# 1

# Financial Management

*"Inflation is when you go to the same restaurant each morning, order the same breakfast, and each time have to ask how much it costs."*

*— Brazilian businessman*

The critical factor that distinguishes the financial management of a business under high inflation is the two-dimensional nature of money. Because of the speed with which the buying power of cash erodes, its value is a matter not just of quantity, but of timing — when it is invested, when it is received, when it is paid out, etc.

Under such circumstances, any monetary transaction takes on a much greater immediacy. A dollar today is quite literally not a dollar tomorrow, and the value of a corporation's cash holdings and receivables deteriorates rapidly. As a result, the precise timing of any transaction can become as important — or even more so — than the specific amount involved.

While cash management is an important aspect of business management in any economy, it is absolutely critical during hyperinflation. For many South American companies, intelligent, innovative cash management provides a major source of corporate profits. Likewise, poor cash management has destroyed companies throughout South America with a speed that is unrivaled in the American business arena.

The impact of money's increased two-dimensional nature is broad, changing the very way business managers must look at

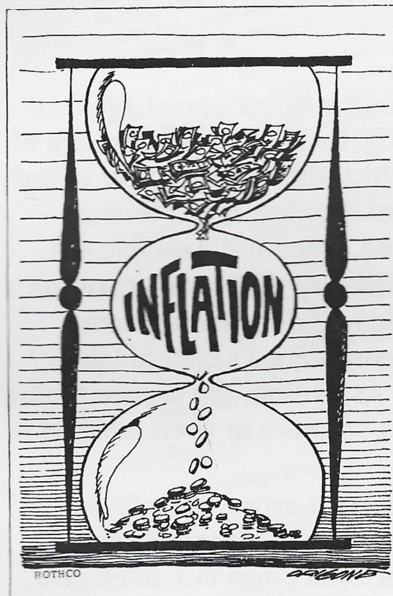
their operations. Cash management becomes the primary key to success and failure, shifting the relative importance of the various departments of a business. Hyperinflation changes not only the pace at which decisions must be made, but the ways in which they are made, and it alters a business's relationship with constituents ranging from its customers and suppliers to its banks and investors.

Among all the factors that arise for businesses facing high inflation rates, there is none more important than the impact of time on money.

■ ***Make absolutely certain your managers understand the time value of money.***

Management from top to bottom must be aware of the time value of money, because it is a critical consideration in any decision involving a financial transaction. Failure to consider the impact of time into such decisions can be ruinous.

One area where time is particularly important is purchasing, because a delay in ordering and/or paying for inventory can significantly increase a company's costs. In Brazil during early 1988, it took less than four months for the average item to double in price.




Time is perhaps an even more critical factor when making a sale. In the United States, terms of sale might include a discount for a payment made in ten days, or the full amount if payment is made in thirty days. This would be disastrous in a hyperinflationary economy, where, at the extreme, a thirty-day delay could cut the value received for a product in half. Even waiting as little as seven days is a big mistake unless interest that reflects the rate of inflation is charged for every day's delay.

In South America, this is particularly problematic when dealing with government agencies, which are notoriously late in their

payments. Since the state owns and operates such a large percentage of the economy, this can be a serious problem for private suppliers. When not restricted by wage and price controls, firms compensate for these delays by adding an extra margin into the prices they charge the government.

While the government may not be a problematic customer in the United States, certain other buyers might. Firms may want to analyze the payment histories of their customers to determine those who tend to drag out their payables, and charge these customers a premium to counteract the lessened value of late payments.

## ■ ***Never allow your cash to remain idle.***

All South American companies share one common bit of philosophy: Never leave cash so that it is not earning interest, even for one day. Cash investments are made on an overnight basis and renewed daily.

Payment for goods and services is received as quickly as possible, and then that payment is used immediately. It is either invested in a high-yield money market account, used to purchase some kind of hard goods or inventory, or placed into a dollar-denominated account, which often means it is sent out of the country.

Since rates vary among different banks, it is not unusual for a firm's financial officer to call many banks at the end of each business day in search of the best overnight rate. Available cash is then spread between three or four banks for security, in case one bank goes bankrupt.

