BD20303 ADVANCED FINANCIAL MANAGEMENT

SECTION 2

Case Study: Cash Budgeting (The Elusive Cash Balance)

GROUP NO. 8

Prepare to: Dr Dg Safrina Ag Budin

Bil	Name	Matric no.
1	AIMAN FARIHIN BIN SAFARUDDIN	BB23110812
2	ROLAND ALBERT	BB23110848
3	MUHAMMAD HAZIQ FIKRI BIN ZULKIFLI	BB23110806
4	MUHAMMAD WAZIF ZAKWAN BIN MOHD SAPRI	BB23110824
5	MOHAMMAD HAYKAL HIZAN BIN HUSNAN	BB23110801

TABLE OF CONTENTS

INTRODUCTION

Cash budgeting is an essential financial tool used by the business to manage its cash flow effectively. In this case study, we will evaluate Hunt Distributing Inc.'s financial health by looking at its cash inflow or cash outflow over a specific period of time. The primary purpose of a cash budget is to help businesses ensure they have enough cash to meet their obligations and avoid liquidity problems. By planning and controlling cash flows, businesses can ensure they meet financial obligations such as payroll, supplier payments, and loan repayments while controlling spending based on cash availability. We also will determine whether it is aligned with financial goals or not.

Cash inflows, cash outflows, net cash flow, and opening and closing cash balances are the elements that make up a cash budget. All cash payments, such as capital expenses, loan repayments, operating expenses (rent, utilities, labor), and other outgoings, are included in cash outflows. A positive net cash flow indicates a surplus and a negative net cash flow indicates a deficit. Net cash flow is computed by deducting total cash outflows from total cash inflows. The amount of cash on hand at the start of the period is known as the opening cash balance, and the amount remaining at the conclusion of the period after all inflows and outflows have been taken into account is known as the closing cash balance.

This case study is talking about the shortage of cash to pay any expenses that need to be paid at that moment. This happened when the leader was changed from Nelson to Donald Hunt. Although Hunt Distributing Inc. grew slowly when it was under Mr. Nelson, the business was steady. Mr. Nelson also maintains strong ties with local businesses, suppliers, and customers. Mr. Nelson did not undue risk and only accepted the highest quality product for distribution. Donald on the other hand, always criticizes his father, Mr. Nelson, for conservative business policies.

1. What seems to be the major problem with Hunt Distributing Inc.? Why has this problem occurred?

Hunt Distributing Inc. has an unstable cash balance, due to poor cash management. When Donald took over, he expanded the list of products offered for distribution for his retailers, extended much longer credit periods to clients, and also took on additional bank loans to further the company's expansion. Although the list of offerings and the number of supplies increased, and the revenue during the five-year period also increased, the cash balance seems to be unstable and significantly decreased over time.

2. Based on the prior years' financial statements, what conclusion do you think Patrick would be justified in reaching? What calculations should he make to analyze the cash positions of the company? Substantiate your answer by making the necessary calculations.

To analyze the cash positions of the company based on prior years' financial statements, Patrick would need to perform several calculations that would help him understand the liquidity and cash flow situation of the business. Here are some key calculations he should make:

i) Cash flow from operating activities

Cash flow from operating activities = cash received from customers - cash payment to suppliers and employees

= Sales - (starting account payable + purchases on credit)

Years	**Calculation**	**Cash Flow from Operating Activities**
2013	RM4,000,000 - (200,000+300,000+50,000)	RM3,450,000
2014	RM4,880,000 - (300,000+450,000+69,733)	RM4,060,267
2015	RM6,100,000 - (350,000+574,553+79,749)	RM5,095,698

ii) Cash flow from investing activities

Cash Flow from Investing Activities = Acquisition of fixed assets + Sales of fixed assets

Years	Calculations	Cash Flow from Investing Activities
2013	RM4,000,000 + (-RM750,000)	RM3,250,000
2014	RM4,880,000 + (-RM750,000)	RM4,130,000
2015	RM6,100,000 + (-RM750,000)	RM5,350,000

iii) Cash Flow from Financing Activities

Cash flow from financing activities = Proceeds from Issuing Debt or Equity − Repayments of Debt − Dividends Paid

