

**INFLATION ACCOUNTING
AND EFFECTS OF INFLATION ADJUSTED
ACCOUNTING FIGURES ON DECISION MAKING**

A THESIS

**Submitted to the Faculty of Management
and the Graduate School of Business Administration
of Bilkent University
in Partial Fulfillment of the Requirements
For the Degree of
Master of Business Administration**

By

ALİ İHSAN ÖZKAŞIKÇI

SEPTEMBER 1995

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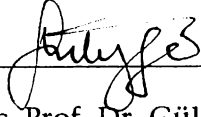
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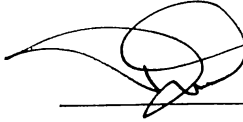
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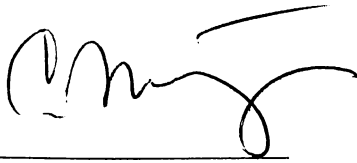
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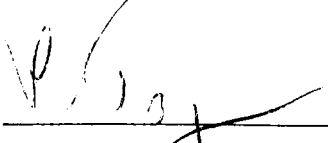
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Asst. Prof. Dr. Can Őimga MUĖAN

Approved by the dean of the Graduate School of Business Administration.


Prof. Dr. SubiĖey TOGAN

ABSTRACT

**INFLATION ACCOUNTING
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BY

ALİ İHSAN ÖZKAŞIKÇI

M.B.A. THESIS

BİLKENT UNIVERSITY - ANKARA

SEPTEMBER 1995

Supervisor: Dr. Can Şimga MUĞAN

Various studies in accounting have shown that, historical cost model can not adapt itself to the changing economic environment. The change that is being suggested is a modification to the existing accounting practice of reporting only historical cost information. The scope of this case study is to find out whether inflation adjusted accounting figures is necessary for meaningful decision making by the user of the financial statement. General Price Level Accounting has been selected as an accepted methodology for revaluation.

Keywords: Inflation, Inflation Accounting, Historical Cost Accounting, General Price-Level Accounting, Revaluation

ÖZET

ENFLASYON MUHASEBESİ VE ENFLASYONA GÖRE AYARLANMIŞ MUHASEBE VERİLERİNİN KARAR-ALMA ÜZERİNDEKİ ETKİLERİ

HAZIRLAYAN

ALİ İHSAN ÖZKAŞIKÇI

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Muhasebe alanında yapılmış çeşitli araştırmalar, geleneksel muhasebe sisteminin değişen ekonomik yapıya uyum sağlamadığını göstermektedir. Önerilen değişiklik, yalnızca geleneksel muhasebe sistemi ile yapılan raporlama sistemini düzenlemektir. Bu vaka çalışmasının kapsamı, enflasyona göre düzeltilmiş muhasebe rakamlarının finansal tablo kullanıcılarının anlamlı kararlar vermelerine yardımcı olup olmadığının araştırılmasıdır. Yeniden değerlendirme için, geçerli metodlardan, Fiyatlar Genel Seviyesi Muhasebesi seçilmiştir.

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CHAPTER 1

INTRODUCTION

Accounting is means of communicating the economic events of an entity. The economic events are identified by economic resources controlled by the entity and their changes.

A financial statement is useful, since it represents the financial position and the operating results of the firm. The information provided in the financial statements should facilitate comparison of the performance of the entity with other enterprises as well as performance of the entity over time. Financial ratios, on the other hand, are a convenient way to summarize large quantities of financial data and to compare firms' past performance with current time.

Inflation in Turkey starts to play an important role in the economy especially, after the Cyprus war and the petroleum crisis in 1974. It had become the most important item for the governments and also for the public, but the problem is not solved yet. Instead, the public is used to live with high inflation for many years.

In 1982, the first application of inflation accounting was introduced as revaluation fund. The government sets a certain percentage to revalue assets at the end of each fiscal year. The percentage set for revaluation is constant for every industry but, inflation amount is different from one industry to the other. Therefore, this method of revaluating is unsatisfactory.

In this study, monthly accounting data's were converted to balance sheets and income statements are prepared. Considering the fact that, the monthly inflation rate in Turkey is usually more than the yearly inflation in developed countries, monthly corrections in accounting data will supply more meaningful information.

In chapter 2, the need for inflation accounting was discussed. Also, some information was given about alternative accounting methods and adjustments in Turkish Codes . In Chapter 3, the data and methodology were described. The analyses of the results of inflation accounting were also made in this chapter. In chapter 4, the study was summarized and recommendations were stated.

The goal of this case study is to explore whether inflation adjusted accounting figures is necessary for meaningful decision making by the user of the financial statement.

CHAPTER 2

FINANCIAL REPORTING AND INFLATION

2.1. Do We Need Inflation Accounting ?

The goals of the entity are normally economic goals. Consequently, the measurement is primarily economic performance measurement. Any measure of performance generated by the accounting system must be relatively free of dispute, and the measurement has to be highly standardized and verifiable so that, it is relatively insulated from the pressures that may be exerted by the interested parties of their self interest. The virtue of historical cost accounting lies in the fact that, the rules under historical accounting are the least ambiguous of the methods of accounting measurement. Because of its near complete verifiability, the difference between measurer to measurer is likely to be the least.

The principle of historical costs has remained fundamental to accounting methodology for centuries. In fact, even today a large majority of transactions are recorded and reported based on historical costs. This, to some extent, is an indication of its usefulness.

On the other hand, in a world of changing prices, accounting information based on historical cost principle can not adopt itself to the environment and hence doesn't aid the user of the financial statement for meaningful decision making. Because, in historical cost financial statements the cost figures represents the figures of a year ago, which in fact are not comparable to current cost levels.

Adoption of general price-level accounting doesn't mean discarding of historical cost accounting. The recording of actual transactions in the past is still required for control purposes. The alternative suggested is the simultaneous operation of the historical cost and general price-level systems of accounting.

2.2. Alternative Financial Reporting Approaches

To meet the demand for more relevant information, three different solutions have been offered.

2.2.1. General Price-Level Accounting

A currency has a real value that is determined by the amount of goods and services for which it can be exchanged. This real value is commonly called purchasing power. As the economy experiences periods of inflation (rising price levels) or deflation (declining price levels), the amount of goods and services for which a currency can be exchanged changes; that is, the purchasing power of a currency change from one time period to the next.

The aggregation of specific prices at any particular time constitutes a general price level. A general price level change recognizes the change in the value of money in all its uses.

General price-level accounting is historical cost data adjusted for changes in the unit of measurement. If general price-level fluctuations are extreme enough to make cost data less useful than desired, financial statements adjusted for price-level changes can be prepared from the historical cost data.

General price-level accounting changes the measuring unit but retain the historical cost reporting model.

The restatement is accomplished by multiplying the amount to be restated by a fraction, the numerator of which is the index for current prices and the denominator of which is the index for prices that prevailed at the date related to the amount being restated.

In preparing general price-level financial statements, it is essential to distinguish between monetary items, and non monetary items.¹

The advantages of this approach are that it is simple to compute, objective in nature, and easy to understand.

2.2.2. Current Value Accounting

Proponents of this approach argue that the problem is not with the unit of measure but rather with the historical cost model. Current value accounting retains the measuring unit but departs from the historical cost reporting model.

Their position is that users of financial statements are primarily interested in what the business is worth now, rather than what costs were incurred at some point in the past. Their argument is based on the notion of economic asset value, which conceptually is the present value of the future receipts from the particular asset in question.

Technically, the value of an asset could change even during periods of general price stability, due to factors like technological change or change in the demand-supply situation of the asset.

The term current value has been adopted as the generic term representative of the process that reports an entity's resources and obligations on the basis of present worth, using any of several means or techniques of evaluation.

The three most commonly advocated concepts of current value are:

1. Present Value : discounted future cash flows.
2. Net Realizable Value : current cash equivalents.
3. Current Cost

¹ See section 3.2.2. on pp. 11

Present value relates to the future cash inflows and outflows that can be attributed to or related to the specific item or group of items being measured. Present value is measured by discounting at an appropriate interest rate the future estimated net cash inflows, or cost savings, of the item being valued.

A net realizable value model is based on the premise that the value of the asset is the selling price of the asset in the market less cost of disposal, instead of its purchase price or replacement cost. The criticisms of this model are that some assets do not have ready market price, that the computation of value is subjective, and that many assets are held for use, not sale, so that market value is not useful information.

Current cost is the cost of replacing the identical asset owned, that is, one of the same age and the same operating capacity. Current cost may be approximated in a variety of ways but often is computed by applying a specific price index to the historical cost or book value of assets.

2.2.3. Current Value/General Price-Level Accounting

A third group contends that both the units of measurement and the historical cost model should be changed. Advocates of this approach argue that the unit of measurement must be standardized and that after standardization some form of current value accounting should be employed.

2.3. Results of Inflation Accounting: A Literature Summary

- ❑ The gains and losses in purchasing power with respect to assets and liabilities run to considerable amounts even if the rates of price increases are not very high.
- ❑ The results of inflation accounting depend to a high degree on the selection of the price index which is used as an indicator for the general price development.

Even slight differences in price trends do have a considerable impact on the results of purchasing power measurement.

- ❑ Under general price level system, profit rates in the economy would be likely to decline.
- ❑ A number of studies have concluded that the profit rates and both the rates of return in manufacturing had declined.
- ❑ In restated accounting figures, the amount of assets in total assets is decreasing. The amount of fixed assets, and therefore accumulated depreciation is increasing.
- ❑ The amounts of current and long term-liabilities in total liabilities are decreasing, due to an increase in shareholder's equity.

2.4. Inflation Adjustments in Turkish Codes

In 1982, the Turkish Ministry of Finance has changed the accounting regulations, and first applications of “revaluation fund”² had begun.

At the end of each fiscal year, the ministry sets a certain percentage to revalue the fixed assets. The asset in the balance sheet which can be depreciated and the amount of accumulated depreciation is multiplied by a factor, and thus revaluated. The increase due to revaluation is shown in the revaluation fund account in shareholders' s equity. Revaluated figures are stated as the beginning value for the following year's accounting statement.

The revaluation amounts can be added to the capital. If so, the amount added is considered as an asset supplied by the shareholder' s, and the amount is free of taxation. If the revaluation amounts are transferred to different accounts than capital, then they will be considered as profits, and will be taxed.

² Turkish Procedural Tax Code, Item 298

If the revaluated asset is sold, similar to depreciation, the revaluated amount is subtracted from the statements.

This method, in some way, prevents the depreciation of capital. On the other hand, if any gain obtained on retirement of assets, by this method the company can write this gain in the revaluation fund account, which will be tax proof for three years.

CHAPTER 3

DATA & METHODOLOGY

3.1. Data

In this study, inflation accounting adjustments are made on monthly basis. As, the monthly inflation rates in Turkey are higher than the yearly inflation rates in developed countries, restatement of accounting figures on monthly basis will give more meaningful information. Also, the management will be informed on monthly basis about the changing economic conditions, which is a necessity in a dynamic economic environment. On the other hand, the governments are making frequent changes in Turkish Codes, therefore monthly analysis becomes very important.

Five year (1989-1993) monthly accounting figures of a food manufacturing firm was provided from the accounting department. Then, the effects of beginning (except January 1989) and ending balance were eliminated from the figures, leaving out only the monthly transactions. Finally, the figures were added together to obtain a monthly cumulative accounting data on yearly basis (See Appendix A).

In this study, general price-level accounting method is used since;

□ General price-level accounting eliminates the effects of price-level changes without having to develop a new structure of accounting; that is, it preserves the historical cost-based accounting system that is currently used and understood.

□ General price-level accounting enhances comparability of financial statements of a single firm, and also preserves comparability of financial statements between firms if a common price index is used.

□ In Turkey, neither we have specific price indexes which must be used for current value method, nor an established market to determine the market price for some assets.

3.2. Process and Analysis

3.2.1. Selection of the Price Index

The results of the inflation accounting depend to a high degree on the selection of the price index which is used as an indicator for the general price development. Even slight differences in price trends do have a considerable impact on the results of purchasing power measurement.³ The index selection should essentially be determined by the objective of the analysis. In the analysis, the wholesale price index in food manufacturing industry obtained from state statistical institute was used.

TABLE 1: MONTHLY WHOLESALE PRICE INCREASE RATES (%)
IN PRIVATE FOOD MANUFACTURING

MONTHS	1989	1990	1991	1992	1993
JANUARY	3.9	6.4	5.7	7.8	4.5
FEBRUARY	1.9	1.2	3.8	3.4	4.5
MARCH	2.4	2.0	2.2	4.2	4.1
APRIL	6.6	3.0	3.4	2.7	3.7
MAY	7.7	2.3	4.2	3.6	3.2
JUNE	8.2	1.7	2.2	5.6	4.0
JULY	3.9	1.4	2.5	5.4	1.8
AUGUST	3.7	4.4	3.4	2.6	5.1
SEPTEMBER	2.8	4.9	9.8	5.0	6.8
OCTOBER	1.5	4.9	6.2	6.1	8.2
NOVEMBER	2.8	4.3	4.5	4.4	7.4
DECEMBER	3.5	4.1	5.1	4.9	4.9

Source: State Statistical Institute

³ Lützel, H., Inflation Accounting for the Federal Republic of Germany Results Using Different Deflator Price Indices, Review of Income and Wealth Iss. 3 1985, pp. 207 - 221

3.2.2. Monetary and Non Monetary Classifications

Monetary items automatically gain or lose general purchasing power during inflation or deflation as a result of changes in the general price-level index.

On the other hand, holders of non monetary items may lose or gain with the rise or fall of the general price-level index if the non monetary item does not rise or fall in proportion to the change in the price-level index. In other words, a non monetary asset or liability is affected;

- (a) by the rise or fall of the general price level index and,
- (b) By the increase or decrease of the fair value of the non monetary item.