Many South American companies with excess cash choose to lend it to others. High reserve requirements, as much as 90 percent of deposits, make it difficult for South American banks to meet the financial needs of local corporations. Successful companies with surplus cash often fill this void by becoming competitors of the local banking establishment, and many generate significant interest income.

While every company may employ any of a variety of cash investment options during hyperinflation, every successful company has one policy in common: cash is *never* left idle.

■ ***Good cash management can provide a major source of profit, while poor cash management can destroy a company in a matter of months.***

In hyperinflation, operational management frequently takes a back seat to cash management, which can have an immense impact on a firm's income. The earned interest on the lending and investing of surplus cash can become an important ingredient in a company's total profits.

In 1985, one client of a large Argentine public accounting firm earned more than half its $200 million pretax income from investing the company's cash. The following year, another Argentine manufacturer's interest income accounted for $47 million of its $103 million profit. These figures are not at all unusual in a hyperinflationary economy, but would be inordinately high for a U.S. manufacturing firm.

Rarely does interest income have a significant impact on the profits of an American manufacturer.

By the same token, many South American businessmen and bankers indicate that, during high inflation, poor cash management can destroy a company within months, if not weeks. If cash is allowed to stay idle without earning interest income — if cash is not earning interest at all times, or customers are allowed to drag out payables without being charged a premium to counteract inflation — the firm's asset balance and profits will be reduced and may over time be wiped out altogether.

■ ***Be prepared to convert dollars into a stable foreign currency.***

Should inflation accelerate in the United States, American businesses may be forced to convert their dollar holdings into a more stable currency to keep the value of their assets from plummeting.

Throughout Brazil, Argentina and Bolivia, companies routinely hold a minimal proportion of their money in domestic currencies, converting the remainder into a more stable currency whenever possible. Most often they turn to the U.S. dollar.

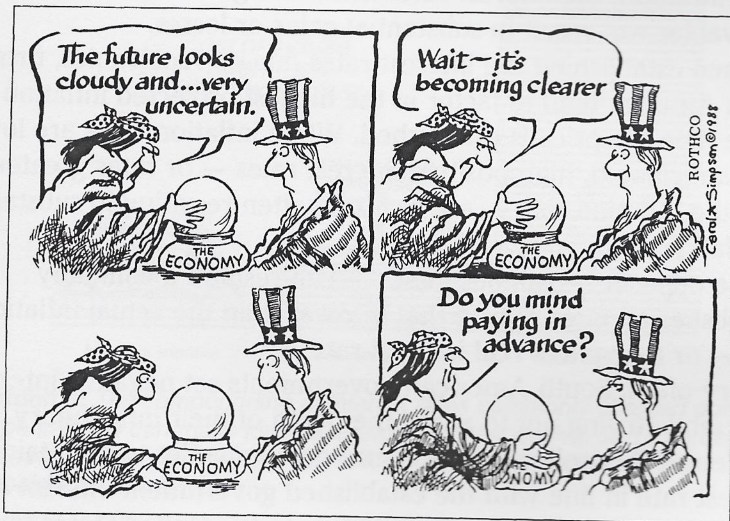
American businesses facing runaway inflation will have to seek an alternative currency. This may be the German mark, Swiss

franc, Japanese yen or some other currency, depending on conditions in foreign exchange markets at the time.

This conversion may be significantly more difficult for American businesses than it is for South American businesses. The dollar is currently the world's most freely traded currency, and Brazil, Argentina and Bolivia have developed domestic exchange markets based on the dollar, institutionalizing its existence in their economies. The U.S. has no such system in place for a second currency, and access to an alternative currency may be limited.

## ■ *Whenever possible, deal in cash payments.*

Businessmen have to be very careful in extending credit during hyperinflation, so it is always safest to complete deals immediately, in cash. Indexation — the normal alternative to cash payment — is not a cure-all, and no index accurately reflects the individual seller's own inflation rate. While every company has its own specific mix of necessary resources, indexes are based on averages, and may or may not be favorable to the companies in question.




