanuel, and Lawson (1988, 1989) have developed a cash flow model of bankruptcy and conducted empirical study. Based on the results of this study, they recommended operating cash flow and cash taxes paid as key predictor of financial distress. They claim that it is superior to the financial ratios measures of bankruptcy and argue that distressed companies with little or no earnings will have no tax liabilities.

A firm may not be able to service its debt due to a lack of cash, and insufficient future expected cash flow and obtain additional financing leading to bankruptcy. Recently Deo (2016) reiterated that the financial ratios are generally derived from the balance sheet and the income statement. While the balance sheet data are static and historic, the income statement utilizes the accrual-based accounting, and includes some arbitrary noncash allocations such as depreciation and amortization. He has developed cash flow ratios based on well-established sound financial theory of the firm, which, in turn, he claims should aid the decision-makers in assessing a comprehensive financial performance of a firm. These measures/ratios in combination with traditional financial ratios also provide opportunity for a firm to identify any early warning signals about a firm's impending cash crunch. He has recommended two measures and their underlying critical drivers, we proceed to discuss Deo (2016) study.

#### FREE CASH FLOW

The first measure, free cash flow (FCF) leads to approaches for valuation of securities and a firm, and capital investment in projects (Estridge and Lougee, 2007). It also alludes to the agency relationship between the firm's owners and its managers. Therefore, it is not surprising that free cash-flow measure is the basic measure for the discounted cash-flow model deployed in capital investment projects and in the capital budgeting process including the M&A process. The annual free cash-flow measure is volatile, and as a short-term measure it is more suitable for business units of a firm that have a large asset base and less vulnerable to surges in cash associated with any individual project.

Using the financial theory of a firm, Deo has derived an expression for FCF:

$$FCF = [(OCF_{SCF} - \Delta NOWC_{SCF}) - CFI_{SCF}] + (I - \Delta CASH - \Delta MS)$$
(1)

where,

OCF<sub>SCF</sub>: Operating cash flows from the income statement in the statement of cash flows;  $\Delta$ NOWC<sub>SCF</sub>: Change in net operating working capital in the statement of cash flows; CFI<sub>FCF</sub>: Cash flow from investment activities and equals; I: Interest expense;  $\Delta$ CASH: Change in cash;  $\Delta$ MS: Change in marketable securities. The first term [OCF <sub>SCF</sub> -  $\Delta$ NOWC <sub>SCF</sub> + CFI<sub>SCF</sub>] represents the sum of the first two components of the statement of cash flows. Therefore, FCF can be derived from the first two components of the statement of cash flows with adjustment or addition of the last term (I -  $\Delta$ CASH - $\Delta$ MS). Note that OCF<sub>SCF</sub> =EBIT - T + DEP – I. The EBIT represents the earnings before interest and taxes, the interest expense is denoted by I, and T represents income taxes. The OCF<sub>SCF</sub> is derived from the income statement. Also, note that

$$\Delta \text{NOWC}_{\text{SCF}} = \left[ \left( \Delta AR + \Delta INV \right) - \left( \Delta AP + \Delta ACCR \right) \right] \tag{2}$$

where,

 $\Delta NOWC_{SCF:}$  represents the change in net operating working capital in the statement of cash flows; the term ( $\Delta AP + \Delta ACCR$ ) represents the non-interest-bearing current liabilities or NBCLs;  $\Delta AR$ : Change in accounts receivable;  $\Delta INV$ : Change in inventories;  $\Delta AP$ : Change in accounts payable;  $\Delta ACCR$ : Change in accruals;  $\Delta GFA$ : Change in gross fixed assets; and  $\Delta MS$ : Change in marketable securities.