TABLE 2: CLASSIFICATION OF MONETARY AND NON MONETARY ITEMS ⁴

MONETARY ITEMS	NON MONETARY ITEMS	INCOME STATEMENT ITEMS
CASH	FIXED ASSETS	SALES ACCOUNT
KONYA BUREAU	PARTICIPATIONS	GENERAL EXPENDITURES
CHEQUES	SUBSIDIARIES	VARIOUS INCOMES
BANKS CURRENT ACCOUNT	PREPAID EXPENSES	COST OF GOODS SOLD
CUSTOMERS	INVESTMENT ACCOUNT	
VARIOUS DEBTORS	SPECIAL COST VALUE	
INVENTORIES	ACCUMULATED DEPRECIATION	
LETTER OF CREDITS		
GUARANTEES AND DEPOSITS		
ADVANCES		
TEMPORARY ACCOUNT		
SHAREHOLDERS CURRENT ACCOUNT		
PACKAGING MATERIAL		
GUARANTEE AND COLLECTION NOTES		
V.A.T. ACCOUNT		
FIXED ASSET V.A.T. ACCOUNT		
PREPAID TAXES		
FEED MILL CURRENT ACCOUNT		
DOUBTFUL RECEIVABLES		
DEBTS TO CONNECTED PARTNERSHIPS		
ISSUED BONDS		
BANK CREDITS ACCOUNT		
TAX AND INSURANCE DEBTS		
SELLERS ACCOUNT		
VARIOUS CREDITORS		
PROVISIONS		
RETAINED EARNINGS		

⁴ The description of monetary and non monetary items are shown in Appendix B.

3.2.3. Adjustment of Balance Sheet Items

For meaningful analysis, the effect of revaluation fund is removed from the restated financial statement by deducting the fund amount from the assets and equities.

Also, the depreciation is not adjusted with an index. Instead, the monthly depreciation of the inflation adjusted asset value is recalculated in the adjusted financial statement according to Turkish Tax Procedural Code.⁵

Two different depreciation methods are being used in Turkey:

1. Normal - in equal amounts (20 %) in 5 years.
2. Accelerated - 40 % each year, and the residual in fifth year.

The company decides on the method according to the profit level. If the profit is high for a certain year, the company uses accelerated depreciation for the goods purchased during that year. If not, they prefer normal depreciation. During the period 1989-1993 both methods were used by the company, which were kept as same for restatements.

Restatement of Accounting Figures

V_H : value according to historical cost method

V_R : restated value

I_0 : prior period index

I_1 : beginning period index

I_2 : ending period index

r : inventory turnover rate

I_r : index at r months prior to beginning period

I_t : entry period index for an accounting figure

I_n : exit period index for an accounting figure

⁵ Item 315.

Restatement of Monetary Items

$$V_R = V_H \times (I_1 + I_0)$$

Restatement of Non Monetary Items

$$V_R = V_H \times (I_n + I_t)$$

Restatement of Income Statement Items

$$V_R = V_H \times [(I_0 + I_1) \div 2] \div I_0$$

Restatement of Inventories

$$V_R = V_H \times (I_1 + I_r)$$

3.2.4. Analysis

After obtaining monthly historical and restated accounting figures, monthly balance sheets and income statements were prepared (See Appendix C).

Then, the historical and restated balance sheets and income statements were used for monthly financial ratio analysis (See Appendix E and F).

Finally, in order to prove that, there is a significant difference between the historical and restated financial ratios, a hypothesis test was conducted.

Hypothesis Testing To Compare Means

$$H_0: \mu_1 = \mu_2$$

$$H_a: \mu_1 \neq \mu_2$$

$$\text{Test Statistic} \quad F = \text{MST/MSE}$$

Assumptions 1. Both population probability distributions are normal.

$$\text{Rejection Region :} \quad F > F_\alpha$$

The result of the testing is shown in Appendix D.

3.3. Effects of Adjusted Statements on Decision Making

3.3.1. *The Difference Between Financial Ratios of General Price-Level and Historical Cost Accounting Systems*

3.3.1.1. Operating Cash Flow to Current Liabilities

TABLE 3: OPERATING CASH FLOW TO CURRENT LIABILITIES RATIO (YEARLY AVERAGE FIGURES OBTAINED FROM APPENDIX F)

	1989	1990	1991	1992	1993
Historical	276 %	50 %	121 %	326 %	71 %
Restated	254 %	316 %	346 %	507 %	105 %

Cash flow from operations in restated figures is much higher than the historical figures. This difference is due to high increases in depreciation amount. Since, the restated fixed assets shows an increase compared to historical method of accounting, the depreciation amount is also increased significantly.

Operating cash flow to current liabilities ratio is used to test possible financial distress.

In restated figures, the company shows much healthier situation as the liquidity is improved. The ratios obtained from the restated figures enables the company to a build-up in current liabilities if necessary.

3.3.1.2. Working Capital to Total Assets

TABLE 4: WORKING CAPITAL TO TOTAL ASSETS RATIO (YEARLY AVERAGE FIGURES OBTAINED FROM APPENDIX F)

	1989	1990	1991	1992	1993
Historical	45 %	28 %	23 %	38 %	23 %
Restated	11 %	9 %	7 %	15 %	13 %

This ratio indicates the relative liquidity of total assets and distribution of resources employed as to liquidity.

The increase in fixed asset for restated figures is effecting the outcome of ratio analysis by decreasing the working capital to total assets ratio.

The ratios obtained from the restated figures shows weaker current position. The assets are less liquid, which increases the short-term risk.

The current asset needs to be improved. This improvement can be made by an increase in long-term borrowing since, the company can increase it 's debt capital.⁶

3.3.1.3. Rate of Return on Assets

TABLE 5: RATE OF RETURN ON ASSETS (YEARLY AVERAGE FIGURES OBTAINED FROM APPENDIX F)

	1989	1990	1991	1992	1993
Historical	29 %	8 %	16 %	28 %	19 %
Restated	7 %	3 %	6 %	12 %	11 %

The rate of return on assets measures a firm's performance in using assets to generate earnings independent of the financing of those assets.

To study changes in the rate of return on assets, we can disaggregate the ratio into two other ratios, as follows;

$$\text{Rate of Return on Assets} = \text{Profit Margin Ratio} \times \text{Total Asset Turnover Ratio}$$

⁶ See the analysis made on pp. 19 - 22

The profit margin ratio measures a firm's ability to control the level of expenses relative to revenues generated.

The total asset turnover ratio measures a firm's ability to generate revenues from a particular level of investment in assets.

TABLE 6: TOTAL ASSET TURNOVER RATIO (YEARLY AVERAGE FIGURES OBTAINED FROM APPENDIX F)

	1989	1990	1991	1992	1993
Historical	1.44	1.05	1.36	1.43	1.38
Restated	0.35	0.33	0.51	0.60	0.80

The rate of return on assets ratio shows a significant decrease in restated values. Profit margins are exactly the same for both methods, but asset turnover obtained from restated figures are also lower.

The value of fixed assets, when restated, increases significantly. As the revenues do not show too much difference, an increase in assets results in a decrease in above mentioned ratios.

The rate of return on assets has particular relevance to lenders, or creditors, of a firm. When extending credit or providing debt capital to a firm, creditors want to be sure that the return generated by the firm on that capital (assets) exceeds its cost.

Starting from 1989, the company invested an excessive amount for a new mill. By this investment, the company is planning to increase its production approximately three times it's current level. As the executives tried to finance this investment from the earnings generated, the new mill started operating at the end of 1994.

A significant decrease for both total asset turnovers and return on assets is a result of this huge investment.

The current depreciation and revaluation methods according to Turkish accounting procedures do not reflect the effects of high inflation in Turkey. Therefore, the book values of these assets are significantly lower than the actual market price for these assets.

As an example, the book value for the new investment is nearly \$ 1.3 million. On the other hand, the company has invested approximately \$ 10 million. A recent auditing report prepared by “KPMG Optima Management Consulting” for the company points out the same difference.

. The effects of such a decrease in return on assets might be;

- ❑ difficulty in finding creditors,
- ❑ increased interest rates for borrowings,

since, the restated figure shows lower earnings generated from assets (higher risk).

Other possible changes in decision making can be explained as follows:

- ❑ In acquisitions, mergers or in stock's exchange markets, the value of the company will be lower, if the ratios are evaluated from restated accounting datas.

- ❑ Better control on the level of investments will be possible under the new ratios. The management will try to minimize the investment period and/or, to increase the revenues generated from assets.

Another important point is taxation. If a firm shows the real market price, in accounting figures, for an asset, and sell the asset according to the market price, than the firm is obliged to pay an increased amount of tax. Therefore, in Turkey, in buying and selling of assets, the value of an asset is stated a value close to the book values instead of its real price. By changing the accounting methods to restated model, the government can increase its tax income significantly.

Finally, the corporation in Turkey needs to invest more frequently, when compared to their European associates, to minimize the tax amount, and to protect their capital against inflation. By changing the accounting methods, companies will be protected well against inflation.

3.3.1.4. Rate of Return on Common Shareholders' Equity

TABLE 7: RATE OF RETURN ON COMMON SHAREHOLDERS' EQUITY (YEARLY AVERAGE FIGURES OBTAINED FROM APPENDIX F)

	1989	1990	1991	1992	1993
Historical	41 %	10 %	17 %	31 %	25 %
Restated	8 %	2 %	5 %	12 %	11 %

The rate of return on common shareholders' equity measures a firm's performance in using assets to generate earnings. Unlike the return on assets, it explicitly considers the financing of those assets.

This ratio primarily interests investors in a firm's common stock.

We can disaggregate the return on common stock into several components as follows:

$$\begin{array}{l} \text{Rate of Return} \\ \text{on Common} \\ \text{Shareholder's} \\ \text{Equity} \end{array} = \begin{array}{l} \text{Profit Margin} \\ \text{Ratio} \end{array} \times \begin{array}{l} \text{Total Asset Turnover} \\ \text{Ratio} \end{array} \times \begin{array}{l} \text{Leverage} \\ \text{Ratio} \end{array}$$

The leverage ratio indicates the extent to which common shareholders provide capital.

TABLE 8: LEVERAGE RATIO (YEARLY AVERAGE FIGURES OBTAINED FROM APPENDIX F)

	1989	1990	1991	1992	1993
Historical	1.47	1.87	1.42	1.26	1.91
Restated	1.09	1.18	1.14	1.10	1.42

The leverage ratio obtained from the restated figures shows a significant decrease thus, meaning that, the portion of capital common shareholder's provide is higher. The reason for the decrease is; to balance the assets and liabilities in restated balance sheets, the difference is added to profit reserves in shareholder's equity. The relative increase in equities, compared to assets, results a decrease in leverage ratio.

The equity capital is more costly, since the investors have higher expectations and interest on debt is tax deductible.

Financial leverage increases the return on common shareholder's equity when the return on assets is higher than the after-tax cost of debt. The greater the proportion of debt in capital structure, however, the greater the risk the common shareholders bear. Lenders, including investors in a firm's bonds, require increasingly higher returns to compensate for this additional risk. At some point, the after-tax cost of debt will exceed the return on assets. At this point, leverage no longer increase the potential return on common stock holder's equity.

In summary, the difference in leverage amount under historical and general price-level accounting methods may effect the debt capital amount. If the ratios were calculated according to general price-level method than, the company could increase the debt capital by increasing long-term borrowings. ⁷

⁷ See the analysis made on pp. 20 - 22

If the ratios were calculated according to restated figures, than;

- ❑ the price in stocks exchange may be lower and,
- ❑ the value of the company may decrease in mergers and acquisitions

since, the return on shareholders' equity is significantly lower under the general price-level accounting method.

Under the new circumstances, the managers will try to increase the rate of return on common shareholder's equity by increasing debt capital.

3.3.1.5. Long-Term Debt Ratio

TABLE 9: LONG-TERM DEBT RATIO (YEARLY AVERAGE FIGURES OBTAINED FROM APPENDIX F)

	1989	1990	1991	1992	1993
Historical	7 %	19 %	8 %	7 %	16 %
Restated	1 %	4 %	3 %	3 %	8 %

This ratio reports the portion of the firm's long-term capital that is furnished by debt holders.

As explained previously,⁸ the equity capital is more costly, and the debt capital can increase the value of the firm up to a point.

The restated figure shows that, the firm has improved its ability to meet fixed interest and principal payments in the future, when compared to historical figures. The company can afford to take on some additional risk by obtaining funds from issuing bonds or borrowings from banks.

⁸ See pp. 19 for detailed explanation.

3.3.1.6. Debt/Equity Ratio

TABLE 10: DEBT-EQUITY RATIO (YEARLY AVERAGE FIGURES OBTAINED FROM APPENDIX F)

	1989	1990	1991	1992	1993
Historical	32 %	44 %	29 %	19 %	47 %
Restated	8 %	15 %	13 %	9 %	30 %

Similar to long-term debt ratio, the ratios obtained from restated figures shows better situation when compared to historical method.

The firm is using more of owner's equity. The firm can undertake more risks by raising funds.

3.3.1.7. Cash Flow From Operations to Total Liabilities Ratio

TABLE 11: CASH FLOW FROM OPERATIONS TO TOTAL LIABILITIES RATIO (YEARLY AVERAGE FIGURES OBTAINED FROM APPENDIX F)

	1989	1990	1991	1992	1993
Historical	107 %	35 %	106 %	203 %	59 %
Restated	104 %	202 %	303 %	345 %	86 %

This ratio, unlike the debt ratios, considers the availability of liquid assets to cover various levels of debt.

