Cash Flow Measurements for Management: A New Perspective

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Kenneth R. Creech
Associate Professor of Accounting
Briar Cliff University
Kenneth Creech
P.O. Box 1553
Sioux City, IA 51102
Mail: ken.creech@gmx.com
Contact No: 616-450-0768
United States

Abstract:

Business managers are always evaluating cash flows for their business. Traditionally cash flow measurements have focused on those items that people external to the business management think are important. Some of the measurements that will be discussed include: free cash flow; net cash flow; owners' excess cash flow and the Statement of Cash Flows. This paper proposes a method that will show the effects on cash, of management decision making, through modifications of the Statement of Cash Flows designed for internal use in a business.

Key Words: Cash Flow; Management Accounting; Decision Making

1. Introduction

Management focuses on many issues during the day to day operation of the business. They have to be constantly aware of all economic trends that may affect the business, key issues regarding competition and the financial health of the business among other things. The most significant issue management must be aware of is how the operation of the business affects cash flow. To properly understand the impact of decisions made on cash flow management needs new tools to show the relationship between decision making and cash flow.

2. Previous Methods

Management decisions affect cash flow (the life blood of business) and previous measurement methods provide limited direct links to show management the effects of their decisions. Free cash flow refers to cash flow that is left, after reinvesting in the business and cash flow from investment operations, for payment of creditors and possible distribution to owners Besley & Brigham (2012). This concept recognizes the need for the business to continue to invest in assets for use in the business and assumes that everything else can be used for creditors or for distribution to owners, thus creditors and owners are equated in this measurement. While there may be some similarities between creditors and owners (especially preferred stockholders, if any), there are more differences than similarities.

Creditors may have claims against specific assets and the payment of the creditors so these claims are released is of great importance to the company so that assets can continue to be used to support the company's operations that create value. Preferred stockholders, if any, typically only have claims to dividends when declared by the board of directors and do not have any voice when it comes to the decision making process. Common stockholders (owners) have a voice in the decision making process and only have

claims to dividends when declared by the board of directors but their dividends are paid after the preferred stockholders' dividends. The differences between these diverse groups point out why free cash flow as a measurement tool for management use may not be the best tool.

Net cash flow is determined by starting with earnings before taxes and interest and decreasing it by the amount of repayment of short term-term debt. This measurement excludes any cash flow from investment operations Saksonova (2009). Because this measurement excludes cash flow from investment operations it does not provide a comprehensive basis for management to assess the impact of their decisions on cash flow.

David DeBoeuf proposed an alternative to using free cash flow, owners' excess cash flow. Owners' excess cash flow (OECF) is a measurement where all legal obligations are netted out to determine the cash flow left for the possible payment of dividends to common stockholders.

In determining OECF after calculating free cash flow all legal obligations for interest expense and preferred stock dividends are deducted to arrive at the amount left for potential dividends to common stockholders DeBoeuf (2010). This measurement provides an excellent way of looking at how common stockholders should view the firm and in market use for determining the price of the stock. The shortcoming of this method is that it is focused on what is left for shareholders rather than how management's decisions affect cash flow.

The traditional statement of cash flows required by Generally Accepted Accounting Principles (GAAP) provides a reconciliation of beginning cash to ending cash broken down by business purpose. This statement has been part of a complete set of financial statements since it was implemented in 1987 by the Financial Accounting Standards Board (FASB). The rules regarding its preparation and format are currently contained in Topic 230 of the Accounting Standards Codification. While this provides an excellent reconciliation of the changes in the cash balance it does not show how management decisions directly affect those changes.

3. Proposed Method

To provide management information that shows how their decisions directly affect cash flow a modification to the statement of cash flows is proposed for internal use. Two possible ways the statement could be changed to show management how their decisions affect cash flow will be shown. One of the modifications keeps the current format and remains one page in length while adding explanatory lines while the other modification expands the statement to two pages and provides detailed information on how management's decisions affect cash flows. The two page format provides information that allows management to quickly see how their current period's decisions impacted cash flows for the business. It provides detail without needing to look through each section to find the detail. Some modifications to the statement of cash flows that would enable management to see how their decisions affect the business' cash flows have been proposed. These examples would form the basis for management to design a cash flow statement that could be used in the decision making process. While the exhibits all show an annual cash flow statement the statements could be prepared on a quarterly or semiannual basis to provide more timely feedback.