The second term in the right-hand side of equation represents the cash flow from investment activities (CFI<sub>FCF</sub>) in the statement of cash flows. That is, cash flow from investment activities,

$$CFI_{SCF} = (\Delta GFA + \Delta MS)$$
(3)

Note that  $\Delta GFA = \Delta NFA + DEP$ , where, NFA: Change in net fixed assets; DEP: Depreciation expense. The negative sign indicates that it is a cash flow outflow to the firm. The  $\Delta GFA$  equals net capital spending (NCS). The gross fixed assets less accumulated depreciation (ADEP) equals the net fixed assets (NFA). i.e., NFA = GFA- ADEP. For simplicity, we assume that, besides fixed assets, a firm does not have any noncurrent assets. In practice, in addition to the changes in gross fixed assets and marketable securities, there may be several other transactions that will be included in the investment activity section. Note that in equation (1), OCF<sub>SCF</sub> = EBIT - T + DEP - I. He then dissects the depreciation and interest expenses from OCF<sub>SCF</sub> and combine it with the capital expenditures or cash flow from investing (CFI<sub>SCF</sub>) and cash flow from financing (CFF<sub>SCF</sub>), respectively. The cash flow from financing is discussed in the latter part of this study. The remainder term is OCF<sub>SCF</sub> = EBIT - T.

For discussion purposes, Deo (2016) divides both sides of equation (1) by incremental sales ( $\Delta$ Sales) and concludes that the free cash flow per incremental dollar of sales originates from incremental free cash from operations generated per dollar net of incremental investment in net operating working capital per dollar of sales and net of incremental investment in long-term assets per dollar of sales. These are the critical variables or free cash flow drivers. The term incremental free cash flow from operations created per dollar of sales may be viewed as operating profit margin generated per dollar of sales. The cash flow from operations is the primary source and a driver of cash for a firm. For an entrenched firm, it pays for the operating costs and expenses, payments for dividends and interest, and for the on-going replacement of fixed assets and operating working capital.

The net working capital to sales ratio is also known as net working capital intensity and these intensities differ both within industries (which may reflect different managerial decisions and level of vertical of integration), and across industries (e.g. service versus manufacturing). When intensity differs greatly from the industry average, managers should analyze the consequences for the operation's profitability, and identify the optimal level of net working capital for their industry's operations.

The capital investment is calculated as sales times the fixed capital investment rate. In turn, the fixed capital investment rate is generally calculated as incremental fixed capital expenditures in excess of the depreciation expense divided by the incremental sales. Capital expenditures serve two main purposes: to expand productive capacity commensurate with sales growth rate, and to replace existing facilities in kind. The latter expenditures also help to reduce costs and improve productivity. One way to measure the impact of investments is to measure investment intensity, the investment in plant and equipment as a percentage of output or sales. Once again, the investment intensities differ both within industries (which may reflect different managerial decisions and level of vertical integration), and across industries (which may reflect different production or process technologies). When investment intensity differs greatly from the industry average, managers should analyze the consequences for the operation's profitability, and identify the optimal; level of fixed assets (in accounting terms) for their industry's operations.

#### THE FCF MEASURE LEADING TO ADDITIONAL USEFUL

Deo (2016) also derives the following relationship:

$$FCF = (I - \Delta IBD + DIV - \Delta CS)$$
(4)

which shows that Cash flow from assets = Cash flow to the investors.

If  $\triangle IBD = 0$  and  $\triangle CS = 0$ , that is, if a firm does not engage in additional borrowing or retiring debt or issuing new or buying back its common stock. Then,

$$FCF = (I + DIV)$$
 (5)

The firm utilizes its FCF, which it derived from its assets and pays investors the on-going interest payments to service its debt and the promised dividend payments. The interest payments arise due to borrowing via short- and long-term debt. The interest payments are paid first prior to any dividend payments. Therefore, to make any interest payments FCF > I or (FCF/I) >1, since the firm has other obligations to the investors such as the dividend payments, the magnitude of FCF compared to I (FCF/I) will allow the decision maker to assess the potential of the firm to meet the investors' other obligations. Alternatively, the FASB requires that the interest expense be included in the operating cash flow, and  $OCF_{SCF} = EBIT - T + DEP - I$ . Therefore,

$$(OCF_{SCF})/I = (EBIT - T + DEP - I)/I = [(EBIT - T + DEP)/I] - 1$$
 (6)

The ratios (OCF<sub>SCF</sub>) /I or [(EBIT - T + DEP)/I] > 1 also provide insights into the potential of the firm to pay the interest payments from its operations prior to investing in net working capital and PP&E. In addition to the annual interest expense, the firm may have entered contractual obligation to retire annually a part of the debt (sinking fund). In such a case, analysts need to include the non-tax-deductible sinking fund along with the interest expense.