Due to increased depreciation amounts under the general price-level method when compared to historical method, cash flow from operations in restated figures are much higher than those in historical figures, which results in a higher ratio.

When we compare the differences in ratios between two methods; restated figure shows a better situation. The availability of liquid assets is increased, decreasing the long-term liquidity risk.

The company can undertake more risks by raising funds from issuing bonds, borrowings from bank, etc.

3.3.1.8. Total Liabilities/Owner's Equity

TABLE 12: TOTAL LIABILITIES/OWNER'S EQUITY RATIO (YEARLY AVERAGE FIGURES OBTAINED FROM APPENDIX F)

	1989	1990	1991	1992	1993
Historical	0.48	0.88	0.43	0.25	0.94
Restated	0.09	0.18	0.14	0.10	0.43

It shows relative amounts of resources provided by creditors and shareholders.

The decrease in ratios for restated figures indicates the same outcome as “debt-equity” and “long-term debt” ratios; possibility to increase debt capital.

3.3.2. *Advantages and Disadvantages of Restatements*

Advantages of general price-level financial statements are:

1. The general price-level accounting only changes one fact in historical accounting; currency is not stable. Other implementations of historical method are kept the same.
2. General price-level financial statements provide more meaningful information in terms of current economic conditions.
3. General price-level accounting is more objective compared to other accounting methods. Therefore, auditing of restated accounting data is quite easy.
4. Management's effectiveness in periods of inflation can be more readily determined.

Disadvantages of general price-level financial statements are:

1. There is no general agreement as to which price-level index to use and how it should be applied.

2. The value of an asset could change even during periods of general price stability, due to factors like technological change or change in the demand-supply situation of the asset. Therefore, adjustment to financial statements under general price-level accounting is less meaningful compared to other methods.

3. Historical costs have been employed traditionally over many years with satisfactory results.

CHAPTER 4

SUMMARY AND RECOMMENDATIONS

4.1. Summary

The management of a company is of necessity concerned about the composition of its capital structure and about the changes and trends in earnings.

The interpretation and evaluation of financial statement data require familiarity with the basic tools of financial statement analysis.

Various studies in accounting have shown that, historical cost model can not adapt itself to the changing economic environment. The change that is being suggested is a modification to the existing accounting practice of reporting only historical cost information.

Three different solutions exists for accounting to adapt itself to the changed economic environment:

1. General price-level accounting
2. Current value accounting
3. Current value/general price-level accounting

In order to modify the current accounting system; first, five year monthly accounting data is obtained. Than, monthly balance sheets and income statements were prepared, and first set of financial ratios were calculated.

To evaluate the results of inflation accounting and to prove the significance; first, the effect of revaluation fund was removed from the historical data. Than, monetary and non

monetary items were classified and the balance sheets and income statements were adjusted with a selected price index.

Finally, after obtaining the second set of financial ratios from adjusted balance sheets and income statements, a hypothesis test was conducted to verify any significant difference between two sets of information.

The analysis shows that, there is a significant difference in some ratios obtained from two different accounting methods; the historical model and the general price-level model.

The difference is arising from two different items:

1. An increase in the value of fixed assets
2. An increase in shareholder's equity

A difference in the financial ratios has an important effect; a change in management decision making. Under the new circumstance, the company will raise funds by increasing its long-term borrowings. The funds obtained will be utilized to improve the current assets.

Finally, under general-price level accounting the company (own capital) will be protected against the inflation. Increased depreciation amounts (compared to historical cost model) will provide to pay less corporate tax if, the general price-level accounting method is accepted by the tax authorities and the government.

4.2. Recommendations

The company policy for many years was to be self sufficient. The management was keen not to use bank credits. Therefore, all the cash necessary for the investments were supplied from the earnings. At the end, the long investment period, as a result of using own capital, pushed the company in deep financial problems in 1994. The company was not able to generate earnings to supply cash for both the investments and to protect capital against inflation.

If the management were using inflation accounting, instead of historical method, than they could adapt themselves in changing environments more quickly.

Analyzing the company figures between 1989 to 1993, the following recommendations are made:

- ❑ The company should raise funds by long term borrowings.
- ❑ Some of the funds obtained should be used to finance the ongoing investment to shorten the investment period.
- ❑ Rest of the funds should be added to the working capital.

The above recommendations will have the following effects:

- ❑ The increase in working capital will increase the inventories for a certain period of time. But, by using the additional capacity obtained from the new investment, the company's market share in domestic market should be increased. Also, there will be enough capacity for exports.
- ❑ An increase in sales will also increase the accounts receivable, but together with the inventories, the current position of the company will be improved.
- ❑ The additional earnings generated and also shorter investment period will improve both rates of returns.

In addition to the recommendations that were submitted to the company, I would like to point another important item; tax regulations. The current depreciation method is not enough to protect the capital against inflation.

In Turkey, the initiative has to come from the government because of the strong linkage between the accounting system and the regulatory framework of the government. Application of revaluation fund was a good initiative, but it is currently become meaningless, since the rates determined by the government are lower than the actual inflation rates. The

accounting profession and industry too need to strongly express the need for inflation adjusted accounts.

4.3. Response from the Management

After the first analysis were made (December 1994), the company has increased it's debt capital both by short and long-term borrowings (May 95).

The managemet has decided to increase the level of investments, and the second unit in the new mill has started operating (August 1995). The third unit will start operating before the end of the year.⁹

The company has almost doubled the domestic sales by changing the pricing policies, and the remaining capacity is fully utiziled for export purposes.

As a result of increased production, the company has increased the raw material and finished products inventory level inorder to meet the necessary demands from the market.

4.4. Comparison with Revaluation Fund

In section 2.4. the revaluation fund application was explained. Now, the comparison between the general price-level accounting and revaluation fund will be made to find out the differences between these alternative approaches. First, the price indices than, accounting figures will be compared.

TABLE 13: PRICE INDICES (%)

	1989	1990	1991	1992	1993
Revaluation Fund Index	70.4	55.5	54.1	61.5	58.4
Consumer Price Index	63.3	60.3	66.0	70.1	66.1
General Price-Level Index ¹⁰	48.9	40.6	60.0	55.7	58.2

⁹ The new mill consists of three units of equal capacity. The first unit has started operating at the end of 1994.

¹⁰ The price index used in this study, which is the wholesale price index in private food manufacturing industry.

TABLE 14: HISTORICAL COST BASED ACCOUNTING FIGURES INCLUDING THE REVALUATION FUND.

TL×1000

	1990	1991	1992	1993
Fixed Assets	9,894,702	20,688,307	27,906,381	72,224,939
Accumulated Depreciation	5,596,227	12,227,925	27,084,599	38,398,998
Shareholders' Equity	15,037,822	30,381,534	46,850,837	91,746,255

TABLE 15: GENERAL PRICE-LEVEL BASED ACCOUNTING FIGURES

TL×1000

	1990	1991	1992	1993
Fixed Assets	54,661,846	75,504,855	108,289,562	129,527,666
Accumulated Depreciation	24,680,121	40,761,417	44,970,716	56,987,856
Shareholders' Equity	59,644,887	79,163,656	127,919,600	149,626,322

The figures shown above points out some important end results:

- ❑ Price indices used for revaluation are higher than the index used for this study but, lower than the consumer price index.
- ❑ Although the price index used for revaluation is higher, because of differences in methodology, the fixed assets adjusted under the general price-level model is higher than that of revaluation fund.
- ❑ Similar explanation for shareholders' equity can also be made; the equity under general price-level is higher than that of revaluation fund.
- ❑ Ratio analysis showed no significant change for profit levels however, depreciation expense under the general price-level is higher than that of revaluation fund; providing better tax shield and therefore better protection of capital against inflation.

APPENDIX A

**MONTHLY CUMULATIVE ACCOUNTING
DATA (1989-1993)**

APPENDIX B

DESCRIPTION OF MONETARY AND NON MONETARY ITEMS

DESCRIPTION OF MONETARY AND NON MONETARY ITEMS

Cash : The cash available in head office.

Konya Bureau : The cash available in Konya Bureau.

Cheques : According to Turkish Trade Law, the cheques in hand are considered as cash, since the law does not recognize the date written (the date that the cheque is payable) on cheques. Therefore, instead of accounts receivable, the cheques in hand are considered as a cash item in balance sheets.

Inventories : Weighted average method is used for the inventories. Beginning period value is added to the purchases during the period, and the average is obtained by dividing the total value to total kilogram. The holding cost (i.e. interests) was not recognized as a part of inventories until the end of 1994.

V.A.T. Account : There is certain amounts of Value Added Tax for all purchases and for all sales. The V.A.T. from sales minus the V.A.T. from purchases is the amount that the company pays to the tax office. If the V.A.T. from purchases is more than the sales for a period, then the difference is deducted from next periods tax amount.

Fixed Asset V.A.T. Account : If the company acquires a fixed asset, the V.A.T. for that asset is deducted in equal amounts from the tax payable in three years. For example, if an asset was bought in May 91, the amount of V.A.T is divided into three, and deducted from the tax in May 91, May 92, and May 93.

Prepaid Taxes : Each year, a certain amount of tax is paid in advance to tax office. For example, 1.000.000 TL. tax is paid in 1994 from 1993 corporate profit. 70 % of this amount is

also paid to the tax office in 12 months in 1994. This additional payment is deducted from the corporate tax which will be paid in 1995.

Feed Mill Current Account : Until the end of 1992, the feed mill was an associated company, therefore all the transactions between two companies had to be kept in a different account according to Turkish Trade Law.

Provisions : Allowances for debts and expenses. These are the expenses (i.e. seniority bonus) belonging to a period but, which are not written in that period.

Retained Earnings : The earnings are usually not distributed. They are added to the capital.

Special Cost Value : All the expenditures made for an asset which is rented, all expenses for R&D, patents etc. It is a part of intangible assets.

Participations vs. Subsidiaries : If the company holds less than 50 % of the shares of another company, than it is called as participations. Otherwise, it is called as subsidiaries.

