

AN EMPIRICAL INVESTIGATION OF THE VALIDITY  
OF HISTORICAL COST/CONSTANT DOLLAR  
DATA ESTIMATION MODELS

By

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## CHAPTER I

### INTRODUCTION AND NATURE OF PROBLEM

#### Introduction

Statement of Financial Accounting Standards Number 33 (SFAS No. 33), "Financial Reporting and Changing Prices," was issued by the Financial Accounting Standards Board in September of 1979. The Statement represents a significant development in the history of modern financial accounting and reporting in the United States. SFAS No. 33 is the first generally accepted accounting principle (GAAP) requiring disclosure of inflationary effects on a company's financial position and results of operations.

SFAS No. 33 requires two supplementary income disclosures, one dealing with the effects of general inflation (historical cost/constant dollar accounting), the other dealing with the effects of specific price changes (current cost accounting). The provisions of the Statement apply only to certain large public enterprises.

Several authors have developed models which generate surrogate historical cost/constant dollar data directly from information available in historical cost financial statements. Due to the past unavailability of actual historical cost/constant dollar data, meaningful validation of the models has not been possible. Nevertheless, data produced by the models have been relied on in a number of research efforts.

The historical cost/constant dollar disclosures made pursuant to SFAS No. 33 have provided the first comprehensive data base against which to test the validity of the estimation models. The present dissertation reports the results of empirical research which compared model generated historical cost/constant dollar data to actual historical cost/constant dollar data presented pursuant to SFAS No. 33.

### Historical Perspective

The present section highlights significant developments in the history of inflation accounting in America. The background information provides an indication of the difficulties which have been encountered in attempting to develop acceptable inflation accounting methods, and provides evidence regarding the existence of divergent opinions on how best to account for the effects of inflation. The historical perspective, therefore, provides evidence that inflation accounting is not a well settled issue and that there is a great need for additional research on the topic (such as the present study).

Problematic to basic financial accounting data is the existence of an unstable monetary unit as a basis for measurement. The problem has long been recognized by accountants. As early as 1922, Professor William Paton (1973, p. 427) indicated that, because of changes in the general purchasing power of the dollar, comparisons of accounting statements over time tended to be misleading.

In 1936, H. W. Sweeney challenged the assumption that the monetary unit was a stable basis for measurement. He presented the first American work which included details of general price-level adjusted financial statements.

During the inflationary period following World War II, articles including discussions of the accounting problems associated with price-level changes flourished. The Committee on Accounting Procedure of the American Institute of Certified Public Accountants (AICPA, 1953) also addressed the problem. The Committee was primarily concerned with determining the appropriate amount of depreciation to charge against income during times of rising prices. The Committee concluded that charges to depreciation in the basic financial statements should be based on historical cost; however, supplementary disclosures indicating inflationary effects were encouraged.

The American Accounting Association (AAA) was also concerned with the accounting implication of a changing price-level. In 1951, the AAA released Supplementary Statement Number 2, "Price-Level Changes and Financial Statements." The publication included a description of some of the steps necessary to prepare general price-level adjustments. During the same time period the AAA also conducted several case studies on general price-level adjustments.

Despite the attention given general purchasing power accounting, no comprehensive discussion of the steps necessary to generate a complete set of general price-level adjusted financial statements was published (except for Sweeney's book of 1936). In 1955, Corbin attempted to alleviate the deficiency with an article entitled "A Case Study of Price-Level Adjustments." The article presented a complete general price-level restatement of a retail store's basic financial statements.

Accounting Research Study Number 6, "Reporting the Financial Effects of Price-Level Changes," was published by the AICPA in 1963.



In 1969, The AICPA's Accounting Principles Board (APB) issued APB Statement Number 3, "Financial Statements Restated for General Price-Level Changes." ARS No. 6 and APB Statement No. 3 contained discussions of theoretical and practical aspects of preparing and presenting general price-level information. APB Statement No. 3 included a recommendation that general price-level information be presented as a supplement to basic historical cost financial statements. However, few companies followed the APB's recommendation.

Inflation became a persistent problem in the early 1970's and the accounting profession had not provided a viable reporting requirement to account for inflation's impact. As such, the newly formed Financial Accounting Standards Board (FASB) placed the problem of accounting for the effects of inflation high on its agenda of items for consideration. On February 15, 1974, an FASB Discussion Memorandum (FASB, 1974a), "Reporting the Effects of General Price-Level Changes in Financial Statements," was issued. An FASB Exposure Draft (FASB, 1976), "Financial Reporting in Units of General Purchasing Power," was issued the following December. The Exposure Draft included a proposal to establish supplementary general purchasing power (price-level adjusted) disclosure requirements for specified financial information.

A number of criticisms were leveled against general purchasing power accounting during the same time period. The criticisms maintained that measurements of the effect of general inflationary impacts on a business were meaningless because inflation affected different businesses in different ways. Hence, argument evolved contending that general purchasing power data provided little useful

information for predicting earnings and cash flows of a specific business.

In an effort to overcome perceived shortcomings, and as the result of numerous individual research activities, alternative accounting schemes (and combinations of schemes) were proposed to attempt to deal with the accounting problems created by inflation. The alternative schemes were generally of a "current cost" or "replacement cost" composition, the details of which are not developed here. During March of 1976, in an action basically independent of the FASB project, the Securities and Exchange Commission (SEC) issued Accounting Series Release Number 190 (ASR 190). ASR 190 included a requirement that certain publicly held companies disclose specified replacement cost information in annual reports filed with the SEC.

Because of the controversy surrounding the entire issue of inflation accounting and because of the uncertainty and lack of understanding regarding the preparation, use, and need for general purchasing power information, the FASB formally deferred action on its Exposure Draft on general purchasing power in June of 1976. The Board indicated that it would resume consideration of the problem once further progress had been made on its project of developing a conceptual framework for financial accounting and reporting.

The Board did continue, however, with a research project on general purchasing power accounting. The project consisted of the FASB enlisting 101 companies to conduct field tests of the general purchasing power accounting techniques proposed in the Exposure Draft. In May, 1977, the FASB released a report containing a discussion of

the problems encountered and special techniques utilized in applying the Exposure Draft to the field test companies. The FASB Research Report (FASB, May, 1977), "Field Tests of Financial Reporting in Units of General Purchasing Power," also contained a summary of the financial statement effects of applying the specified restatement techniques of the Exposure Draft.

Over the period from June, 1976, when the Board deferred action on the general purchasing power Exposure Draft, until December of 1978, the FASB continued with research efforts aimed at developing a conceptual framework for financial accounting and reporting. Two particularly significant publications were issued on December 2, 1976. The first publication, Tentative Conclusions on Objectives of Financial Statements of Business Enterprises (FASB, December, 1976b), contained an indication that financial reporting information should provide information that is useful in assessing cash flow prospects and evaluating management stewardship. The other publication, "Conceptual Framework for Financial Accounting and Reporting: Elements of Financial Statements and Their Measurements" (FASB, December 1976a), included a discussion of various units of measurement and attributes to be measured in financial reporting.

The net result of research on a conceptual framework was the issuance of the first FASB Concepts Statement (FASB, December, 1978a), "Objectives of Financial Reporting by Business Enterprises," which culminated with the conclusion that:

financial reporting should provide information to help investors, creditors, and others assess the amounts, timing, and uncertainty of prospective net cash inflows to the enterprise (paragraph 37). It also calls for the provision of information about the economic resources of an enter-

prise in a manner that provides direct and indirect evidence of cash flow potential (paragraph 40 and 41) and it concludes that management is accountable to the owners for 'protecting them to the extent possible from unfavorable economic impacts of factors in the economy such as inflation or deflation' (paragraph 50) (FASB, 1979b, para. 2).

Based on the objectives set forth in FASB Concepts Statement No. 1, the Board issued an FASB Exposure Draft, "Financial Reporting and Changing Prices" (FASB, 1978b). The Exposure Draft was followed by another FASB Exposure Draft, "Constant Dollar Accounting" (FASB, 1979a).

The Exposure Drafts provided the foundation for the issuance of SFAS No. 33, "Financial Reporting and Changing Prices." SFAS No. 33 established the first reporting requirements for information on the effects of changing prices.

#### Nature Of The Problem

Even though extensive work has been done to determine appropriate financial reporting techniques during times of changing prices, and even though the inadequacies of historical cost accounting have been generally agreed upon, a consensus has not been reached on the financial reporting methods which best relieve the accounting problems associated with an unstable measuring unit. Therefore, SFAS No. 33 requires supplemental disclosure of both historical cost/constant dollar (general purchasing power) information and current cost information. The Board considers SFAS No. 33 to be experimental in nature:

The measurement and use of information on changing prices will require a substantial learning process on the part of all concerned. The Board makes no pretense of having solved all of the implementation problems. Rather, it encourages experimentation within the guidelines of this Statement and the development of new techniques that fit

the particular circumstances of the enterprise (FASB, 1979b, para. 14).

and

The requirement to present information on both a constant dollar basis and a current cost basis provides a basis for studying the usefulness of the two types of information. The Board intends to study the extent to which the information is used, the types of people to whom it is useful, and the purpose for which it is used (FASB, 1979b, para. 15).

Numerous research efforts need to be conducted to assist in determining the relative usefulness and merits of financial information disclosed pursuant to SFAS No. 33. Research efforts should encompass evaluations of the usefulness of the historical cost/constant dollar information and current cost information. Because reporting requirements of SFAS No. 33 are generally phased in, much of the empirical data necessary to facilitate many of the needed research efforts will not become available for several years. For instance, current cost information for fiscal years ending on or after December 25, 1979, but before December 25, 1980, need not be presented until reports for fiscal years ending on or after December 25, 1980, are issued. However, beginning with fiscal years ended on or after December 25, 1979, companies subject to SFAS No. 33 are required to disclose in their annual reports for the same year then ended, (a) information on income on a historical cost/constant dollar basis and (b) the purchasing power gain or loss on net monetary items.

A number of research opportunities exist. Possibilities include market studies aimed at assessing the usefulness or information content of the disclosures, analysis of the relative costs and benefits of the disclosures, and predictive ability studies.

Another useful area of research (the topic of the present research) was to assess the validity of historical cost/constant dollar data estimation techniques. A number of authors, including Davidson and Weil (Davidson, Stickney, and Weil, 1976), Petersen (1973), and Parker (1977), have proposed models which generate surrogate historical cost/constant dollar financial data directly from historical cost basis financial statements.

The data generated by such models have been applied in numerous past research efforts. The validity of the conclusions reached in such research efforts necessarily depended on the validity of the estimation models. Furthermore, if valid, the estimation models may have numerous future applications in accounting research and practice. The implications are more fully developed in Chapter IV.

#### Overview Of Subsequent Chapters

Chapter II is a literature review summarizing significant studies which developed or relied on historical cost/constant dollar data estimation models. The description of the research questions, specific details of the Davidson-Weil and Parker models, and other methodological considerations are included in Chapter III. The results and implications are described in Chapter IV. Chapter V contains a summarization of the study and recommendations for further research.

## CHAPTER II

### PRIOR STUDIES

#### Introduction

Numerous research studies have been conducted in the area of financial accounting and reporting in an inflationary environment. Several studies incorporated surrogate historical cost/constant dollar data generated by various techniques. The present chapter includes a brief discussion of these techniques.

The estimation models are one specific type of technique used to produce surrogate historical cost/constant dollar data. The present research was primarily concerned with the validity of the estimation models. Therefore, prior studies which developed and/or relied on an estimation model were of particular significance to the present research effort. Accordingly, the present chapter also contains a summarization of previous empirical research utilizing historical cost/constant dollar data estimation models.

The last section of the present chapter contains a discussion of limitations inherent in prior studies which relied on the historical cost/constant dollar data estimation models. The existence of the limitations provided additional justification for the present study.

## Alternative Historical Cost/Constant Dollar

### Data Empirical Research Techniques

Actual historical cost/constant dollar disclosures, although recommended in pronouncements such as APB Statement No. 3, generally have not been prepared and made available to the public by American companies. There have been a limited number of exceptions. For instance, Continental Oil Company, Gulf Oil Corporation, Indiana Telephone Corporation, Shell Oil Company, Sun Oil Company, and others have presented some historical cost/constant dollar data. In many cases, insignificant detail was provided and/or recommended restatement procedures were not applied (Parker, 1977, p. 84).

In addition to the publicly available data, confidential field tests of historical cost/constant dollar data preparation have been conducted under the auspices of both the APB and FASB. Results of the APB's field test were summarized by Rosenfield (1969). The study was conducted during a period of relatively mild inflation, and included eighteen companies of various size and type. Specific results were not made available. The FASB's field test included 101 companies and was conducted with the cooperation of the Financial Executives Institute and the American Petroleum Institute. Again, specific details of results achieved were not made available.

Due to the absence of an actual historical cost/constant dollar data base, empirical studies necessarily have been limited in scope and reliability. The studies which have been conducted utilized case study, simulation, and especially estimation models to generate the surrogate historical cost/constant dollar data on which they relied.



Jones (1955), Corbin (1955), and Dockweiler (1969) employed case study methodology to produce historical cost/constant dollar financial data. The case study approach allowed the researcher to make detailed observations of the firm which he was studying. While case studies allowed more precise conclusions than either simulation or modeling, a principle limitation was that conclusions which applied to the small sample of firms under observation did not necessarily apply to all firms.

An alternative technique was simulation. Simmons and Gray (1969), Bazley (1972), and Kuzdrall (1975) applied simulation to historical cost/constant dollar data research. Simulation methodology attempted to develop a pattern of real world processes and replicate these processes over a broad base. Simulation techniques were quite sensitive to the accuracy of the pattern on which they relied. Any defects in the pattern resulted in conclusions which possibly lacked realism.

A more popular approach adopted by researchers has been the development and use of historical cost/constant dollar data estimation models. The surrogate historical cost/constant dollar data generated by such models have been used to analyze the impact of historical cost/constant dollar type computations on reported earnings and financial position [Buckmaster and Brooks (1974), Davidson and Weil (1975a, 1975b, 1975c), Davidson, Stickney, and Weil (1976), Parker (1977), Watts and Zimmerman (1978)], to assess the information content of historical cost/constant dollar data [Petersen (1973), Baran, Lakonishok, and Ofer (1980)], to analyze cash flow predictability based on historical cost/constant dollar data [Samuelson (1972)],

to predict business failures [Ketz (1977)], and to assess the extent of inflation's impact on tax rates [Parker (1976)]. To a large extent, the reliability of conclusions reached in studies which relied on an estimation technique depended on the accuracy of the surrogate data produced by the technique.

Summarization of Prior Studies Which  
Utilized An Historical Cost/Constant  
Dollar Data Estimation Model

Since the present research study was primarily concerned with the validity of the estimation models, the following presentation summarizes significant prior studies which utilized historical cost/constant dollar data estimation models.

Samuelson Study

Samuelson (1972) conducted a study to provide empirical evidence about the relative predictive abilities of historical cost/constant dollar adjusted and unadjusted earnings numbers. His basic methodology was to discount actual net cash flows plus a terminal market value back to base period years in the late 1930's. He then attempted to assess whether the historical cost/constant dollar adjusted earnings numbers or the historical cost earnings numbers provided more predictive ability of the discounted cash flows.

Samuelson generated his historical cost/constant dollar adjusted earnings numbers by developing a set of very basic assumptions (a simplistic model) about the nature of adjustments which actual firms would have made to develop historical cost/constant dollar adjusted

financial statements. A shortcoming to his study was that there was virtually no change in the general price-level experienced immediately before and during the base years of his study. The average difference between historical cost/constant dollar adjusted earnings and historical cost earnings was only 7.6 percent. Because of the behavior of the price-level index during the time period examined, Samuelson's tests were inconclusive.

#### Petersen Study

Petersen (1973) conducted research to examine whether or not historical cost/constant dollar restatements would have sufficient impact to alter decisions made by users of financial information. To develop surrogate historical cost/constant dollar data, Petersen developed his own computer-based model. The model utilized data readily available in published annual reports.

Based on results achieved by his model, Petersen concluded that historical cost/constant dollar adjustments had a fairly uniform effect over firms. As such, investors may have been able to "adjust" for inflationary effects when using published financial statements. Also, historical cost/constant dollar financial statements resulted in little significant change in orderings of firms based on size and income.

#### Buckmaster and Brooks Study

Buckmaster and Brooks (1974) developed unique historical cost/constant dollar and current cost adjustment models. They utilized their models to calculate surrogate measures of operating income for

42 companies over a 19 year period.

Buckmaster and Brooks found that historical cost, historical cost/constant dollar, and current cost measurements resulted in substantially different operating incomes. The historical cost income was normally the largest while the pattern of differences between current cost and historical cost/constant dollar incomes varied across industries.

#### Davidson and Weil Studies

Davidson and Weil (1975a, 1975b, 1975c) (Davidson, Stickney, and Weil, 1976) developed their own historical cost/constant dollar adjustment model. They applied their model in several studies, each of which had the same basic objective; to measure the impact of inflation on earnings and financial position. Davidson and Weil found that income tended to be reduced significantly by general inflationary effects on cost of goods sold and depreciation. The effect was especially pronounced on utility and other capital intensive companies. However, the general inflationary effect on cost of goods sold and depreciation was typically offset by purchasing power gains on net monetary liability positions.