From the equation (5), the FCF/ (I+DIV) multiple helps to assess the firm's potential to pay the annul obligations to creditors and the promised and expected payments of dividends to the preferred and common stockholders, respectively. If a firm engages in external financing or has obligations to make sinking fund payments, the ratio of FCF/IBD specifically addresses the capacity of the firm to potentially pay off its debt for strategic reasons without resorting to the liquidation of its assets. Now we proceed to discuss the second measure, the change in internal cash.

#### **CHANGE IN INTERNAL CASH**

Deo (2016) has also derived the expression for the change in cash as:

$$\Delta CASH = (NI + DEP - \Delta AR - \Delta INV + \Delta AP + \Delta ACCR + (-\Delta GFA - \Delta MS) + (\Delta IBD - DIV + \Delta CS)$$

The first two terms in the right-hand side of the equation represent OCF <sub>SCF</sub> and CFI<sub>SCF</sub>, respectively, where, NI = EBIT - I - T, and NI represents the net income Finally, the last term in the right-hand side of equation is the change in interest-bearing debt less the dividends plus the change in common stock and represents the cash flow from financing activities (CFF<sub>SCF</sub>) in the statement of cash flows. That is,

$$CFF_{SCF} = (\Delta IBD - DIV + \Delta CS) \tag{7}$$

The term IBD is the sum of long- and short-term debt and bank notes. The total equity is the sum of (1) external common equity, also commonly denoted as common stock (CS), which is the sum of common stock at par plus the paid-in capital surplus and (2) the internal common equity, which is the (cumulative) retained earnings (RE).

Deo (2016) has developed another gauge of a firm's cash position discussed in the literature. If a firm plans no additional external financing, that is,  $\Delta IBD = 0$  and  $\Delta CS = 0$ , then the change in cash on the left-hand side of the equation (1) is the change in internal cash (or the change in cash without any additional external financing). That is,

$$\Delta Internal \ Cash = (NI + DEP - \Delta AR - \Delta INV + \Delta AP + \Delta ACCR) + (-\Delta GFA - \Delta MS) - (DIV)$$

$$= Cash \ flow \ from \ operating \ activities + Cash \ flow \ from \ investment \ activities$$

$$- \ Dividends \ paid.$$

$$= (OCF_{SCF} - \Delta NOWC_{SCF}) + (-\Delta GFA - \Delta MS) - (DIV)$$

$$(9)$$

Note that net income is net of interest expense, which is consistent with the statement of cash flows. A zero or no change in internal cash implies that the firm is generating just enough cash to meet its financial obligations (resource requirements including net operating working capital and long-term capital, tax and interest, and dividends) without assuming additional debt or new equity and without drawing on a pool of funds. A positive change in internal cash allows a firm to improve its capital structure, reduce preferred equity, and pay off debt. A zero or positive change can be interpreted by the investment community as a signal of higher future profits or lower risk. A positive change helps to improve a firm's cash position and its financial slack (and debt capacity). In turn, enough financial slack paves a path for potential lenders to see the company's debt as a safe investment and hence provide ready access to debt financing. It also ensures that financing is quickly available for good investments. We now proceed to utilize these cash flow-based ratios to investigate the Circuit City bankruptcy.