APPENDIX C

**BALANCE SHEETS AND
INCOME STATEMENTS BASED ON
HISTORICAL COST METHOD OF
ACCOUNTING**

	Jan-89	Feb-89	Mar-89	Apr-89	May-89	Jun-89	Jul-89	Aug-89	Sep-89	Oct-89	Nov-89	Dec-89
CURRENT ASSETS	6,129,394,720	6,122,830,754	6,989,206,554	8,575,757,129	8,150,776,165	9,002,220,312	8,718,014,309	8,988,659,038	8,897,086,420	8,887,018,528	8,731,404,486	10,095,571,651
CASH	301,687,768	223,933,817	249,571,423	533,015,192	490,895,524	570,697,349	334,171,111	298,310,314	556,232,782	303,035,689	358,754,720	355,270,747
ACCOUNTS RECEIVABLE	3,091,832,884	3,332,084,760	3,860,948,030	3,414,074,298	3,336,522,664	4,279,957,637	3,893,967,166	4,063,062,984	4,237,204,852	4,310,527,448	4,004,540,210	3,885,524,795
OTHER RECEIVABLES	1,987,882,704	1,777,358,579	1,634,308,323	2,285,021,877	2,219,449,889	2,417,303,547	2,174,454,700	2,081,691,298	2,010,024,604	2,180,142,046	2,482,953,782	2,606,259,650
INVENTORIES	366,396,184	350,071,402	714,586,494	1,441,702,947	1,332,078,895	948,782,168	1,540,100,860	1,764,800,785	1,311,109,766	1,104,824,340	1,092,815,096	2,232,866,394
OTHER CURRENT ASSETS	381,595,180	439,382,196	529,192,284	901,942,815	771,829,193	785,479,611	775,320,472	780,793,657	782,514,416	788,489,005	792,340,678	1,015,650,065
FIXED ASSETS	1,956,403,407	2,321,801,141	2,385,439,770	2,819,592,948	3,130,384,685	3,442,316,649	3,756,136,388	4,162,600,558	4,392,300,652	4,386,991,491	4,520,911,302	4,617,528,208
ACCOUNTS RECEIVABLE	0	0	0	0	56,000	56,000	56,000	56,000	24,150,800	24,150,800	24,150,800	24,499,650
OTHER RECEIVABLES	57,742,668	400,002,385	450,141,316	723,609,798	895,975,135	833,217,643	790,395,049	745,500,306	0	0	0	0
FINANCIAL ASSETS	551,513,000	551,513,000	551,513,000	551,513,000	551,513,000	551,513,000	551,513,000	809,496,714	1,604,965,537	1,604,965,537	1,604,965,537	1,654,013,000
TANGIBLE ASSETS	1,330,166,028	1,351,608,788	1,368,835,333	1,526,355,029	1,664,695,100	2,033,407,595	2,389,869,458	2,581,220,816	2,728,271,443	2,738,324,956	2,871,222,933	2,713,256,938
INTANGIBLE ASSETS	0	0	0	0	0	0	0	0	0	0	0	191,320,840
FUTURE EXPENDITURES	0	0	1,125,000	1,125,000	1,125,000	5,985,000	7,485,000	7,485,000	15,882,456	0	0	3,160,814
OTHER FIXED ASSETS	16,981,711	18,676,968	15,825,121	15,990,121	17,020,450	18,137,411	18,817,881	18,841,722	19,030,416	19,550,198	20,572,032	31,276,966
TOTAL ASSETS	8,085,798,127	8,444,631,895	9,374,646,324	11,394,350,077	11,281,160,850	12,444,536,961	12,476,150,697	13,151,259,596	13,289,387,072	13,074,010,019	13,252,315,788	14,713,099,859
SHORT-TERM LIABILITIES	2,752,306,547	2,847,566,173	3,142,422,970	5,097,797,388	4,165,109,004	4,337,376,912	3,558,564,786	3,826,851,011	1,218,789,998	513,822,187	578,031,900	3,141,563,736
FINANCIAL BORROWINGS	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	0	0	0	500,000,000	138,649,189	65,007,952	66,132,175	50,922,125
ACCOUNTS PAYABLE	0	0	0	0	136,240,992	410,032,079	114,058,933	0	0	0	107,704,278	1,353,167,160
OTHER LIABILITIES	739,123,232	833,616,017	1,122,068,803	987,975,530	2,568,421,389	2,524,114,784	2,499,206,556	2,442,973,878	300,113,191	288,090,362	258,295,281	1,071,992,944
TAX AND OTHER LIABILITIES PAYABLE	13,183,315	13,950,156	20,354,167	2,109,821,858	1,457,366,589	1,403,230,049	940,387,863	853,737,944	759,591,359	213,952,024	133,713,760	665,481,507
OTHER SHORT-TERM LIABILITIES	0	0	0	0	3,080,034	0	4,911,434	30,139,189	20,336,259	46,771,849	12,186,406	0
LONG-TERM LIABILITIES	0	0	0	0	0	0	0	0	2,260,527,575	2,239,372,214	2,266,477,436	2,237,332,732
FINANCIAL DEBTS	0	0	0	0	0	0	0	0	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000
OTHER LONG-TERM LIABILITIES	0	0	0	0	0	0	0	0	260,527,575	239,372,214	266,477,436	237,332,732
SHAREHOLDER'S EQUITY	5,333,491,580	5,597,065,722	6,232,223,354	6,296,552,689	7,116,051,846	8,107,160,049	8,917,585,911	9,324,408,585	9,810,069,499	10,220,815,618	10,407,806,452	9,334,203,391
PAID-IN CAPITAL	4,060,000,000	4,060,000,000	4,060,000,000	3,280,000,000	3,280,000,000	4,000,000,000	4,000,000,000	4,000,000,000	4,000,000,000	4,000,000,000	4,000,000,000	4,000,000,000
CAPITAL RESERVES	307,675,114	307,675,114	307,675,114	307,675,114	480,527,988	480,527,988	480,527,988	480,527,988	480,527,988	480,527,988	480,527,988	480,527,988
PROFIT RESERVES	612,205,024	612,205,024	612,205,024	612,205,024	612,205,024	0	0	0	0	0	0	0
FUNDS	0	0	0	0	0	0	430,000,000	430,000,000	430,000,000	430,000,000	430,000,000	430,000,000
NET PROFITS	353,611,442	617,185,584	1,252,343,216	2,096,672,551	2,743,318,834	3,626,632,061	4,007,057,923	4,413,880,597	4,899,541,511	5,310,287,630	5,497,278,464	4,423,675,403
TOTAL LIABILITIES	8,085,798,127	8,444,631,895	9,374,646,324	11,394,350,077	11,281,160,850	12,444,536,961	12,476,150,697	13,151,259,596	13,289,387,072	13,074,010,019	13,252,315,788	14,713,099,859
COMPARATIVE INCOME STATEMENTS												
SALES REVENUES (NET)	2,050,143,766	3,990,135,698	6,597,352,498	9,193,436,506	11,798,846,730	15,100,422,850	17,734,917,060	20,419,642,110	23,795,121,390	26,866,077,970	29,690,723,636	32,440,357,736
COST OF GOODS SOLD	1,574,052,000	3,070,709,000	4,681,271,000	6,224,637,000	7,947,914,000	10,107,036,000	12,290,207,000	14,331,583,000	16,917,713,000	19,217,517,000	21,449,696,000	23,900,129,000
OTHER EXPENDITURES	131,033,157	321,478,537	694,263,742	915,514,066	1,161,660,003	1,433,894,214	1,612,584,290	1,860,619,573	2,179,233,541	2,551,399,922	2,983,415,167	4,373,108,198
OTHER REVENUES AND PROFITS	8,552,833	19,237,423	30,525,460	43,387,111	54,046,107	67,139,425	174,932,153	186,441,060	201,366,662	213,126,582	239,665,995	256,554,865
NET PROFITS	353,611,442	617,185,584	1,252,343,216	2,096,672,551	2,743,318,834	3,626,632,061	4,007,057,923	4,413,880,597	4,899,541,511	5,310,287,630	5,497,278,464	4,423,675,403

	Jan-90	Feb-90	Mar-90	Apr-90	May-90	Jun-90	Jul-90	Aug-90	Sep-90	Oct-90	Nov-90	Dec-90
CURRENT ASSETS	10,003,574,339	10,768,716,021	8,985,221,418	11,890,925,517	12,864,699,630	8,124,300,599	9,604,437,799	10,713,573,526	11,009,576,151	10,101,752,786	8,774,105,126	9,401,041,186
CASH	268,158,832	288,520,383	264,757,149	1,561,881,006	68,871,022	98,113,581	2,760,917,642	2,662,550,383	2,816,242,021	2,458,740,483	2,239,092,409	1,377,535,093
ACCOUNTS RECEIVABLE	4,057,154,447	3,618,183,404	3,966,942,433	2,500,612,253	3,977,049,230	4,000,066,715	2,348,156,331	2,837,601,470	3,367,840,976	3,132,238,426	3,025,697,291	4,272,119,442
OTHER RECEIVABLES	2,717,419,029	3,402,537,855	2,565,380,063	5,367,907,634	4,813,027,398	2,228,264,738	2,230,177,363	2,662,924,761	2,381,000,092	2,354,935,348	1,881,000,919	2,193,230,768
INVENTORIES	1,910,954,324	2,321,122,223	1,011,071,884	1,475,392,293	2,970,481,359	665,562,863	1,434,004,638	1,669,675,008	1,563,339,191	1,273,749,455	746,069,433	674,700,600
OTHER CURRENT ASSETS	1,049,887,707	1,138,352,146	1,177,069,889	985,132,331	1,035,270,621	1,132,292,702	831,181,825	880,821,904	881,153,871	882,089,074	882,245,074	883,455,283
FIXED ASSETS	4,444,472,388	4,514,940,532	4,993,602,602	5,114,886,257	5,181,377,166	8,012,082,443	8,131,284,997	8,287,508,643	8,443,360,505	8,511,282,585	8,906,957,759	9,199,116,936
ACCOUNTS RECEIVABLE	24,499,650	24,499,650	24,499,650	24,499,650	24,499,650	24,499,650	24,150,800	24,150,800	24,366,800	24,366,800	24,366,800	24,366,800
OTHER RECEIVABLES	0	0	182,213,346	169,341,848	227,075,957	757,203,313	858,403,262	782,805,212	840,514,216	790,387,307	1,139,350,895	1,160,416,338
FINANCIAL ASSETS	1,654,013,000	1,654,013,000	1,654,013,000	1,654,013,000	1,654,013,000	1,654,013,000	1,654,013,000	1,654,013,000	1,654,013,000	1,654,013,000	1,654,013,000	1,654,013,000
TANGIBLE ASSETS	2,577,268,722	2,635,733,006	2,905,543,569	3,038,823,569	3,044,264,759	5,343,595,342	5,355,800,727	5,590,301,404	5,672,798,123	5,789,903,780	5,794,024,062	6,067,901,885
INTANGIBLE ASSETS	153,056,672	164,909,402	190,034,582	191,123,877	194,164,870	194,164,870	194,164,870	194,164,870	194,164,870	194,164,870	234,164,870	234,164,870
FUTURE EXPENDITURES	3,160,814	3,160,814	3,160,814	3,160,814	3,160,814	5,310,814	5,310,814	5,310,814	19,783,314	19,783,314	18,970,727	18,970,727
OTHER FIXED ASSETS	32,473,530	32,624,660	34,137,641	33,923,699	34,198,116	33,295,454	39,441,524	36,782,543	37,740,182	38,643,514	42,067,405	39,283,316
TOTAL ASSETS	14,448,046,727	15,283,656,553	13,978,824,020	17,005,811,774	18,046,076,796	16,136,383,042	17,735,722,796	19,001,082,169	19,452,956,656	18,613,015,371	17,681,062,885	18,600,158,122
SHORT-TERM LIABILITIES	6,208,902,666	6,837,874,529	5,385,688,844	7,427,983,508	8,306,705,487	6,454,315,487	3,048,513,494	4,666,493,493	5,118,660,713	4,651,524,551	3,572,394,453	2,447,618,307
FINANCIAL BORROWINGS	3,500,000,000	3,500,000,000	3,500,000,000	3,500,000,000	3,828,545,335	315,141,430	0	1,399,392,500	1,274,100,000	1,371,376,538	375,751,367	188,311,447
ACCOUNTS PAYABLE	1,511,996,667	1,819,154,287	793,834,704	297,209,114	972,600,253	572,767,416	141,314,540	231,432,156	168,793,540	222,924,304	220,723,298	967,841,451
OTHER LIABILITIES	817,170,092	1,136,905,617	986,813,144	2,009,339,653	2,032,974,986	4,150,991,918	1,782,797,313	1,973,501,224	2,583,815,213	2,453,003,024	2,525,120,036	919,324,009
TAX AND OTHER LIABILITIES PAYABLE	379,735,907	381,814,625	105,040,996	1,621,434,741	1,472,584,914	1,415,414,723	1,049,432,888	1,032,103,654	1,023,055,885	471,257,493	379,328,783	239,374,463
OTHER SHORT-TERM LIABILITIES	0	0	0	0	0	0	74,968,753	30,063,959	58,796,075	32,963,192	71,470,969	132,766,937
LONG-TERM LIABILITIES	2,276,377,282	2,302,916,377	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000
FINANCIAL DEBTS	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000
OTHER LONG-TERM LIABILITIES	276,377,282	302,916,377	0	0	0	0	0	0	0	0	0	0
SHAREHOLDER'S EQUITY	5,962,766,779	6,142,865,647	6,593,135,176	7,577,828,266	7,739,371,309	7,682,067,555	12,687,209,302	12,334,588,676	12,334,395,943	12,061,490,820	12,108,668,432	14,152,539,815
PAID-IN CAPITAL	4,000,000,000	4,000,000,000	4,000,000,000	4,000,000,000	4,000,000,000	4,000,000,000	10,000,000,000	10,000,000,000	10,000,000,000	10,000,000,000	10,000,000,000	10,000,000,000
CAPITAL RESERVES	480,527,987	480,527,987	480,527,987	627,916,654	627,916,654	627,916,654	627,916,654	627,916,654	627,916,654	627,916,654	627,916,654	627,916,654
PROFIT RESERVES	667,462,075	667,462,075	667,462,075	1,080,202,107	1,080,202,107	1,080,202,107	0	0	0	0	0	0
FUNDS	430,000,000	430,000,000	430,000,000	950,000,000	950,000,000	950,000,000	950,000,000	950,000,000	950,000,000	950,000,000	950,000,000	950,000,000
NET PROFITS	384,776,717	564,875,585	1,015,145,114	919,709,505	1,081,252,548	1,023,948,794	1,109,292,648	756,672,022	756,479,289	483,574,166	530,751,778	2,574,623,161
TOTAL LIABILITIES	14,448,046,727	15,283,656,553	13,978,824,020	17,005,811,774	18,046,076,796	16,136,383,042	17,735,722,796	19,001,082,169	19,452,956,656	18,613,015,371	17,681,062,885	18,600,158,122
COMPARATIVE INCOME STATEMENTS												
SALES REVENUES (NET)	2,538,926,980	4,822,867,480	7,644,882,670	9,201,233,430	13,081,322,521	16,065,012,071	19,489,712,165	22,886,373,802	26,690,209,482	30,263,422,482	33,160,347,182	37,603,957,522
COST OF GOODS SOLD	1,915,651,000	3,777,109,000	5,516,594,000	6,946,330,000	10,403,478,000	12,946,560,000	15,917,503,000	19,277,846,000	22,126,714,000	25,371,668,000	27,799,791,000	29,952,431,000
OTHER EXPENDITURES	244,908,769	501,341,019	1,144,418,799	1,376,034,629	1,737,568,966	2,253,914,639	2,672,506,284	3,091,562,059	4,110,853,570	4,737,779,449	5,184,722,294	5,445,986,430
OTHER REVENUES AND PROFITS	6,309,506	20,458,124	31,275,243	40,840,704	140,976,993	159,411,362	209,589,767	239,706,279	303,837,377	329,599,133	354,917,890	369,083,069
NET PROFITS	384,776,717	564,875,585	1,015,145,114	919,709,505	1,081,252,548	1,023,948,794	1,109,292,648	756,672,022	756,479,289	483,574,166	530,751,778	2,574,623,161

