

CHAPTER 6: WORKING CAPITAL

Working capital management is the financing and manage your company current assets, such as cash, accounts receivable and inventory.

1. The Nature of Assets Growth

If a firm grows, current assets increase over time. If actual sales and forecasted don't match can lead to unexpected grow up or reduction in inventory will affect firm's receivables and cash flow. Effective current assets require matching the forecasted sales and production schedules.

Self-liquidating assets known as sold at the end of a specified time. Firm's current assets can be self-liquidating or permanent.

2. Controlling Assets – Matching Sales and Production

2.1. Controlling Assets

In a company, current assets change shortly. When your company produces more than sells, inventory rises. When sales rise faster than production, inventory declines and receivables rise.

As what we studied in Chapter 4, **level production** makes current asset up and down when sales and production aren't equal. Then, some company try to match sales and production closely which reject increase or decrease in current asset.

2.2. Matching Sales & Production

If sales and production are matched, your firm can keep the inventory also the current asset at the minimum figures. Then, your firm can save more financing costs. This matching has the advantage of keeping current assets that smaller than level production. However, if sales are seasonal or cyclical, workers will be laid off in a declining sales climate and machinery (fixed assets) will be idle. Here lies the trade-off between level and seasonal production: Full utilization of fixed assets with skilled workers and more financing of current assets versus unused capacity, training and retraining workers, with lower financing for current assets.

Example for matching sales and productions is textbook market. This is a seasonal sales market, which products mostly sold in fall semester (7, 8, 9) and second semester(12). Firstly, publishing company keep printing many copies as they can with fixed costs. When they cannot reproduce on demand, they contract with the printing company to print books depend on expected sales at least one year. If it sells better than expected, they keep

printing for the second, third, ... When the book is declined popularity, the publisher stuck with a huge number of books.

Nowadays, most companies have been more successful in matching sales and productions when they apply computerized inventory control system. These technology can helps manager control the sales figure and inventory levels item by item at the end of the day.

3. Patterns of Financing

The financial manager's selection of external sources of funds to finance assets may be one of the firm;s most important decisions.

The appropriate finance pattern would be one in which asset buildup and length of financing terms which are matched perfectly.

3.1. Alternstive Plans:

Only financial manager with unusual insight and timing could constructa financial plan for working cappital that adhered perfectly. The difficulty rests in determining precisely what part of current assets in temporary and what part is permanent.

To compound the problem, we are never quite sure how much short-term or long-term financing is available at a given time.

3.2. Long – Term Financing

To protect against the danger of not being able to provide adequate short-term financing in tight money periods, the financial manager may rely on long-term funds to cover some short-term needs.

By using long-term capital to cover part of short-term needs, the firm virtually assures itself of having adequate capital at all times.

3.3. Short – Term Financing (Opposite Approach)

Many small businesse do not have access to such long-term capital and are forced to rely heavily on short-term bank and trade credit. Short-term financing offers some advantages over more extended financial arrangements. As a general rule, the interest rate on short-term funds is lower than that on long-term funds.

A working capital financing plan in which short-term funds are used to finance not only temporary current assets, but also part of the permanent working capital needs of the firm.

4. The Financing Decision

Corporations would like many financing alternatives in order to minimize their cost of funds at any point. During an economic boom period, a shortage of low-cost alternatives exists, and firms often minimize their financing cost by raising funds in advance of forecasted asset needs.

A decision is made at each point until a final financing method is chosen in most cases, a corporation will use a combination of these financing methods. The ratio of long-term financing to short-term financing at any point in time will be greatly influenced by the term structure of interest rates.

4.1. Term Structure of Interest Rates

The term structure of interest rates is often referred to as the yield curve, which represents a relatively short-term and long-term interest rate at a given point in time. Understanding interest rate changes and interest rate theory is extremely valuable for the CEO to make a rational decision.

The yield curve for both corporate and government securities changes daily to reflect the current competitive conditions in the currency and capital markets, expected inflation and changes in economic theory.

The first theory is liquidity premium theory, which says that long-term interest rates should be higher than short-term interest rates. Long-term premiums on short-term interest rates exist because short-term securities have higher liquidity and therefore higher rates must be provided to potential long-term bond buyers to attract them.