#### **EXAMINATION OF THE CIRCUIT CITY BANKRUPTCY**

One of the remarkable success stories of retailing, Circuit City started in 1949 as a small storefront in Richmond, Virginia. By 2000, it became a household name and 616 locations across the U.S. and employed more than 60,000 people. On November 4, 2008. Circuit City made an announcement of hundreds of store closures and layoffs and on November 10, 2008 Circuit City filed for bankruptcy protection under Chapter 11 to reorganize and restructure its operations. In January, 2009 Circuit City converted its Chapter 11 bankruptcy to Chapter 7 and initiated store closures and liquidation of its business. Since then past employees, pundits and academicians (Romero (2013) and Wurtzel (2012)) have written about Circuit City's successes and failures of its strategies over more than 50 years of its operations. Some point out the beginning of the end was to stop carrying appliances (and missing out on the residential real estate boom), and sell small electronics and software, which most consumers buy online for much less; its use of commission-based salesforce to smaller consumer electronics; mismanagement of transition from commission-based sales to self-service; its continuation of showroomstyle layouts instead of packing the shelves and aisles with merchandise like other big-box stores, and under shareholder pressure, using the cash received from the sale of CarMax and private-label credit card bank, to buyback about \$1 billion buying back stock at an average of \$20 per share over the period 2003 and 2007 while the business was failing. The stock was worth only \$4.20 per share by the end of 2007. Circuit City did not have enough cash on hand to weather the 2008 financial-crisis in the U.S. economy. We now proceed to study the financial positions of circuit city over a 3-year period prior to its Chapter 11 filing in the Bankruptcy court. The exhibits A, B and C include the Circuit City's income statement, the balance sheet and the statement of cash flows over the period 2005-2008.

Table 1 shows the values for the commonly used traditional financial ratios for Circuit City. We observe that (1) the current ratio was low and decreasing, (2) the quick ratio was very low due to excessive inventories, and (3) the debt ratio was high and increasing due to excessive current liabilities, specifically the payables and accruals. We also notice that the times interest earned ratio was very high in 2006, followed by a dramatic decline in 2007, and was significantly negative in 2008 due to the high

negative EBIT. Finally, the profit margin was very low in 2006, declined further in 2007, and became negative in 2008. In conclusion, while these ratios indicated a trend in declining financial performance, they did not provide the warning to the stakeholders of the potential bankruptcy and alarm them about the urgency of the financial situation.

TABLE 1 TRADITIONAL FINANCIAL RATIOS

Financial Ratios	2006	2007	2008
Liquidity			
Current Ratio	1.75	1.68	1.52
Quick Ratio	0.70	0.73	0.54
Turnover Ratios			
Inventory Turnover			
(Cost of Sales/ Inventory)	5.13	5.81	5.92
Days Sales Outstanding	7.74	12.13	9.71
Total Asset Turnover	2.83	3.10	3.14
Leverage			
Debt Ratio	0.52	0.55	0.60
Times Interest Earned	74.27	13.38	(272.33)
Profitability			
Profit Margin	1.21	(0.07)	(2.72)

Following our discussion, the Table 2 shows the calculations of the FCF components and the Table 3 shows the underlying values of the drivers of these components. The annual sales growth rate was 10.6% in 2006, declined somewhat in 2007 to 8.0%, but exhibited a 13.5 percentage points drop in 2008 to (5.5) %. The lower level of operating margin of 1.87% in 2006 declined to (0.04) % % and (3.2) % in 2007 and 2008, respectively. The declining trend in operating margins indicate management of cost and expenses continues to be of grave concern. The current assets, specifically the accounts receivable and inventory declined in 2007, but more than doubled in 2008. During this period, the sales increased in 2007 at a slower pace and declined dramatically in 2008. Finally, the accounts payable and accruals increased with sales in 2007 and declined in 2008 commensurate with the decline in sales. As a result, the change in net operating working capital as a percent of incremental sales was low and negative in 2006, increased somewhat in 2007, however, it increased dramatically in 2008 to 70.1%. Note that the negative sign in 2008 was due to the negative incremental sales in 2008. The high-level of incremental long-term capital intensity of 54% was primarily due to investment in marketable securities in 2006 and declined to 36.6% in 2007. The net investment (the numerator of the ratio) in 2008 was negative (an inflow rather than outflow) due to the sale of marketable securities, but the negative sign of the ratio was due to the drop in incremental sales, which is the denominator of the ratio.