	Jan-91	Feb-91	Mar-91	Apr-91	May-91	Jun-91	Jul-91	Aug-91	Sep-91	Oct-91	Nov-91	Dec-91
CURRENT ASSETS	10,649,707,692	9,664,325,965	9,398,787,641	9,617,643,262	11,942,941,178	14,144,302,846	11,890,828,277	15,506,939,830	13,451,416,511	14,807,962,829	13,764,741,241	16,111,721,554
CASH	3,580,037,726	2,561,382,905	3,187,254,617	2,446,737,019	2,348,555,436	2,281,812,322	2,861,065,379	3,683,648,868	4,571,627,534	3,135,865,535	3,990,056,489	3,345,811,002
ACCOUNTS RECEIVABLE	4,088,240,324	4,189,308,190	3,590,514,277	5,634,050,421	7,900,190,963	10,364,653,195	8,155,134,836	8,804,721,342	5,750,978,765	9,315,427,343	6,713,608,009	11,049,850,136
OTHER RECEIVABLES	452,527,167	423,046,122	303,878,775	224,193,332	270,076,342	383,242,258	197,556,821	919,579,688	738,515,101	268,734,803	697,852,679	768,325,361
INVENTORIES	1,631,728,094	1,556,616,835	1,403,087,242	407,209,898	1,389,152,535	1,114,595,071	640,656,139	2,061,027,990	2,390,295,111	2,087,935,145	2,323,684,849	869,389,417
OTHER CURRENT ASSETS	897,174,381	933,971,913	914,052,730	305,452,592	34,965,902	0	36,415,102	37,961,642	0	0	39,539,215	78,345,638
FIXED ASSETS	13,920,596,420	13,199,936,485	13,151,520,699	13,272,322,107	12,926,008,214	13,640,737,511	14,023,731,764	14,921,065,069	14,949,754,354	14,989,192,664	15,399,019,136	20,173,277,507
ACCOUNTS RECEIVABLE	373,437,026	370,437,026	365,637,026	357,287,026	357,287,026	357,287,026	357,287,026	357,287,026	340,844,737	340,844,737	341,494,737	341,494,737
OTHER RECEIVABLES	3,883,827,679	3,579,809,253	3,525,864,680	3,623,565,893	3,214,396,306	3,646,227,889	3,763,570,989	692,880,382	847,687,333	808,383,928	899,279,285	755,203,020
FINANCIAL ASSETS	1,654,013,000	1,654,013,000	1,654,013,000	1,654,013,000	1,654,013,000	1,967,530,000	1,979,030,000	5,864,030,000	5,864,030,000	5,864,030,000	5,864,030,000	5,864,030,000
TANGIBLE ASSETS	7,761,609,045	7,348,581,733	7,357,424,257	7,387,584,982	7,450,480,485	7,420,099,256	7,660,487,921	7,748,388,334	7,834,849,810	7,916,002,119	8,218,718,827	12,931,112,428
INTANGIBLE ASSETS	179,679,062	179,679,062	179,679,062	179,679,062	179,679,062	179,679,062	179,679,062	179,679,062	179,679,062	179,679,062	179,679,062	179,679,062
FUTURE EXPENDITURES	30,337,841	30,337,841	32,673,666	32,673,666	32,573,666	32,829,687	44,270,279	44,270,279	47,286,080	47,286,080	63,429,044	68,211,408
OTHER FIXED ASSETS	37,692,767	37,078,570	36,229,108	37,498,478	37,478,659	37,084,591	39,406,487	34,529,986	35,377,032	32,966,738	32,388,181	33,546,852
TOTAL ASSETS	24,570,304,112	22,864,262,450	22,550,308,340	22,889,965,369	24,868,949,392	27,785,040,357	25,914,560,041	30,428,004,899	28,401,170,865	29,797,155,493	29,163,760,377	36,284,999,061
SHORT-TERM LIABILITIES	6,674,242,595	5,257,011,733	5,282,201,869	5,909,619,736	6,046,035,242	8,125,951,945	7,502,576,124	5,531,069,641	7,502,256,528	4,730,971,217	4,156,170,937	8,369,283,638
FINANCIAL BORROWINGS	275,778,281	1,271,490,794	1,149,806,171	667,532,794	581,586,740	358,000,000	3,424,896,920	3,324,995,170	3,203,600,624	326,909,156	708,215,160	4,902,519,115
ACCOUNTS PAYABLE	2,632,621,624	378,842,842	446,949,973	0	0	0	0	0	0	0	0	0
OTHER LIABILITIES	3,407,046,944	3,507,441,336	3,583,446,077	5,170,006,732	5,300,920,948	7,665,986,030	3,721,010,354	1,390,661,350	3,733,310,160	3,905,683,766	2,991,760,496	3,415,631,028
TAX AND OTHER LIABILITIES PAYABLE	175,028,429	99,236,761	101,999,648	29,719,373	79,186,390	94,234,426	74,921,326	137,784,464	174,019,073	95,286,836	135,952,035	51,133,495
OTHER SHORT-TERM LIABILITIES	183,767,317	0	0	42,360,837	84,341,164	7,731,489	281,747,524	677,628,657	391,326,671	403,091,459	320,243,246	0
LONG-TERM LIABILITIES	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	0	0	0	3,186,173,426
FINANCIAL DEBTS	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	2,000,000,000	0	0	0	3,000,000,000
OTHER LONG-TERM LIABILITIES	0	0	0	0	0	0	0	0	0	0	0	186,173,426
SHAREHOLDER'S EQUITY	15,896,061,517	15,607,250,717	15,268,106,471	14,980,345,633	16,822,914,150	17,659,088,412	16,411,983,917	22,896,935,258	20,898,914,337	25,066,184,276	25,007,589,440	24,729,541,997
PAID-IN CAPITAL	10,000,000,000	10,000,000,000	10,000,000,000	10,000,000,000	10,000,000,000	14,000,000,000	14,000,000,000	14,000,000,000	14,000,000,000	18,000,000,000	18,000,000,000	18,000,000,000
CAPITAL RESERVES	627,916,654	627,916,654	627,916,654	627,916,654	1,137,321,758	1,137,321,758	1,137,321,758	1,137,321,758	1,137,321,758	1,137,321,758	1,137,321,758	1,137,321,758
PROFIT RESERVES	1,977,510,844	1,977,510,844	1,977,510,844	1,977,510,844	1,977,510,844	619,636,699	619,636,699	1,272,764,892	1,272,764,892	342,809,337	342,809,337	342,809,337
FUNDS	950,000,000	950,000,000	950,000,000	950,000,000	0	0	0	0	0	0	0	0
NET PROFITS	2,340,634,019	2,051,823,219	1,712,678,973	1,424,918,135	3,708,081,548	1,902,129,955	655,025,460	6,486,848,608	4,488,827,687	5,586,053,181	5,527,458,345	5,249,410,902
TOTAL LIABILITIES	24,570,304,112	22,864,262,450	22,550,308,340	22,889,965,369	24,868,949,392	27,785,040,357	25,914,560,041	30,428,004,899	28,401,170,865	29,797,155,493	29,163,760,377	36,284,999,061
COMPARATIVE INCOME STATEMENTS												
SALES REVENUES (NET)	5,471,947,250	10,202,207,860	15,496,579,375	19,803,340,062	26,144,335,470	33,667,511,554	39,774,817,636	49,305,929,056	53,243,066,936	60,913,437,470	67,719,807,036	75,879,746,702
COST OF GOODS SOLD	2,804,768,000	7,313,174,000	11,805,794,000	15,778,937,000	19,398,984,000	28,314,276,000	34,394,840,000	38,364,309,000	42,851,400,000	48,209,058,000	54,025,632,000	61,677,550,000
OTHER EXPENDITURES	551,203,159	1,197,115,335	2,440,239,835	3,191,078,512	3,735,449,522	4,637,392,585	6,040,611,929	5,854,658,105	7,392,612,015	8,733,846,662	10,138,621,979	10,934,360,743
OTHER REVENUES AND PROFITS	224,557,928	359,904,694	462,133,433	591,593,585	698,179,600	1,186,286,986	1,315,659,753	1,399,886,657	1,489,772,766	1,615,520,373	1,971,905,288	1,981,574,943
NET PROFITS	2,340,634,019	2,051,823,219	1,712,678,973	1,424,918,135	3,708,081,548	1,902,129,955	655,025,460	6,486,848,608	4,488,827,687	5,586,053,181	5,527,458,345	5,249,410,902

APPENDIX C

**BALANCE SHEETS AND
INCOME STATEMENTS BASED ON
GENERAL PRICE-LEVEL METHOD
OF ACCOUNTING**

	Jan-89	Feb-89	Mar-89	Apr-89	May-89	Jun-89	Jul-89	Aug-89	Sep-89	Oct-89	Nov-89	Dec-89
CURRENT ASSETS	6,372,267,615	6,249,581,467	7,165,050,702	9,143,490,179	8,776,734,465	9,739,883,281	9,060,376,722	9,220,224,509	9,144,120,490	8,819,028,940	8,974,649,434	10,450,876,964
CASH	313,466,510	228,276,776	255,506,534	568,301,912	528,595,017	617,461,623	347,294,240	309,314,113	571,676,989	307,640,706	368,749,134	367,774,208
ACCOUNTS RECEIVABLE	3,212,546,762	3,396,707,010	3,952,766,057	3,540,093,154	3,592,758,882	4,630,667,367	4,046,885,933	4,212,937,552	4,354,853,924	4,376,031,453	4,116,101,205	4,022,272,634
OTHER RECEIVABLES	2,065,495,253	1,811,828,564	1,673,788,426	2,436,295,102	2,389,897,838	2,615,383,049	2,259,847,030	2,158,478,831	2,065,834,398	2,213,272,107	2,552,125,467	2,697,984,808
INVENTORIES	380,701,325	356,860,666	731,580,229	1,537,146,696	1,434,379,072	1,026,527,596	1,500,581,679	1,829,899,150	1,347,513,681	1,121,613,566	1,123,259,425	2,311,450,284
OTHER CURRENT ASSETS	400,057,765	455,908,452	551,409,457	961,653,315	831,103,657	849,843,646	805,767,840	809,594,863	804,241,497	800,471,109	814,414,202	1,051,395,031
FIXED ASSETS	30,481,218,825	31,063,928,692	31,157,977,207	33,277,233,928	34,924,258,767	38,108,380,678	41,123,160,987	43,712,241,001	50,673,221,802	50,722,855,076	51,782,637,228	55,944,643,597
ACCOUNTS RECEIVABLE	0	0	0	0	60,301	60,589	58,199	58,066	24,821,365	24,517,802	24,823,608	25,361,895
OTHER RECEIVABLES	59,997,105	407,760,007	460,846,222	771,514,279	964,783,683	901,493,444	821,434,406	772,999,643	0	0	0	0
FINANCIAL ASSETS	6,474,762,620	6,474,762,620	6,474,762,620	6,474,762,620	6,474,762,620	6,474,762,620	6,474,762,620	6,474,762,620	6,474,762,620	6,474,762,620	6,474,762,620	6,474,762,620
TANGIBLE ASSETS	23,928,814,376	24,192,366,877	24,204,595,693	26,012,337,118	27,364,753,377	30,705,404,806	33,798,690,496	34,268,155,031	35,464,381,573	35,529,912,387	36,588,090,681	40,230,918,203
INTANGIBLE ASSETS	0	0	0	0	0	0	0	0	0	0	0	498,907,689
FUTURE EXPENDITURES	0	0	1,571,211	1,571,211	1,571,211	7,035,587	8,658,394	8,658,394	17,183,460	1,301,004	1,301,004	9,801,481
OTHER FIXED ASSETS	17,644,725	19,039,188	16,201,462	17,048,700	18,327,576	19,623,633	19,556,872	19,536,738	19,558,809	19,847,288	21,145,141	32,377,733
TOTAL ASSETS	36,853,486,440	37,313,510,159	38,323,027,909	42,420,724,108	43,600,993,233	47,848,263,960	50,183,537,709	53,032,465,509	59,817,342,292	59,541,884,017	60,757,286,663	66,395,520,560
SHORT-TERM LIABILITIES	2,859,764,359	2,902,791,699	3,217,153,599	5,381,269,960	4,443,864,715	4,663,852,707	3,701,357,826	3,987,666,266	1,291,543,782	661,413,577	669,110,105	3,347,281,177
FINANCIAL BORROWINGS	2,078,085,642	2,038,787,879	2,047,562,426	2,132,404,181	0	0	0	518,443,545	142,498,884	65,995,831	67,974,527	52,714,287
ACCOUNTS PAYABLE	0	0	0	0	146,703,944	443,631,066	118,538,106	0	0	0	110,704,771	1,400,790,762
OTHER LIABILITIES	767,980,688	849,783,116	1,148,752,960	1,053,381,576	2,765,669,437	2,730,946,648	2,597,352,115	2,533,068,074	308,446,052	292,468,265	265,491,033	1,109,720,851
TAX AND OTHER LIABILITIES PAYABLE	13,698,029	14,220,704	20,838,214	2,195,464,204	1,528,174,762	1,489,274,993	980,363,295	904,903,711	819,697,936	275,466,873	212,413,872	784,055,278
OTHER SHORT-TERM LIABILITIES	0	0	0	0	3,316,573	0	5,104,309	31,250,936	20,900,910	47,482,607	12,525,903	0
LONG-TERM LIABILITIES	0	0	0	0	0	0	0	0	2,323,292,766	2,273,402,353	2,329,618,387	2,316,073,811
FINANCIAL DEBTS	0	0	0	0	0	0	0	0	2,055,531,453	2,030,392,571	2,055,717,256	2,070,388,350
OTHER LONG-TERM LIABILITIES	0	0	0	0	0	0	0	0	267,761,312	243,009,782	273,901,132	245,685,462
SHAREHOLDER'S EQUITY	33,993,722,081	34,410,718,460	35,105,874,310	37,039,454,147	39,157,128,518	43,184,411,253	46,482,179,884	49,044,779,243	56,202,505,744	56,587,068,086	57,758,558,170	60,732,165,572
PAID-IN CAPITAL	4,060,000,000	4,060,000,000	4,060,000,000	3,280,000,000	3,280,000,000	4,000,000,000	4,000,000,000	4,000,000,000	4,000,000,000	4,000,000,000	4,000,000,000	4,000,000,000
CAPITAL RESERVES	307,675,114	307,675,114	307,675,114	307,675,114	480,527,988	480,527,988	480,527,988	480,527,988	480,527,988	480,527,988	480,527,988	480,527,988
PROFIT RESERVES	29,269,006,565	29,418,519,051	29,444,402,110	31,274,596,997	32,540,884,718	35,006,041,038	37,490,689,620	39,659,093,357	46,355,208,829	46,292,283,805	47,254,015,628	51,256,210,957
FUNDS	0	0	0	0	0	0	430,000,000	430,000,000	430,000,000	430,000,000	430,000,000	430,000,000
NET PROFITS	357,040,401	624,524,295	1,293,797,086	2,177,182,036	2,855,715,812	3,697,842,228	4,080,962,275	4,475,157,898	4,936,768,926	5,384,256,293	5,594,014,553	4,565,426,627
TOTAL LIABILITIES	36,853,486,440	37,313,510,159	38,323,027,909	42,420,724,108	43,600,993,233	47,848,263,960	50,183,537,709	53,032,465,509	59,817,342,292	59,541,884,017	60,757,286,663	66,395,520,560
COMPARATIVE INCOME STATEMENTS												
SALES REVENUES (NET)	2,070,023,948	4,037,580,831	6,815,731,762	9,546,452,450	12,282,259,267	15,396,924,841	18,062,011,797	20,703,125,211	23,975,920,117	27,240,304,004	30,213,193,894	33,479,869,004
COST OF GOODS SOLD	1,589,315,535	3,107,221,592	4,836,225,963	6,463,654,924	8,273,549,323	10,305,491,125	12,516,881,983	14,530,546,408	17,046,256,197	19,485,203,827	21,827,148,175	24,665,979,167
OTHER EXPENDITURES	132,303,782	325,301,112	717,244,598	950,668,609	1,209,254,571	1,462,049,220	1,642,326,061	1,886,450,300	2,195,791,668	2,586,939,172	3,035,914,584	4,513,239,059
OTHER REVENUES AND PROFITS	8,635,770	19,466,168	31,535,885	45,053,119	56,260,439	68,457,731	178,158,522	189,029,396	202,896,675	216,095,289	243,883,418	264,775,849
NET PROFITS	357,040,401	624,524,295	1,293,797,086	2,177,182,036	2,855,715,812	3,697,842,228	4,080,962,275	4,475,157,898	4,936,768,926	5,384,256,293	5,594,014,553	4,565,426,627