Market segmentation theory (second theory) states that the market is divided into market segments by financial institutions investing in the market. Commercial banks prefer short-term securities of one year or less to match their short-term lending strategies. Savings and loans and other financial mortgage institutions prefer securities of an average length of 5 to 7 years, while pension funds and life insurers prefer long securities. The term is from 20 to 30 years to offset their long term nature for contract owners. Needs, desires, and strategy of these investors tend to strongly influence the nature and relationship of short and long term interest rates.

Third theory is expectations hypothesis. This theory explains the yield on long-term securities as a function of short-term interest rates. The expected theory of long-term

interest rates reflects the average of short-term expectations over a period of long-term security.

This theory helps them set the expectation of financial cost when choosing short or long term debt. There are some practical implications, all three of the term structure theory is just interest.

The Fed kept all the low interest rates. The shorter the term, the lower. This Fed action is intended to help the economy recover recession. The big difference between the 10-year rate also helps banks to fix their balance sheets by reducing their debt ratios. "

An upward-sloping yield curve considered normal, but the difference between long and short terms is often wide. In general, the higher the curve, the higher the interest rate will be. The reverse is a downward-sloping yield curve.

4.2. What does CFO do when interest rates fluctuate?

High interest rates and is expected to fall in, while CFOs should only borrow short-term loans.

When interest rates fall, it is advisable to borrow long-term loans. Most long-term loans will pay off for short-term loans and upgrade the equipment needed.

5. A Decision Process

5.1. Introducing Varying Conditions

Although the use of short-term funding is cheaper, it provides more money. But not always. In times of tight budgets, when capital is scarce, short-term financing can carry an exorbitant interest rate. For these reasons, the company may want to evaluate the plan based on different assumptions about the economy and the money market.

5.2. Expected Valued

Comparisons of past data combined with economic forecasts can help increase the likelihood of additional returns, and limit the risk to business.

6. Shifts in Asset Structure

Company's solvency depends on short-term assets and short-term debt. The short-term debt is higher than the short-term assets means that the ability to collapse, bankruptcy of the company is very high. As the company's profit grows, its receivables increase,

inventory increases and short-term debt can be reduced. In times of economic downturn. Cash storage, short term capital can help companies reduce the possibility of collapse.

Each company must decide how to liquidate its assets and financial needs accordingly.

If you choose short-term loans, the company must be qualified to maintain profit and hopefully increase profits to offset the high cost of borrowing due to short-term borrowing.

Safe companies choose long-term loans to limit risk if there are economic fluctuations.

7. Toward an Optimal Policy

The firm should attempt to relate asset liquidity to financing patterns, and vice versa. Each firm must decide how it wishes to combine asset liquidity and financing needs. The aggressive will borrow short term and maintain relatively low levels of liquidity, hoping to increase profit. It will benefit from low-cost financing and high-return assets, but it will be vulnerable to a credit crunch. The more conservative firm, will utilize established long-term financing and maintain a high degree of liquidity.

8. Working Capital Problems in a Small Business

Many small business households often have financial difficulties, especially for retailers. These households often have fixed annual sales commitments, but seasonal business activities can not compete with large retail chains. It is very difficult to attract financial capital, especially if you want to borrow from a bank you need a lot of verification and qualification to ensure your ability to pay as well as verify the source of your assets. So every manager must structure his or her working capital and anticipate the risks that can be gleaned to maintain the money properly and create credibility for attracting outside capital.

9. Discussion questions

9.1. Explain how rapidly expanding sales can drain the cash resources of a firm. (L06-3)

Answer: Rapidly expanding sales will require a buildup in assets to support the growth. In particular, more and more of the increase in current asset will be permanent in nature. A nonliquidating aggregate stock of current assets will be necessary to allow for floor displays, multiple items for selection, and other purposes. All of these "asset" investments can drain the cash resources of the firm.

9.2. Discuss the relative volatility of short and long- term interest rates. (L06-4)

Answer: Figure 6-10 shows the long-run view of short- and long-term interest rates. Normally, short-term rates are much more volatile than long-term rates.

9.3. What is the significance to working capital management of matching sales and production? (L06-3)

Answer: If sales and production can be matched, the level of inventory and the amount of current assets needed can be kept to a minimum; therefore, lower financing costs will be incurred. Matching sales and production has the advantage of maintaining smaller amounts of current assets than level production, and therefore less financing costs are incurred. However, if sales are seasonal or cyclical, workers will be laid off in a declining sales climate and machinery (fixed assets) will be idle. Here lies the tradeoff between level and seasonal production: Full utilization of fixed assets with skilled workers and more financing of current assets versus unused capacity, training and retraining workers, with lower financing for current assets.