Davidson and Weil found that inflation adjusted income (including purchasing power gains and losses) was 92-100 percent of reported historical cost income. Davidson and Weil utilized large industrial companies in their samples.

#### Parker Studies

Parker (1977) also developed a historical cost/constant dollar

data estimation model. He employed his model to analyze the effects on 1974 income and financial position for 1050 companies. Parker's model was unique in that all information necessary to operate the model was available on COMPUSTAT files.

In summary, Parker found that inflationary effects varied among individual firms and between industry groups. Overall, however, income tended to be significantly reduced by inflationary effects on depreciation and cost of goods sold. The reduction was mostly offset by the purchasing power gain on the net monetary liability position maintained by most firms in the study.

Parker (1976) also utilized his historical cost/constant dollar data estimation model to demonstrate the divergence in tax rates based on inflation adjusted income versus historical cost income. Utilizing a 1050 firm sample, he found that, on average, the adjusted tax rate was 101 percent of the historical cost based tax rate. However, the average was not representative; the ratio of adjusted tax rate to historical cost tax rate varied across industry groups from .51 to 1.55. Therefore, the author suggested that the tax burden did not fall equitably among business firms.

#### Watts and Zimmerman Study

Watts and Zimmerman (1978) utilized the Davidson-Weil model in research which they were conducting to analyze the motivations behind a firm's lobbying efforts before various standard and legislative setting bodies. They used the Davidson-Weil model to analyze the impact on earnings of historical cost/constant dollar type disclosures. They then associated the earnings impact on individual firms with that

firm's lobbying efforts regarding potential FASB mandated historical cost/constant dollar adjustment requirements. In brief, they found that firms whose income increased as a result of historical cost/constant dollar adjustment opposed the imposition of such a reporting requirement. The position taken by firms whose income declined as a result of historical cost/constant dollar adjustment depended on other considerations (i.e., total assets). The basic implication was that firms tended to oppose reporting standards which resulted in higher reported income and thus higher taxes and perhaps more regulation.

#### Baran, Lakonishok, and Ofer Study

Baran, Lakonishok, and Ofer (1980) utilized a historical cost/constant dollar data estimation model (similar to Parker's model) to develop data used in a research effort to evaluate the information content of historical cost/constant dollar earnings. The researchers measured information content based on the degree of association between systematic market risk and alternative accounting measures (i.e., historical cost vs. historical cost/constant dollar). For the 242 firms examined, they found support for the hypothesis that historical cost/constant dollar adjusted data did contain information not already included in historical cost disclosures.

#### Limitation of Prior Studies

Lacking an actual historical cost/constant dollar data base, researchers have been unable to perform meaningful validation of the various historical cost/constant dollar data estimation models. Researchers have not been oblivious to the limitation. Petersen

(1973, p. 36) wrote that "a limited amount of information is available on which to base an evaluation of a procedure of the kind described in this paper." He attempted to validate his model by testing it against a limited amount of data provided by Rosenfield (1969) and McKenzie (1970). The McKenzie data consisted of nine general price-level adjusted balance sheets which were prepared from Civil Aeronautics Board data. Petersen (1973) recognized shortcomings of his limited validation effort, but concluded that:

Based on this analysis and other inquiry, the procedure was judged a satisfactory estimator of general price-level restated financial information and is the basis for the research reported in the remainder of this paper. (p. 36)

Parker (1976) noted the problems he encountered in validation of his model:

Hence, the obvious question is to ask how well restatement procedures employed accomplished this task. Unfortunately, information needed to answer this question directly is not readily available . . . Thus, comparing the data developed in this study with that actually reported in the real world is not a viable means of testing the appropriateness of the approximation techniques applied to companies of this study. (p. 84)

Parker satisfied himself as to the appropriateness of his estimation model by comparing the results he achieved with those achieved by another estimation model, the Davidson-Weil model. He emphasized, however, "that comparing the approximations of the current study with those produced by the Davidson and Weil does not prove or disprove the accuracy of either set of estimates since neither constitutes reality." (Parker, 1977, p. 84). The model developed by Davidson and Weil was also not subjected to rigorous validation. Davidson and Weil (Davidson, Stickney, and Weil, 1976, chapter 8) attempted to validate their model by comparing the results that they achieved with the

actual data prepared and presented by ten companies (three of which were fictitious companies). The authors were reasonably satisfied with the results of their model, but cautioned that their model was not rigorously tested.

While a number of other historical cost/constant dollar data estimation models were available, Ketz (1978, p. 953) concluded that the Petersen, Parker, and Davidson-Weil models were the most comprehensive. Ketz desired to validate these models but lacked a comprehensive body of actual historical cost/constant dollar data against which to compare results achieved by the models. Because it was the "only tractable data available" (1978, p. 955), Ketz employed historical cost/constant dollar data developed by McKenzie (1970). There were several problems with the McKenzie data: the McKenzie study encompassed only balance sheet data, the study covered the years of 1958-1967 during which only mild inflation was experienced, the data applied only to the airline industry, the data were generated by and from sources external to the airline companies themselves, the sample was small and non-random, and meaningful statistical analysis of the results was not possible. Thus, the Ketz study suffered from several deficiencies. However, based on his restricted study, Ketz concluded that all three models produced fairly accurate surrogate historical cost/constant dollar data.

#### Summary

The present chapter included a description of various techniques for developing surrogate historical cost/constant dollar data, included a summary of past empirical research which utilized historical



cost/constant dollar data estimation models, and contained a discussion of the limitations inherent in prior studies which relied on the historical cost/constant dollar data estimation models. The objective of the present research was to utilize data which companies presented pursuant to SFAS No. 33 in order to examine the validity of historical cost/constant dollar data estimation models. The study provided evidence regarding the validity of conclusions reached in the past studies which relied on historical cost/constant dollar data estimation models. The following chapter contains a description of the study's formal research questions and methodology employed in answering those questions.

## CHAPTER III

### RESEARCH QUESTIONS AND METHODOLOGY

#### Introduction

The purpose of the present chapter is to present the research questions addressed in this study and to explain the methodology utilized in answering those questions. The research questions pertained to measuring the mean percentage difference between various surrogate historical cost/constant dollar data and corresponding actual historical cost/constant dollar data. The basic methodology incorporated was to generate surrogate historical cost/constant dollar data directly from comparative historical cost financial statements by applying two unique estimation models. The surrogate data were then compared to actual historical cost/constant dollar data presented pursuant to SFAS No. 33. Statistics to measure mean percentage differences between estimated and actual data were calculated.

The first major section of the present chapter contains a description of the research questions. The next major section contains an explanation of the methodology utilized in answering those questions. The methodology section contains a brief outline of SFAS No. 33 mandated disclosure requirements, details of the Davidson-Weil and Parker models, a description of special problems encountered in applying the models, a profile of the companies whose data were

analyzed in this study, and a description of the statistical analysis techniques utilized in the study.

### Research Questions

The basic objective of the present research was to measure differences between specified historical cost/constant dollar data derived from certain of the estimation models and the actual historical cost/constant dollar data presented pursuant to reporting requirements of SFAS No. 33. As developed later in the chapter, methodological considerations resulted in a more specifically defined objective. The specific objective of the present research was to measure differences between historical cost/constant dollar data (cost of goods sold, depreciation expense, and purchasing power gain/loss) derived from the Davidson-Weil and Parker estimation models and the corresponding actual historical cost/constant dollar data presented pursuant to reporting requirements of SFAS No. 33.

As developed later in the chapter, selected Fortune (1979a, 1979b) identified companies were surveyed to obtain necessary empirical data. Since data for almost all firms in the study frame were acquired, descriptive rather than inferential statistical techniques were utilized. Therefore, rather than stating a formal test of hypothesis, series of research questions were posed. Research questions pertaining to the mean percentage differences between surrogate and actual historical cost/constant dollar data were raised for both models (Davidson-Weil and Parker), across several different industry groups (industrial, banking, utility, transportation, retail), and on several financial statement items (i.e., cost of goods sold, depreciation

expense, and purchasing power gain/loss). Research questions also pertained to the relative accuracy of specific adjustment routines of each model.

Of the industry groups included in the study, cost of goods sold was a relevant amount only for industrial and retail companies. Therefore, research questions concerning the ability of the models to estimate historical cost/constant dollar cost of goods sold were raised only for industrial and retail companies:

#### Research Question 1

For industrial and retail companies, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

#### Research Question 2

For industrial and retail companies, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Parker model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

Each of the immediately preceding research questions was dichotomized to reflect an interest in the performance of the models for specific industry groups:

#### Research Question 3

For industrial companies, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

#### Research Question 4

For industrial companies, what was the mean percentage difference between estimated historical cost/constant dollar

cost of goods sold amounts derived from the Parker model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

#### Research Question 5

For retail companies, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

#### Research Question 6

For retail companies, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Parker model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

In addition to examining the accuracy of cost of goods sold estimates by industry group, the relative accuracy of specific cost of goods sold adjustment routines within each model was determined. The specific routine utilized depended on a company's inventory valuation technique (i.e., first-in-first-out, etc.). Therefore, the following research questions were posed:

#### Research Question 7

For those industrial and retail companies which used the first-in-first-out inventory valuation technique, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

#### Research Question 8

For those industrial and retail companies which used the first-in-first-out inventory valuation technique, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Parker model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pur-

suant to reporting requirements of SFAS No. 33?

Research Question 9

For those industrial and retail companies which used the last-in-first-out inventory valuation technique (where the carrying value of inventory increased during the year), what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 10

For those industrial and retail companies which used the last-in-first-out inventory valuation technique (where the carrying value of inventory increased during the year), what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Parker model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 11

For those industrial and retail companies which used the last-in-first-out inventory valuation technique (where the carrying value of inventory decreased during the year), what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 12

For those industrial and retail companies which used the last-in-first-out inventory valuation technique (where the carrying value of inventory decreased during the year), what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Parker model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 13

For those industrial and retail companies which used the lower-of-cost-or-market inventory valuation technique, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived

from the Davidson-Weil model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 14

For those industrial and retail companies which used the lower-of-cost-or-market inventory valuation technique, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Parker model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 15

For those industrial and retail companies which used the average inventory valuation technique, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 16

For those industrial and retail companies which used the average inventory valuation technique, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Parker model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 17

For those industrial and retail companies which used the specific identification inventory valuation technique, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 18

For those industrial and retail companies which used the specific identification inventory valuation technique, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Parker model and corresponding actual historical cost/constant dollar cost of goods sold amounts

presented pursuant to reporting requirements of SFAS No. 33?

#### Research Question 19

For those industrial and retail companies which used the retail inventory valuation technique, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

#### Research Question 20

For those industrial and retail companies which used the retail inventory valuation technique, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Parker model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

#### Research Question 21

For those industrial and retail companies which used both first-in-first-out and last-in-first-out (mixed) inventory valuation techniques, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

#### Research Question 22

For those industrial and retail companies which used both first-in-first-out and last-in-first-out (mixed) inventory valuation techniques, what was the mean percentage difference between estimated historical cost/constant dollar cost of goods sold amounts derived from the Parker model and corresponding actual historical cost/constant dollar cost of goods sold amounts presented pursuant to reporting requirements of SFAS No. 33?

Of the industry groups included in the study, depreciation expense was material only for industrial, utility, transportation, and retail companies. Therefore, research questions pertaining to the ability of the models to estimate historical cost/constant dollar



depreciation expense were raised only for industrial, utility, transportation, and retail companies:

Research Question 23

For industrial, utility, transportation, and retail companies, what was the mean percentage difference between estimated historical cost/constant dollar depreciation expense amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar depreciation expense amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 24

For industrial, utility, transportation, and retail companies, what was the mean percentage difference between estimated historical cost/constant dollar depreciation expense amounts derived from the Parker model and corresponding actual historical cost/constant dollar depreciation expense amounts presented pursuant to reporting requirements of SFAS No. 33?

Each of the immediately preceding research questions was refined to reflect an interest in the performance of the models for specific industry groups:

Research Question 25

For industrial companies, what was the mean percentage difference between estimated historical cost/constant dollar depreciation expense amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar depreciation expense amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 26

For industrial companies, what was the mean percentage difference between estimated historical cost/constant dollar depreciation expense amounts derived from the Parker model and corresponding actual historical cost/constant dollar depreciation expense amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 27

For utility companies, what was the mean percentage difference between estimated historical cost/constant dollar depreciation expense amounts derived from the Davidson-Weil

model and corresponding actual historical cost/constant dollar depreciation expense amounts presented pursuant to reporting requirements of SFAS No. 33?

#### Research Question 28

For utility companies, what was the mean percentage difference between estimated historical cost/constant dollar depreciation expense amounts derived from the Parker model and corresponding actual historical cost/constant dollar depreciation expense amounts presented pursuant to reporting requirements of SFAS No. 33?

#### Research Question 29

For transportation companies, what was the mean percentage difference between estimated historical cost/constant dollar depreciation expense amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar depreciation expense amounts presented pursuant to reporting requirements of SFAS No. 33?

#### Research Question 30

For transportation companies, what was the mean percentage difference between estimated historical cost/constant dollar depreciation expense amounts derived from the Parker model and corresponding actual historical cost/constant dollar depreciation expense amounts presented pursuant to reporting requirements of SFAS No. 33?

#### Research Question 31

For retail companies, what was the mean percentage difference between estimated historical cost/constant dollar depreciation expense amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar depreciation expense amounts presented pursuant to reporting requirements of SFAS No. 33?

#### Research Question 32

For retail companies, what was the mean percentage difference between estimated historical cost/constant dollar depreciation expense amounts derived from the Parker model and corresponding actual historical cost/constant dollar depreciation expense amounts presented pursuant to reporting requirements of SFAS No. 33?

In addition to examining the accuracy of depreciation expense estimates by industry group, observing the relative accuracy of

specific depreciation expense adjustment routines within each model was of interest. The specific routine utilized depended on a company's depreciation method (i.e., straight-line, etc.). Therefore, the following research questions were posed:

Research Question 33

For those industrial, utility, transportation, and retail companies which used the straight-line depreciation method, what was the mean percentage difference between estimated historical cost/constant dollar depreciation expense amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar depreciation expense amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 34

For those industrial, utility, transportation, and retail companies which used the straight-line depreciation method, what was the mean percentage difference between estimated historical cost/constant dollar depreciation expense amounts derived from the Parker model and corresponding actual historical cost/constant dollar depreciation expense amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 35

For those industrial, utility, transportation, and retail companies which used the double-declining balance depreciation method, what was the mean percentage difference between estimated historical cost/constant dollar depreciation expense amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar depreciation expense amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 36

For those industrial, utility, transportation, and retail companies which used the double-declining balance depreciation method, what was the mean percentage difference between estimated historical cost/constant dollar depreciation expense amounts derived from the Parker model and corresponding actual historical cost/constant dollar depreciation expense amounts presented pursuant to reporting requirements of SFAS No. 33?

## Research Question 37

For those industrial, utility, transportation, and retail companies which used the sum-of-the-year's digits depreciation method, what was the mean percentage difference between estimated historical cost/constant dollar depreciation expense amounts derived from the Davidson-Weil model and corresponding actual historical cost/constant dollar depreciation expense amounts presented pursuant to reporting requirements of SFAS No. 33?

## Research Question 38

For those industrial, utility, transportation, and retail companies which used the sum-of-the-year's digits depreciation method, what was the mean percentage difference between estimated historical cost/constant dollar depreciation expense amounts derived from the Parker model and corresponding actual historical cost/constant dollar depreciation expense amounts presented pursuant to reporting requirements of SFAS No. 33?

Purchasing power gains or losses were disclosed by all companies included in the study. Therefore, research questions pertaining to the ability of the models to estimate the purchasing power gain or loss excluded none of the industry groups examined in the study. The Davidson-Weil and Parker models employed identical methodology for estimating the purchasing power gain or loss. Because the adjustment methodologies were identical, all of the research questions pertaining to the purchasing power gain/loss simultaneously addressed both models.

## Research Question 39

For industrial, banking, utility, transportation, and retail companies, what was the mean percentage difference between estimated purchasing power gain/loss amounts derived from the Davidson-Weil and Parker models and corresponding actual purchasing power gain/loss amounts presented pursuant to reporting requirements of SFAS No. 33?

The immediately preceding research question was refined to reflect an interest in the performance of the models for each industry

group:

Research Question 40

For industrial companies, what was the mean percentage difference between estimated purchasing power gain/loss amounts derived from the Davidson-Weil and Parker models and corresponding actual purchasing power gain/loss amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 41

For banking companies, what was the mean percentage difference between estimated purchasing power gain/loss amounts derived from the Davidson-Weil and Parker models and corresponding actual purchasing power gain/loss amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 42

For utility companies, what was the mean percentage difference between estimated purchasing power gain/loss amounts derived from the Davidson-Weil and Parker models and corresponding actual purchasing power gain/loss amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 43

For transportation companies, what was the mean percentage difference between estimated purchasing power gain/loss amounts derived from the Davidson-Weil and Parker models and corresponding actual purchasing power gain/loss amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 44

For retail companies, what was the mean percentage difference between estimated purchasing power gain/loss amounts derived from the Davidson-Weil and Parker models and corresponding actual purchasing power gain/loss amounts presented pursuant to reporting requirements of SFAS No. 33?