In Bolivia in 1985, during the worst of that country's hyperinflationary crisis, terms of sale generally dictated that the price charged for goods was the price in effect at the time the customer received the merchandise. All payments had to be made in cash, and the price was determined not by using the official currency exchange rate, but by using the black market currency

exchange rate, which more accurately reflected the inflationary impact on the value of the currency than did the official rate.

### ■ *Anticipate competition between the buyer and seller over when payments will be made.*

The timing of payments takes on added importance during hyperinflation, and the issue of who is going to have the use of the money and when it will be available may be a key negotiating point between buyer and seller.

A seller that is in desperate need of cash may give a buyer a significant price discount for early cash payment. Buyers, on the other hand, may try to negotiate long lags in payment schedules in order to assure their own access to cash, and may be willing to pay a significantly higher price for a longer payment schedule.

### ■ *Work continually to maintain positive real interest rates.*

Because of the volatility of real interest rates during hyperinflation, the interest rates firms charge on their own receivables can result in substantial gains or losses.

When establishing the interest rates due on receivables, firms in South America tend to factor in the highest projected inflation rate at the time the price is established. When inflation rates are lower than anticipated, high positive interest rates — or rates greater than the inflation rate — are realized, often resulting in substantial windfall profits.

The opposite — ruinous losses — can result if a company establishes an interest rate that is lower than the actual inflation rate — or a negative real interest rate.

Very often, South American governments set negative interest rates while trying not to admit the depth of their inflationary problems. This policy puts pressure on companies to maintain an interest rate in line with the established government interest rate.

During the 1970s, savings and loans in the United States found themselves in a financial squeeze because many of the home mortgages they had outstanding yielded a negative interest rate. Meanwhile, they were forced to pay their depositors a positive interest rate that was adjusted for the high rates of inflation. American companies should be careful not to allow themselves to be placed in a similar squeeze should inflation rates take off.

■ ***Develop practices that enable you to internally finance working capital.***

Private companies within Bolivia, Brazil and Argentina are extremely limited in their efforts to borrow money, and it is a fair assumption that a similar condition would develop in the United States if inflation rises sufficiently.

According to the South American model, banks have very small amounts of money to lend during high inflation, and the money they do have is made available only at extremely high interest rates and only for short periods of time. In the first quarter of 1988, for example, companies needing capital in Brazil had to pay 15 to 18 percent monthly interest on loans. (The cost of a loan at such rates is shown in Exhibit 5.)

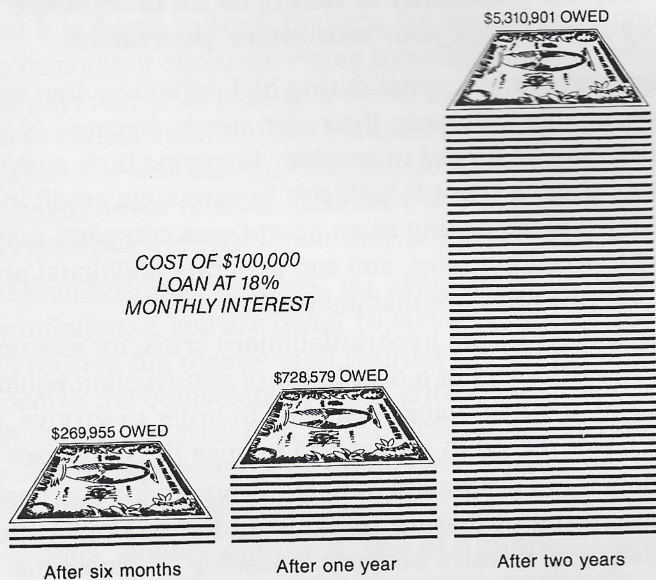



**Exhibit 5:** *The compounding of interest rates commonly charged during hyperinflation can make loans astronomically expensive. At 18 percent monthly interest, a $100,000 loan would cost over $5 million if left unpaid for just two years.*

During hyperinflation, venture capital is not really an alternative either, since available funds can instead be invested in bonds with an extremely high yield, and much of the money leaves the country for safer, more certain investments.