TABLE 2
THE DRIVERS OF CASH FLOW FROM THE STATEMENT OF CASH FLOW

(Percentage)	<u>2006</u>	<u>2007</u>	<u>2008</u>
Annual sales growth rate	10.6	8.0	(5.5)
Operating margin (Operating income/Sales)	1.87	(0.04)	(3.2)
Incremental net operating working capital intensity			
(Change in net operating working capital)/Incremental sales	(2.1)	3.8	(70.1)
Incremental long-term capital Intensity			
(CFI <sub>SCF</sub> /Incremental sales)	54.0	36.6	(49.7)

Table 3 shows the stepped calculations of the free cash flow. First, the relevant components are calculated from the statement of cash flow (SCF). Then, we apply the necessary adjustments as explained by Deo (2016) to derives the values of the components of the FCF. As indicated by the drives of FCF, the operating cash flow decreased and turned negative in 2008. The net operating working capital did not impact the FCF significantly in 2006 and in 2007, but in 2008, due to the increase in current assets, it lowered the FCF. Finally, the investment in long-term capital increased the demand for cash in 2006 followed by a decline in 2007. However, the sale of marketable securities provided a source of cash in 2008. The combination of these components turned the FCF positive in 2006, then negative in 2007, and deteriorated significantly in 2008.

TABLE 3 FREE CASH FLOW

	<u>2006</u>	<u>2007</u>	<u>2008</u>
Calculations of the components of FCF			
I. Calculations of OCF <sub>SCF</sub> and OCF <sub>FCF</sub>			
$OCF_{SCF} = EBIT - T + DEP - I$	313,818	172,810	(132,425)
$OCF_{FCF} = OCF_{SCF} + I$	316,961	174,329	(131,245)
II. Calculations of $\Delta NOWC_{SCF}$ and $\Delta NOWC_{FCF}$			
$\Delta$ NOWC <sub>SCF</sub> = [( $\Delta$ AR + $\Delta$ INV + $\Delta$ OTHER CA)			
$- (\Delta AP + \Delta ACCR)]$	(23, 376)	34, 863	481, 031
$\Delta NOWC_{FCF} = \Delta NOWC_{SCF} + \Delta CASH$	(587,066)	(139,966)	635,945
III. Calculation of CFI <sub>SCF</sub>			
$CFI_{SCF} = \Delta GFA + \Delta MS + OTHER$	(593,880)	(334,709)	341,171
IV. Calculation of FCF			
$FCF = OCF_{FCF} - \Delta NOWC_{FCF} - CFI_{FCF}$	310,147	(20,414)	(426,019)

Table 4 delineated the free cash flow ratios and points out that in 2008 the firm did not have enough FCF to pay for the contractual interest payment on debt and the promised dividend payments in 2007. It should have provided a dire warning to the stakeholders as it led to even more serious cash crunch leading to bankruptcy in 2008.

TABLE 4 FREE CASH FLOW RATIOS

Free Cash Flow Ratios	2006	2007	<u>2008</u>
Free cash flow to promised			
payments			
FCF/(I+DIV)	19.40	(0.94)	(15.20)
Free cash flow to interest bearing			
debt			
FCF/(IBD)	3.82	(0.35)	(2.53)

The calculation of the change in internal cash in Table 5 provides clear warning to the stakeholders that in 2006 and onwards the firm was not internally generating cash and in fact was negative over the 3year period. Specifically, the firm could not pay the installment of the long-term debt, which was due in 2008.

TABLE 5 **CHANGE IN INTERNAL CASH** 

	<u>2006</u>	<u>2007</u>	<u>2008</u>
Change in internal cash			
Operating cash flow from FCF calculations <u>less</u> Change in net operating working capital <u>less</u> Cash flow from investing <u>less</u> dividends			
	(266,387)	(215,369)	(297,949)

Finally, we rearrange the equation (4), and write an expression for the financing cash flow to the firm.

Cash flow to the firm = 
$$(I - \Delta IBD + DIV - \Delta CS)$$
 (10)

where, CS represents external common equity, and is the sum of common stock at par plus the paid-in capital surplus. It does not include the internal common equity, which is the cumulative retained earnings (RE). The cash inflow includes the change in external common equity ( $\Delta$ CS), but do not include the change or additions (\( \Delta RE \) or ARE) to the internal common equity (RE) because the net income in the operating cash flow already includes it, i.e.,  $NI = \Delta RE + DIV$ . Therefore, the cash flow to the firm includes the cash flow from issuance of interest-bearing debt and external common equity less any interest payments on debt and dividend payments to the shareholders.