9.4. How is cash budget used to help manage current assets? (L06-1)

Answer: A cash budget helps minimize current assets by providing a forecast of inflows and outflows of cash. It also encourages the development of a schedule as to when inventory is produced and maintained for sales (production schedule), and accounts receivables are collected. The cash budget allows us to forecast the level of each current asset and the timing of the buildup and reduction of each.

9.5. The most appropriate financing pattern would be one in which asset buildup and a length of financing terms are perfectly matched. “Discuss the difficulty involved in achieving this financing pattern. (L06-5)

Answer: Only a financial manager with unusual insight and timing could design a plan in which asset buildup and the length of financing terms are perfectly matched. One would need to know exactly what part of current assets is temporary and what part are permanent. Furthermore, one is never quite sure how much short-term or long-term financing is available at all times. Even if this were known, it would be difficult to change the financing mix on a continual basis.

9.6. By using long term financing to finance part of temporary current assets, a firm may have less risk but lower returns than a firm with a normal financing plan. Explain the significance of this statement. (L06-5)

Answer: By establishing a long-term financing arrangement for temporary current assets, a firm is assured of having necessary funding in good times as well as bad, thus we say there is low risk. However, long-term financing is generally more expensive than short-term financing and profits may be lower than those which could be achieved with a synchronized or normal financing arrangement for temporary current assets.

9.7. A firm that uses short-term financing methods for a portion of permanent current assets is assuming more risk but expects higher returns than a firm with a normal financing plan. Explain. (L06-3)

Answer: By financing a portion of permanent current assets on a short-term basis, we run the risk of inadequate financing in tight money periods. However, since short-term financing is less expensive than long-term funds, a firm tends to increase its profitability over the long run (assuming it survives). In answer to the preceding question, we stressed less risk and less return; here the emphasis is on risk and high return.

9.8. What does the term structure of interest rates indicate? (L06-4)

Answer: The term structure of interest rates shows the relative level of short-term and long-term interest rates at a point in time on U.S. treasury securities. It is often referred to as a yield curve.

9.9. What are three theories for describing the shape of the term structure of interest rates (the yield curve)? Briefly describe each theory. (L06-4)

Answer:

Liquidity premium theory, the market segmentation theory, and the expectations theory. The liquidity premium theory indicates that long-term rates should be higher than short-term rates. This premium of long-term rates over short-term rates exists because short-term securities have greater liquidity, and therefore higher rates have to be offered to potential long-term bond buyer to entice them to hold these less liquid and more price sensitive securities.

The market segmentation theory states that Treasury securities are divided into market segments by the various financial institutions investing in the market. The changing needs, desires, and strategies of these investors tend to strongly influence the nature and relationship of short- and long-term rates.

The expectations hypothesis maintains that the yields on long-term securities are a function of short-term rates. The result of the hypothesis is that when long-term rates are much higher than short-term rates, the market is saying that it expects short-term rates to rise. Conversely, when long-term rates are lower than short-term rates, the market is expecting short-term rates to fall.

10. Summary

We advocate tying the maturity of the financing plan to the maturity of the current assets. That is, finance short-term cyclical current assets with short-term liabilities and permanent current assets with long-term sources of funds. In order to carry out the company's financing plan with minimum cost, the financial manager must keep an eye on the general cost of borrowing, the term structure of interest rates the relative volatility of short- and long-term rates, and predict. Because the yield curve is usually upward sloping, long-term financing is generally more expensive than short-term financing. This lower cost in favor of short-term financing must be weighed against the risk that short-term rates are more volatile than long-term rates. Additionally, if long-term rates are expected to rise, the financial manager may want to lock in long-term financing needs before they do. The firm has a number of risk-return decisions to consider. Though long-term financing provides a safety margin for the availability of funds, its higher cost may reduce the profit potential of the firm. On the asset side, carrying highly liquid current assets assures the bill-paying capability of the firm-but detracts from profit potential. Each firm must tailor the various risk-return trade-offs to meet its own needs. The peculiarities of a firm's industry will have a major impact on the options open to its management.