Often a company's only choice is to borrow from its parent company outside the country, or, as is most often the case, not to

borrow at all. This inability to borrow results in a stagnation of investments and a severe curtailment of economic growth.

Most companies, therefore, can expand only through internal financing, and working capital needs are typically met by customers.

In Brazil, for example, purchasers of capital equipment pay as much as 50 percent down, with the balance to be adjusted by indexation. Each sale is treated differently, and the amount of down payment depends on the financial condition of the customer and its relationship to the supplier. In some extreme cases, sales are strictly in cash, and many South American companies go so far as to negotiate with their customers for prepayment of orders.

### ■ *Consider the possibility of acting as an acceptance company to facilitate your customers' purchases.*

The evaporation of capital during high inflation often leaves customers unable to finance their own needs. Because of this, companies may be forced to consider financing their customers' purchases. Though there is high risk to extending credit in high inflationary periods, acting as an acceptance company may be the only way to maintain sales, and can generate additional profits if positive interest rates are maintained.

During Bolivia's 1985 hyperinflationary crisis, for example, most of the customers of a distributor of construction equipment were unable to obtain bank financing. In order to survive, the distributor was forced to step in and finance the purchases itself.

The inability of customers to borrow money for purchases can also be overcome by leasing agreements. For example, after an in-depth analysis of its sales network, a leading multinational manufacturer found that most of its customers and potential customers in Argentina were unable to obtain financing to purchase its product. As a result, the company was losing sales to a competitor that offered its customers an inferior product but better financial terms. The multinational, not wanting to establish an acceptance company, decided the best method to maintain sales was to lease rather than sell its product. Rentals became a form of lending, with the lease contracts tied to the exchange rate between the U.S. dollar and the Argentine austral. Through this innovative method of making its product more accessible, the company protected itself against inflation and its business soared.

It is important to note that in a hyperinflationary economy, overcoming your customers' inability to obtain financing is often as important a selling tool as product quality or price. Salesmen are often required to sell not only a product, but also a method to finance purchase of that product.

## ■ *Make the rapid collection of receivables a primary goal.*

Because money loses its value so quickly and working capital is in such short supply during hyperinflation, the timely collection of receivables becomes absolutely critical. It is also important that, immediately upon receipt, all payments are deposited in interest-bearing accounts.

The fact that tomorrow's money will be worth significantly less than what it is worth today is perhaps the single most important lesson to remember about surviving hyperinflation. A delay in receiving payment of as little as a week, surely a month, without a premium to reflect inflation, can completely eliminate your profit margin, and may well place a company in a loss position from which it might never recover. (Exhibit 6 shows how rapidly the value of receivables erodes when they are past due.)

The reason is simple. In Brazil, for example, at 18 percent monthly inflation, if you are owed 10,000 cruzados on January 1 but don't receive the money until February 1, the payment will only be worth the equivalent of 8,200 cruzados. By March 1, it will be worth only 6,724 cruzados. A 30 percent profit margin — fairly good by American standards — would have totally disappeared during this two-month period.

In Argentina, Bolivia and Brazil, one of a business's most important goals is to keep its DSO (days sales outstanding) as low as possible. Large firms sometimes use their leverage to force rapid payment from their customers, using their size to delay their own payments to their creditors at the same time. This is an obvious attempt to beat inflation at both ends of the spectrum — when paying *and* collecting bills.

Because of the high time value of money, South American companies often penalize those customers who do not pay promptly. These slow-paying buyers are often the last to have their orders filled, and their new orders are frequently rejected. This becomes particularly critical as shortages develop, a typical

occurrence once governments attempt to halt hyperinflation through wage and price controls.