TABLE 6 FINANCING CASH FLOW TO THE FIRM

Components of the financing cash flow to the firm	<u>2006</u>	<u>2007</u>	2008
Change in IBD	60,404	(23, 587)	110, 983
Change in CS	(125, 294)	(163, 389)	(288, 069)
I	3,143	1, 519	1,180
DIV	12, 844	20, 126	26, 844
Cash flow from financing to the firm	(80,877)	(208, 621)	(205, 110)

The Table 6 shows that the cash flow from financing to the firm was negative as the cash inflow from increase in debt was more than offset primarily by the cash outflow associated with the common equity, which in turn, was due to the share buy-back program initiated by the firm.

#### **CONCLUSIONS**

In this article we have identified studies, which attempt to predict financial distress of firms. We have examined a specific (Deo (2016)) financial model that utilizes a comprehensive valuation approach rather than an ad hoc approach to unravel if a firm is on a path to its financial ruin, and thereby provide early warning of a potential financial distress. We utilize these measures to study over time the financial positions of Circuit City Inc., which announced bankruptcy in 2008. We find that the free cash flow and the change in internal cash measures do help to warn any potential financial issues a firm may encounter in the future. In addition, the article also identifies and gauge the impact, i.e., magnitudes and directions, of the components or the drivers of these measures. The results of this study will help to learn and apply the recommended financial techniques to financial information of other bankrupt firms and confirm or deny the finding of this study. This, in turn, should provide a decision-maker to be pro-active and take actions to avert any potential financial distress. The recommended financial measures should be part of the monthly results report submitted to the chief financial officer of a firm, and quarterly and annual reports filed with the SEC and provided to the shareholders. This research work also binds together academic theory of finance and applied research in finance and paves a path to build similar predictive or early warning financial models, which are based on the well-established sound financial theory of a firm.

#### **EXHIBIT A**

#### **Circuit City Stores, Inc.** CONSOLIDATED STATEMENTS OF OPERATIONS-

**Income Statement (ending February 28 or 29)** 

(Amount in thousands)	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Net Sales	9,857,057	10,413,524	11,514,151	12,429,754	11,743,691
Cost of Sales, buying	7,573,049	7,861,364	8,703,683	9,501,438	9,318,174
and warehousing					
Gross Profit	2,284,008	2,552,160	2,810,468	2,928,316	2,425,517
Finance Income	32,693	5,564			
Selling, general and administrative expenses	2,281,663	2,470,712	2,595,706	2,841,619	2,770,104
Impairment of goodwill				92,000	26,000
Stock-based compensation expense	38,658	19,139			
Operating Income	(3,620)	87,012	214,762	(5,303)	(370,587)
Interest income	6,582	14,404	21,826	27,150	18,188
Interest expense	4,202	4,451	3,143	1,519	1,180
Net (loss) earnings from continuing operations before income taxes	(1,240)	96,965	233,445	20,328	(321,353)
Income tax expense	(453)	36,396	85,996	30,510	(32,353)
Net (loss) earnings from continuing operations	(787)	60,569	147,449	(10,182)	(321,353)
Earnings (loss) from discontinued operations, net of tax	(88,482)	1,089	(5,350)	128	1,456
Cumulative effect of change in accounting principles, net of tax	0	0	(2,353)	1,773	0
Net (loss) earnings	(89,269)	61,658	139,746	(8,281)	(319,897)

**EXHIBIT B** 

## **Circuit City Stores, Inc. CONSOLIDATED STATEMENTS OF OPERATIONS-Balance Sheet** (ending February 28 or 29)

(Amount in thousands)	2005	<u>2006</u>	<u>2007</u>	<u>2008</u>
ASSETS				
CURRENT ASSETS:				
Cash and cash equivalents	879,660	315,970	141,141	296,055
Short-term investments	125,325	521,992	598,341	1,366
Accounts receivable, net of allowance for doubtful accounts	230,605	220,869	382,555	330,599
Merchandise inventory	1,455,170	1,698,026	1,636,507	1,573,560
Deferred income taxes, net of valuation allowance	31,194	29,598	34,868	38,672
Income tax receivable	0	5,571	42,722	158,116
Prepaid expenses and other current assets	23,303	41,315	<u>47,378</u>	<u>411,352</u>
TOTAL CURRENT ASSETS	2,745,1 57	2,833,341	2,883,512	2,439,720
Property and equipment, net of accumulated depreciation	726,940	839,356	921,027	1,037,321
Deferred income taxes	79,935	97,889	31,910	0
Goodwill	21 5,884	223,999	121,774	118,031
Other intangible assets, net of accumulated amortization	31,331	30,372	19,285	18,400
Other assets	40,763	44,087	<u>29,775</u>	<u>132,458</u>
TOTAL ASSETS	3,840,010	4,069,044	4,007,283	3,745,930