APPENDIX D

RESULTS OF HYPOTHESIS TESTING

RESULTS OF HYPOTHESIS TESTING

$$\alpha = 0.05$$

$$v_1 = p - 1 = 1 \quad ; \quad v_2 = n - p = 116$$

$$F_{\alpha} = 3.923$$

<u>Financial Ratio</u>	<u>F</u>	<u>p-value</u>	<u>Significant Difference</u>
Current Ratio	0.464	0.497	NO
Quick Ratio	0.451	0.503	NO
Oper. Cash Flow to Current Liab.	9.595	0.002	YES
Working Capital to Total Assets	154.5	4.5E-23	YES
Working Capital Turnover	0.391	0.533	NO
Receivable Turnover	0.043	0.836	NO
Inventory Turnover	0.018	0.894	NO
Long-Term Debt Ratio	49.09	1.7E-10	YES
Debt-Equity Ratio	86.89	9.2E-16	YES
Total Liabilities / Owner's Equity	61.41	2.5E-12	YES
Cash Flow From Oper. / Total Liab.	18.81	3.1E-05	YES
Times Interest Earned	0.005	0.944	NO
ROE	77.70	1.4E-14	YES
Profit Margin	0	1	NO
ROA	55.09	2.1E-11	YES
Profit Margin	0.001	0.970	NO
Total Asset Turnover	76.05	2.3E-14	YES
Leverage Ratio	68.29	2.6E-13	YES
Earnings Per Share	0.025	0.874	NO

CURRENT RATIO

Anova: Single-Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	182.3302	3.090342	7.640457
Resatated	59	163.3003	2.767802	5.577906

ANOVA

Source of Variation

	SS	df	MS	F	P-value	F crit
Between Groups	3.068949	1	3.068949	0.464346	0.496958	3.922878
Within Groups	766.6651	116	6.609182			
Total	769.734	117				

QUICK RATIO

Anova: Single-Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	155.6336	2.637858	6.091538
Resatated	59	138.9126	2.35445	4.412863

ANOVA

Source of Variation

	SS	df	MS	F	P-value	F crit
Between Groups	2.369449	1	2.369449	0.451134	0.503132	3.922878
Within Groups	609.2553	116	5.252201			
Total	611.6247	117				

OPERATING CASHFLOW TO CURRENT LIABILITIES

Anova: Single-factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	98.59624	1.671123	4.701432
Resatated	59	180.8474	3.06521	7.248577

ANOVA

Source of Variation

	SS	df	MS	F	P-value	F crit
Between Groups	57.33263	1	57.33263	9.595412	0.002447	3.922878
Within Groups	693.1006	116	5.975005			
Total	750.4332	117				

WORKING CAPITAL TO TOTAL ASSETS

Anova: Single-Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	18.30854	0.310314	0.013382
Resatated	59	6.566188	0.111291	0.001742

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1.168498	1	1.168498	154.5235	4.55E-23	3.922878
Within Groups	0.877185	116	0.007562			
Total	2.045683	117				

WORKING CAPITAL TURNOVER RATIO

Anova: Single-Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	48.21962	0.817282	0.088613
Resatated	59	51.6695	0.875754	0.144075

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.100862	1	0.100862	0.866927	0.353741	3.922878
Within Groups	13.49587	116	0.116344			
Total	13.59673	117				

RECEIVABLE TURNOVER RATIO

Anova: Single-Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	57.86889	0.980829	0.062019
Resatated	59	57.11843	0.968109	0.068297

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.004773	1	0.004773	0.07325	0.787144	3.922878
Within Groups	7.558329	116	0.065158			
Total	7.563102	117				

INVENTORY TURNOVER RATIO

Anova: Single Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	161.5326	2.737841	4.916766
Resatated	59	159.5898	2.704912	4.706972

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.031987	1	0.031987	0.006647	0.935159	3.922878
Within Groups	558.1768	116	4.811869			
Total	558.2088	117				

LONG-TERM DEBT RATIO

Anova: Single Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	6.758751	0.114555	0.005904
Resatated	59	2.317358	0.039277	0.000907

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.167169	1	0.167169	49.08874	1.72E-10	3.922878
Within Groups	0.395032	116	0.003405			
Total	0.562202	117				

DEBT-EQUITY RATIO

Anova: Single Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	20.2876	0.343858	0.01792
Resatated	59	8.790217	0.148987	0.007865

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1.120252	1	1.120252	86.8921	9.23E-16	3.922878
Within Groups	1.495525	116	0.012892			
Total	2.615777	117				

TOTAL LIABILITIES TO OWNER'S EQUITY RATIO

Anova: Single-Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	35.22743	0.597075	0.139207
Resatated	59	11.18603	0.189594	0.020318

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	4.898208	1	4.898208	61.41009	2.46E-12	3.922878
Within Groups	9.252422	116	0.079762			
Total	14.15063	117				

CASH FLOW FROM OPERATIONS TO TOTAL LIABILITIES

Anova: Single-Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	60.09823	1.018614	0.785781
Resatated	59	123.7592	2.097614	2.865203

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	34.34508	1	34.34508	18.81415	3.09E-05	3.922878
Within Groups	211.7571	116	1.825492			
Total	246.1022	117				

TIMES INTEREST EARNED

Anova: Single-Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	3003.03	50.89882	7001.089
Resatated	59	3067.441	51.99053	7346.128

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	35.15875	1	35.15875	0.004901	0.944308	3.922878
Within Groups	832138.6	116	7173.609			
Total	832173.7	117				

RATE OF RETURN ON COMMON SHAREHOLDERS' EQUITY

Anova: Single-Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	14.60851	0.247602	0.019829
Resatated	59	4.464058	0.075662	0.00262

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.872119	1	0.872119	77.69762	1.4E-14	3.922878
Within Groups	1.302044	116	0.011225			
Total	2.174163	117				

PROFIT MARGIN

Anova: Single-Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	8.255032	0.139916	0.006064
Resatated	59	8.255032	0.139916	0.006064

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0	1	0	0	1	3.922878
Within Groups	0.703446	116	0.006064			
Total	0.703446	117				

RATE OF RETURN ON ASSETS

Anova: Single-Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	11.78643	0.19977	0.013273
Resatated	59	4.573622	0.077519	0.002733

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.440887	1	0.440887	55.08901	2.08E-11	3.922878
Within Groups	0.928368	116	0.008003			
Total	1.369255	117				

PROFIT MARGIN

Anova: Single-Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	9.47722	0.160631	0.004722
Resatated	59	9.449437	0.16016	0.004747

ANOVA

Source of Variation

	SS	df	MS	F	P-value	F crit
Between Groups	6.54E-06	1	6.54E-06	0.001382	0.970413	3.922878
Within Groups	0.549201	116	0.004734			
Total	0.549208	117				

TOTAL ASSET TURNOVER RATIO

Anova: Single-Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	77.59078	1.315098	0.390583
Resatated	59	30.59662	0.518587	0.101638

ANOVA

Source of Variation

	SS	df	MS	F	P-value	F crit
Between Groups	18.71569	1	18.71569	76.04586	2.32E-14	3.922878
Within Groups	28.54882	116	0.246111			
Total	47.2645	117				

LEVERAGE RATIO

Anova: Single-Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	93.74596	1.588915	0.121795
Resatated	59	69.95677	1.185708	0.018655

ANOVA

Source of Variation

	SS	df	MS	F	P-value	F crit
Between Groups	4.795981	1	4.795981	68.29455	2.61E-13	3.922878
Within Groups	8.146094	116	0.070225			
Total	12.94207	117				

EARNINGS PER SHARE

Anova: Single-Factor
Summary

Groups	Count	Sum	Average	Variance
Historical	59	26496.56	449.0943	114711.8
Resatated	59	27088.04	459.1194	119325.4

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	2964.84	1	2964.84	0.025336	0.873808	3.922878
Within Groups	13574160	116	117018.6			
Total	13577125	117				

APPENDIX E

SUMMARY OF FINANCIAL STATEMENT RATIOS

SUMMARY OF FINANCIAL STATEMENT RATIOS

Ratio	Numerator	Denominator
Current Ratio	Current Assets	Current Liabilities
Quick Ratio	Highly Liquid Assets (cash, marketable securities, and receivables)	Current Liabilities
Operating Cash Flow to Current Liabilities	Cash Flow from Operations	Average Current Liabilities during the Period
Working Capital to Total Assets	Working Capital	Total Assets
Working Capital Turnover Ratio	Revenues	Average Working Capital during the Period
Receivable Turnover Ratio	Net Sales on Account	Average Accounts Receivable during the Period
Inventory Turnover	Cost of Goods Sold	Average Inventory during the Period
Long-Term Debt Ratio	Total Long-Term Debt	Total Long-Term Debt Plus Shareholders' Equity
Debt-Equity Ratio	Total Liabilities	Total Equities (total liabilities plus shareholders' equity)
Total Liabilities to Owner's Equity Ratio	Total Liabilities	Shareholders' Equity
Cash Flow from Operations to Total Liabilities Ratio	Cash Flow from Operations	Average Total Liabilities during the Period
Times Interest Earned	Net Income before Interest and Income Taxes	Interest Expense
Rate of Return on Common Shareholders' Equity	Net Income minus Preferred Stock Dividends	Average Common Shareholders' Equity during the Period
Profit Margin Ratio (after interest expense and preferred dividends)	Net Income minus Preferred Stock Dividends	Revenues
Rate of Return on Assets	Net Income plus Interest Expense (net of tax effects)	Average Total Assets during the Period
Profit Margin Ratio (before interest effects)	Net Income plus Interest Expense (net of tax effects)	Revenues
Total Asset Turnover Ratio	Revenues	Average Total Assets during the Period
Leverage Ratio	Average Total Assets during the Period	Average Common Shareholders' Equity during the Period
Earning per Share	Net Income minus Preferred Stock Dividends	Weighted-Average Number of Common Shares Outstanding during the Period