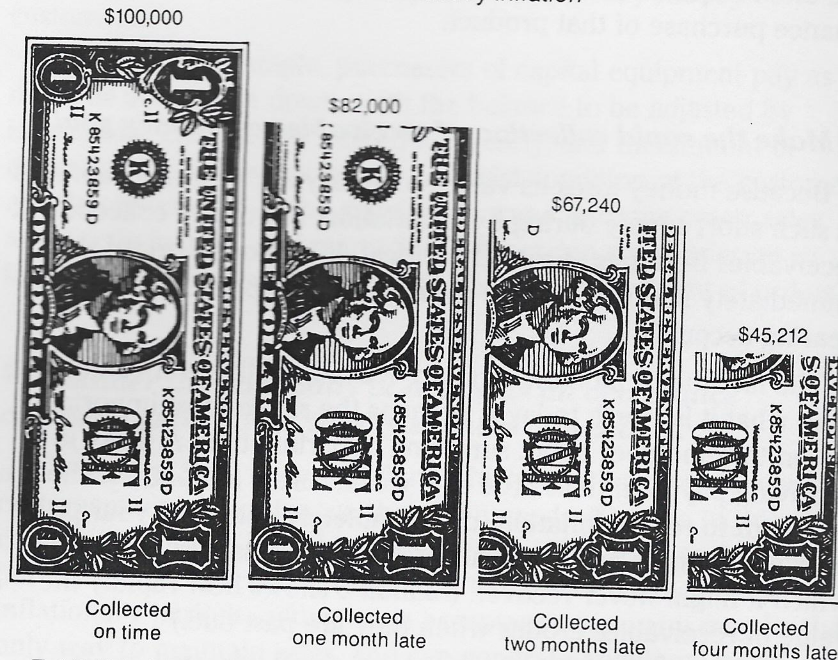



**Exhibit 6:** *With inflation running 18 percent monthly, a $100,000 payment will lose more than half its purchasing power if it is collected just four months late.*

## ■ *Be aware that the stock market may become an uncertain source of capital.*

The ability of the government to control inflation greatly influences the stability of the stock market. In inflationary economies, like those in South America, stock markets tend to resemble roller coasters, in which peaks and valleys in stock prices correspond to hopes of economic reform and fears of economic collapse.

As inflation rises, investors often abandon the stock market, making it significantly less useful as a source of capital.

Brazil's stock market, the largest in any developing country, provides an excellent illustration of the volatility brought on by inflation. In February 1986, the Brazilian stock market soared on hopes surrounding the Cruzado Plan, which the government introduced to curb the inflationary spiral. From February 1986 to

April 1986, the Bovespa Index — similar to the U.S. Dow Jones Average — more than doubled. Then the Cruzado Plan began to falter, price freezes caused company profits to disappear, and, between April 1986 and October 1986, the Index declined 50 percent.

The stock market does well during early stages of a new plan to control inflation because individuals react negatively to the lower interest rates banks pay as the inflation rate falls. Depositors tend to withdraw their money from banks in favor of investments they believe will yield a higher rate of return, such as the stock market or properties. As inflation begins to build again, interest rates increase, and fears about economic stability grow, driving many investors to desert the stock market and deposit in banks again.

If inflation rises in the U.S., firms should anticipate a flight of capital — particularly foreign capital — from our stock market. This may limit the market's viability as a source of equity capital, making it more difficult for companies to raise money. Domestic investors as well as foreign investors will seek safer havens for their funds, and will tend to turn their backs on the stock market.

In Brazil, where 3,400 companies are qualified to issue stock, only 610 companies were traded on the market in 1986. The rest chose not to enter the market at all because it was an uncertain source of capital.

The U.S. stock market may be hit especially hard by inflation because of the huge role foreign investors play here. When a country experiences inflation, foreigners tend to become very leary of investing in its stock market because they face a double risk: first, that the currency will devalue, reducing the value of stock holdings; and second, that the market will plunge because of economic instability. These two events can lead to a double loss for the foreign investor.

If inflation rises in the United States, then, it is likely that many investors will flee the stock market, substantially reducing its usefulness as a source of capital.

■ ***Develop relationships with several banks to facilitate capital availability in tightened capital markets.***

Banks play an integral role in a company's operation during hyperinflation, and under such conditions it may become necessary to develop or maintain relationships with more than

one bank. Some companies in South America have deposits with as many as 17.

Because access to capital during high inflation is extremely limited, a connection with several lending institutions increases a firm's chances of obtaining financing when necessary. The more banks a company does business with, the more potential sources of credit it has.