## **EXHIBIT B (CONTINUED)**

# Circuit City Stores, Inc. CONSOLIDATED STATEMENTS OF OPERATIONS-Balance Sheet

(Amount in thousands)	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
CURRENT LIABILITIES:				
Merchandise payable	635,674	850,359	922,205	912,094
Expenses payable	170,629	202,300	281,709	232,386
Accrued expenses and other current liabilities	433,110	379,768	404,444	346,818
Accrued compensation	0	84,743	98,509	85,127
Accrued income taxes	75,183	75,909	0	17,680
Short-term debt	0	22,003	0	0
Current installments of long-term debt	888	7,248	<u>7, 162</u>	111,582
TOTAL CURRENT LIABILITIES	1,315,484	1,622,330	1,714,029	1,605,687
Long-term debt, excluding current installments	19,944	51,985	50,487	57,050
Accrued straight-line rent	242,001	256,120	133,759	145,960
Deferred rent credits	0	0	143,877	163,662
Accrued lease termination costs	91,920	79,091	76,326	82,900
Deferred income taxes, net of valuation allowance	0	0	<u>0</u>	35,586
Other liabilities	0	104,885	<u>97,561</u>	<u>151,910</u>
TOTAL LIABILITIES	1,760,083	2,114,411	2,216,039	2,242,755
Commitments and contingent liabilities				
STOCKHOLDERS' EQUITY:				
Common stock, \$0.50 par value; 525,000,000 shares authorized;				
168,859,462 shares issued and outstanding (170,689,406 in 2007)	94,075	87,395	85,345	84,430
Additional paid-in capital	721,038	458,211	344,144	319,573
Retained earnings	1,239,714	1,364,740	1,336,317	981,112
Accumulated other comprehensive income	25,100	44,287	25,438	118,060
TOTAL STOCKHOLDERS' EQUITY	2,079,927	1,954,633	1,791,244	1,503,175
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	3,840,010	4,069,044	4,007,283	3,745,930

### **EXHIBIT C**

## **Circuit City Stores, Inc.** CONSOLIDATED STATEMENTS OF CASH FLOWS

**Years Ended February 29 or 28** 

	<u>2004</u>	2005	<u>2006</u>	<u>2007</u>	<u>2008</u>
OPERATING ACTIVITIES:					
Net (loss) earnings	(89,269)	61,658	139,746	(8,281)	(319,897)
Adjustments to reconcile net earnings (loss) to net cash provided by (used					
in)					
operating activities of continuing operations:					
Net (earnings) loss from discontinued operations	88,482	2,698	5,350	(128)	(1,456)
Depreciation expense	197,607	151,620	160,608	177,828	183,433
Amortization expense		2,262	2,618	3,645	4,188
Impairment of goodwill				92,000	26,000
Stock-based compensation expense		2,262	24,386	26,727	21,610
Loss (gain) on dispositions of property and equipment	7,500	(206)	2,370	(1,439)	2,734
Provision for deferred income taxes	(35,61 8)	(116,455)	(14,252)	72,717	27,587
Cumulative effect of change in accounting principles			2,353	(1,773)	
Other			(1,726)	1,689	5,821
Changes in operating assets and liabilities:					
Accounts receivable, net	(63,486)	(61,601)	16,552	(133, 152)	45,814
Merchandise inventory	(107,520)	158,660	(231,114)	49,352	84,362
Prepaid expenses and other current assets	(3,923)	6,946	(17,341)	(9,580)	5,875
Other assets	12,553	3,816	(3,061)	535	(4,844)
Merchandise payable	(49,607)	28,798	211,362	73,317	(19,237)
Expenses payable	(42,280)	52,071	40,921	55,722	11,527
Accrued expenses, other current liabilities and income taxes	90,040	55,305	43,202	(81,364)	(188,010)
Other long-term liabilities	<u>18,966</u>	<u>63,494</u>	(17,032)	(1,474)	<u>68,867</u>
NET CASH (USED IN) PROVIDED BY OPERATING ACTIVITCES OF CONTINUING OPERATIONS	(125,513)	460,238	364,942	316,341	(45,626)