APPENDIX F

MONTHLY FINANCIAL RATIOS

	Jan-89	Feb-89	Mar-89	Apr-89	May-89	Jun-89	Jul-89	Aug-89	Sep-89	Oct-89	Nov-89	Dec-89
CURRENT RATIO		2.15	2.22	1.68	1.96	2.08	2.45	2.35	7.30	14.15	15.11	3.21
CURRENT RATIO		2.15	2.23	1.70	1.98	2.09	2.45	2.34	7.08	12.94	13.41	3.12
QUICK RATIO		2.03	2.00	1.40	1.64	1.86	2.02	1.89	6.22	12.35	13.21	2.50
QUICK RATIO		2.03	2.00	1.41	1.65	1.87	2.02	1.88	6.04	11.30	11.73	2.43
OPER. CASHFLOW TO CURRENT LIAB.		0.32	0.30	0.55	0.64	0.80	1.16	1.34	2.62	9.46	11.07	2.13
OPER. CASHFLOW TO CURRENT LIAB.		0.33	0.30	0.51	0.61	0.75	1.20	1.31	2.49	8.79	9.58	2.04
WORKING CAPITAL TO TOT. ASSETS		0.39	0.41	0.31	0.35	0.37	0.41	0.39	0.58	0.62	0.62	0.47
WORKING CAPITAL TO TOT. ASSETS		0.09	0.10	0.09	0.10	0.11	0.11	0.10	0.13	0.14	0.14	0.11
WORKING CAPITAL TURNOVER RATIO		0.58	0.73	0.71	0.70	0.76	0.54	0.52	0.53	0.39	0.35	0.36
WORKING CAPITAL TURNOVER RATIO		0.57	0.76	0.71	0.68	0.66	0.51	0.49	0.50	0.41	0.36	0.42
RECEIVABLE TURNOVER RATIO		0.60	0.72	0.71	0.77	0.87	0.64	0.67	0.81	0.72	0.68	0.70
RECEIVABLE TURNOVER RATIO		0.60	0.76	0.72	0.76	0.76	0.61	0.64	0.76	0.75	0.70	0.80
INVENTORY TURNOVER		4.18	3.03	1.43	1.24	1.89	1.75	1.24	1.68	1.90	2.03	1.47
INVENTORY TURNOVER		4.12	3.18	1.43	1.22	1.65	1.68	1.17	1.68	1.98	2.09	1.65
LONG-TERM DEBT RATIO		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.18	0.18	0.19
LONG-TERM DEBT RATIO		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.04	0.04
DEBT-EQUITY RATIO		0.34	0.34	0.45	0.37	0.35	0.29	0.29	0.26	0.22	0.21	0.37
DEBT-EQUITY RATIO		0.08	0.08	0.13	0.10	0.10	0.07	0.08	0.06	0.05	0.05	0.09
TOT. LIAB./OWNER'S EQUITY		0.51	0.50	0.81	0.59	0.54	0.40	0.41	0.35	0.28	0.27	0.58
TOT. LIAB./OWNER'S EQUITY		0.08	0.09	0.15	0.11	0.11	0.08	0.08	0.06	0.05	0.05	0.09
CASHFLOW FROM OP./TOT. LIAB.		0.32	0.32	0.69	0.58	0.82	1.05	1.39	0.87	1.83	2.25	1.63
CASHFLOW FROM OP./TOT. LIAB.		0.34	0.31	0.63	0.56	0.77	1.06	1.36	0.85	1.82	2.15	1.58
TIMES INTEREST EARNED		181.68	273.93	223.64	249.91	300.52	279.11	197.55	161.62	91.57	72.46	10.51
TIMES INTEREST EARNED		183.83	282.96	232.19	260.11	306.40	284.24	200.28	162.84	92.93	73.72	10.81
ROE		0.11	0.21	0.33	0.41	0.48	0.47	0.48	0.51	0.53	0.53	0.45
ROE		0.02	0.04	0.06	0.07	0.09	0.09	0.09	0.09	0.10	0.10	0.08
PROFIT MARGIN		0.15	0.19	0.23	0.23	0.24	0.23	0.22	0.21	0.20	0.19	0.14
PROFIT MARGIN		0.15	0.19	0.23	0.23	0.24	0.23	0.22	0.21	0.20	0.19	0.14
ROA		0.08	0.14	0.20	0.24	0.31	0.32	0.35	0.37	0.41	0.42	0.35
ROA		0.02	0.03	0.05	0.07	0.08	0.08	0.09	0.09	0.09	0.09	0.08
PROFIT MARGIN		0.16	0.19	0.23	0.23	0.24	0.23	0.22	0.21	0.20	0.19	0.15
PROFIT MARGIN		0.16	0.19	0.23	0.23	0.24	0.23	0.22	0.21	0.20	0.19	0.15
TOTAL ASSET TURNOVER		0.48	0.74	0.89	1.04	1.27	1.42	1.59	1.80	2.04	2.26	2.32
TOTAL ASSET TURNOVER		0.11	0.18	0.24	0.29	0.34	0.37	0.40	0.42	0.46	0.50	0.53
LEVERAGE RATIO		1.51	1.51	1.66	1.69	1.56	1.46	1.40	1.58	1.32	1.28	1.42
LEVERAGE RATIO		1.08	1.09	1.12	1.13	1.11	1.09	1.08	1.07	1.06	1.05	1.07
EARNINGS PER SHARE		152.02	308.46	639.23	836.38	906.66	1001.76	1103.47	1224.89	1327.57	1374.32	1105.92
EARNINGS PER SHARE		153.82	318.67	663.78	870.65	924.46	1020.24	1118.79	1234.19	1346.06	1398.50	1141.36

HISTORICAL VALUE 

RESTATED VALUE 

	Jan-99	Feb-99	Mar-99	Apr-99	May-99	Jun-99	Jul-99	Aug-99	Sep-99	Oct-99	Nov-99	Dec-99
CURRENT RATIO	1.61	1.57	1.67	1.60	1.55	1.26	3.15	2.30	2.15	2.22	2.46	3.84
CURRENT RATIO	1.59	1.56	1.65	1.58	1.53	1.24	3.04	2.26	2.11	2.16	2.36	3.80
QUICK RATIO	1.30	1.24	1.48	1.40	1.19	1.16	2.68	1.94	1.85	1.94	2.25	3.57
QUICK RATIO	1.28	1.22	1.46	1.39	1.18	1.14	2.59	1.90	1.81	1.89	2.16	3.34
OPER. CASHFLOW TO CURRENT LIAB.	0.61	0.13	0.39	0.14	0.27	0.83	-0.70	0.68	0.59	0.69	0.96	1.47
OPER. CASHFLOW TO CURRENT LIAB.	0.84	0.68	1.37	1.06	1.32	2.45	3.31	3.53	3.54	4.37	6.08	9.38
WORKING CAPITAL TO TOT. ASSETS	0.26	0.26	0.26	0.26	0.25	0.10	0.37	0.32	0.30	0.30	0.29	0.37
WORKING CAPITAL TO TOT. ASSETS	0.09	0.09	0.08	0.09	0.09	0.03	0.11	0.10	0.10	0.09	0.08	0.11
WORKING CAPITAL TURNOVER RATIO	0.47	0.59	0.75	0.39	0.86	0.96	0.83	0.54	0.64	0.62	0.54	0.73
WORKING CAPITAL TURNOVER RATIO	0.46	0.60	0.78	0.38	0.86	0.97	0.92	0.56	0.64	0.61	0.53	0.78
RECEIVABLE TURNOVER RATIO	0.64	0.60	0.74	0.48	1.20	0.75	1.08	1.31	1.23	1.10	0.94	1.22
RECEIVABLE TURNOVER RATIO	0.61	0.58	0.75	0.47	1.17	0.73	1.16	1.32	1.20	1.05	0.91	1.27
INVENTORY TURNOVER	0.92	0.88	1.04	1.15	1.56	1.40	2.83	2.17	1.76	2.29	2.40	3.03
INVENTORY TURNOVER	0.89	0.86	1.06	1.12	1.52	1.37	3.03	2.18	1.73	2.18	2.32	3.29
LONG-TERM DEBT RATIO	0.28	0.27	0.23	0.21	0.21	0.21	0.14	0.14	0.14	0.14	0.14	0.12
LONG-TERM DEBT RATIO	0.07	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.03
DEBT-EQUITY RATIO	0.59	0.60	0.53	0.55	0.57	0.52	0.28	0.35	0.37	0.35	0.32	0.24
DEBT-EQUITY RATIO	0.21	0.21	0.17	0.21	0.22	0.15	0.09	0.11	0.12	0.11	0.10	0.07
TOT. LIAB./OWNER'S EQUITY	1.42	1.49	1.12	1.24	1.33	1.10	0.40	0.54	0.58	0.54	0.46	0.31
TOT. LIAB./OWNER'S EQUITY	0.27	0.27	0.21	0.26	0.28	0.17	0.10	0.13	0.14	0.12	0.11	0.08
CASHFLOW FROM OP./TOT. LIAB.	0.55	0.10	0.25	0.12	0.22	0.57	-0.31	0.54	0.44	0.46	0.57	0.72
CASHFLOW FROM OP./TOT. LIAB.	0.78	0.52	0.89	0.95	1.11	1.69	1.52	2.86	2.65	2.94	3.64	4.74
TIMES INTEREST EARNED	36.68	28.58	4.77	4.30	4.76	4.52	4.71	3.43	1.82	1.44	1.48	3.01
TIMES INTEREST EARNED	36.89	28.85	4.83	4.34	4.80	4.54	4.79	3.49	1.84	1.45	1.49	3.07
ROE	0.05	0.09	0.16	0.13	0.14	0.13	0.11	0.06	0.06	0.04	0.04	0.20
ROE	0.01	0.02	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.05
PROFIT MARGIN	0.15	0.12	0.13	0.10	0.08	0.06	0.06	0.03	0.03	0.02	0.02	0.07
PROFIT MARGIN	0.15	0.12	0.13	0.10	0.08	0.06	0.06	0.03	0.03	0.02	0.02	0.07
ROA	0.03	0.04	0.09	0.08	0.08	0.08	0.08	0.06	0.09	0.08	0.09	0.21
ROA	0.01	0.01	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.03	0.03	0.06
PROFIT MARGIN	0.16	0.12	0.17	0.13	0.10	0.08	0.07	0.05	0.06	0.05	0.05	0.10
PROFIT MARGIN	0.16	0.12	0.17	0.13	0.10	0.08	0.07	0.05	0.06	0.05	0.05	0.10
TOTAL ASSET TURNOVER	0.17	0.32	0.52	0.59	0.75	0.94	1.15	1.25	1.39	1.59	1.83	2.07
TOTAL ASSET TURNOVER	0.05	0.11	0.18	0.20	0.27	0.30	0.33	0.38	0.43	0.49	0.54	0.61
LEVERAGE RATIO	1.91	2.46	2.30	2.19	2.29	2.22	1.66	1.47	1.56	1.56	1.50	1.38
LEVERAGE RATIO	1.16	1.27	1.24	1.23	1.27	1.22	1.13	1.11	1.13	1.13	1.12	1.09
EARNINGS PER SHARE	96.19	141.22	253.79	229.93	270.31	255.99	110.93	75.67	75.65	48.36	53.08	257.46
EARNINGS PER SHARE	96.76	142.63	257.62	232.55	272.64	257.77	113.36	77.52	77.50	49.40	54.16	264.80

HISTORICAL VALUE

RESTATED VALUE

	Jan-91	Feb-91	Mar-91	Apr-91	May-91	Jun-91	Jul-91	Aug-91	Sep-91	Oct-91	Nov-91	Dec-91
CURRENT RATIO	1.60	1.84	1.78	1.63	1.98	1.74	1.58	2.80	1.79	3.13	3.31	1.93
CURRENT RATIO	1.55	1.77	1.47	1.37	1.67	1.53	1.38	2.34	1.58	2.56	2.63	1.71
QUICK RATIO	1.35	1.54	1.51	1.56	1.75	1.60	1.50	2.43	1.47	2.69	2.75	1.82
QUICK RATIO	1.31	1.48	1.25	1.32	1.48	1.41	1.31	2.03	1.30	2.19	2.18	1.61
OPER. CASHFLOW TO CURRENT LIAB.	0.89	0.55	0.74	0.74	0.78	0.67	0.87	1.04	1.86	1.59	3.04	1.72
OPER. CASHFLOW TO CURRENT LIAB.	1.22	1.50	2.02	2.13	2.48	2.36	2.96	4.11	4.16	5.77	7.98	4.85
WORKING CAPITAL TO TOT. ASSETS	0.16	0.19	0.18	0.16	0.24	0.22	0.17	0.33	0.21	0.34	0.33	0.21
WORKING CAPITAL TO TOT. ASSETS	0.06	0.07	0.05	0.04	0.07	0.07	0.05	0.11	0.07	0.11	0.11	0.08
WORKING CAPITAL TURNOVER RATIO	1.00	1.13	1.24	1.10	1.32	1.26	1.17	1.33	0.49	0.96	0.89	0.94
WORKING CAPITAL TURNOVER RATIO	1.01	1.13	1.47	1.54	1.61	1.53	1.52	1.80	0.44	0.99	0.77	1.18
RECEIVABLE TURNOVER RATIO	1.31	1.14	1.36	0.93	0.94	0.82	0.66	1.12	0.54	1.02	0.85	0.92
RECEIVABLE TURNOVER RATIO	1.27	1.09	1.36	0.94	0.88	0.81	0.67	1.29	0.41	0.91	0.85	1.01
INVENTORY TURNOVER	2.43	2.83	3.04	4.39	4.03	7.12	6.93	2.94	2.02	2.39	2.64	4.79
INVENTORY TURNOVER	2.36	2.72	3.02	4.43	3.75	7.00	7.03	3.78	1.66	2.11	2.63	5.19
LONG-TERM DEBT RATIO	0.11	0.11	0.12	0.12	0.11	0.10	0.11	0.08	0.00	0.00	0.00	0.11
LONG-TERM DEBT RATIO	0.03	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.00	0.00	0.00	0.04
DEBT-EQUITY RATIO	0.35	0.32	0.32	0.35	0.32	0.36	0.37	0.25	0.26	0.16	0.14	0.32
DEBT-EQUITY RATIO	0.14	0.12	0.13	0.14	0.14	0.17	0.16	0.11	0.11	0.07	0.07	0.14
TOT. LIAB./OWNER'S EQUITY	0.55	0.46	0.48	0.53	0.48	0.57	0.58	0.33	0.36	0.19	0.17	0.47
TOT. LIAB./OWNER'S EQUITY	0.16	0.14	0.15	0.17	0.16	0.20	0.19	0.12	0.13	0.08	0.07	0.17
CASHFLOW FROM OP./TOT. LIAB.	0.91	0.36	0.54	0.58	0.59	0.60	0.66	0.67	1.86	1.23	2.85	1.83
CASHFLOW FROM OP./TOT. LIAB.	1.25	1.00	1.62	1.72	1.96	2.12	2.34	2.85	4.25	4.58	7.52	5.13
TIMES INTEREST EARNED	223.39	68.27	3.66	2.76	5.42	3.23	1.63	7.22	3.66	4.22	4.09	3.64
TIMES INTEREST EARNED	227.62	69.01	3.71	2.80	5.47	3.25	1.64	7.52	3.74	4.29	4.16	3.75
ROE	0.16	0.13	0.11	0.09	0.23	0.11	0.04	0.33	0.20	0.24	0.22	0.21
ROE	0.04	0.04	0.03	0.03	0.07	0.03	0.01	0.10	0.06	0.08	0.07	0.07
PROFIT MARGIN	0.43	0.20	0.11	0.07	0.14	0.06	0.02	0.13	0.08	0.09	0.08	0.07
PROFIT MARGIN	0.43	0.20	0.11	0.07	0.14	0.06	0.02	0.13	0.08	0.09	0.08	0.07
ROA	0.11	0.09	0.10	0.10	0.19	0.10	0.06	0.27	0.21	0.25	0.25	0.22
ROA	0.04	0.03	0.04	0.04	0.07	0.04	0.02	0.10	0.08	0.09	0.09	0.08
PROFIT MARGIN	0.43	0.20	0.15	0.11	0.17	0.08	0.04	0.15	0.12	0.12	0.11	0.10
PROFIT MARGIN	0.43	0.20	0.15	0.11	0.17	0.08	0.04	0.15	0.12	0.12	0.11	0.10
TOTAL ASSET TURNOVER	0.25	0.43	0.68	0.87	1.09	1.28	1.48	1.75	1.81	2.09	2.30	2.32
TOTAL ASSET TURNOVER	0.08	0.15	0.24	0.31	0.40	0.50	0.59	0.68	0.66	0.75	0.83	0.90
LEVERAGE RATIO	1.44	1.51	1.47	1.50	1.50	1.53	1.58	1.43	1.34	1.27	1.18	1.32
LEVERAGE RATIO	1.12	1.15	1.14	1.16	1.17	1.18	1.19	1.15	1.12	1.10	1.07	1.12
EARNINGS PER SHARE	234.06	205.18	171.27	142.49	370.81	135.87	46.79	463.35	320.63	310.34	307.08	291.63
EARNINGS PER SHARE	238.51	207.44	174.18	145.49	374.88	137.57	47.58	486.03	330.56	317.33	314.92	303.01