As mentioned earlier, another reason South American companies deal with several banks is the increased rate of bank failures during high inflation. By spreading their deposits around, companies avoid risking too much with any single institution.

A third reason to conduct business with numerous banks is to have branches in a wide variety of locations. Since every hour counts, one can't afford the lost time that would result in having checks sent to a central location and then deposited. A five-day lag in the deposit could significantly reduce the value of the payment. In Brazil, for example, most customers pay their invoices directly to a bank rather than to the company itself, postal boxes, or lock boxes.

Problems related to the timeliness of bank transactions are unlikely to be so great in the United States because of the increasingly widespread use of electronic fund transfers. Should inflation begin to take off here, it is likely this trend will accelerate.

## ■ *Make corresponding accounts and tax deposits a key negotiating point with your banks.*

Much more than in the United States, South American companies constantly negotiate with their banks to obtain better financial arrangements. One reason they do so is because during hyperinflation, the interest income available to banks in corresponding accounts and tax deposits is substantial, and can often be used for leverage in these negotiations.

In Brazil, for example, businesses are required to deposit payroll taxes three days after paying an employee, but banks have ten days to deposit that money with the government. During hyperinflation, this seven-day difference can mean substantial earnings for the bank. At one point in 1987, the annualized interest rate stood at 900 percent, or approximately 2½ percent a day in simple interest. On a deposit of $1 million, that seven-day delay would net the bank approximately $175,000.

In South America, knowledge of a change in monetary policy, government bond rates, or the size of a bond issue are all eagerly awaited by businessmen and individuals alike. Getting the jump on officially released information by as little as five minutes can be extremely profitable. Those people with access to government officials have a tremendous advantage in determining how their cash should be used.

Gathering and acting on such information can be the key to survival, and often takes precedence over standard operational concerns. According to a Bolivian banker, during the worst of that country's hyperinflationary crisis, "No company survived by doing what it was supposed to do. Everyone speculated."

Regardless of how detailed or up-to-the-minute one's information is, there is always a high degree of uncertainty when making decisions in a high inflationary economy because of the rate at which all economic factors change. One can never be sure that economic data is being interpreted correctly. Prices and rates rise so rapidly that even the best laid plans can go suddenly and disastrously awry.

During one particularly volatile month in early 1987, the president of a Brazilian manufacturer of healthcare products was faced with the decision of putting his company's excess cash back into his company, or into a ninety-day money market account. In one form or another, thousands of South American businessmen are confronted with this kind of decision every day. In this case, since the government had recently forced up interest rates to discourage borrowing for the purpose of speculating on raw materials, this Brazilian executive chose a 90-day account paying 300 percent annual interest. A week later, the government decided to tighten credit further and interest rates jumped to 400 percent, turning the executive's well-reasoned decision into an unfortunate one. By locking in his money just one week too early, he forfeited 20 percent in interest earnings. On a $100,000 investment, that would translate into a loss of over $8,000 in just 90 days.

Because interest rates become so volatile, hyperinflation is a second-guesser's breeding ground.

### ■ *Be prepared to maintain more than one set of books.*

During hyperinflation, historical costs become meaningless as a

means of comparison, and multiple sets of books are necessary to get an accurate picture of performance.

Consider what would happen to an Argentine company that simply kept a single set of books in australes. It might double its profits from one million to two million australes between 1986 and 1987, but the failure to understand what that means in real terms would be ruinous. While one million australes were worth $795,545 on December 31, 1986, a year later two million australes were worth only $533,333. In this hypothetical case, an apparent 100 percent increase in profits was a 33 percent decrease in real terms.

To combat this problem, virtually every company in Argentina, Bolivia and Brazil keeps more than one set of books, and some companies keep as many as four. This obviously increases the number of individuals required in an accounting department. Several South American financial directors reported that they had to double their staffs to cope with the requirements of inflationary bookkeeping.

