Chapter 19

- *Short-Term Finance and Planning*

Key Concepts and Skills

- Understand S-T Financial Decisions (Working Capital Management)
- Understand the components of the cash cycle and the operating cycle and why it is important
- Be able to prepare a cash budget

- To this point, we have described many of the decisions of L-T finance (Example: capital budgeting, financial structure).
- The most important difference between S-T and L-T finance is the timing of the cash flows. (S-T financial decision involves cash inflows or outflows that occur within a year or less)

S-T Finance

- S-T finance is primarily concerned with the analysis of decisions that affects CAs and CLs.
  - NWC – is associated with S-T financing decision making. (CA-CL)
  - S-T Financial Management : Working Capital Management
- *Example :*
  - What is a reasoable level of cash to keep on hand (in a bank) to pay bills?
  - How much should the firm borrow in the S-T?
  - How much credit should be extended to customers?

Sources and Uses of Cash

- Balance sheet identity (rearranged)
  - NWC + fixed assets = long-term debt + equity
  - NWC = (cash + other CA) – CL
  - Cash = long-term debt + equity + CL – CA other than cash – fixed assets
- Sources of Cash
  - Increasing long-term debt, equity or current liabilities
  - Decreasing current assets other than cash or fixed assets
- Uses of Cash
  - Decreasing long-term debt, equity or current liabilities
  - Increasing current assets other than cash or fixed assets

Activities that increase Cash

- Increasing L-T Debt (borrow over the long-term)
- Increasing Equity (selling some stock)
- Increasing Current Liabilities (getting a 90-day loans)
- Decreasing current asset other than cash (selling some inventory other for cash)
- Decreasing fix assets (selling some inventory)

Activities that decrease Cash

- Decrease L-T debt (paying-off a L-T debt)
- Decrease Equity (repurchase some stock)
- Decrease Current Liabilities (paying-off a 90-day loans)
- Increase current asset other than cash (buying some inventory other for cash)
- Increasing fix assets (buying some inventory)

Example 19.1: Label each as a source or Use and describe its effect on the firm's cash balance

- A $500 dividend was paid
- Account Payable Increased by $500
- Fixed asset purchased were $900
- Inventories increased by $625
- L-T Debt decreased by $1,200.

Answer 19.1

The Operating Cycle and Cash Cycle

The primary concern in S-T finance is the firms short –run operating and financing activities. For manufacturing firm, for short-run activities might consist of;

Events	Decisions
Buying raw materials	How much inventory to order
Paying cash	Whether to borrow/draw down cash balances
Manufacturing the product	What choice of production technology to use
Selling the product	Whether credit should be extended to a particular customer
Collecting cash	How to collect

The Operating Cycle

- **Operating cycle** – time between purchasing the inventory and collecting the cash from selling the inventory
- **Inventory period** – time required to purchase and sell the inventory
- **Accounts receivable period** – time required to collect on credit sales
- **Operating cycle = inventory period + accounts receivable period**

Characteristics of a firm with a long Operating Cycle?

•Operating Cycle = Inventory Period +
•Acc Receivable Period

- Firms with relatively long inventory periods and/ relatively long receivable periods.
- i.e. such firm tends to keep inventory on hand, and they allow customer to purchase on credit and take a relatively long time to pay.

Cash Cycle

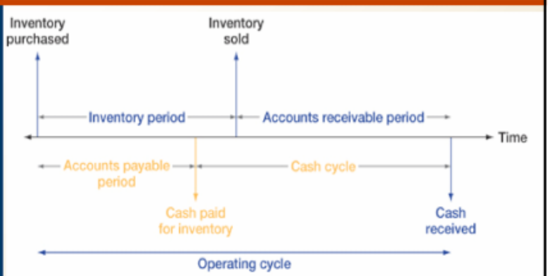
- **Cash cycle**
  - Amount of time we finance our inventory
  - Difference between when we receive cash from the sale and when we have to pay for the inventory
- **Accounts payable period** – time between purchase of inventory and payment for the inventory
- **Cash cycle = Operating cycle – accounts payable period**

Characteristics of a firm with a long Cash Cycle?

- Cash Cycle = Operating Cycle - Account Payable Period

- A firm have relatively L-T between the time purchased inventory is paid for and the time that inventory is sold and payment received.
- Thus, these are firms that have relatively short payables periods and/or long receivable cycles.