A potential distortion was introduced into the calculation of the mean percentage difference between estimated and actual purchasing power gains and losses. The potential distortion arose because,

for companies with relatively small purchasing power gains and losses, even small absolute differences between estimated and actual purchasing power gains and losses resulted in large percentage differences (i.e., a difference of \$1 million between an estimated and actual purchasing power gain resulted in a 100 percent deviation for a company with an actual purchasing power gain of \$1 million, but only a one percent deviation for a company with a purchasing power gain of \$100 million). However, the amount of the purchasing power gain or loss was not necessarily related to company size (i.e., in the preceding example, the company with the \$1 million purchasing power gain may very well have been the larger company). Based on a review of all companies included in the study, \$10 million was arbitrarily selected as a level beyond which a purchasing power gain or loss would not be considered as a relatively small amount. The following research question was posed for the group of companies which had purchasing power gains and losses in excess of \$10 million:

Research Question 45

For those industrial, banking, utility, transportation, and retail companies with purchasing power gains and losses in excess of \$10 million, what was the mean percentage difference between estimated purchasing power gain/loss amounts derived from the Davidson-Weil and Parker models and corresponding actual purchasing power gain/loss amounts presented pursuant to reporting requirements of SFAS No. 33?

The immediately preceding research question was refined to reflect an interest in each specific industry group.

Research Question 46

For those industrial companies with purchasing power gains or losses in excess of \$10 million, what was the mean percentage difference between estimated purchasing power gain/loss amounts derived from the Davidson-Weil and Parker

models and corresponding actual purchasing power gain/loss amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 47

For those banking companies with purchasing power gains or losses in excess of \$10 million, what was the mean percentage difference between estimated purchasing power gain/loss amounts derived from the Davidson-Weil and Parker models and corresponding actual purchasing power gain/loss amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 48

For those utility companies with purchasing power gains or losses in excess of \$10 million, what was the mean percentage difference between estimated purchasing power gain/loss amounts derived from the Davidson-Weil and Parker models and corresponding actual purchasing power gain/loss amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 49

For those transportation companies with purchasing power gains or losses in excess of \$10 million, what was the mean percentage difference between estimated purchasing power gain/loss amounts derived from the Davidson-Weil and Parker models and corresponding actual purchasing power gain/loss amounts presented pursuant to reporting requirements of SFAS No. 33?

Research Question 50

For those retail companies with purchasing power gains or losses in excess of \$10 million, what was the mean percentage difference between estimated purchasing power gain/loss amounts derived from the Davidson-Weil and Parker models and corresponding actual purchasing power gain/loss amounts presented pursuant to reporting requirements of SFAS No. 33?

All of the research questions are answered in Chapter IV.

Additional descriptive statistics are also provided.

## Methodology

### SFAS No. 33 Mandated Disclosures

The minimum historical cost/constant dollar disclosures of SFAS No. 33 require calculating adjusted amounts for property, plant, and equipment; inventory; depreciation; and cost of goods sold. The computation of a purchasing power gain or loss is also required. Of the adjusted amounts, depreciation, cost of goods sold, and the purchasing power gain/loss must be disclosed. Such disclosure is termed partial restatement. Companies may, as an option, disclose a complete set of historical cost/constant dollar financial statements. Such disclosure is termed comprehensive restatement.

Computation of the actual historical cost/constant dollar data may involve detailed computation; however, where feasible, the FASB encourages innovativeness and utilization of reasonable simplification techniques. SFAS No. 33 includes a description of steps necessary in the restatement process. As a general rule, the calculations are straightforward but require access to records underlying the basic financial statements. The estimation models, on the other hand, do not require access to underlying financial records. Estimated data are generated exclusively from basic published historical cost financial statements.

### The Models

Of the models considered to be most complete (Ketz, 1978, p. 953), the Petersen and Davidson-Weil models have been termed theoretical while Parker has been classified as a practical model because it



invoked fewer broad assumptions (Ketz, 1978, p. 953). An attempt to validate all three models would have been desirable; however, the Petersen model presented several problems. The primary problem was that the model was rather elaborate, requiring collection of data beyond that normally found in one year's comparative financial statements. Obtaining such extensive data for a significant number of companies was not a feasible option. Since the Davidson-Weil model was also a "theoretical" model, eliminating the Petersen model from the present validation study did not impose a serious limitation. Therefore, only the validity of the Parker (practical) and Davidson-Weil (theoretical) models were examined.

The following is a presentation of applicable portions of the basic methodology of the Davidson-Weil model, as adapted from Inflation Accounting: A Guide for the Accountant and the Financial Analyst (Davidson, Stickney, and Weil, 1976), and the Parker model, as adapted from an article entitled, "Impact of Price-Level Accounting" (Parker, 1977). Certain modifications were necessary to cause the models to conform to SFAS No. 33. For instance, one change involved the choice of a price-level adjustment index. To be consistent with SFAS No. 33 the Consumer Price Index (CPI) was employed throughout the present research, irrespective of the index specified by the specific model. Also, to be consistent with partial restatement requirements of SFAS No. 33, only the ability of the models to estimate adjusted cost of goods sold, adjusted depreciation expense, and the purchasing power gain/loss was examined. As specified by partial requirements of SFAS No. 33, adjustment was to average-for-the-year constant dollars. Where other changes were made, they are

clearly noted.

A listing of the Fortran computer program developed especially for the present study is included in Appendix A. Appendix B contains a listing of the computer generated output produced by the Fortran program when the program was applied to the companies analyzed in the study.

#### Davidson-Weil Model

Cost of Goods Sold Adjustment. The Davidson-Weil model provides five unique routines for estimating historical cost/constant dollar cost of goods sold. The routines rest on the assumption that purchases and general price-level changes occur uniformly throughout each year. The selection of a specific routine depends on the inventory valuation technique used by a company.

For companies which use first-in-first-out (FIFO) or specific identification (or which simply identify their inventory valuation technique to be "lower-of-cost-or-market"), the following portrays the basic Davidson-Weil estimate of historical cost/constant dollar cost of goods sold:

##### Step No. 1

Estimate the percentage of the prior year's general price-level change for which the current year's beginning inventory must be adjusted:

$$C = \frac{1}{2} \left[ 1 - \frac{\text{COGS}_t - \text{BI}_t}{\text{Purchases}_t} \right]$$

where:

$C$  = the percentage of the prior year's (t-1) general price-level change for which  $BI_t$  must be adjusted;

$COGS_t$  = current year's (t) cost of goods sold;

$BI_t$  = current year's (t) beginning inventory;

$Purchases_t$  = current year's (t) purchases.

Step No. 2

Adjust the current year's beginning inventory to end-of-current-year constant dollars:

$$ABI_t = \left\{ BI_t \right\} \left\{ \left[ \left( \frac{\text{Ending } CPI_{t-1}}{\text{Beginning } CPI_{t-1}} - 1 \right) (C) \right] + 1 \right\} \cdot \left\{ \frac{\text{Ending } CPI_t}{\text{Beginning } CPI_t} \right\}$$

where:

$ABI_t$  = beginning inventory in the current year, t, adjusted for the full general price-level change occurring during the current year, and adjusted for a percentage, C, of the prior year's (t-1) general price-level change;

CPI = consumer price index.

Step No. 3

Estimate the percentage of the current year's general price-level change for which the portion of cost of goods sold purchased in the current year must be adjusted:

$$D = 1 - \left[ \left( \frac{COGS_t - BI_t}{Purchases_t} \right) \left( \frac{1}{2} \right) \right]$$

where:

$D$  = the percentage of current year's (t) general price-level change for

which current year purchases included in current year cost of goods sold must be adjusted.

Step No. 4

Adjust the portion of cost of goods sold purchased in the current year to end-of-current-year constant dollars:

$$APCOGS_t = \left\{ COGS_t - BI_t \right\} \left\{ \left[ \left( \frac{\text{Ending CPI}_t}{\text{Beginning CPI}_t} - 1 \right) (D) \right] + 1 \right\}$$

where:

$APCOGS_t$  = portion of cost of goods sold purchased in the current year,  $t$ , adjusted for a percentage,  $D$ , of the current year's general price-level change;

$COGS_t - BI_t$  = portion of cost of goods sold purchased in the current year.

Step No. 5

Calculate the adjusted cost of goods sold:

$$ACOGS_t = ABI_t + APCOGS_t$$

where:

$ACOGS_t$  = cost of goods sold in the current year,  $t$ , adjusted to end-of-current-year constant dollars.

Step No. 6

Adjust cost of goods sold to average-for-the-year constant dollars:

$$ACOGS_{t(a)} = ACOGS_t \left[ \frac{\text{Average CPI}_t}{\text{Ending CPI}_t} \right]$$

where:

$ACOGS_{t(a)}$  = cost of goods sold in the current year,  $t$ , adjusted to average-for-the-year,  $t$ , constant dollars.

For companies which use the last-in-first-out (LIFO) inventory valuation technique and which experience an increase in the carrying value of their inventory during the current year, the following portrays the basic Davidson-Weil estimate of historical cost/constant dollar cost of goods sold:

Step No. 1

Estimate the percentage of the current year's general price-level change for which the current year's cost of goods sold must be adjusted:

$$E = \frac{1}{2} \left[ \frac{\text{COGS}_t}{\text{Purchases}_t} \right]$$

where:

E = the percentage of the current year's (t) general price-level change for which the current year's cost of goods sold must be adjusted;

COGS<sub>t</sub> = current year's (t) cost of goods sold;

Purchases<sub>t</sub> = current year's (t) purchases.

Step No. 2

Adjust the current year's cost of goods sold to end-of-current-year constant dollars:

$$\text{ACOGS}_t = \left\{ \text{COGS}_t \right\} \left\{ \left[ \left( \frac{\text{Ending CPI}_t}{\text{Beginning CPI}_t} - 1 \right) (E) \right] + 1 \right\}$$

where:

ACOGS<sub>t</sub> = cost of goods sold in the current year, t, adjusted to end-of-current-year constant dollars;

CPI = consumer price index.

## Step No. 3

Adjust cost of goods sold to average-for-the-year constant dollars:

$$ACOGS_{t(a)} = ACOGS_t \left[ \frac{\text{Average CPI}_t}{\text{Ending CPI}_t} \right]$$

where:

$ACOGS_{t(a)}$  = cost of goods sold in the current year, t, adjusted to average-for-the-year, t, constant dollars.

For companies which use the last-in-first-out inventory valuation technique and which experience a decrease in the carrying value of their inventory during the current year, the following portrays the basic Davidson-Weil estimate of historical cost/constant dollar cost of goods sold:

## Step No. 1

Adjust the current year's purchases for one-half of the current year's general price-level change:

$$APurchases_t = \left\{ Purchases_t \right\} \left\{ \left[ \frac{1}{2} \left( \frac{\text{Ending CPI}_t}{\text{Beginning CPI}_t} - 1 \right) \right] + 1 \right\}$$

where:

$APurchases_t$  = purchases in the current year, t, adjusted to end-of-current-year constant dollars;

$Purchases_t$  = current year's (t) purchases;

CPI = consumer price index.

## Step No. 2

Adjust the amount of the decrease in inventory experienced during the current year for the full general price-level change experienced during the last two years:

$$A \left( BI_t - EI_t \right) = \left[ BI_t - EI_t \right] \left[ \frac{\text{Ending CPI}_t}{\text{Beginning CPI}_{t-1}} \right]$$

where:

$A \left( BI_t - EI_t \right)$  = the amount of the decrease in inventory experienced during the current year, t, adjusted for the full general price-level change experienced during the last two years, t and t-1;

$BI_t$  = current year's (t) ending inventory;

$EI_t$  = current year's (t) ending inventory.

Step No. 3

Calculate the adjusted cost of goods sold:

$$ACOGS_t = APurchases_t + A \left( BI_t - EI_t \right)$$

where:

$ACOGS_t$  = cost of goods sold in the current year, t, adjusted to end-of-current-year constant dollars.

Step No. 4

Adjust cost of goods sold to average-for-the-year constant dollars:

$$ACOGS_{t(a)} = ACOGS_t \left[ \frac{\text{Average CPI}_t}{\text{Ending CPI}_t} \right]$$

where:

$ACOGS_{t(a)}$  = cost of goods sold in the current year, t, adjusted to average-for-the-year, t, constant dollars.

For companies which use the weighted-average or retail inventory valuation technique, the following portrays the basic Davidson-Weil estimate of historical cost/constant dollar cost of goods sold:

## Step No. 1

Estimate the age of the average dollar in the current year's beginning inventory:

$$F = \left[ \frac{1 + G + H}{2 (1 + G - H)} \right]$$

where:

F = age of the average dollar in the current year's (t) beginning inventory;

$$G = \left[ \frac{EI_t}{BI_t} \right]$$

where:  $EI_t$  = current year's (t) ending inventory;

$BI_t$  = current year's (t) beginning inventory;

$$H = \left[ 1 - \frac{COGS_t}{Purchases} \right]$$

where:  $COGS_t$  = current year's (t) cost of goods sold;

$Purchases_t$  = current year's (t) purchases.

## Step No. 2

Adjust the current year's beginning inventory to end-of-current-year constant dollars:

$$ABI_t = BI_t \left[ \frac{\text{Ending CPI}_t}{\text{Ending CPI}_{(t - (1 + F))}} \right]$$

where:



$ABI_t$  = beginning inventory in the current year,  $t$ , adjusted for the full general price-level change occurring during the current year and adjusted for the full general price-level change occurring during the last 'F' years (note: where  $\{t - (1 + F)\}$  is not a whole number, ending  $CPI_{\{t - (1 + F)\}}$  is not known and must be estimated). The estimate should be based on the assumption that general price-level changes occur uniformly across the calendar year containing the end of time period  $\{t - (1 + F)\}$ ;

CPI = consumer price index.

Step No. 3

Adjust the current year's purchases for one-half of the current year's general price-level change:

$$APurchases_t = \left\{ Purchases_t \right\} \left\{ \left[ \frac{1}{2} \left( \frac{\text{Ending } CPI_t}{\text{Beginning } CPI_t} - 1 \right) \right] + 1 \right\}$$

where:

$APurchases_t$  = purchases in the current year,  $t$ , adjusted to end-of-current-year constant dollars.

Step No. 4

Calculate adjusted cost of goods sold available for sale:

$$ACOGAS_t = ABI_t + APurchases_t$$

where:

$ACOGAS_t$  = cost of goods available for sale in the current year,  $t$ , adjusted to end-of-current-year constant dollars.

Step No. 5

Calculate the adjusted cost of goods sold:

$$ACOGS_t = ACOGAS_t \left[ \frac{COGS_t}{COGAS_t} \right]$$

where:

$ACOGS_t$  = cost of goods sold in the current year, t, adjusted to end-of-current-year constant dollars;

$COGAS_t = BI_t + Purchases_t$ .

Step No. 6

Adjust cost of goods sold to average-for-the-year constant dollars:

$$ACOGS_{t(a)} = ACOGS_t \left[ \frac{\text{Average CPI}_t}{\text{Ending CPI}_t} \right]$$

where:

$ACOGS_{t(a)}$  = cost of goods sold in the current year, t, adjusted to average-for-the-year, t, constant dollars.

Some companies may use both FIFO and LIFO (mixed inventory method). In such a situation, sufficient information to calculate the portion of ending inventory valued under FIFO and the portion valued under LIFO is normally provided. The Davidson-Weil model uses information on the composition of ending inventory to estimate the FIFO and LIFO portions of total purchases:

Step No. 1

Estimate the FIFO fraction of current year purchases:

$$I_t = \left[ \frac{(J_t) (EI_t)}{(EI_t + K_t)} \right]$$

where:

$I_t$  = fraction of current year, t,  
purchases attributable to FIFO  
inventories;

$J_t$  = fraction of the current year's  
(t) ending inventory valued at  
FIFO;

$EI_t$  = current year's (t) ending inven-  
tory;

$K_t$  = excess of FIFO valuation over the  
book value of the current year's  
(t) ending inventory valued at LIFO;

$(J_t)(EI_t)$  = current year's (t) ending inventory  
valued at FIFO;

$(EI_t + K_t)$  = book value of the current year's  
(t) ending inventory if the entire  
inventory were valued at FIFO.

Step No. 2

Estimate the LIFO fraction of current year purchases:

$$L_t = 1 - I_t$$

where:

$L_t$  = fraction of current year, t,  
purchases attributable to LIFO  
inventories.

Step No. 3

Calculate purchases in the current year attributable to FIFO  
inventories:

$$FPurchases_t = I_t (Purchases_t)$$

where:

$FPurchases_t$  = purchases in the current year, t,  
attributable to FIFO inventories;

$Purchases_t$  = current year's (t) purchases.

## Step No. 4

Calculate purchases in the current year attributable to LIFO inventories:

$$LPurchases_t = L_t (Purchases_t)$$

where:

$$LPurchases_t = \text{purchases in the current year, } t, \\ \text{attributable to LIFO inventories.}$$

The allocation scheme for purchases rest on the assumption that "the portion of total purchases allocated to LIFO goods is the same as the proportion that LIFO goods would be of total inventories if all inventories were valued with FIFO." (Davidson, Stickney, and Weil, 1976, p. 123).