Years	Calculations	Cash Flow from Financing Activities
2013	RM300,000+RM200,000	RM500,000
2014	RM450,000+RM200,000	RM650,000
2015	RM574,553+RM200,000	RM774,553

Total Cash Flow = Cash Flow from Operating Activities + Cash Flow from Investing Activities + Cash Flow from Financing Activities

Years	Calculations	Total Cash Flow
2013	RM3,450,000+RM3,250,000+RM500,000	RM7,200,000
2014	RM4,060,267+RM4,130,000+RM650,000	RM8,840,267
2015	RM5,095,698+RM5,350,000+RM774,553	RM11,220,251

This calculation shows that the company had a positive cash flow of $7,200,000 in 2013, $8,840,267 in 2014, and $11,220,251 in 2015, indicating an increase in its cash flow every year.

3. Should Patrick prepare a quarterly or a monthly cash budget for Hunt Distributing Inc.? Explain why.

Patrick should prepare a monthly cash budget for Hunt Distributing Inc. because of some reasons. One of the reasons is granularity. Monthly budgets can provide more detailed insights into cash flows, allowing for better tracking and management. Then, volatility. Given the fluctuating sales and cash balance instability, a monthly budget will help identify issues earlier. Decision-making also can be easier. More frequent data points support timely and informed decision-making, which is especially important for adjusting to unexpected changes. Lastly, expense and tax payments. Monthly budgeting aligns better with the firm's expense and debt payment schedules, ensuring all obligations are met.

4. Prepare a suitable cash budget for Hunt Distributing Inc. Build in minimum and maximum cash balances as requested by Donald. Assume that the cash position at the start of the budgeting period is zero.

Determine the minimum cash balance: Donald wants a minimum cash balance that is at least 25% higher than last year's ending cash balance.

- Last year's ending cash balance (2015) was $57,154.
- Therefore,

Minimum Cash Balance =1.25×57,154= 71,443

Determine the maximum cash balance: Donald also wants to ensure that the maximum cash balance is not more than 50% higher than last year's ending cash balance.

.

Maximum Cash Balance =1.50×57,154= 85,731

5. Based on your calculations, which months seem to be the most vulnerable to cash deficits and which ones have the greatest surplus funds?

Vulnerable Months:

- December 2016: This month stands out with an expected sales volume of $1,200,000, which is significantly higher than other months. If collections do not align with this spike in sales, it could lead to a cash deficit.
- March 2016: Expected sales of $500,000 without significant collections could pose a risk due to high operating expenses and debt payments.

Surplus Funds Months:

- October 2015: The month has actual sales of $400,000, with no significant scheduled expenses, indicating a potential surplus.
- November 2015: Similar to October, with actual sales of $450,000 and relatively lower expense commitments.

6. Assuming borrowed funds cost 10% per year and excess funds can be invested at 6% per year, prepare an annual financial plan for Hunt Distributing, Inc.

- Annual Financial Plan: To address the current cash flow challenges and ensure financial stability, a comprehensive financial plan is essential. This plan should incorporate the following elements:

-Sales Forecast: Project sales growth at a rate of 25% based on historical trends, aligning with Donal's expectations.

-Cash Collections: Utilize the collection schedule provided (20% within <30 days, 40% within 31-60 days, 40% within 61-90 days) to estimate cash inflows from sales.

-Cash Disbursements: Estimate monthly operating expenses, including salaries, utilities, and other expenses, adjusted proportionally with sales forecasts. Incorporate specific expenses such as the new delivery truck purchase ($40,000 in May 2016) and debt payments.

-Interest and Investment Strategy: Calculate monthly interest expenses on existing loans at 10% per year. Evaluate opportunities to invest excess funds at a 6% annual return to optimize cash management.

-Monthly Cash Budget: Develop a detailed cash budget outlining monthly cash inflows and outflows, ensuring visibility into potential deficits or surplus funds each month. Monitor and adjust collections and payment schedules to mitigate risks during high sales months (like December 2016).

-Financial Strategy Recommendations: Recommend strategies to Donal that could include renegotiating supplier terms to extend payables where feasible, optimizing inventory management, and potentially reducing credit periods to improve cash flow.