HISTORICAL VALUE

RESTATED VALUE

	Jan-92	Feb-92	Mar-92	Apr-92	May-92	Jun-92	Jul-92	Aug-92	Sep-92	Oct-92	Nov-92	Dec-92
CURRENT RATIO	1.98	2.15	2.57	4.86	6.25	8.52	6.78	5.53	8.08	4.71	3.08	3.05
CURRENT RATIO	1.74	1.90	2.21	3.92	4.79	6.06	5.30	4.55	6.35	4.13	2.83	2.78
QUICK RATIO	1.86	1.98	2.47	3.93	5.76	8.26	6.20	4.33	6.76	3.76	2.39	2.83
QUICK RATIO	1.63	1.75	2.12	3.17	4.41	5.87	4.84	3.57	5.32	3.30	2.20	2.59
OPER. CASHFLOW TO CURRENT LIAB.	0.59	0.61	1.27	1.25	4.10	6.72	5.02	4.01	5.74	3.82	2.81	3.18
OPER. CASHFLOW TO CURRENT LIAB.	0.76	1.12	2.08	2.89	5.90	8.73	7.47	6.80	8.95	6.17	4.67	5.35
WORKING CAPITAL TO TOT. ASSETS	0.21	0.25	0.28	0.41	0.42	0.43	0.44	0.44	0.50	0.46	0.33	0.35
WORKING CAPITAL TO TOT. ASSETS	0.06	0.08	0.09	0.15	0.16	0.17	0.18	0.18	0.21	0.21	0.19	0.16
WORKING CAPITAL TURNOVER RATIO	1.49	1.25	1.12	0.62	0.56	0.63	0.60	0.53	0.64	0.47	0.71	0.62
WORKING CAPITAL TURNOVER RATIO	1.65	1.39	1.21	0.68	0.61	0.65	0.56	0.59	0.68	0.44	0.73	0.62
RECEIVABLE TURNOVER RATIO	1.17	1.26	1.15	0.95	1.01	1.11	1.04	0.99	1.37	0.94	1.16	0.94
RECEIVABLE TURNOVER RATIO	1.12	1.23	1.10	0.85	1.05	1.09	0.92	1.05	1.40	0.85	1.15	0.90
INVENTORY TURNOVER	7.84	6.13	7.74	2.07	2.37	6.41	6.46	2.68	1.79	1.87	1.68	2.45
INVENTORY TURNOVER	7.49	5.98	7.47	2.09	2.45	6.30	5.82	2.80	1.84	1.71	1.66	2.37
LONG-TERM DEBT RATIO	0.11	0.10	0.10	0.08	0.07	0.08	0.07	0.06	0.06	0.06	0.05	0.06
LONG-TERM DEBT RATIO	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.03
DEBT-EQUITY RATIO	0.30	0.30	0.26	0.17	0.15	0.13	0.14	0.15	0.12	0.17	0.23	0.22
DEBT-EQUITY RATIO	0.12	0.12	0.10	0.08	0.07	0.06	0.07	0.07	0.06	0.09	0.12	0.11
TOT. LIAB./OWNER'S EQUITY	0.43	0.42	0.34	0.21	0.17	0.15	0.16	0.18	0.14	0.21	0.29	0.28
TOT. LIAB./OWNER'S EQUITY	0.13	0.13	0.12	0.08	0.07	0.07	0.07	0.08	0.07	0.10	0.14	0.13
CASHFLOW FROM OP./TOT. LIAB.	0.40	0.46	0.81	0.67	2.07	2.84	3.02	2.76	3.01	3.31	2.70	2.37
CASHFLOW FROM OP./TOT. LIAB.	0.55	0.86	1.39	1.67	3.38	4.46	4.92	4.90	5.27	5.45	4.49	4.09
TIMES INTEREST EARNED	84.49	116.60	52.51	68.38	21.98	7.57	8.41	8.07	8.19	8.43	9.61	4.99
TIMES INTEREST EARNED	85.91	119.03	53.20	69.59	22.57	7.75	8.51	8.24	8.41	8.69	9.82	5.08
ROE	0.13	0.20	0.24	0.28	0.29	0.33	0.35	0.32	0.39	0.39	0.44	0.40
ROE	0.04	0.06	0.07	0.09	0.10	0.12	0.13	0.12	0.16	0.16	0.18	0.17
PROFIT MARGIN	0.28	0.24	0.20	0.21	0.20	0.20	0.19	0.16	0.17	0.16	0.16	0.14
PROFIT MARGIN	0.28	0.24	0.20	0.21	0.20	0.20	0.19	0.16	0.17	0.16	0.16	0.14
ROA	0.09	0.14	0.17	0.22	0.25	0.33	0.35	0.31	0.38	0.37	0.39	0.39
ROA	0.03	0.05	0.06	0.08	0.10	0.13	0.14	0.13	0.17	0.16	0.18	0.18
PROFIT MARGIN	0.28	0.24	0.20	0.22	0.21	0.23	0.21	0.18	0.20	0.18	0.18	0.17
PROFIT MARGIN	0.28	0.24	0.20	0.22	0.21	0.23	0.21	0.18	0.20	0.18	0.18	0.17
TOTAL ASSET TURNOVER	0.31	0.59	0.87	1.03	1.19	1.43	1.61	1.73	1.93	2.03	2.13	2.25
TOTAL ASSET TURNOVER	0.11	0.21	0.31	0.38	0.46	0.56	0.54	0.72	0.84	0.90	1.00	1.08
LEVERAGE RATIO	1.45	1.42	1.38	1.27	1.19	1.16	1.15	1.17	1.16	1.18	1.25	1.29
LEVERAGE RATIO	1.15	1.13	1.12	1.10	1.08	1.07	1.07	1.08	1.07	1.08	1.12	1.13
EARNINGS PER SHARE	173.66	291.36	363.50	424.79	502.99	600.80	647.59	557.64	736.98	764.68	904.14	843.82
EARNINGS PER SHARE	176.61	297.48	368.40	432.43	517.08	617.02	656.00	571.57	759.46	781.52	926.27	862.82

HISTORICAL VALUE

RESTATED VALUE

	Jan-93	Feb-93	Mar-93	Apr-93	May-93	Jun-93	Jul-93	Aug-93	Sep-93	Oct-93	Nov-93	Dec-93
CURRENT RATIO	1.36	2.02	1.62	1.62	1.46	1.45	1.37	2.05	1.55	1.72	1.74	1.69
CURRENT RATIO	1.31	1.91	1.54	1.57	1.43	1.42	1.34	1.98	1.52	1.68	1.70	1.65
QUICK RATIO	1.02	1.97	1.53	1.07	0.87	0.83	0.76	1.22	1.00	1.28	1.16	1.31
QUICK RATIO	0.99	1.86	1.45	1.04	0.85	0.81	0.74	1.18	0.98	1.25	1.13	1.28
OPER. CASHFLOW TO CURRENT LIAB.	0.55	0.41	0.90	0.19	0.48	0.52	0.73	0.69	0.99	0.83	0.98	1.28
OPER. CASHFLOW TO CURRENT LIAB.	0.61	0.61	1.16	0.42	0.71	0.78	1.08	1.20	1.39	1.32	1.45	1.86
WORKING CAPITAL TO TOT. ASSETS	0.16	0.29	0.20	0.25	0.21	0.20	0.17	0.31	0.21	0.25	0.25	0.23
WORKING CAPITAL TO TOT. ASSETS	0.08	0.14	0.10	0.14	0.12	0.12	0.09	0.19	0.13	0.15	0.17	0.15
WORKING CAPITAL TURNOVER RATIO	1.09	1.35	1.06	1.34	0.99	0.98	1.18	1.07	0.92	0.87	0.74	0.66
WORKING CAPITAL TURNOVER RATIO	1.14	1.42	1.10	1.39	1.04	0.95	1.36	1.15	0.98	0.84	0.65	0.69
RECEIVABLE TURNOVER RATIO	1.24	1.13	0.97	1.41	1.23	1.15	1.24	1.53	1.29	1.06	0.96	0.87
RECEIVABLE TURNOVER RATIO	1.21	1.10	0.94	1.37	1.23	1.08	1.34	1.60	1.32	0.99	0.81	0.88
INVENTORY TURNOVER	2.18	1.86	11.66	1.78	0.74	0.50	0.59	0.67	1.03	0.81	0.56	0.82
INVENTORY TURNOVER	2.13	1.81	11.36	1.73	0.74	0.48	0.64	0.70	1.04	0.75	0.44	0.82
LONG-TERM DEBT RATIO	0.08	0.07	0.07	0.23	0.23	0.23	0.23	0.17	0.19	0.18	0.15	0.12
LONG-TERM DEBT RATIO	0.03	0.03	0.03	0.11	0.11	0.11	0.11	0.09	0.10	0.10	0.09	0.07
DEBT-EQUITY RATIO	0.48	0.33	0.38	0.54	0.58	0.57	0.57	0.42	0.50	0.46	0.43	0.41
DEBT-EQUITY RATIO	0.27	0.18	0.20	0.33	0.36	0.36	0.35	0.27	0.33	0.30	0.31	0.29
TOT. LIAB./OWNER'S EQUITY	0.94	0.49	0.61	1.19	1.36	1.34	1.34	0.72	1.01	0.85	0.77	0.71
TOT. LIAB./OWNER'S EQUITY	0.37	0.22	0.25	0.50	0.57	0.57	0.55	0.37	0.49	0.43	0.44	0.40
CASHFLOW FROM OP./TOT. LIAB.	0.70	0.27	0.83	3.19	0.40	0.41	0.56	0.42	0.85	0.59	0.81	1.01
CASHFLOW FROM OP./TOT. LIAB.	0.76	0.41	1.08	0.42	0.60	0.62	0.83	0.75	1.21	0.96	1.21	1.45
TIMES INTEREST EARNED	28.74	64.51	4.46	4.86	5.41	3.44	3.79	4.95	2.61	2.11	3.07	2.56
TIMES INTEREST EARNED	29.37	65.82	4.52	4.92	5.50	3.46	3.86	5.08	2.67	2.15	3.12	2.61
ROE	0.06	0.27	0.16	0.19	0.21	0.24	0.30	0.37	0.23	0.23	0.39	0.38
ROE	0.02	0.11	0.07	0.08	0.09	0.10	0.12	0.17	0.11	0.11	0.20	0.21
PROFIT MARGIN	0.14	0.28	0.12	0.10	0.09	0.09	0.09	0.11	0.07	0.06	0.11	0.11
PROFIT MARGIN	0.14	0.29	0.12	0.10	0.09	0.09	0.09	0.11	0.07	0.06	0.11	0.11
ROA	0.04	0.16	0.14	0.13	0.11	0.15	0.18	0.24	0.20	0.23	0.32	0.36
ROA	0.02	0.08	0.07	0.07	0.07	0.09	0.11	0.14	0.12	0.14	0.20	0.23
PROFIT MARGIN	0.15	0.29	0.16	0.12	0.11	0.12	0.13	0.14	0.11	0.11	0.16	0.18
PROFIT MARGIN	0.15	0.29	0.16	0.12	0.11	0.12	0.13	0.14	0.11	0.11	0.16	0.18
TOTAL ASSET TURNOVER	0.27	0.57	0.85	1.02	1.05	1.18	1.40	1.65	1.82	1.97	1.96	1.95
TOTAL ASSET TURNOVER	0.14	0.30	0.43	0.56	0.63	0.71	0.86	1.02	1.14	1.23	1.25	1.30
LEVERAGE RATIO	1.55	1.69	1.55	1.90	2.27	2.35	2.34	1.97	1.85	1.92	1.60	1.74
LEVERAGE RATIO	1.23	1.29	1.24	1.38	1.53	1.57	1.56	1.45	1.43	1.46	1.44	1.42
EARNINGS PER SHARE	104.88	439.51	274.75	318.15	367.01	433.43	494.93	501.64	342.65	300.65	600.06	658.21
EARNINGS PER SHARE	107.24	448.51	279.83	323.25	374.35	437.33	507.55	518.70	356.70	311.78	614.76	676.64

HISTORICAL VALUE

RESTATED VALUE

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