## Step No. 5

Estimate the current year's beginning inventory valued at FIFO:

$$FBI_t = J_t (BI_t)$$

where:

$$FBI_t = \text{current year's (t) beginning in-} \\ \text{ventory valued at FIFO;}$$

$$BI_t = \text{current year's beginning inventory.}$$

## Step No. 6

Estimate the current year's beginning inventory valued at LIFO:

$$LBI_t = (1 - J_t) (BI_t)$$

where:

$$LBI_t = \text{current year's (t) beginning} \\ \text{inventory valued at LIFO.}$$

Given the FIFO and LIFO beginning and ending inventories and estimates of FIFO and LIFO purchases, the regular Davidson-Weil FIFO and LIFO cost of goods sold estimation routines may be applied

separately and the results summed to obtain an estimate of the total adjusted cost of goods sold.

Depreciation Expense Adjustment. The Davidson-Weil model provides three unique routines for estimating historical cost/constant dollar depreciation expense. The routines rest on the assumption that general price-level changes occur uniformly throughout each year and that there is not a material amount of fully depreciated assets carried on the books. The selection of a specific routine depends on the inventory valuation technique used by a company.

For companies which use the straight-line depreciation method, the following portrays the basic Davidson-Weil estimate of historical cost/constant dollar depreciation expense:

Step No. 1

Estimate the average age of the depreciable assets account at the end of the current year:

$$AGE_t = \left[ \frac{ACC_t}{DEP_t} \right]$$

where:

$AGE_t$  = average age of the depreciable assets account at the end of the current year, t;

$ACC_t$  = accumulated depreciation at the end of the current year, t;

$DEP_t$  = depreciation expense for the current year, t.

Step No. 2

Adjust the current year's depreciation expense for the full general price-level change occurring during the average life of the depreciable assets account:

$$ADEP_t = DEP_t \left[ \frac{\text{Ending CPI}_t}{\text{Ending CPI}_{(t - AGE_t)}} \right]$$

where:

$ADEP_t$  = depreciation expense for the current year,  $t$ , adjusted for the full general price-level change occurring during the last  $AGE_t$  years (note: where  $AGE_t$  is not a whole number, ending  $CPI_{(t - AGE_t)}$  is not known and must be estimated. The estimate should be based on the assumption that general price-level changes occur uniformly across the calendar year containing the end of time period  $(t - AGE_t)$ );

CPI = consumer price index.

### Step No. 3

Adjust depreciation expense to average-for-the-year constant dollars:

$$ADEP_{t(a)} = ADEP_t \left[ \frac{\text{Average CPI}_t}{\text{Ending CPI}_t} \right]$$

where:

$ADEP_{t(a)}$  = depreciation expense in the current year,  $t$ , adjusted to average-for-the-year,  $t$ , constant dollars.

For companies which use the double-declining balance depreciation method, the following portrays the basic Davidson-Weil estimate of historical cost/constant dollar depreciation expense:

### Step No. 1

Estimate the average age of the depreciable assets account at the end of the current year:

$$AGE_t = \left[ \frac{ACC_t}{DEP_t} \right]$$

where:

$AGE_t$  = average age of the depreciable assets account at the end of the current year;

$ACC_t$  = accumulated depreciation at the end of the current year, t;

$DEP_t$  = depreciation expense for the current year, t.

### Step No. 2

Estimate the growth rate of the depreciable assets account

$$M = \left[ \frac{EA_t}{EA_{(t-1)}} - 1 \right]$$

where:

M = growth rate for the depreciable assets account;

$EA_t$  = cost basis of all depreciable assets at the end of the current year, t;

$EA_{(t-1)}$  = cost basis of all the depreciable assets at the end of the prior year, t-1.

### Step No. 3

Select the double declining balance age reducing factor (DDBARF) corresponding to the growth rate (M) and the average age ( $AGE_t$ ) (interpolation may be necessary). In their book, Davidson and Weil provide the double declining balance age reducing factors in tabular form. (The computer program in Appendix A of the present study includes the factors and an interpolation routine (beginning at statement no. 3200).)

## Step No. 4

Calculate the modified average asset age at the end of the current year:

$$\text{MAGE}_t = \text{AGE}_t (\text{DDBARF})$$

where:

$\text{MAGE}_t$  = modified average age of the depreciable assets account at the end of the current year, t.

## Step No. 5

Adjust the current year's depreciation expense for the full general price-level change occurring during the modified average life of the depreciable assets account:

$$\text{ADEP}_t = \text{DEP}_t \left[ \frac{\text{Ending CPI}_t}{\text{Ending CPI}_{(t - \text{MAGE}_t)}} \right]$$

where:

$\text{ADEP}_t$  = depreciation expense for the current year, t, adjusted for the full general price-level change occurring during the last  $\text{MAGE}_t$  years (note: where  $\text{MAGE}_t$  is not a whole number, ending  $\text{CPI}_{(t - \text{MAGE}_t)}$  is not known and must be estimated. The estimate should be based on the assumption that general price-level changes occur uniformly across the calendar year containing the end of time period  $(t - \text{MAGE}_t)$ );

CPI = consumer price index.

## Step No. 6

Adjust depreciation expense to average-for-the-year constant dollars:

$$\text{ADEP}_{t(a)} = \text{ADEP}_t \left[ \frac{\text{Average CPI}_t}{\text{Ending CPI}_t} \right]$$



where:

$ADEP_{t(a)}$  = depreciation expense in the current year,  $t$ , adjusted to average-for-the-year,  $t$ , constant dollars.

For companies which use the sum-of-the-years' digits depreciation method, the following portrays the basic Davidson-Weil estimate of historical cost/constant dollar depreciation expense:

Step No. 1

Estimate the average age of the depreciable assets account at the end of the current year:

$$AGE_t = \left[ \frac{ACC_t}{DEP_t} \right]$$

where:

$AGE_t$  = average age of the depreciable assets account at the end of the current year,  $t$ ;

$ACC_t$  = accumulated depreciation at the end of the current year,  $t$ ;

$DEP_t$  = depreciation expense for the current year,  $t$ .

Step No. 2

Estimate the growth rate of the depreciable assets account:

$$M = \left[ \frac{EA_t}{EA_{(t-1)}} - 1 \right]$$

where:

$M$  = growth rate for the depreciable assets account;

$EA_t$  = cost basis of all depreciable assets at the end of the current year,  $t$ ;

$EA_{(t-1)}$  = cost basis of all depreciable assets at the end of the prior year, t-1.

Step No. 3

Select the sum-of-the-years' digits age reducing factor (SYDARF) corresponding to the growth rate (M) and the average age ( $AGE_t$ ) (interpolation may be necessary). In their book, Davidson and Weil provide the sum-of-the-years' digits age reducing factors in tabular form. (The computer program in Appendix A of the present study includes the factors and an interpolation routine (beginning at statement no. 3300).)

Step No. 4

Calculate the modified average asset age at the end of the current year:

$$MAGE_t = AGE_t (SYDARF)$$

where:

$MAGE_t$  = modified average age of the depreciable assets account at the end of the current year, t.

Step No. 5

Adjust the current year's depreciation expense for the full general price-level change occurring during the modified average life of the depreciable assets account:

$$ADEP_t = DEP_t \left[ \frac{\text{Ending CPI}_t}{\text{Ending CPI}_{(t - MAGE_t)}} \right]$$

where:

$ADEP_t$  = depreciation expense for the current year, t, adjusted for the full general price-level change occurring during the last  $MAGE_t$  years (note: where  $MAGE_t$  is not a whole number, ending  $CPI_{(t - MAGE_t)}$  is not known and must be estimated. The estimate should be based on the assumption

that general price-level changes occur uniformly across the calendar year containing the end of the time period  $(t - MAGE_t)$ );

CPI = consumer price index.

Step No. 6

Adjust depreciation expense to average-for-the-year constant dollars:

$$ADEP_{t(a)} = ADEP_t \left[ \frac{\text{Average CPI}_t}{\text{Ending CPI}_t} \right]$$

where:

$ADEP_{t(a)}$  = depreciation expense in the current year, t, adjusted to average-for-the-year, t, constant dollars.

Purchasing Power Gain/Loss. The Davidson-Weil model provides a single routine for estimating the purchasing power gain/loss. In applying the estimation procedure in the present research, definitions of monetary and non-monetary items corresponded to the definitions set forth in SFAS No. 33. The following portrays the basic Davidson-Weil estimate of the purchasing power gain/loss:

Step No. 1

Calculate the simple average net monetary position during the current year:

$$ANMP_t = \frac{1}{2} (BNMP_t + ENMP_t)$$

where:

$ANMP_t$  = average net monetary position during the current year, t;

$BNMP_t$  = current year's (t) beginning net monetary position;

$ENMP_t$  = current year's (t) ending monetary position.

Step No. 2

Calculate the purchasing power gain/loss for the entire current year:

$$PPGL_t = \left[ \begin{array}{c} -1 \end{array} \right] \left[ \begin{array}{c} ANMP_t \end{array} \right] \left[ \begin{array}{c} \frac{\text{Ending CPI}_t}{\text{Beginning CPI}_t} - 1 \end{array} \right]$$

where:

$PPGL_t$  = purchasing power gain/loss for the entire current year, t;

CPI = consumer price index.

Step No. 3

Adjust the purchasing power gain/loss to average-for-the-year constant dollars:

$$PPGL_{t(a)} = PPGL_t \left[ \begin{array}{c} \frac{\text{Average CPI}_t}{\text{Ending CPI}_t} \end{array} \right]$$

where:

$PPGL_{t(a)}$  = purchasing power gain/loss for the current year, t, adjusted to average-for-the-year, t, constant dollars.

Parker Model

Cost of Goods Sold Adjustment. The Parker model provides four unique routines for estimating historical cost/constant dollar cost of goods sold. The routines rest on the assumption that purchases occur uniformly throughout each year. The Parker model rests on the assumption that the primary cost flow assumption used by a company is used for all inventory items. The selection of a specific routine

depends on the inventory valuation technique used by a company.

For companies which use first-in-first-out (FIFO) or specific identification (or which simply identify their inventory valuation technique to be "lower-of-cost-or-market"), the following portrays the basic Parker estimate of historical cost/constant dollar cost of goods sold:

Step No. 1

Calculate the average daily purchases during the current year:

$$ADP_t = \left[ \frac{\text{Purchases}_t}{365} \right]$$

where:

$ADP_t$  = average daily purchases during the current year, t;

$\text{Purchases}_t$  = current year's (t) purchases.

Step No. 2

Calculate the number of days purchases in the current year's ending inventory:

$$NDP_t = \left[ \frac{EI_t}{ADP_t} \right]$$

where:

$NDP_t$  = number of days purchases in the current year's (t) ending inventory;

$EI_t$  = current year's (t) ending inventory.

## Step No. 3

Adjust the current year's ending inventory to end-of-current-year constant dollars:

$$\text{If: } \text{NDP}_t \leq \text{Month}_1$$

$$\text{Then: } \text{AEI}_t = \text{ADP} (\text{NDP}_t)$$

$$\text{If: } \text{NDP}_t > \text{Month}_1$$

$$\text{But: } \text{NDP}_t \leq \text{Month}_1 + \text{Month}_2$$

$$\text{Then: } \text{AEI}_t = \left[ \text{ADP}_t (\text{Month}_1) \right] + \left[ \text{ADP}_t (\text{NDP}_t - \text{Month}_1) \right. \\ \left. \cdot \left( \frac{\text{Ending CPI}_t}{\text{Ending CPI}_{(t-1/12)}} \right) \right]$$

$$\text{If: } \text{NDP}_t > \text{Month}_1 + \text{Month}_2$$

$$\text{But: } \text{NDP}_t \leq \text{Month}_1 + \text{Month}_2 + \text{Month}_3$$

$$\text{Then: } \text{AEI}_t = \left[ \text{ADP}_t (\text{Month}_1) \right] + \left[ \text{ADP}_t (\text{Month}_2) \right. \\ \left. \cdot \left( \frac{\text{Ending CPI}_t}{\text{Ending CPI}_{(t-1/12)}} \right) \right] \\ + \left[ \text{ADP}_t (\text{NDP}_t - (\text{Month}_1 + \text{Month}_2)) \right. \\ \left. \cdot \left( \frac{\text{Ending CPI}_t}{\text{Ending CPI}_{(t-2/12)}} \right) \right]$$

And so on for  $\text{NDP}_t$ 's of greater magnitude.

where:

$\text{AEI}_t$  = ending inventory in the current year,  $t$ , adjusted to end-of-current-year constant dollars;

Month = number of days in the nth month preceding the end of the current year, t;

CPI = consumer price index.

Step No. 4

Calculate the average daily purchases during the prior year:

$$ADP_{t-1} = \left[ \frac{\text{Purchases}_{t-1}}{365} \right]$$

where:

$ADP_{t-1}$  = average daily purchases during the current year, t-1;

$\text{Purchases}_{t-1}$  = prior year's (t-1) purchases.

Step No. 5

Calculate the number of days purchases in the current year's beginning inventory:

$$NDP_{t-1} = \left[ \frac{BI_t}{ADP_{t-1}} \right]$$

where:

$NDP_{t-1}$  = number of days purchases in the current year's (t) ending inventory;

$BI_t$  = current year's (t) beginning inventory.

Step No. 6

Adjust the current year's beginning inventory to end-of-current-year constant dollars:

If:  $NDP_{t-1} \leq \text{Month}_{13}$

$$\text{Then: } ABI_t = \left[ ADP_{t-1} \right] \left[ NDP_{t-1} \right] \left[ \frac{\text{Ending CPI}_t}{\text{Ending CPI}_{t-1}} \right]$$

If:  $NDP_{t-1} > \text{Month}_{13}$

But:  $NDP_{t-1} \leq \text{Month}_{13} + \text{Month}_{14}$

$$\begin{aligned} \text{Then: } ABI_t &= \left\{ ADP_{t-1} (\text{Month}_{13}) \left[ \frac{\text{Ending CPI}_t}{\text{Ending CPI}_{t-1}} \right] \right\} \\ &+ \left\{ ADP_{t-1} (NDP_{t-1} - \text{Month}_{13}) \left[ \frac{\text{Ending CPI}_t}{\text{Ending CPI}_{(t-13/12)}} \right] \right\} \end{aligned}$$

If:  $NDP_{t-1} > \text{Month}_{13} + \text{Month}_{14}$

But:  $ADP_{t-1} \leq \text{Month}_{13} + \text{Month}_{14} + \text{Month}_{15}$

$$\begin{aligned} \text{Then: } ABI_t &= \left\{ ADP_{t-1} (\text{Month}_{13}) \left[ \frac{\text{Ending CPI}_t}{\text{Ending CPI}_{t-1}} \right] \right\} \\ &+ \left\{ ADP_{t-1} (\text{Month}_{14}) \left[ \frac{\text{Ending CPI}_t}{\text{Ending CPI}_{(t-13/12)}} \right] \right\} \\ &+ \left\{ ADP_{t-1} (NDP_{t-1} - (\text{Month}_{13} + \text{Month}_{14})) \right. \\ &\quad \left. \cdot \left[ \frac{\text{Ending CPI}_t}{\text{Ending CPI}_{(t-14/12)}} \right] \right\} \end{aligned}$$

And so on for  $NDP_{t-1}$ 's of greater magnitude.

where:

$ABI_t$  = beginning inventory in the current year, t, adjusted to end-of-current-year constant dollars.

Step No. 7

Adjust the current year's purchases to end-of-current-year constant dollars:



$$APurchases_t = Purchases_t \left[ \frac{\text{Ending CPI}_t}{\text{Average CPI}_t} \right]$$

where:

$APurchases_t$  = purchases in the current year, t, adjusted to end-of-current-year constant dollars.

Step No. 8

Calculate the adjusted cost of goods sold:

$$ACOGS_t = ABI_t + APurchases_t - AEI_t$$

where:

$ACOGS_t$  = cost of goods sold in the current year, t, adjusted to end-of-current-year constant dollars.

Step No. 9

Adjust cost of goods sold to average-for-the-year constant dollars:

$$ACOGS_{t(a)} = ACOGS_t \left[ \frac{\text{Average CPI}_t}{\text{Ending CPI}_t} \right]$$

where:

$ACOGS_{t(a)}$  = cost of goods sold in the current year, t, adjusted to average-for-the-year, t, constant dollars.

The preceding routine contains a modification of the Parker model. In steps 3 and 6, the ending and beginning inventories are adjusted by month. In the actual Parker model, the adjustment is by quarter. The Parker model uses quarterly adjustment because the model utilizes the GNP Deflator price index (published quarterly). Since SFAS No. 33 requires use of the CPI (a monthly index), the preceding routine contains the monthly adjustment modification.

For companies which use the last-in-first-out (LIFO) inventory valuation technique and which experience an increase in the carrying value of their inventory during the current year, the following portrays the basic Parker estimate of historical cost/constant dollar cost of goods sold:

$$\text{ACOGS}_{t(a)} = \text{COGS}_t$$

where:

$\text{ACOGS}_{t(a)}$  = cost of goods sold in the current year, t, adjusted to average-for-the-year, t, constant dollars;

$\text{COGS}_t$  = current year's (t) cost of goods sold.