4. Feedback on the Concept

The concept of internal changes to the statement of cash flows and the two potential ways to modify the statement were presented to a sample of management students and business owners or managers (primarily small business). The management students (non accounting majors) all thought the potential modifications gave them more understandable and usable information that the format required by GAAP. Between the two Potential modifications there was a slight preference for the 2 page format as the students found it easier to read. In a sample of 13 small and medium sized business owners or managers there was a mixture of responses. The businesses surveyed included five manufacturing firms and eight merchandising firms.

Three of the businesses felt that the GAAP required format was sufficient and that additional information that might be provided by either of the proposed formats would not be worthwhile for their business. Ten of the owners/managers liked the idea of more closely tying decisions to the cash impact on the business and would possibly use one of the proposed formats. The businesses that would possibly use one of the formats were evenly split as to which format they found the most useful.

The GAAP compliant format for the merchandising company is shown in Exhibit A, while the one page modification for management use is shown in Exhibit B and the two page modification for management use is shown in Exhibit C. The GAAP compliant format for the manufacturing company is shown in Exhibit D, while the one page modification for management use is shown in Exhibit E and the two page modification for management use is shown in Exhibit F.

A further breakdown of the data showed that managers at 75% of the manufacturing firms preferred the one page modification while 2/3 of the managers at the merchandising firms preferred the two page modification. A possible explanation for this is that manufacturing managers are used to sorting through a large volume of data and have learned what to look for while managers at merchandising firms have less similar experience so like things to be clearer.

5. Conclusion

Survey results show that the potential for internal modifications to the Statement of Cash Flows would serve a useful business purpose for many managers of small businesses. The results showed that entry level people such as recent college graduates find the information useful in how it ties decision making to a key element in business. The managers that thought the modifications would be useful all had either no financial training or very little which would appear to point a deficiency in the usefulness of the GAAP Statement of Cash Flows in decision making. The managers that stated they would not use something like the proposed statements all had extensive financial training or worked for a division of a much larger company where the financial tools were dictated and provided by the corporate office. Even those that would not use the tools found some things in the concepts to be useful such as splitting out the investment in fixed assets between current products and new products. There will need to be further studies, about the concepts. The sample sizes in the surveys are not large enough to be statistically valid, for projection to the population as a whole.

Exhibit A

CREATURE CLOTHING, LLC
STATEMENT OF CASH FLOWS
For year ending December 31, 2013

CASH FLOWS FROM OPERATING ACTIVITIES

Net Income	**$128,765**
Depreciation & Amortization	42,156
Adjustments to Reconcile Operating Income To Cash From Operating Activities:	170,921
Trade Accounts Receivable - Net	-2,805
Inventory	-19,973
Prepaid Expenses And Other Current Assets	1,534
Trade Accounts Payable	23,545
Other Current Liabilities(Exc.Capital Lease)	-4,584
Changes in Assets And Liabilities	-2,283
NET CASH FROM OPERATING ACTIVITIES	168,638
CASH FLOWS FROM INVESTING ACTIVITIES	

Additions To Plant And Equipment	-52,781
NET CASH FROM INVESTING ACTIVITIES	-52,781
CASH FLOWS FROM FINANCING CTIVITIES Revolving Credit Line	 -10,766
Long Term Loan	-10,922
Payments On Capital Lease Obligations	0
Dividends Declared	-65,000
NET CASH FROM FINANCING CTIVITIES	-86,688
NET CHANGE IN CASH - INCR/(DECR)	29,169
Cash At Beginning Of Period	36,662
Cash and Cash Equivalents At End Of Period	$65,831

Exhibit B

CREATURE CLOTHING, LLC
STATEMENT OF CASH FLOWS FOR MANAGEMENT
For year ending December 31, 2013