Figure 19.1



The operating cycle is the time period from inventory purchase until the receipt of cash. (The operating cycle may not include the time from placement of the order until arrival of the stock.) The cash cycle is the time period from when cash is paid out to when cash is received.

Example 19.2: Calculate Operating Cycle and Cash Cycle?

- Inventory:
  - Beginning = 200,000
  - Ending = 300,000
- Accounts Receivable:
  - Beginning = 160,000
  - Ending = 200,000
- Accounts Payable:
  - Beginning = 75,000
  - Ending = 100,000
- Net sales = 1,150,000
- Cost of Goods sold = 820,000

Answer 19.2: Cash Cycle

Cash Budget

- Cash Budget is the primary tool in short-term finacial planning, which allows financial manager to idendify short-term financial needs and opportunities.
- It records estimates of cash receipts (cash in) and disbursments (cash out)
- Forecast of cash inflows and outflows over the next short-term planning period
- Cash budget can be prepared quarterly, monthly, weekly, or even daily bases.
- The result is an estimate of the cash surplus or deficit.

The Cash Budget

- ***Sales and Cash Collections***
  - Example: If a company has a 45-day receivables, or average collection period. This means that half of the sales in a given quarter will be collected the following quarter. (We are assuming that each quarter is 90 days)
  - Cash Collection = Beg. Acc. Receivables+1/2 Sales
  - Endind receivables = Beg. Receivables + Sales -Collections
- ***Cash Outflows** (Cash Disbursement, or payments)*
  - *Payments of Acc. Payable*
  - *Wages, Taxes and other expenses*
  - *Capital expenditures*
  - *L-T Financing expenses (Int. Payments on L-T debt outstanding and dividend payments to shareholders)*
- **The Cash Balance**
  - The predicted net cash inflow is the difference between cash collections and cash discursements.

Greenwell Corporation Cash Budget (in millions)

		Q1	Q2	Q3	Q4
Beginning receivables					
+ Sales					
- Cash Collections	(Beg. rec. + 1/2 Sales)				
Ending Receivables	(Beg. rec + sales - collections)				
Payment of Accounts					
+ Wages, Taxes and Other Expenses					
+ Capital Expenditures					
+ Interest and Dividend payments					
Total Cash Disbursement					
Total Cash Collections					
- Total Cash Disbursement					
Net Cash Inflow					
Beginning Cash Balance					
+ Net Cash Inflows					
Ending Cash Balance					
- Minimum Cash Balance					
Cumulative Surplus (Deficit)					

Example 19.3: Prepare a Cash Budget

- Pet Treats Inc. specializes in gourmet pet treats and receives all income from sales
- Sales estimates (in millions)
  - Q1 = 500; Q2 = 600; Q3 = 650; Q4 = 800
- Accounts receivable
  - Beginning receivables = $250
  - Average collection period = 30 days
- Accounts payable
  - Purchases = 50% of next quarter's sales
  - Beginning payables = 125
  - Accounts payable period is 45 days

Example 19.3: Cash Budget Information.......Continued

- Other expenses
  - Wages, taxes and other expense are 30% of sales
  - Interest and dividend payments are $50
  - A major capital expenditure of $200 is expected in the second quarter
- The initial cash balance is $80 and the company maintains a minimum balance of $50

Example 19.4: The Operating and Cash Cycle

- Consider the following Financial Statement information for the Route 66 Company.

Item	Beginning	Ending
Inventory	$1,273	$1,401
Acc. Rec.	3,782	3,368
Acc. Pay.	1,795	2,025

  - Net Sales $14,750
  - COGS $11,375
  - Calculate the Operating and the Cash Cycles.

Example 19.5: Cash Balance for Greenwell Corporation

- The Greenwell Corporation has a 60-day average collection period and wishes to maintain a $160 million minimum cash balance. Based on this the information given in the following cash budget, complete the cash budget. What conclusion do you draw?

Greenwell Corporation
Cash Budget (in millions)

	Q1	Q2	Q3	Q4
• Beginning receivables	$240			
• Sales	150	165	180	135
• Cash Collections				
• Ending Receivables				
• Total Cash Collections				
• Total Cash Disbursement	170	160	185	190
• Net Cash Inflow				
• Beginning Cash Balance	45			
• Net Cash Inflows				
• Ending Cash Balance				
• Minimum Cash Balance				
• Cumulative Surplus (Deficit)				

Sugested Problems

- 1, 3, 6.