In Argentina, for example, one set of books is kept in australes, the new Argentine currency. In order to make historical comparisons to past years, another set is maintained in pesos, the old currency. A third set is maintained in U.S. dollars. This is often the set that is used to manage the company, and is the one that is always used by U.S. multinationals, since SEC regulations mandate that they must report in a manner consistent with their U.S. parent. Finally, there is a concept in vogue among some companies to keep a set of books in units of the products they produce. In this way, they eliminate any inflationary impact on their operations by tracking sales growth in physical units sold rather than sales revenue.

Because of the necessity of maintaining different sets of books in different currencies, the preparation of financial statements is terribly confusing. Firms have to develop systems that provide current information in such areas as prices, costs and inventories. They need a financial system and reporting structure that will reflect inflation's overall impact on the performance of their business and allow them to make informed decisions. These systems should have the capability of being updated on a daily basis so that they reflect the most current price changes taking place in the economy.

Such systems will be more easily developed in the United States than in South America because of the greater prevalence of computerized information processing here. American firms preparing for high inflation would be wise to ensure that their computer capabilities are sophisticated enough to perform the necessary functions.

### ■ *Inventory valuation should be based on NIFO rather than LIFO.*

Another difficulty of maintaining accurate financial records in an inflationary economy is the valuation of inventory. The standard inventory valuation practice in the United States is LIFO, or Last In First Out. LIFO assumes that items purchased last will be sold first. By valuating inventory items at the price of the most recent purchases, inventory value becomes comparable to current prices.

In South America, on the other hand, the inventory valuation process is taken one step further by the use of NIFO, or Next In First Out. NIFO is used to reflect future inflation by valuing the cost of replacing inventory. NIFO valuation is, in effect, a company's best guess as to the impact of the future rate of inflation on the costs of the materials it uses.

If a company were to use LIFO during high inflationary periods, it would be greatly underpricing the value of its inventory and therefore eroding its profit margin. At Brazil's current 20 percent monthly inflation rate, an inventory valuated at $1 million with LIFO would have an actual replacement cost of $1,200,000 after just one month. In such a case, NIFO would have avoided a potential $200,000 undervaluation of inventory.

### ■ *Develop an appropriate inflationary adjustment for capital replacement or the value of your capital will disappear.*

Tax depreciation deductions are normally based on original purchase costs rather than replacement costs. However, high inflation has a major impact on a firm's capital replacement costs and failure to take this into account during such times can be suicidal, because it can cause the firm's capital base to disappear.

For example, if a Brazilian company purchases a piece of equipment for 300,000 cruzados, it might be allowed to deduct

100,000 per year from its taxable income for three years. But at 400 percent per year inflation, the replacement cost three years later would be more in the neighborhood of 37,500,000 cruzados. Unless the company increases its annual depreciation to account for this inflationary effect, the value of its capital stock for tax purposes will decline to virtually zero.

Under such circumstances, inflation will not only eliminate a company's ability to recapture its capital base, but will also cause the firm to have virtually no depreciation deductions for tax purposes.

The inability of a country's businesses to recapture the true cost of their capital will obviously have a very negative impact on capital formation within the country as a whole.

## *SUMMARY*

- Make absolutely certain your managers understand the time value of money.
- Never allow your cash to remain idle.
- Good cash management can provide a major source of profit, while poor cash management can destroy a company in a matter of months.
- Be prepared to convert dollars into a stable foreign currency.
- Whenever possible, deal in cash payments.
- Anticipate competition between the buyer and seller over when payments will be made.
- Work continually to maintain positive real interest rates.
- Develop practices that enable you to internally finance working capital.
- Consider the possibility of acting as an acceptance company to facilitate your customers' purchases.
- Make the rapid collection of receivables a primary goal.
- Be aware that the stock market may become an uncertain source of capital.
- Develop relationships with several banks to facilitate capital availability in tightened capital markets.
- Make corresponding accounts and tax deposits a key negotiating point with your banks.

- Develop your ability to anticipate changes in monetary and fiscal policy and the effects on interest rates in financial markets.
- Be prepared to maintain more than one set of books.
- Inventory valuation should be based on NIFO rather than LIFO.
- Develop an appropriate inflationary adjustment for capital replacement or the value of your capital will disappear.