7. How might the firm avoid cash shortage in the future? Explain.

- Cash flow forecasting.

Anticipating periods of financial surpluses and shortages can be achieved by routinely creating cash flow projections. The company can prepare for any gaps in funding and take proactive steps to close them by predicting financial inflows and outflows. Ensuring there is enough cash on hand to fulfill commitments, involves determining when receivables and payables are due. For example, let's say Hunt Distributing Inc. creates a cash flow forecast and identifies that its cash reserves will be low in the next quarter due to seasonal fluctuations in sales. Hunt Distributing Inc. can plan to tighten the collection of their receivables and delay some non-essential expenditures until after the high-sales season. This may help them have enough cash to cover their short-term obligations.

- Maintain a cash reserve.

This can provide a safety net during periods of unexpected cash shortages. This can be built up during periods of strong cash flow and used to cover shortfalls during leaner times. For example, Hunt Distributing Inc. had a good profitable quarter. The firm can set aside a portion of its profit into a cash reserve. This reserve is used in the next quarter when sales dip, ensuring they can cover their payroll and other critical expenses without needing external financing.

- Having access to short-term financing solutions like lines of credit or short-term loans.

Building strong ties with financial institutions can guarantee that these choices are accessible when required. For example, Hunt Distributing Inc. encounters an unexpected major equipment failure that requires immediate repair, costing more than its current cash reserve. The firm can utilize a pre-approved line of credit to cover the repair costs, ensuring that production continues without disruption. Once their cash flow stabilizes, they repay the line of credit.

8. Based on the data provided, calculate and comment on the absolute liquidity of Hunt Distributing Inc.

Absolute Liquidity Ratio = (Cash and Cash Equivalent)÷(Current Liability)

Years	**Calculations**	**Absolute Liquidity Ratio (%)**
2013	RM160,000 RM550,000	29.1%
2014	RM48,800÷ RM820,000	5.95%
2015	RM57,154÷ RM1,004,553	5.7%

Over the three-year period, the absolute liquidity ratio has significantly declined from 29.1% in 2013 to 5.7% in 2015. This indicates a deteriorating ability of the company to cover its current liabilities with its most liquid assets. The absolute liquidity ratio of 29.1% in 2013 suggests that the company had a relatively strong liquidity position, with almost 30% of its current liabilities covered by cash and cash equivalents. This level of liquidity would generally be considered healthy, providing a good way to meet short-term obligations. In 2014 The ratio dropped to 5.95%, indicating a sharp decline in liquidity. The decline shows that the company either reduced its cash reserves or significantly increased its current liabilities, or both. This reduction in liquidity would make it more challenging to meet immediate financial obligations without relying on additional financing. In 2015 the ratio further decreased to 5.7%, continuing the downward trend. This very low ratio highlights a critical liquidity issue, where the company can cover only about 5.7% of its current liabilities with its cash and cash equivalents. Such a low level of liquidity is alarming and indicates a high risk of cash flow problems, potentially leading to an inability to meet short-term debts and obligations without external financing.

CONCLUSION

The company Hunt Distributing Inc. has faced significant financial difficulties since Mr. Nelson Nelson's departure. The business grew steadily and developed solid ties with nearby companies, suppliers, and clients under Mr. Nelson's cautious and conservative leadership. Mr. Nelson's approach of cutting risks and emphasizing high-quality items made sure the business had a steady cash flow and sound finances. However, this stability was severely upset by the change in management that resulted from Donald Hunt's more forceful attitude to corporate expansion. The company's cash flow dynamics were significantly altered as a result of Donald Hunt's strategy to increase the product options for distribution, lengthen customer credit periods, and get additional bank loans to support the business's expansion ambitions. Over a five-year period, these tactics raised revenues, but they also resulted in an unstable cash balance. The main problem was the mismatch between cash inflows and outflows, which over time caused the company's cash reserves to drop significantly.