The Parker model requires extensive inventory layering for companies which use the last-in-first-out (LIFO) inventory valuation technique and which experience a decrease in the carrying value of their inventory during the current year. Extensive layering is not possible from the data available in a set of comparative financial statements. In the present research, therefore, the Parker LIFO cost of goods sold adjustment routine rested on the assumption that any decrease in inventory was associated with purchases of the immediately preceding year. The following portrays the modified Parker estimate of historical cost/constant dollar cost of goods sold:

Step No. 1

Adjust the amount of the current year's decrease in inventory for the change in the average general price-level occurring between the current and prior years:

$$A \left( \text{BI}_t - \text{EI}_t \right) = \left\{ \text{BI}_t - \text{EI}_t \right\} \left\{ \frac{\text{Average CPI}_t}{\text{Average CPI}_{t-1}} \right\}$$

where:

$A(BI_t - EI_t)$  = the amount of the decrease in inventory experienced during the current year, t, adjusted for the change in the average general price-level occurring between the current year, t, and the prior year, t-1;

$BI_t$  = current year's (t) beginning inventory;

$EI_t$  = current year's (t) ending inventory;

CPI = consumer price index.

#### Step No. 2

Calculate the adjusted cost of goods sold in average-for-the-year constant dollars:

$$ACOGS_{t(a)} = \left[ A(BI_t - EI_t) \right] + \left[ Purchases_t \right]$$

where:

$ACOGS_{t(a)}$  = cost of goods sold in the current year, t, adjusted to average-for-the-year, t, constant dollars;

$Purchases_t$  = current year's (t) purchases.

The Parker model requires extensive inventory layering to estimate historical cost/constant dollar cost of goods sold for companies which use the weighted average inventory valuation technique. Extensive layering is not possible from the data available in a set of comparative financial statements. The Davidson-Weil model overcomes this problem by assuming that 'F' (previously developed) is a fairly accurate assessment of the component age of an inventory valued by the weighted average method. Assuming that beginning inventory is 'F' years old, the Parker estimate of historical cost/constant dollar cost of goods sold is equivalent to the estimate

derived from the Davidson-Weil model.

Depreciation Expense Adjustment. Parker's historical cost/constant dollar depreciation expense estimation procedure implicitly assumes that all companies use the straight-line depreciation method. The mechanics of the Parker adjustment procedure are identical to the mechanics of the Davidson-Weil straight-line depreciation adjustment.

Purchasing Power Gain/Loss. In applying the Parker purchasing power gain/loss estimation procedure in the present research, definitions of monetary and non-monetary items corresponded to the definitions set forth in SFAS No. 33. The mechanics of the Parker adjustment procedure are identical to the mechanics of the Davidson-Weil purchasing power gain/loss adjustment procedure.

#### Special Problems and Assumptions

In applying the historical cost/constant dollar data estimation models, several special problems not specifically addressed by the models were encountered. Following is an outline of recurring special problems encountered and the assumptions made to deal with those problems.

To properly apply the models, the amount of depreciation allocated to cost of goods sold had to be determined. When such information was not clearly provided, an assumption was made that depreciation was allocated between cost of goods sold and administrative expense categories on a pro rata basis. In some cases an assumption was made that the percentage of total depreciation allocated to cost of goods sold was constant from year to year.

"Short-term investment" accounts typically consist of both debt (monetary) and equity (non-monetary) investments. Whenever supplemental information was unavailable regarding the composition of the "short-term investments" account, an assumption was made that one-half of the account was monetary and one-half was non-monetary. The impact of the assumption was nominal since the "short-term investments" account was normally immaterial. When the "short-term investments" account was material, information regarding the composition of the account was usually provided.

The financial statements of some companies indicated that an accelerated depreciation method was used, but failed to specifically identify the method. For purposes of applying the models, an assumption was made that such companies used the double-declining balance method of depreciation.

On occasion, other assumptions were made; however, the assumptions were situation specific, non-recurring, and generally had an immaterial impact on the model generated results. As presented later, several companies were excluded from the study because their financial statement disclosure did not supply sufficient data to allow proper operation of the models.

#### Profile of the Study Frame

Disclosure requirements of SFAS No. 33 are applicable to public enterprises that have, at the beginning of their fiscal year, inventories, property, plant, and equipment with combined aggregate cost basis in excess of \$125 million, or that have total assets with a net book value in excess of \$1 billion. The data are to be presented for

fiscal years ending on or after December 25, 1979; however, current cost information need not be presented until such time as reports for fiscal years ending on or after December 25, 1980, are issued.

Certain industries, such as the oil and gas industry, possess unique characteristics which present special problems in applying current cost disclosure requirements. Therefore, SFAS No. 33 excludes some industries from the current cost reporting requirements. However, the historical cost/constant dollar disclosure requirements are applicable to all public enterprises within the prescribed size limitations.

Fortune magazine's 1979 directories (May 7, 1979, pp. 270-288; and July 16, 1979, pp. 156-169) of large American companies listed (as of 1978) the nation's 500 largest industrial corporations (ranked by sales); 50 largest commercial banking companies, 50 largest life insurance companies, 50 largest diversified financial companies, and 50 largest utility companies (all ranked by total assets); and 50 largest retailing and 50 largest transportation companies (ranked by sales and operating revenue, respectively). While the directories were not complete listings of all firms subject to SFAS No. 33 requirements at December 31, 1979, they did represent, in a reasonably comprehensive and manageable fashion, a significant listing of firms which were required to present historical cost/constant dollar data (at December 31, 1979). Most companies not identified by Fortune were not large enough to be affected by SFAS No. 33.

Therefore, the Fortune identified companies served as a departure point for developing a list of companies eligible for inclusion in the analysis phase of this research (the study frame). Initial research

provided an indication that the models were not particularly suited to insurance and diversified financial companies. Generally, insurance and diversified financial companies presented only purchasing power gain/loss information. Other historical cost/constant dollar data were not material. Also, many of the insurance companies were mutual companies and, therefore, did not present SFAS No. 33 data. For the preceding reasons, the insurance and diversified financial companies were not included in the study frame. The remaining Fortune identified companies (industrial, banking, utility, transportation, and retail) constituted the study frame.

Annual reports were requested from all companies in the study frame. Requests for annual reports were first mailed in February, 1980. Those companies which had not responded by April, 1980, were mailed a second request. Companies which failed to respond by June, 1980, were not included in the study. Nonresponse bias was not an imposing limitation because only five percent of the study frame failed to respond, because the requests for annual reports did not specify a reason for requesting the information, and because the information requested was public information.

Historical cost/constant dollar data reporting requirements are applicable for fiscal years ending on or after December 25, 1979. The majority of the study frame companies had fiscal years ending on December 31, 1979. To facilitate timely data accumulation, only companies with fiscal years ending on December 31, 1979, (or a 52/53 week year ended in the last calendar week of 1979) were analyzed in the study.

Companies were not included in the study for other reasons.

To avoid the possibility of comparing actual end-of-year constant dollar amounts (companies which applied comprehensive restatement were allowed to adjust to end-of-year constant dollars) to estimated average-for-the-year constant dollar amounts (computer program utilized in the study adjusted to average-for-the-year constant dollars) companies which utilized comprehensive restatement were not included in the study. Other companies were excluded because their financial statements lacked adequate detail to allow proper operation of the models (i.e., unable to determine depreciation included in cost of goods sold, etc.). Some companies were acquired during 1979 (or were subsidiaries of other companies) and did not, therefore, present a complete annual report. Such companies, necessarily, were not included in the study. Still other companies were not included in the study because they were not public, were too small to be affected by SFAS No. 33, were in reorganization, or did not present SFAS No. 33 data for an indeterminate reason.

Table I includes summary statistics for companies in the study frame. Of the 700 companies in the study frame, 432 (62 percent) were actually included in the study. (Lists of companies included in the study, by company number and alphabetically, may be found in Appendixes C and D, respectively.) Some companies were excluded from the study for two or more reasons (i.e., acquired during 1979 and fiscal year end other than December 31). Such companies are enumerated in Table I in the "exclusion category" which first became evident.



TABLE I  
 PROFILE OF COMPANIES INCLUDED IN STUDY FRAME

Status	Industry Group					Total
	Industrial	Banking	Utility	Transportation	Retail	
Companies Included in Study	303	46	47	29	7	432
Companies Excluded from Study Because:						
Comprehensive Restatement or Inadequate Disclosure	9				1	10
Acquired, Subsidiary, or in Reorganization	19	1		8	2	30
Not Public, Too Small, or No SFAS No. 33 Disclosure	10			4		14
Not 12/31 Year End	134		1	5	38	178
Unable to Obtain Annual Report	<u>25</u>	<u>3</u>	<u>2</u>	<u>4</u>	<u>2</u>	<u>36</u>
Total Companies in Study Frame	<u>500</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>700</u>

Statistical Analysis

As previously developed, the research questions of the present study pertained to measuring mean percentage differences between specified data generated by historical cost/constant dollar data estimation models and corresponding actual historical cost/constant dollar data which companies presented pursuant to SFAS No. 33. To facilitate measurement, an index, P, was calculated for each surrogate datum generated. The index expressed the percentage deviation between an estimated historical cost/constant dollar value and the corresponding actual historical cost/constant dollar value:

$$P = \frac{S - R}{R}$$

where:

P = error rate of "estimate" expressed as percentage of "actual amount;

S = surrogate or estimated historical cost/constant dollar value;

R = real or actual historical cost/constant dollar value.

Therefore, when a model estimated historical cost/constant dollar amount was close to the actual amount, the 'P' value was close to zero. Any deviation from zero expressed potential deficiencies in an estimation model.

The statistical evaluation phase of the research involved calculating a mean 'P' value for each of the 50 research questions. Mean 'P' values for estimated historical cost/constant dollar cost of goods sold, estimated historical cost/constant dollar depreciation expense, and the estimated purchasing power gain/loss were required

by model, by industry group, and by inventory and depreciation method. The actual mean 'P' values are presented in Chapter IV. In addition to the mean 'P' values, the standard deviation and range for selected 'P' value distributions are also presented in Chapter IV.

#### Summary

The research questions and methodological considerations involved in answering those questions were presented in the present chapter. The objective of the present research, and, accordingly, the research questions, pertained to the degree of variation between estimated historical cost/constant dollar data produced by the Davidson-Weil and Parker models and historical cost/constant dollar data actually presented by companies.

432 companies were included in the study. Both estimation models were applied to each of the 432 companies and 'P' values (an index expressing the percentage deviation between estimated and actual historical cost/constant dollar data) were calculated. The next chapter contains a presentation of the results of the research in the form of summary 'P' value statistics.

## CHAPTER IV

### RESULTS AND IMPLICATIONS

#### Introduction

Chapter IV contains the results of the empirical experiment and the analyses of the results. Chapter IV also contains a discussion of the implications of the research effort. A brief summary of the methodology (which was presented in detail in Chapter III) precedes the analyses.

Financial statements were obtained from 432 large American companies affected by SFAS No. 33. The companies were selected from Fortune listings of industrial, banking, utility, transportation, and retail companies. Modified Davidson-Weil and Parker historical cost/constant dollar data estimation models were applied to historical cost data taken from the companies' financial statements. The model generated historical cost/constant dollar data were then compared to actual historical cost/constant dollar data presented by the companies. Error terms ('P' values) expressing the percentage deviation of estimated historical cost/constant dollar data amounts about corresponding actual historical cost/constant dollar data amounts were calculated for a number of data items. Summary 'P' value statistics were calculated to provide answers to each of the research questions developed in Chapter III. The following section includes a presenta-

tion of the summary 'P' value statistics. Noteworthy observations are also pointed out in the following analyses.

### Results and Analyses of the Experiment

#### Cost of Goods Sold

As developed in Chapter III, research questions 1 - 22 pertained to the measurement of mean percentage differences (mean 'P' values) between estimated and actual historical cost/constant dollar cost of goods sold data. More specifically, research questions 1 - 6 pertained to the ability of each model to estimate historical cost/constant dollar cost of goods sold across the industrial and retail industry groups. Therefore, Table II contains cost of goods sold mean 'P' values by model and industry group. Each mean 'P' value in Table II is cross-referenced to a specific research question. Other descriptive statistics are also presented in Table II.

The overall cost of goods sold mean 'P' values were .0051 for the Davidson-Weil model and -.0018 for the Parker model. The overall mean 'P' values provided an indication that, on average, the Davidson-Weil model overstated historical cost/constant dollar cost of goods sold by slightly over one-half percent and the Parker model understated historical cost/constant dollar cost of goods sold by less than one-quarter percent. The degree of variability of the overall 'P' value distributions, as measured by the standard deviation, was between .012 and .013 for both the Davidson-Weil and Parker models.

Research questions 7 - 22 pertained to the relative accuracy of specific (inventory valuation technique dependent) cost of goods

TABLE II  
 COST OF GOODS SOLD 'P' VALUE STATISTICS  
 (BY INDUSTRY GROUP)

Model	Industry Group	Research Question	Number of Observations	Mean 'P' Value	Std. Deviation of 'P' Values	Minimum 'P' Value	Maximum 'P' Value
Davidson-Weil	Industrial	3	303	0.0050	0.0123	-0.0580	0.0749
	Retail	5	7	0.0072	0.0028	0.0017	0.0097
	Overall	1	<u>310</u>	0.0051	0.0121	-0.0580	0.0749
Parker	Industrial	4	303	-0.0018	0.0131	-0.0638	0.0677
	Retail	6	7	-0.0006	0.0041	-0.0064	0.0066
	Overall	2	<u>310</u>	-0.0018	0.0130	-0.0638	0.0677

TABLE III  
 COST OF GOODS SOLD 'P' VALUE STATISTICS  
 (BY INVENTORY METHOD)

Model	Inventory Method	Research Question	Number of Observations	Mean 'P' Value	Std. Deviation of 'P' Values	Minimum 'P' Value	Maximum 'P' Value
Davidson-Weil	FIFO	7	60	0.0132	0.0151	-0.0558	0.0749
	LIFO (with Inv. increase)	9	103	-0.0014	0.0096	-0.0556	0.0085
	LIFO (with Inv. decrease)	11	16	0.0013	0.0106	-0.0311	0.0112
	Lower Cost-Mkt.	13	6	0.0172	0.0086	0.0048	0.0283
	Average	15	38	0.0012	0.0127	-0.0580	0.0211
	Specific ID	17	0				
	Retail	19	1	0.0066			
	Mixed	21	86	0.0088	0.0068	-0.0194	0.0299
	Overall	1	<u>310</u>	0.0051	0.0121	-0.0580	0.0749

TABLE III (Continued)

Model	Inventory Method	Research Question	Number of Observations	Mean 'P' Value	Std. Deviation of 'P' Values	Minimum 'P' Value	Maximum 'P' Value
Parker	FIFO	8	60	0.0051	0.0151	-0.0638	0.0677
	LIFO (with Inv. increase)	10	103	-0.0081	0.0091	-0.0608	0.0019
	LIFO (with Inv. decrease)	12	16	-0.0081	0.0117	-0.0443	0.0019
	Lower Cost-Mkt.	14	6	0.0091	0.0084	-0.0028	0.0195
	Average	16	38	0.0012	0.0127	-0.0580	0.0211
	Specific ID	18	0				
	Retail	20	1	-0.0014			
	Mixed	22	86	-0.0001	0.0121	-0.0415	0.0364
	Overall	2	<u>310</u>	-0.0018	0.0130	-0.0638	0.0677



sold adjustment routines within each model. Therefore, Table III contains cost of goods sold mean 'P' values by model and inventory valuation technique. Each mean 'P' value in Table III is cross-referenced to a specific research question. Other descriptive statistics are also presented in Table III.

Several observations which pertained to specific inventory valuation techniques were noteworthy. First, the Parker model always achieved an average 'P' value of less than .01, regardless of the specific inventory valuation technique. The Davidson-Weil model was not as consistent. For companies which used either FIFO or lower-of-cost-or-market inventory valuation techniques, the mean 'P' values for the Davidson-Weil model exceeded .01.

Another observation was that, for companies which used mixed inventory valuation techniques (i.e., both FIFO and LIFO), the Davidson-Weil model achieved an average 'P' value of .0088 while the simpler Parker model achieved an average 'P' value of -.0001. The complexity of the Davidson-Weil mixed inventory adjustment routine should not be condemned, however, as the routine did achieve a narrower standard deviation than the Parker routine. Also, historical cost/constant dollar cost of goods sold was at least as well predicted (based on mean 'P' values) by the Parker model as by the Davidson-Weil model for all companies except those which used LIFO. Figures 1 - 4, included in Appendix E, are histograms for various cost of goods sold 'P' value distributions.

#### Depreciation

As developed in Chapter III, research questions 23 - 38 pertained

to the measurement of mean percentage differences (mean 'P' values) between estimated and actual historical cost/constant dollar depreciation expense data. More specifically, research questions 23 - 32 pertained to the ability of each model to estimate historical cost/constant dollar depreciation expense across the industrial, utility, transportation, and retail industry groups. Therefore, Table IV contains depreciation expense mean 'P' values by model and industry group. Each mean 'P' value in Table IV is cross-referenced to a specific research question. Other descriptive statistics are also presented in Table IV.