CASH FLOWS FROM OPERATING ACTIVITIES

Net Income	**$128,765**
Depreciation & Amortization (current year)	5,278
Depreciation & Amortization (prior years)	36,878
Adjustments to Reconcile Operating Income To Cash From Operating Activities: Trade Accounts Receivable - Net	 -2,805
Inventory	-19,973
Prepaid Expenses And Other Current Assets	1,534
Trade Accounts Payable	23,545
Other Current Liabilities (Exc. Capital Lease)	-4,584
Changes in Assets And Liabilities	-2,283
NET CASH FROM OPERATING ACTIVITIES	168,638
CASH FLOWS FROM INVESTING ACTIVITIES Additions To Plant And Equipment	 -52,781
NET CASH FROM INVESTING ACTIVITIES	-52,781
CASH FLOWS FROM FINANCING ACTIVITIES Revolving Credit Line (current year)	 -10,766
Long Term Loan (prior years)	-10,922
Payments On Capital Lease Obligations (prior years)	0
Dividends Declared (ownership)	-65,000
NET CASH FROM FINANCING ACTIVITIES	-86,688
Cash At Beginning Of Period	36,662
Cash provided by current year decisions	68,213
Cash provided by prior years' decisions	25,956
Cash used based on ownership directives	-65,000
Cash and Cash Equivalents At End Of Period	$65,831

Exhibit C

CREATURE CLOTHING, LLC
MANAGEMENT STATEMENT OF CASH FLOWS
For year ending December 31, 2013

CASH FLOWS FROM CURRENT YEAR MANAGEMENT DECISIONS
CASH FLOWS FROM OPERATIONS

Net Income	**$128,765**
CASH FLOWS PROVIDED BY (USED FOR) WORKING CAPITAL	
Trade Accounts Receivable - Net	-2,805
Inventory	-19,973
Prepaid Expenses And Other Current Assets	1,534
Trade Accounts Payable	23,545
Other Current Liabilities (Exc. Capital Lease)	-4,584
Changes in working capital	-2,283
NET CASH FROM OPERATIONS	126,482
CASH FLOWS PROVIDED BY (USED FOR) INVESTING IN THE BUSINESS Additions To Plant And Equipment	-52,781
Depreciation and amortization on current year additions	5,278
NET CASH FROM INVESTING ACTIVITIES	-47,503
CASH FLOWS PROVIDED BY (USED FOR) FINANCING THE BUSINESS Revolving Credit Line	-10,766
NET CASH FROM FINANCING ACTIVITIES	-10,766
CASH FLOWS PROVIDED BY (USED FOR) CURRENT MANGEMENT DECISIONS	68,213
CASH FLOWS FROM MANAGEMENT DECISIONS IN PREVIOUS YEARS CASH FLOWS PROVIDED BY (USED FOR) INVESTING IN THE BUSINESS Depreciation and amortization on previous years' additions	36,878
CASH FLOWS PROVIDED BY (USED FOR) FINANCING THE BUSINESS Payments on Long Term Loan	-10,922
Payments On Capital Lease Obligations	0
NET CASH FROM FINANCING ACTIVITIES	-10,922
NET CASH FLOWS FROM MANAGEMENT DECISIONS IN PREVIOUS YEARS	25,956
CASH FLOWS FROM OWNERSHIP DIRECTIVES Dividends Declared	-65,000
NET CASH FLOWS NOT FROM CURRENT YEAR MANAGEMENT DECIISIONS	-39,044
NET CHANGE IN CASH - INCR/(DECR	29,169
Cash At Beginning Of Period	36,662
Cash and Cash Equivalents At End Of Period	$65,831

Exhibit D

MICHIGAN WIDGET MANUFACTURING, INC.
STATEMENT OF CASH FLOWS
For year ending December 31, 2013

CASH FLOWS FROM OPERATING ACTIVITIES

Net Income	**$352,468**
Depreciation & Amortization	252,621
Adjustments to Reconcile Operating Income To Cash From Operating Activities:	
Trade Accounts Receivable - Net	-24,805
Inventory	-39,973
Prepaid Expenses And Other Current Assets	31,534
Trade Accounts Payable	53,545
Other Current Liabilities (Exc. Capital Lease)	-14,584
Changes in Assets And Liabilities	5,717
NET CASH FROM OPERATING ACTIVITIES	610,806
CASH FLOWS FROM INVESTING ACTIVITIES Additions To Plant And Equipment	-292,781
NET CASH FROM INVESTING ACTIVITIES	-292,781
CASH FLOWS FROM FINANCING ACTIVITIES:	
Revolving Credit Line	80,766
Long Term Cap-X Loan	-22,922
Payments On Capital Lease Obligations	-128,163
Dividends Declared	-325,000
NET CASH FROM FINANCING ACTIVITIES	-395,319
NET CHANGE IN CASH - INCR/(DECR)	-77,294
Cash At Beginning Of Period	376,662
Cash and Cash Equivalents At End Of Period	$299,368