A number of important difficulties are highlighted by the financial analysis. First off, longer loan terms and higher operating costs contributed to the unstable cash flow from operating activities, even with rising revenues. Second, the cash position was further strained since the cash flow from investing activities—which was mostly caused by the purchase of fixed assets—did not produce returns right away. Finally, the cash flow from financing activities showed that day-to-day operations were managed through an unsustainable reliance on outside finance. Hunt Distributing Inc.'s liquidity ratio dropped precipitously from 29.1% in 2013 to a dangerously low 5.7% in 2015. There is a significant chance of cash flow issues because of this declining trend, which shows a declining ability to pay current liabilities with the most liquid assets. A liquidity ratio of less than 10% raises red flags and implies that the business would find it difficult to pay off its short-term debts and commitments without obtaining further funding or fundamentally altering its financial plans.

Strong cash management procedures must be put in place by Hunt Distributing Inc. in order to overcome these financial difficulties. To enable more precise tracking and management of financial flows, this involves creating comprehensive monthly cash budgets. The business can foresee times of financial excesses and deficits and take proactive steps to alleviate them by forecasting cash flows. When cash flow is good, keeping a cash reserve can act as a safety net for when things get tighter. The business should also review its credit rules to make sure that lending terms aren't unduly prolonged, as this could put a pressure on cash flow. Having solid connections with financial institutions to obtain lines of credit or other short-term financing solutions can also act as a safety net in case of unforeseen financial difficulties. Ultimately, the company's cash position can be further strengthened by reframing supplier terms to extend payables when practical and streamlining inventory management.

To sum up, although Donald Hunt's aggressive expansion plans have raised sales, they have also caused a great deal of cash flow instability. Improved liquidity and long-term, sustainable growth are within reach for Hunt Distributing Inc. with a more cautious approach to cash management and a careful balance between expansion and stability.

REFERENCE

Admin. (2021, September 23). *Liquidity Ratios: Definition, Types, Formula, Importance, FAQs*. BYJUS. https://byjus.com/commerce/liquidity-ratio/

Asokan, N. (2024, April 30). *Causes and solutions for cash shortage you need to know about*. https://agicap.com/en/article/cash-shortage/#:~:text=Cash%20shortage%20is%20when%20a,problems%20leading%20to%20production%20standstill

Cash Budgeting. (n.d.-c). https://brainmass.com/business/cash-budgeting/pg6

Gillespie, M. (2023, February 21). *What is Cash Flow Forecasting?* CashAnalytics. https://www.cashanalytics.com/what-is-cash-flow-forecasting/

Waterman, R. (2024, June 7). *How to calculate cash flow: 7 cash flow formulas, calculations, and examples*. https://www.waveapps.com/blog/cash-flow-formula

2

Analyzing Financial Statements

Are We Getting Too Big for Our Boots?

Andy Gillian, the owner of Gillian Pool & Spa Supplies, paced up and down the balcony of his luxurious Victorian home, overlooking a beautiful backyard, which housed a full-size pool/spa and a sprawling, luscious, green lawn. What was worrying Andy was the fact that over the past two years, his firm's net income figures had been negative, and his cash flow situation had become pretty weak (See Tables 1 and 2). He figured that he had better take a good look at his firm's financial situation and improve it, if possible, before his bankers found out. He knew full well that being shut out by his bankers would be disastrous.

Andy had learned everything he knew about the pool and spa business by working several summers during his high school and college years for a pool construction firm. After graduating with a degree in marketing, 10 years ago, he started his own pool service/supply business and operated it out of his well-stocked delivery truck. Andy, being a very persuasive young man, was able to secure several service contracts from local residents, and with business booming, he opened up his first retail store eight years ago in a reasonably low-cost facility. His revenues rolled in at a fairly healthy pace, and earnings grew as well.

Then, five years ago, motivated by the increasing demand for pool/spa products and leisure activities, Andy moved into a much larger facility, located in a newly developed shopping complex. He was always interested in owning an upscale store, so he took on a mortgage and designed an exceedingly well-planned pool and spa supply store. Andy began offering fairly liberal credit terms to drum up more business and significantly broadened his inventory.

However, having used most of his available funds in expanding the business, Andy was well aware that future growth would have to be funded with external sources of funds. Although a business school graduate, Andy had never taken his finance and accounting courses seriously and had barely managed to scrape by. As a result–not unlike many small business owners–his ability to decipher financial statements was very limited. He had often entertained the thought of taking financial management courses, but could never find the time. Then, the other day, at his downtown small-business association meeting, he mentioned his problem to Vic Sharma, his long-time friend and owner of an auto-parts store. Vic had often given him good advice in the past, and Andy was desperate for a solution. "I'm no finance expert, Andy," said Vic, "but you might want to contact the finance department at our local university's business school and see if you can hire an MBA student as an intern. I have been very fortunate to have hired some good interns from them over the years, you know."