Identical 'P' value summary statistics were generated for the Davidson-Weil and Parker models for utility, transportation, and retail companies. All utility, transportation, and retail companies included in the study used straight-line depreciation, and both estimation models had identical straight-line depreciation adjustment routines. For overall estimated historical cost/constant dollar depreciation expense, the Davidson-Weil model (overall mean 'P' value of .1376) was slightly more accurate than the Parker model (overall mean 'P' value of .1451). The overall mean 'P' values indicated that both models had a tendency to overestimate historical cost/constant dollar depreciation expense by an average of almost fifteen percent.

The overall 'P' value distributions were further characterized by standard deviations in excess of .16 and ranges in excess of 1.0. The average overstatement of almost fifteen percent indicated that the average age estimation tended to overstate the average age of the depreciable assets account; hence, the general price-level adjustment was for too long a time period. An exception was noted in the

TABLE IV  
DEPRECIATION 'P' VALUE STATISTICS  
(BY INDUSTRY GROUP)

Model	Industry Group	Research Question	Number of Observations	Mean 'P' Value	Std. Deviation of 'P' Values	Minimum 'P' Value	Maximum 'P' Value
Davidson-Weil	Industrial	25	303	0.1708	0.1457	-0.1508	0.7573
	Utility	27	47	-0.0250	0.0712	-0.1745	0.1870
	Transportation	29	29	0.0703	0.1910	-0.3887	0.7332
	Retail	31	7	0.0702	0.1606	-0.0900	0.3538
	Overall	23	<u>386</u>	0.1376	0.1614	-0.3887	0.7573
Parker	Industrial	26	303	0.1804	0.1502	-0.1508	0.7573
	Utility	28	47	-0.0250	0.0712	-0.1745	0.1870
	Transportation	30	29	0.0703	0.1910	-0.3887	0.7332
	Retail	32	7	0.0702	0.1606	-0.0900	0.3538
	Overall	24	<u>386</u>	0.1451	0.1660	-0.3887	0.7573

capital intensive utility group whose 'P' value distribution indicated an average understatement of two and one-half percent. The transportation and retail groups both had 'P' value distributions with a mean of about .07.

Table V, relating to research questions 33 - 38, contains data which provided evidence that the difference in overall accuracy between the Davidson-Weil and Parker depreciation expense adjustments was due to differences in estimation routines for companies which used other than straight-line depreciation methods (Davidson-Weil double-declining balance mean 'P' value of .1988 compared to Parker double-declining balance mean 'P' value of .2817 and Davidson-Weil sum-of-the-years'-digits mean 'P' value of .1827 compared to Parker sum-of-the-years'-digits mean 'P' value of .2579). The Parker model was based on an implicit assumption that all companies used straight-line depreciation while the Davidson-Weil model had separate estimation routines for companies which used double-declining balance or sum-of-the-years'-digits depreciation methods.

In summary, the models performed best when applied to companies which used straight-line depreciation (mean 'P' value of .1316 for both models). For companies which used accelerated depreciation methods, the Davidson-Weil model outperformed the Parker model. Figures 5 - 12, included in Appendix E, are histograms for various depreciation 'P' value distributions.

#### Purchasing Power Gain/Loss

As developed in Chapter III, research questions 39 - 50 pertained to the measurement of mean percentage difference (mean 'P' values)

TABLE V  
 DEPRECIATION 'P' VALUE STATISTICS  
 (BY DEPRECIATION METHOD)

Model	Depreciation Method	Research Question	Number of Observations	Mean 'P' Value	Std. Deviation of 'P' Values	Minimum 'P' Value	Maximum 'P' Value
Davidson-Weil	Straight-line	33	350	0.1316	0.1614	-0.3887	0.7573
	Double-declining balance	35	28	0.1988	0.1488	-0.0168	0.5302
	Sum-of-years' digits	37	8	0.1827	0.1721	-0.0458	0.4306
	Overall	23	<u>386</u>	0.1376	0.1614	-0.3887	0.7573
Parker	Straight-line	34	350	0.1316	0.1614	-0.3887	0.7573
	Double-declining balance	36	28	0.2817	0.1533	0.0185	0.6019
	Sum-of-years' digits	38	8	0.2579	0.1758	0.0490	0.5405
	Overall	24	<u>386</u>	0.1451	0.1660	-0.3887	0.7573

between estimated and actual purchasing power gains and losses. More specifically, research questions 39 - 44 pertained to the ability of both models to estimate purchasing power gains and losses across the industrial, banking, utility, transportation, and retail industry groups. Therefore, Table VI contains mean 'P' values by industry group. Each mean 'P' value in Table VI is cross-referenced to a specific research question. Other descriptive statistics are also presented in Table VI.

The overall purchasing power gain/loss mean 'P' value was .7011. The mean 'P' value provided an indication that the estimation procedure overstated the actual amount of purchasing power gain/loss by seventy percent. The standard deviation of the overall 'P' value distribution was 5.49. The estimation procedure performed better for non-industrial companies (mean 'P' values from .0252 to .1788) than for industrial companies (mean 'P' value of .9512).

Several identifiable factors contributed to the average 'P' value's deviation from zero. First, difficulty was experienced in identifying all monetary and nonmonetary assets and liabilities of a company. The problem was due principally to the high level of account aggregation in published financial statements. A second problem related to the fact that the models made no allowance for the rate of change in the net monetary position from the beginning to the end of the year. Finally, due to the way the 'P' value was calculated, differences of the same absolute amount in accumulating the net monetary position resulted in large 'P' values for companies with small purchasing power gains and losses and small 'P' values for companies with large purchasing power gains and losses. Because of

TABLE VI

PURCHASING POWER GAIN/LOSS 'P' VALUE STATISTICS  
(BY INDUSTRY GROUP - APPLIED TO ALL COMPANIES)

Model	Industry Group	Research Question	Number of Observations	Mean 'P' Value	Std. Deviation of 'P' Values	Minimum 'P' Value	Maximum 'P' Value
Davidson-Weil and Parker	Industrial	40	303	0.9512	6.5500	-5.6926	83.8209
	Banking	41	46	0.1049	0.4293	-0.8858	1.9242
	Utility	42	47	0.0955	0.2467	-0.1961	1.2808
	Transportation	43	29	0.1788	0.2778	-0.4113	0.9398
	Retail	44	7	0.0252	0.1920	-0.3996	0.1505
	Overall	39	<u>432</u>	0.7011	5.4918	-5.6926	83.8209

the potential distortion introduced by the last problem, research questions 45 - 50 pertained to evaluating the 'P' value distributions for companies which had purchasing power gains and losses in excess of \$10 million. The results of the analyses are presented in Table VII. Each mean 'P' value in Table VII is cross-referenced to a specific research question. Other descriptive statistics are also presented in Table VII.

A reduction in the overall mean 'P' value was achieved by examining the ability of the models to estimate the purchasing power gain/loss for companies which had an actual purchasing power gain/loss in excess of \$10 million (mean 'P' value of .1868). In addition, the standard deviation and range of the overall 'P' value distribution was reduced. The estimation procedure still performed best for non-industrial companies. The mean 'P' values for non-industrial companies ranged from .0252 to .1516, while the industrial companies had a mean 'P' value of .2419. Figures 13 - 22, included in Appendix E, are histograms for various depreciation 'P' value distributions.

#### Implications

There are several important accounting implications associated with research efforts aimed at evaluating the validity of historical cost/constant dollar data estimation models. However, "validity" is a normative standard. As such, no universally acceptable a priori criteria of validity can be specified. Therefore, the following implications are not absolute. Rather, they depend on whether or not a specific reader, based on his analysis of the results of the study, accepts the models (or parts of the models) as valid.



TABLE VII  
PURCHASING POWER GAIN/LOSS 'P' VALUE STATISTICS  
(BY INDUSTRY GROUP - APPLIED TO COMPANIES WITH  
PURCHASING POWER GAIN/LOSS IN EXCESS OF  
\$10 MILLION)

Model	Industry Group	Research Question	Number of Observations	Mean 'P' Value	Std. Deviation of 'P' Value	Minimum 'P' Value	Maximum 'P' Value
Davidson-Weil and Parker	Industrial	46	220	0.2419	0.7456	-4.6196	5.1665
	Banking	47	43	0.0541	0.3225	-0.8858	0.9662
	Utility	48	47	0.0955	0.2467	-0.1961	1.2808
	Transportation	49	28	0.1516	0.2405	-0.4113	0.8964
	Retail	50	7	0.0252	0.1920	-0.3996	0.1505
	Overall	45	<u>345</u>	0.1868	0.6196	-4.6196	5.1665

If one accepts the models as valid, then support and credibility are lent to past research which relied on the models. Alternatively, for those who deem the models to be inadequate, conclusions reached in past research should be subjected to further scrutiny. Another important implication is that the findings of the present study may be beneficial in future research. Researchers who accept the models as valid will be able to generate surrogate historical cost/constant dollar data for companies which do not present such data. Such researchers may find it advantageous to adjust their surrogate data by the amount of model error (i.e., the 'P' values) discovered in the present study.

The benefits of the present research may be extended into practice. Knowledge of the validity of the models may be useful to financial statement analysts and investors who desire to project or estimate historical cost/constant dollar data.

The models may also find useful auditing applications. Although historical cost/constant dollar data should be relatively easy to audit (in the eventuality that the data must be audited), the models might provide a simple means for reviewing the reasonableness of client prepared historical cost/constant dollar disclosures. Finally, due to the inadequacies of detailed fixed asset records and other problems, certain companies may encounter difficulties in preparing historical cost/constant dollar data. The estimation models may be beneficial to such companies in assisting in the preparation of required historical cost/constant dollar disclosures. While each implication depends on a specific reader's assessment of the validity of the models, the present study provided evidence which may facilitate

individual assessments of the validity of the models.

#### Summary

The present chapter included a presentation of summary 'P' value statistics. The model estimated historical cost/constant dollar cost of goods sold amounts were generally within one percent of the actual amounts, the model estimated historical cost/constant dollar depreciation expense amounts exceeded the actual amounts by an average of almost fifteen percent, and the estimated purchasing power gain/loss exceeded the actual amount by an average of seventy percent. Accuracy of the models in a specific situation depended on the adjustment routine utilized (i.e., FIFO, LIFO, etc.), and on the type of company (i.e., industrial, etc.) to which the model was applied. The next chapter includes a summarization and evaluation of the findings of the present study.

## CHAPTER V

### SUMMARY OF STUDY

The primary objective of the present chapter is to summarize and evaluate the findings of the study. In doing so, the chapter is divided into the following areas:

- I. A General Review
- II. Findings and Limitations
  - A. Summary of Findings
  - B. Limitations of Findings
- III. Recommendations for Further Research

#### A General Review

The objective of the present study was to examine the validity of the Davidson-Weil and Parker historical cost/constant dollar data estimation models. Historical cost data for 432 large American companies were gathered. The estimation models were then applied to the historical cost data to produce surrogate historical cost/constant dollar data. The estimated data were then compared to actual historical cost/constant dollar data which the 432 companies presented pursuant to SFAS No. 33. 'P' values (measurement index of the percentage deviation between an estimated and an actual amount) were calculated for cost of goods sold, depreciation expense, and the purchasing power gain/loss for each company. Summary 'P' value

statistics were calculated to provide clues about the validity of the models.

## Findings and Limitations

### Summary of Findings

To make universally acceptable statements about the validity of the models was not possible. Validity is a normative standard, and, therefore, the assessment of validity would vary among individuals. Nevertheless, to report the summary 'P' value statistics was possible. Based on the summary 'P' value statistics, individual readers can make their own assessments of the validity of the models.

For the 432 companies, both models achieved an average estimated historical cost/constant dollar cost of goods sold amount which was within one percent of the actual amount. Estimated historical cost/constant dollar depreciation expense exceeded actual historical cost/constant dollar depreciation expense by an average of 13.76 percent for the Davidson-Weil model and 14.51 percent for the Parker model. The additional precision of the Davidson-Weil model may be traced to its separate estimation routines for companies which used accelerated depreciation methods. The estimated purchasing power gain/loss (identical calculation for both models) overstated actual amounts by an average of 70.11 percent; however, for companies with purchasing power gains and losses in excess of \$10 million, the estimate exceeded the actual amount by an average of less than nineteen percent.

### Limitations

Two potential limitations were associated with the present research. First, the results of the present research did not apply to companies outside the study. Nevertheless, knowledge about the validity of the models may be most beneficial to companies which have not yet prepared SFAS No. 33 data. Therefore, each of the 'P' value distributions generated for a specific research question and having more than 30 observations was regressed on firm size. In no case did the slope of the regression line differ significantly (at the .05 level) from zero. The regression analyses provided an indication that company size did not significantly affect the accuracy of the models. The finding lended support to a claim that the models were as valid for large companies (such as those in the study) as they were for small companies (such as those not in the study). Still, caution should be exercised in extending the present study's conclusions to companies not included in the study.

The second limitation of the present study was that the models themselves may have been used by companies in the actual preparation of their historical cost/constant dollar disclosures. The FASB encouraged experimentation and use of simplifying techniques. To the extent that companies applied the estimation models in generating historical cost/constant dollar data, the present study was meaningless. Therefore, to determine the extent to which the models were used in developing actual historical cost/constant dollar data, a questionnaire (copy in Appendix F) was mailed to the 432 companies included in the study. Almost eighty percent (339) of the question-

naires were returned. None of the respondents indicated that their companies used the Davidson-Weil or Parker models. The possibility that companies used the models in preparing their actual historical cost/constant dollar disclosures did not, therefore, seem to be an imposing limitation.

#### Recommendations for Further Research

There are two fruitful areas of further research. The present study could be replicated with financial data which becomes available in future years. If the deviation between estimated and actual data is constant from year to year, then the accuracy of the models might be supplemented by simply adjusting model generated results by the amount of the "normal" error.

Research efforts to evaluate merits of historical cost/constant dollar disclosures are also benefited by the present research. There is general agreement that the cost of accounting information should not exceed the benefits derived therefrom. However, measuring such costs and benefits is exceedingly difficult. The Committee on Concepts and Standards for External Financial Reports (American Accounting Association, 1977, p. 37) said, "Proper cost-benefit analysis does not appear possible with the present state of economic knowledge." Nevertheless, research which contributes information about the benefits of historical cost/constant dollar disclosures may be useful in an attempt to develop a cost-benefit analysis. The present study's contribution to knowledge about the validity of historical cost/constant dollar data estimation models may be of use in a cost-benefit analysis. If one accepts the premise that

historical cost/constant dollar disclosures are reasonably approximated by applying simple estimation models to historical cost financial statements, then the supplemental historical cost/constant dollar disclosures may be of limited benefit. Therefore, the cost of such disclosures should be limited. Such a cost-benefit analysis was not attempted in the present research project. The purpose here is to merely suggest how the results achieved in the present research may be of incremental use in a cost-benefit analysis.



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APPENDIXES

APPENDIX A

LISTING OF FORTRAN COMPUTER PROGRAM

C INFLATION ACCOUNTING - CONSTANT DOLLAR RESTATEMENT PROCEDURE  
C DAVIDSON-WEIL AND PARKER MODELS  
C MODIFIED AND PROGRAMED BY L WALTHER, OSU, 1980

C

    DIMENSION F(16,7)  
10 R=AC(5,20,END=9999) NUMCO,INVMET,METDEP,HCGSCY,HCGSPY,HCBI CY,  
    1 HCEICY,HCBI PY,HCDEPR,HCACDE,DEPACY,NUM,FEIF,FEIL,DEPAPY,EFIFUV,  
    1 BEGAMP,ENDAMP,CDCUGS,CDEPR,PUPGL,ICDE  
20 FORMAT(1X,I5,I1,I1,BF9.2/1X,I5,2F3.2,7F9.2,1X,I2)  
    HPURCY=0.  
    HPURCY=HCEICY+HCGSCY-HCBICY

C

C INITIALIZE THE VARIABLES

C

AJBICY=0.  
DWFCE=0.  
DWCUGS=0.  
DWLICE=0.  
DWLDCE=0.  
G=0.  
S=0.  
TW=0.  
BITW=0.  
DWACE=0.  
DWF TPL=0.  
DWF TPF=0.  
AFBICY=0.  
FFCGS=0.  
DWF FCE=0.  
DWF FCA=0.  
DWF LIC=0.  
DWF LIA=0.  
BILIFO=0.  
EILIFO=0.  
CWFLDC=0.  
DWF LDA=0.  
APURCY=0.  
DAYINE=0.  
PFEI=0.  
YEPUR=0.  
BEINAJ=0.  
HPURPY=0.  
APURPY=0.  
DAYINB=0.  
PFBI=0.  
APFBI=0.  
PCOGSE=0.  
PCOGS=0.