Exhibit E

MICHIGAN WIDGET MANUFACTURING, INC.
STATEMENT OF CASH FLOWS FOR MANAGEMENT
For year ending December 31, 2013

CASH FLOWS FROM OPERATING ACTIVITIES

Net Income	$352,468
Depreciation & Amortization (current year additions)	14,639
Depreciation & Amortization (prior years additions)	237,982
Adjustments to Reconcile Operating Income To Cash From Operating Activities:	
Trade Accounts Receivable - Net	-24,805
Inventory	-39,973
Prepaid Expenses And Other Current Assets	31,534
Trade Accounts Payable	53,545
Other Current Liabilities (Exc. Capital Lease)	-14,584
Changes in Assets And Liabilities	5,717
NET CASH FROM OPERATING ACTIVITIES	610,806
CASH FLOWS FROM INVESTING ACTIVITIES:	
Additions To Plant And Equipment (ongoing business)	-139,562
Additions To Plant And Equipment (new business)	-153,219
NET CASH FROM INVESTING ACTIVITIES	-292,781
CASH FLOWS FROM FINANCING ACTIVITIES:	
Revolving Credit Line (current year)	80,766
Long Term Cap-X Loan (prior years)	-22,922
Payments On Capital Lease Obligations (prior years)	-128,163

Dividends Declared	-325,000
NET CASH FROM FINANCING ACTIVITIES	-395,319
Cash At Beginning Of Period	376,662
Provided by current year decisions	160,809
Provided by prior years' decisions	86,897
Used by ownership directives	-325,000
Cash and Cash Equivalents At End Of Period	$299,368

Exhibit F

MICHIGAN WIDGET MANUFACTURING, INC.
MANAGEMENT STATEMENT OF CASH FLOWS
For year ending December 31, 2013

CASH FLOWS FROM CURRENT YEAR MANAGEMENT DECISIONS
CASH FLOWS FROM OPERATIONS

Net Income	**$352,468**
CASH FLOWS PROVIDED BY (USED FOR) WORKING CAPITAL:	
Trade Accounts Receivable - Net	-24,805
Inventory	-39,973
Prepaid Expenses And Other Current Assets	31,534
Trade Accounts Payable	53,545
Other Current Liabilities (Exc. Capital Lease)	-14,584
Changes in working capital	5,717
NET CASH FROM OPERATIONS	358,185
CASH FLOWS PROVIDED BY (USED FOR) INVESTING IN THE BUSINESS:	
Additions To Plant And Equipment (ongoing business)	-139,562
Additions To Plant And Equipment (support new business)	-153,219
Depreciation and amortization on current year additions	14,639
NET CASH FROM INVESTING IN THE BUSINESS	-278,142
CASH FLOWS PROVIDED BY (USED FOR) FINANCING THE BUSINESS:	
Revolving Credit Line	80,766
NET CASH FROM FINANCING THE BUSINESS	80,766
CASH FLOWS PROVIDED BY (USED FOR) CURRENT MANAGEMENT DECISIONS	160,809
CASH FLOWS FROM MANAGEMENT DECISIONS IN PREVIOUS YEARS **CASH FLOWS PROVIDED BY (USED FOR) INVESTING IN THE BUSINESS:**	
Depreciation and amortization on previous years' additions	237,982
CASH FLOWS PROVIDED BY (USED FOR) FINANCING THE BUSINESS:	
Payments on long term debt	-22,922
Payment on capital lease obligations	-128,163
NET CASH FROM INVESTING IN THE BUSINESS	-151,085
NET CASH FLOWS FROM MANAGEMENT DECISIONS IN PREVIOUS YEARS	86,897
CASH FLOWS FROM OWNERSHIP DIRECTIVES Dividends declared	-325,000
NET CASH FLOWS NOT FROM CURRENT YEAR MANAGEMENT DECISIONS	-238,103
NET CHANGE IN CASH - INCR/(DECR)	-77,294
Cash At Beginning Of Period	376,662
Cash and Cash Equivalents At End Of Period	$299,368

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