That's exactly what Andy did. Within a week he recruited Denny Kent, a second-semester MBA student who had an undergraduate degree in accountancy and was interested in concentrating in finance. When Denny started his internship, Andy explained his concerns. "I'm going to have to raise funds for future growth, and given my recent profit situation, the prospects look pretty bleak. I can't seem to put my finger on the exact cause. The bank's commercial loan committee is going to want some pretty convincing arguments as to why they should grant me the loan. I need to put some concrete remedial measures in place, and was hoping that you can help sort things out, Denny. I think we may be getting too big for our boots!"

Table 1

Gillian Pool & Spa Supplies
Balance Sheet

	2011	2012	2013	2014	2015
ASSETS					
Cash and Marketable Securities	$155,000	$309,099	$75,948	$28,826	$18,425
Accounts Receivable	10,000	12,000	20,000	77,653	90,078
Inventory	250,000	270,000	500,000	520,000	560,000
Current Assets	$415,000	$591,099	$595,948	$626,480	$668,503
Land, Buildings, Plant, and Equipment	$250,000	$250,000	$500,000	$500,000	$500,000
Accumulated Depreciation	−25,000	−50,000	−100,000	−150,000	−200,000
Net Fixed Assets	$225,000	$200,000	$400,000	$350,000	$300,000
Total Assets	$640,000	$791,099	$995,948	$976,480	$968,503
LIABILITIES AND EQUITIES					
Short-Term Bank Loans	$50,000	$145,000	$140,000	$148,000	$148,000
Accounts Payable	10,000	10,506	19,998	15,995	16,795
Accruals	5,000	5,100	7,331	9,301	11,626
Current Liabilities	$65,000	$160,606	$167,329	$173,296	$176,421
Long-Term Bank Loans	$63,366	$98,000	$196,000	$190,000	$183,000
Mortgage	175,000	173,000	271,000	268,000	264,000
Long-Term Debt	$238,366	$271,000	$467,000	$458,000	$447,000
Total Liabilities	$303,366	$431,606	$634,329	$631,296	$623,421
Common Stock (100,000 shares)	$320,000	$320,000	$320,000	$320,000	$320,000
Retained Earnings	16,634	39,493	41,619	25,184	25,082
Total Equity	$336,634	$359,493	$361,619	$345,184	$345,082
Total Liabilities and Equity	$640,000	$791,099	$995,948	$976,480	$968,503

Table 2

Gillian Pool & Spa Supplies
Income Statements

	2011	2012	2013	2014	2015
Net Sales	$900,000	$982,500	$1,170,000	$1,310,400	$1,520,064
Cost of Goods Sold	729,000	801,900	962,280	1,100,736	1,305,000
Gross Profit	$171,000	$180,600	$207,720	$209,664	$215,064
Admin and Selling Exp	$45,000	$58,950	$64,350	$72,072	$91,204
Depreciation	37,500	40,000	50,000	50,000	50,000
Miscellaneous Expenses	3,041	3,557	4,680	14,414	22,801
Total Operating Exp	$85,541	$102,507	$119,030	$136,486	$164,005
EBIT	$85,460	$78,093	$88,690	$73,178	$51,059
Interest on ST Loans	$9,600	$9,600	$9,600	$17,760	$17,760
Interest on LT Loans	5,400	5,400	5,400	13,500	16,470
Interest on Mortgage	16,000	13,840	12,240	21,440	21,120
Total Interest	$31,000	$28,840	$27,240	$52,700	$55,350
Before-Tax Earnings	$54,460	$49,253	$61,450	$20,478	($4,291)
Taxes	21,784	19,701	24,580	8,191	−1,716
Net Income	$32,676	$29,552	$36,870	$12,287	($2,574)
Dividends on Stock	0	0	0	0	0
Additions to Retained Earnings	$32,676	$29,552	$36,870	$12,287	($2,574)