CHANGE=0.  
DWDEPE=0.  
DWDEP=0.  
AVGAGE=0.  
ARF=0.  
GRGHTH=0.  
I=0.  
J=0.  
K=0.  
L=0.  
TRP1=0.  
TRP2=0.  
DFF=0.  
DFF1=0.  
ACD1=0.  
FACT1=0.  
DFFF2=0.  
ADD2=0.  
FACT2=0.  
DFFF3=0.  
ADD3=0.  
FACT3=0.  
PPUP=0.  
DWPLP=0.  
PDEP=0.  
PDWDEP=0.  
PPDEP=0.  
PDWCOG=0.  
PPCOG=0.  
PDWPUP=0.  
PPPUP=0.  
JUMP=0.

C  
C LOAD THE CONSUMER PRICE INDICES  
C

CI3612=41.9  
CI3712=43.2  
CI3812=42.0  
CI3912=41.8  
CI4012=42.2  
CI4112=46.3  
CI4212=50.6  
CI4312=52.2  
CI4412=53.3  
CI4512=54.5  
CI4612=64.4  
CI4712=70.2  
CI4812=72.1



CI4912=70.8  
CI5012=74.9  
CI5112=79.3  
CI5212=80.0  
CI5312=80.5  
CI5412=80.1  
CI5512=80.4  
CI5612=82.7  
CI5712=85.2  
CI5812=86.7  
CI5912=88.0  
CI6012=89.3  
CI6112=89.9  
CI6212=91.0  
CI6312=92.5  
CI6412=93.6  
CI6512=95.4  
CI6513=94.5  
CI6612=98.6  
CI6613=97.2  
CI6712=101.6  
CI6713=100.0  
CI6812=106.4  
CI6813=104.2  
CI6912=112.9  
CI6913=109.8  
CI7012=119.1  
CI7013=116.3  
CI7112=123.1  
CI7113=121.3  
CI7212=127.3  
CI7213=125.3  
CI7312=138.5  
CI7313=133.1  
CI7412=155.4  
CI7413=147.7  
CI7512=166.3  
CI7513=161.2  
CI7612=174.3  
CI7613=170.5  
CI7701=175.3  
CI7702=177.1  
CI7703=178.2  
CI7704=179.6  
CI7705=180.6  
CI7706=181.8  
CI7707=182.6

CI7708=183.3  
CI7709=184.0  
CI7710=184.5  
CI7711=185.4  
CI7712=186.1  
CI7713=181.5  
CI7801=187.2  
CI7802=188.4  
CI7803=189.8  
CI7804=191.5  
CI7805=193.3  
CI7806=195.3  
CI7807=196.7  
CI7808=197.8  
CI7809=199.3  
CI7810=200.9  
CI7811=202.0  
CI7812=202.9  
CI7813=195.4  
CI7901=204.7  
CI7902=207.1  
CI7903=209.1  
CI7904=211.5  
CI7905=214.1  
CI7906=216.6  
CI7907=218.9  
CI7908=221.1  
CI7909=223.4  
CI7910=225.4  
CI7911=227.5  
CI7912=229.9  
CI7913=217.4

C  
C DAVIDSON-WEIL INVENTORY METHODS  
C

IF(INVMET.EQ.1) GO TO 1100  
IF(INVMET.EQ.2) GO TO 1200  
IF(INVMET.EQ.3) GO TO 1300  
IF(INVMET.EQ.4) GO TO 1100  
IF(INVMET.EQ.5) GO TO 1400  
IF(INVMET.EQ.6) GO TO 1100  
IF(INVMET.EQ.7) GO TO 1400  
IF(INVMET.EQ.8) GO TO 1500