## **EXHIBIT C (CONTINUED)**

## **Circuit City Stores, Inc.**

## CONSOLIDATED STATEMENTS OF CASH FLOWS

Years Ended February 29 or 28

	2004	2005	2006	2007	2008
INVESTING ACTIVITIES:					
Purchases of property and equipment	(175,769)	(261,461)	(254,451)	(285,725)	(325,382)
Proceeds from sales of property and equipment	40,427	106,369	55,421	38,620	71,451
Purchases of investment securities		(125,325)	(1,409,760)	(2,002, 123)	(2,649,670)
Sales and maturities of investment securities			1,014,910	1,926,086	3,246,254
Other investing activities				(1 1,567)	(1,482)
Proceeds from the sale of private-label finance operation		475,857			
Acquisitions, net of cash acquired of \$30, 615		(262,320)			
NET CASH PROVIDED BY (USED IN) INVESTING ACTIVITIES OF CONTINUING OPERATIONS	(135,342)	(66,880)	(593,880)	(334,709)	341,171

## **EXHIBIT C (CONTINUED)**

# **Circuit City Stores, Inc.**

## CONSOLIDATED STATEMENTS OF CASH FLOWS

Years Ended February 29 or 28

rears Ended residury 25 or 20	<u>2004</u>	<u>2005</u>	2006	2007	<u>2008</u>
FINANCING ACTIVITIES					
Proceeds from short-term		12,329	73,954	35,657	276,168
borrowings		·	·	·	·
Principal payments on short-term		(13,458)	(53,893)	(56,912)	(275,591)
borrowings					
Debt issuance costs					(19,750)
Proceeds from long-term debt			1,032	1,216	
Principal payments on long-term debt	(1,458)	(28,008)	(1,829)	(6,724)	(19,140)
Changes in overdraft balances		36,329	(22,540)	19,347	(49,630)
Repurchases of common stock	(84,353)	(259,832)	(338,476)	(237,203)	(46,757)
Issuances of common stock	11,391	27,156	38,038	89,662	4,907
Dividends paid	(14,660)	(13,848)	(12,844)	(20,126)	(26,844)
Excess tax benefit from stock-				15,729	
based compensation					
Redemption of preferred share			(1,876)		
purchase rights					
Other financing activities				(1,424)	(1,218)
NET CASH USED IN	(89,080)	(239,332)	(3 18.434)	(160,778)	(157,855)
FINANCING ACTIVITIES OF					
CONTINUING OPERATIONS					
DISCONTINUED OPERA					
TIONS: Operating cash flows	45,275	(7,193)	(9,884)	3,310	15,855
	The state of the s	1 1	` ' '	-	13,033
Investing cash flows	203,461	(6,615)	(8,089)	2,958	(5.5)
Financing cash flows		(724)		(592)	<u>(57)</u>
NET CASH PROVIDED BY	248,736	(14,532)	(17,973)	5,676	15,798
(USED IN) DISCONTINUED					
OPERATIONS EFFECT OF EXCHANGE RATE		2.016	1 655	(1.250)	1 426
CHANGES ON CASH		2,016	<u>1,655</u>	(1,359)	<u>1,426</u>
Increase (decrease) in cash and	(101,199)	70,619	(563,690)	(174,829)	154,914
cash equivalents	(101,177)	, 0,019	(505,050)	(171,025)	15 1,511
Cash and cash equivalents at	884,670	809,041	879,660	<u>315,970</u>	141,141
beginning of year	ĺ				<del></del>
CASH AND CASH	783,471	879,660	315,970	141,141	296,055
EQUIVALENTS AT END OF					
YEAR					

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