C  
C DAVIDSON-WEIL FIFO INVENTORY METHOD  
C

1100 AJBICY=((CI7812/CI7712-1)\*.5\*(1-(HCGSCY-HCBICY)/HPURCY)+1)\*HCBICY  
DWFCE=AJBICY\*(CI7912/CI7812)+((CI7912/CI7812-1)\*(1-(HCGSCY-HCBICY)

```

      1/(2*HPURCY))+1)*(HCGSCY-HCBICY)
      DWCOGS=DWFCE*(CI7913/CI7912)
      GO TO 2000
C
C DAVIDSON-WEIL LIFO WITH INVENTORY INCREASE
C
1200 DWLICE=HCGSCY*((CI7912/CI7812-1)*(.5*(HCGSCY/HPURCY))+1)
      DWCOGS=DWLICE*(CI7913/CI7912)
      GO TO 2000
C
C DAVIDSON-WEIL LIFO WITH INVENTORY DECREASE
C
1300 DWLDCE=((.5*(CI7912/CI7812-1))+1)*HPURCY+(HCBICY-HCEICY)*(CI7912/
      CI7712)
      DWCOGS=DWLDCE*(CI7913/CI7912)
      GO TO 2000
C
C DAVIDSON-WEIL AVERAGE COST INVENTORY METHOD
C
1400 G=HCEICY/HCBICY
      S=1-(HCGSCY/HPURCY)
      TW=(1+G+S)/(2*(1+G-S))+1
      IF(TW.LE.1.)GO TO 1401
      IF(TW.LE.2.)GO TO 1402
      IF(TW.LE.3.)GO TO 1403
      IF(TW.LE.4.)GO TO 1404
      IF(TW.LE.5.)GO TO 1405
      IF(TW.LE.6.)GO TO 1406
      IF(TW.LE.7.)GO TO 1407
      IF(TW.LE.8.)GO TO 1408
      IF(TW.LE.9.)GO TO 1409
      IF(TW.LE.10.)GO TO 1410
      IF(TW.GT.10.)GO TO 1411
1401 BITW=((CI7912/CI7812-1)*TW+1)*HCBICY
      GO TO 1450
1402 BITW=(CI7912/CI7812)*((CI7812/CI7712-1)*(TW-1)+1)*HCBICY
      GO TO 1450
1403 BITW=(CI7912/CI7712)*((CI7712/CI7612-1)*(TW-2)+1)*HCBICY
      GO TO 1450
1404 BITW=(CI7912/CI7612)*((CI7612/CI7512-1)*(TW-3)+1)*HCBICY
      GO TO 1450
1405 BITW=(CI7912/CI7512)*((CI7512/CI7412-1)*(TW-4)+1)*HCBICY
      GO TO 1450
1406 BITW=(CI7912/CI7412)*((CI7412/CI7312-1)*(TW-5)+1)*HCBICY
      GO TO 1450
1407 BITW=(CI7912/CI7312)*((CI7312/CI7212-1)*(TW-6)+1)*HCBICY
      GO TO 1450
1408 BITW=(CI7912/CI7212)*((CI7212/CI7112-1)*(TW-7)+1)*HCBICY

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GO TO 1450  
 1409 BITW=(CI7912/CI7112)\*((CI7112/CI7012-1)\*(TW-8)+1)\*HCBICY  
 GO TO 1450  
 1410 BITW=(CI7912/CI7012)\*((CI7012/CI6912-1)\*(TW-9)+1)\*HCBICY  
 GO TO 1450  
 1411 BITW=(CI7912/CI6912)\*HCBICY  
 GO TO 1450  
 1450 DWACE=(HCGSCY/(HCGSCY+HCEICY))\*(BITW+HPURCY\*((CI7912/CI7812-1)\*.5+  
 1))  
 DWCGS=DWACE\*(CI7913/CI7912)  
 GO TO 2000

C  
 C DAVIDSON-WEIL MIXED INVENTORY METHODS

C  
 1500 DWFTPF=(FEIF+HCEICY)/(HCEICY+EFIFDV)  
 DWFTPL=((FEIL+HCEICY)+EFIFDV)/(HCEICY+EFIFDV)  
 FFCGS=(FEIF+HCBICY)\*(DWFTPF+HPURCY)-(FEIF+HCEICY)  
 AFBICY=((CI7812/CI7712-1)\*.5\*((FFCGS-FEIF+HCBICY)/(HPURCY+DWFTPF))  
 +1)\*(HCBICY\*FEIF)  
 DWFFCE=AFBICY\*(CI7912/CI7812)+((CI7912/CI7812-1)\*(1-(FFCGS-HCBICY\*  
 FEIF)/(2\*HPURCY+DWFTPF))+1)\*(FFCGS-HCBICY\*FEIF)  
 DWFFCA=DWFFCE\*(CI7913/CI7912)  
 EILIFO=FEIL\*HCEICY  
 BILIFO=FEIL\*HCBICY  
 IF(BILIFO.GT.EILIFO)GO TO 1525  
 DWFLIC=(HCGSCY-FFCGS)\*((CI7912/CI7812-1)\*(.5\*(HCGSCY-FFCGS)/  
 1(DWFTPL+HPURCY))+1)  
 DWFLIA=DWFLIC\*(CI7913/CI7912)  
 GO TO 1550  
 1525 DWFLDC=((.5\*(CI7912/CI7812-1))+1)\*(HPURCY+DWFTPL)+((HCBICY+FEIL)-  
 1(HCEICY+FEIL))\*(CI7912/CI7712)  
 CWFLDA=DWFLDC\*(CI7913/CI7912)  
 1550 DWCGS=CWFLDA+DWFLIA+DWFFCA  
 GO TO 2000

C  
 C PARKER INVENTORY METHODS

C  
 2000 IF(INVMET.EQ.1) GO TO 2100  
 IF(INVMET.EQ.2) GO TO 2200  
 IF(INVMET.EQ.3) GO TO 2300  
 IF(INVMET.EQ.4) GO TO 2100  
 IF(INVMET.EQ.5) GO TO 2400  
 IF(INVMET.EQ.6) GO TO 2100  
 IF(INVMET.EQ.7) GO TO 2400  
 IF(INVMET.EQ.8) GO TO 2500

C  
C PARKER FIFO INVENTORY METHOD

C  
2100 APURCY=HPURCY/365  
DAYINE=HCEICY/APURCY  
IF(DAYINE.LE.31.)GO TO 2101  
IF(DAYINE.LE.61.)GO TO 2102  
IF(DAYINE.LE.92.)GO TO 2103  
IF(DAYINE.LE.122.)GO TO 2104  
IF(DAYINE.LE.153.)GO TO 2105  
IF(DAYINE.LE.184.)GO TO 2106  
IF(DAYINE.LE.214.)GO TO 2107  
IF(DAYINE.LE.245.)GO TO 2108  
IF(DAYINE.LE.275.)GO TO 2109  
IF(DAYINE.LE.306.)GO TO 2110  
IF(DAYINE.LE.334.)GO TO 2111  
IF(DAYINE.LE.365.)GO TO 2112  
IF(DAYINE.LE.396.)GO TO 2113  
IF(DAYINE.LE.426.)GO TO 2114  
IF(DAYINE.LE.457.)GO TO 2115  
IF(DAYINE.LE.487.)GO TO 2116  
IF(DAYINE.LE.518.)GO TO 2117  
IF(DAYINE.LE.549.)GO TO 2118  
IF(DAYINE.GT.545.)GO TO 2119  
2101 PFEI=APURCY\*DAYINE  
GO TO 2130  
2102 PFEI=(APURCY\*31)+  
1(APURCY\*(DAYINE-31)\*(CI7912/CI7911))  
GO TO 2130  
2103 PFEI=(APURCY\*31)+  
1(APURCY\*30\*(CI7912/CI7911))+  
1(APURCY\*(DAYINE-61)\*(CI7912/CI7910))  
GO TO 2130  
2104 PFEI=(APURCY\*31)+  
1(APURCY\*30\*(CI7912/CI7911))+  
1(APURCY\*31\*(CI7912/CI7910))+  
1(APURCY\*(DAYINE-92)\*(CI7912/CI7909))  
GO TO 2130  
2105 PFEI=(APURCY\*31)+  
1(APURCY\*30\*(CI7912/CI7911))+  
1(APURCY\*31\*(CI7912/CI7910))+  
1(APURCY\*30\*(CI7912/CI7909))+  
1(APURCY\*(DAYINE-122)\*(CI7912/CI7908))  
GO TO 2130  
2106 PFEI=(APURCY\*31)+  
1(APURCY\*30\*(CI7912/CI7911))+  
1(APURCY\*31\*(CI7912/CI7910))+  
1(APURCY\*30\*(CI7912/CI7909))+

1(APURCY\*31\*(CI7912/CI7908))+  
 1(APURCY\*(DAYINE-153)\*(CI7912/CI7907))  
 GO TO 2130  
 2107 PFEI=(APURCY\*31)+  
 1(APURCY\*30\*(CI7912/CI7911))+  
 1(APURCY\*31\*(CI7912/CI7910))+  
 1(APURCY\*30\*(CI7912/CI7909))+  
 1(APURCY\*31\*(CI7912/CI7908))+  
 1(APURCY\*31\*(CI7912/CI7907))+  
 1(APURCY\*(DAYINE-184)\*(CI7912/CI7906))  
 GO TO 2130  
 2108 PFEI=(APURCY\*31)+  
 1(APURCY\*30\*(CI7912/CI7911))+  
 1(APURCY\*31\*(CI7912/CI7910))+  
 1(APURCY\*30\*(CI7912/CI7909))+  
 1(APURCY\*31\*(CI7912/CI7908))+  
 1(APURCY\*31\*(CI7912/CI7907))+  
 1(APURCY\*30\*(CI7912/CI7906))+  
 1(APURCY\*(DAYINE-214)\*(CI7912/CI7905))  
 GO TO 2130  
 2109 PFEI=(APURCY\*31)+  
 1(APURCY\*30\*(CI7912/CI7911))+  
 1(APURCY\*31\*(CI7912/CI7910))+  
 1(APURCY\*30\*(CI7912/CI7909))+  
 1(APURCY\*31\*(CI7912/CI7908))+  
 1(APURCY\*31\*(CI7912/CI7907))+  
 1(APURCY\*30\*(CI7912/CI7906))+  
 1(APURCY\*31\*(CI7912/CI7905))+  
 1(APURCY\*(DAYINE-245)\*(CI7912/CI7904))  
 GO TO 2130  
 2110 PFEI=(APURCY\*31)+  
 1(APURCY\*30\*(CI7912/CI7911))+  
 1(APURCY\*31\*(CI7912/CI7910))+  
 1(APURCY\*30\*(CI7912/CI7909))+  
 1(APURCY\*31\*(CI7912/CI7908))+  
 1(APURCY\*31\*(CI7912/CI7907))+  
 1(APURCY\*30\*(CI7912/CI7906))+  
 1(APURCY\*31\*(CI7912/CI7905))+  
 1(APURCY\*30\*(CI7912/CI7904))+  
 1(APURCY\*(DAYINE-275)\*(CI7912/CI7903))  
 GO TO 2130  
 2111 PFEI=(APURCY\*31)+  
 1(APURCY\*30\*(CI7912/CI7911))+  
 1(APURCY\*31\*(CI7912/CI7910))+  
 1(APURCY\*30\*(CI7912/CI7909))+  
 1(APURCY\*31\*(CI7912/CI7908))+  
 1(APURCY\*31\*(CI7912/CI7907))+  
 1(APURCY\*30\*(CI7912/CI7906))+

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1(APURCY*31*(CI7512/CI7905))+
1(APURCY*30*(CI7512/CI7904))+
1(APURCY*31*(CI7512/CI7903))+
1(APURCY*(DAYINE-306)*(CI7912/CI7902))
GO TO 2130
2112 PFEI=(APURCY*31)+
1(APURCY*30*(CI7912/CI7911))+
1(APURCY*31*(CI7512/CI7910))+
1(APURCY*30*(CI7912/CI7909))+
1(APURCY*31*(CI7512/CI7908))+
1(APURCY*31*(CI7912/CI7907))+
1(APURCY*30*(CI7512/CI7906))+
1(APURCY*31*(CI7512/CI7905))+
1(APURCY*30*(CI7512/CI7904))+
1(APURCY*31*(CI7912/CI7903))+
1(APURCY*28*(CI7912/CI7902))+
1(APURCY*(DAYINE-334)*(CI7912/CI7901))
GO TO 2130
2113 PFEI=(APURCY*31)+
1(APURCY*30*(CI7512/CI7911))+
1(APURCY*31*(CI7512/CI7910))+
1(APURCY*30*(CI7512/CI7909))+
1(APURCY*31*(CI7912/CI7908))+
1(APURCY*31*(CI7512/CI7907))+
1(APURCY*30*(CI7512/CI7906))+
1(APURCY*31*(CI7512/CI7905))+
1(APURCY*30*(CI7512/CI7904))+
1(APURCY*31*(CI7512/CI7903))+
1(APURCY*28*(CI7912/CI7902))+
1(APURCY*31*(CI7912/CI7901))+
1(APURCY*(DAYINE-365)*(CI7912/CI7812))
GO TO 2130
2114 PFEI=(APURCY*31)+
1(APURCY*30*(CI7512/CI7911))+
1(APURCY*31*(CI7912/CI7910))+
1(APURCY*30*(CI7512/CI7909))+
1(APURCY*31*(CI7512/CI7908))+
1(APURCY*31*(CI7912/CI7907))+
1(APURCY*30*(CI7512/CI7906))+
1(APURCY*31*(CI7912/CI7905))+
1(APURCY*30*(CI7512/CI7904))+
1(APURCY*31*(CI7512/CI7903))+
1(APURCY*28*(CI7512/CI7902))+
1(APURCY*31*(CI7512/CI7901))+
1(APURCY*31*(CI7512/CI7812))+
1(APURCY*(DAYINE-396)*(CI7912/CI7811))
GO TO 2130

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2115 PFEI=(APURCY\*31)+  
 1(APURCY\*30\*(CI7912/CI7911))+  
 1(APURCY\*31\*(CI7912/CI7910))+  
 1(APURCY\*30\*(CI7912/CI7909))+  
 1(APURCY\*31\*(CI7912/CI7908))+  
 1(APURCY\*31\*(CI7912/CI7907))+  
 1(APURCY\*30\*(CI7912/CI7906))+  
 1(APURCY\*31\*(CI7912/CI7905))+  
 1(APURCY\*30\*(CI7912/CI7904))+  
 1(APURCY\*31\*(CI7912/CI7903))+  
 1(APURCY\*28\*(CI7912/CI7902))+  
 1(APURCY\*31\*(CI7912/CI7901))+  
 1(APURCY\*31\*(CI7912/CI7812))+  
 1(APURCY\*30\*(CI7912/CI7811))+  
 1(APURCY\*(DAYINE-426)\*(CI7912/CI7810))  
 GO TO 2130

2116 PFEI=(APURCY\*31)+  
 1(APURCY\*30\*(CI7912/CI7911))+  
 1(APURCY\*31\*(CI7912/CI7910))+  
 1(APURCY\*30\*(CI7912/CI7909))+  
 1(APURCY\*31\*(CI7912/CI7908))+  
 1(APURCY\*31\*(CI7912/CI7907))+  
 1(APURCY\*30\*(CI7912/CI7906))+  
 1(APURCY\*31\*(CI7912/CI7905))+  
 1(APURCY\*30\*(CI7912/CI7904))+  
 1(APURCY\*31\*(CI7912/CI7903))+  
 1(APURCY\*28\*(CI7912/CI7902))+  
 1(APURCY\*31\*(CI7912/CI7901))+  
 1(APURCY\*31\*(CI7912/CI7812))+  
 1(APURCY\*30\*(CI7912/CI7811))+  
 1(APURCY\*31\*(CI7912/CI7810))+  
 1(APURCY\*(DAYINE-457)\*(CI7912/CI7809))  
 GO TO 2130

2117 PFEI=(APURCY\*31)+  
 1(APURCY\*30\*(CI7912/CI7911))+  
 1(APURCY\*31\*(CI7912/CI7910))+  
 1(APURCY\*30\*(CI7912/CI7909))+  
 1(APURCY\*31\*(CI7912/CI7908))+  
 1(APURCY\*31\*(CI7912/CI7907))+  
 1(APURCY\*30\*(CI7912/CI7906))+  
 1(APURCY\*31\*(CI7912/CI7905))+  
 1(APURCY\*30\*(CI7912/CI7904))+  
 1(APURCY\*31\*(CI7912/CI7903))+  
 1(APURCY\*28\*(CI7912/CI7902))+  
 1(APURCY\*31\*(CI7912/CI7901))+  
 1(APURCY\*31\*(CI7912/CI7812))+  
 1(APURCY\*30\*(CI7912/CI7811))+  
 1(APURCY\*31\*(CI7912/CI7810))+



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1(APURCY*30*(CI7912/CI7809))+
1(APURCY*(DAYINE-487)*(CI7912/CI7808))
GO TO 2130
2118 PFEI=(APURCY*31)+
1(APURCY*30*(CI7912/CI7911))+
1(APURCY*31*(CI7912/CI7910))+
1(APURCY*30*(CI7912/CI7909))+
1(APURCY*31*(CI7912/CI7908))+
1(APURCY*31*(CI7912/CI7907))+
1(APURCY*30*(CI7912/CI7906))+
1(APURCY*31*(CI7912/CI7905))+
1(APURCY*30*(CI7912/CI7904))+
1(APURCY*31*(CI7912/CI7903))+
1(APURCY*28*(CI7912/CI7902))+
1(APURCY*31*(CI7912/CI7901))+
1(APURCY*31*(CI7912/CI7812))+
1(APURCY*30*(CI7912/CI7811))+
1(APURCY*31*(CI7912/CI7810))+
1(APURCY*30*(CI7912/CI7809))+
1(APURCY*31*(CI7912/CI7808))+
1(APURCY*(DAYINE-518)*(CI7912/CI7807))
GO TO 2130
2119 PFEI=(APURCY*31)+
1(APURCY*30*(CI7912/CI7911))+
1(APURCY*31*(CI7912/CI7910))+
1(APURCY*30*(CI7912/CI7909))+
1(APURCY*31*(CI7912/CI7908))+
1(APURCY*31*(CI7912/CI7907))+
1(APURCY*30*(CI7912/CI7906))+
1(APURCY*31*(CI7912/CI7905))+
1(APURCY*30*(CI7912/CI7904))+
1(APURCY*31*(CI7912/CI7903))+
1(APURCY*28*(CI7912/CI7902))+
1(APURCY*31*(CI7912/CI7901))+
1(APURCY*31*(CI7912/CI7812))+
1(APURCY*30*(CI7912/CI7811))+
1(APURCY*31*(CI7912/CI7810))+
1(APURCY*30*(CI7912/CI7809))+
1(APURCY*31*(CI7912/CI7808))+
1(APURCY*31*(CI7912/CI7807))+
1(APURCY*(DAYINE-549)*(CI7912/CI7806))
GO TO 2130
2130 YEPUR=HPURCY*(CI7912/CI7913)
HPURPY=HCBICY+HCGSPY-HCBIPY
APURPY=HPURPY/365
DAYINB=HCBICY/AFURPY
IF(CAYINB.LE.31.)GO TO 2141

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IF(DAYINB.LE.61.)GO TO 2142  
 IF(CAYINB.LE.92.)GO TO 2143  
 IF(CAYINB.LE.122.)GO TO 2144  
 IF(DAYINB.LE.153.)GO TO 2145  
 IF(DAYINB.LE.184.)GO TO 2146  
 IF(DAYINB.LE.214.)GO TO 2147  
 IF(DAYINB.LE.245.)GO TO 2148  
 IF(CAYINB.LE.275.)GO TO 2149  
 IF(DAYINB.LE.306.)GO TO 2150  
 IF(CAYINB.LE.334.)GO TO 2151  
 IF(DAYINB.LE.365.)GO TO 2152  
 IF(DAYINB.LE.396.)GO TO 2153  
 IF(CAYINB.LE.426.)GO TO 2154  
 IF(DAYINB.LE.457.)GO TO 2155  
 IF(CAYINB.LE.487.)GO TO 2156  
 IF(DAYINB.LE.518.)GO TO 2157  
 IF(CAYINB.LE.549.)GO TO 2158  
 IF(CAYINB.GT.549.)GO TO 2159  
 2141 PFB I=APURPY\*DAYINB  
 GO TC 2170  
 2142 PFB I=(APURPY\*21)+  
 1(APURPY\*(DAYINB-31))\*(CI7812/CI7811))  
 GO TO 2170  
 2143 PFB I=(APURPY\*31)+  
 1(APURPY\*30\*(CI7812/CI7811))+  
 1(APURPY\*(DAYINB-61))\*(CI7812/CI7810))  
 GO TO 2170  
 2144 PFB I=(APURPY\*31)+  
 1(APURPY\*30\*(CI7812/CI7811))+  
 1(APLRPY\*31\*(CI7812/CI7810))+  
 1(APURPY\*(DAYINB-92))\*(CI7812/CI7809))  
 GO TO 2170  
 2145 PFB I=(APURPY\*21)+  
 1(APURPY\*30\*(CI7812/CI7811))+  
 1(APURPY\*31\*(CI7812/CI7810))+  
 1(APURPY\*30\*(CI7812/CI7809))+  
 1(APURPY\*(DAYINB-122))\*(CI7812/CI7808))  
 GO TC 2170  
 2146 PFB I=(APURPY\*31)+  
 1(APURPY\*30\*(CI7812/CI7811))+  
 1(APURPY\*31\*(CI7812/CI7810))+  
 1(APURPY\*30\*(CI7812/CI7809))+  
 1(APURPY\*31\*(CI7812/CI7808))+  
 1(APURPY\*(DAYINB-153))\*(CI7812/CI7807))  
 GO TC 2170  
 2147 PFB I=(APURPY\*31)+  
 1(APURPY\*30\*(CI7812/CI7811))+  
 1(APURPY\*31\*(CI7812/CI7810))+

1(APURPY\*30\*(CI7812/CI7805))+  
1(APURPY\*31\*(CI7812/CI7808))+  
1(APURPY\*31\*(CI7812/CI7807))+  
1(APURPY\*(DAYINB-184)\*(CI7812/CI7806))  
GO TO 2170  
2148 PFB I=(APURPY\*31)+  
1(APURPY\*30\*(CI7812/CI7811))+  
1(APURPY\*31\*(CI7812/CI7810))+  
1(APURPY\*30\*(CI7812/CI7809))+  
1(APURPY\*31\*(CI7812/CI7808))+  
1(APURPY\*31\*(CI7812/CI7807))+  
1(APURPY\*30\*(CI7812/CI7806))+  
1(APURPY\*(DAYINE-214)\*(CI7812/CI7805))  
GO TO 2170  
2149 PFB I=(APURPY\*31)+  
1(APURPY\*30\*(CI7812/CI7811))+  
1(APURPY\*31\*(CI7812/CI7810))+  
1(APURPY\*30\*(CI7812/CI7809))+  
1(APURPY\*31\*(CI7812/CI7808))+  
1(APURPY\*31\*(CI7812/CI7807))+  
1(APURPY\*30\*(CI7812/CI7806))+  
1(APURPY\*31\*(CI7812/CI7805))+  
1(APURPY\*(DAYINB-245)\*(CI7812/CI7804))  
GO TO 2170  
2150 PFB I=(APURPY\*31)+  
1(APURPY\*30\*(CI7812/CI7811))+  
1(APURPY\*31\*(CI7812/CI7810))+  
1(APURPY\*30\*(CI7812/CI7809))+  
1(APURPY\*31\*(CI7812/CI7808))+  
1(APURPY\*31\*(CI7812/CI7807))+  
1(APURPY\*30\*(CI7812/CI7806))+  
1(APURPY\*31\*(CI7812/CI7805))+  
1(APURPY\*30\*(CI7812/CI7804))+  
1(APURPY\*(DAYINB-275)\*(CI7812/CI7803))  
GO TO 2170  
2151 PFB I=(APURPY\*31)+  
1(APURPY\*30\*(CI7812/CI7811))+  
1(APURPY\*31\*(CI7812/CI7810))+  
1(APURPY\*30\*(CI7812/CI7809))+  
1(APURPY\*31\*(CI7812/CI7808))+  
1(APURPY\*31\*(CI7812/CI7807))+  
1(APURPY\*30\*(CI7812/CI7806))+  
1(APURPY\*31\*(CI7812/CI7805))+  
1(APURPY\*30\*(CI7812/CI7804))+  
1(APURPY\*31\*(CI7812/CI7803))+  
1(APURPY\*(DAYINE-306)\*(CI7812/CI7802))  
GO TO 2170  
2152 PFB I=(APURPY\*31)+

1(APURPY\*30\*(CI7812/CI7811))+  
1(APURPY\*31\*(CI7812/CI7810))+  
1(APURPY\*30\*(CI7812/CI7809))+  
1(APURPY\*31\*(CI7812/CI7808))+  
1(APURPY\*31\*(CI7812/CI7807))+  
1(APURPY\*30\*(CI7812/CI7806))+  
1(APURPY\*31\*(CI7812/CI7805))+  
1(APURPY\*30\*(CI7812/CI7804))+  
1(APURPY\*31\*(CI7812/CI7803))+  
1(APURPY\*28\*(CI7812/CI7802))+  
1(APURPY\*(DAYINB-334)\*(CI7812/CI7801))

GO TO 2170

2153 PFB I=(APURPY\*31)+

1(APURPY\*30\*(CI7812/CI7811))+  
1(APURPY\*31\*(CI7812/CI7810))+  
1(APURPY\*30\*(CI7812/CI7809))+  
1(APURPY\*31\*(CI7812/CI7808))+  
1(APURPY\*31\*(CI7812/CI7807))+  
1(APURPY\*30\*(CI7812/CI7806))+  
1(APURPY\*31\*(CI7812/CI7805))+  
1(APURPY\*30\*(CI7812/CI7804))+  
1(APURPY\*31\*(CI7812/CI7803))+  
1(APURPY\*28\*(CI7812/CI7802))+  
1(APURPY\*31\*(CI7812/CI7801))+  
1(APURPY\*(DAYINB-365)\*(CI7812/CI7712))

GO TO 2170

2154 PFB I=(APURPY\*31)+

1(APURPY\*30\*(CI7812/CI7811))+  
1(APURPY\*31\*(CI7812/CI7810))+  
1(APURPY\*30\*(CI7812/CI7809))+  
1(APURPY\*31\*(CI7812/CI7808))+  
1(APURPY\*31\*(CI7812/CI7807))+  
1(APURPY\*30\*(CI7812/CI7806))+  
1(APURPY\*31\*(CI7812/CI7805))+  
1(APURPY\*30\*(CI7812/CI7804))+  
1(APURPY\*31\*(CI7812/CI7803))+  
1(APURPY\*28\*(CI7812/CI7802))+  
1(APURPY\*31\*(CI7812/CI7801))+  
1(APURPY\*31\*(CI7812/CI7712))+  
1(APURPY\*(DAYINE-396)\*(CI7812/CI7711))

GO TO 2170

2155 PFB I=(APURPY\*31)+

1(APURPY\*30\*(CI7812/CI7811))+  
1(APURPY\*31\*(CI7812/CI7810))+  
1(APURPY\*30\*(CI7812/CI7809))+  
1(APURPY\*31\*(CI7812/CI7808))+  
1(APURPY\*31\*(CI7812/CI7807))+  
1(APURPY\*30\*(CI7812/CI7806))+  
1(APURPY\*31\*(CI7812/CI7805))+

1(APURPY\*30\*(CI7812/CI7804))\*  
1(APURPY\*31\*(CI7812/CI7803))\*  
1(APURPY\*28\*(CI7812/CI7802))\*  
1(APURPY\*31\*(CI7812/CI7801))\*  
1(APURPY\*31\*(CI7812/CI7712))\*  
1(APURPY\*30\*(CI7812/CI7711))\*  
1(APURPY\*(DAYINB-426)\*(CI7812/CI7710))

GO TO 2170

2156 PFB I=(APURPY\*31)\*  
1(APURPY\*30\*(CI7812/CI7811))\*  
1(APURPY\*31\*(CI7812/CI7810))\*  
1(APURPY\*30\*(CI7812/CI7809))\*  
1(APURPY\*31\*(CI7812/CI7808))\*  
1(APURPY\*31\*(CI7812/CI7807))\*  
1(APURPY\*30\*(CI7812/CI7806))\*  
1(APURPY\*31\*(CI7812/CI7805))\*  
1(APURPY\*30\*(CI7812/CI7804))\*  
1(APURPY\*31\*(CI7812/CI7803))\*  
1(APURPY\*28\*(CI7812/CI7802))\*  
1(APURPY\*31\*(CI7812/CI7801))\*  
1(APURPY\*31\*(CI7812/CI7712))\*  
1(APURPY\*30\*(CI7812/CI7711))\*  
1(APURPY\*31\*(CI7812/CI7710))\*  
1(APURPY\*(DAYINB-457)\*(CI7812/CI7709))

GO TO 2170

2157 PFB I=(APURPY\*31)\*  
1(APURPY\*30\*(CI7812/CI7811))\*  
1(APURPY\*31\*(CI7812/CI7810))\*  
1(APURPY\*30\*(CI7812/CI7809))\*  
1(APURPY\*31\*(CI7812/CI7808))\*  
1(APURPY\*31\*(CI7812/CI7807))\*  
1(APURPY\*30\*(CI7812/CI7806))\*  
1(APURPY\*31\*(CI7812/CI7805))\*  
1(APURPY\*30\*(CI7812/CI7804))\*  
1(APURPY\*31\*(CI7812/CI7803))\*  
1(APURPY\*28\*(CI7812/CI7802))\*  
1(APURPY\*31\*(CI7812/CI7801))\*  
1(APURPY\*31\*(CI7812/CI7712))\*  
1(APURPY\*30\*(CI7812/CI7711))\*  
1(APURPY\*31\*(CI7812/CI7710))\*  
1(APURPY\*30\*(CI7812/CI7709))\*  
1(APURPY\*(DAYINB-487)\*(CI7812/CI7708))

GO TO 2170

2158 PFB I=(APURPY\*31)\*  
1(APURPY\*30\*(CI7812/CI7811))\*  
1(APURPY\*31\*(CI7812/CI7810))\*  
1(APURPY\*30\*(CI7812/CI7809))\*  
1(APURPY\*31\*(CI7812/CI7808))\*  
1(APURPY\*31\*(CI7812/CI7807))\*

1(APURPY\*30\*(CI7812/CI7806))+  
1(APURPY\*31\*(CI7812/CI7805))+  
1(APURPY\*30\*(CI7812/CI7804))+  
1(APURPY\*31\*(CI7812/CI7803))+  
1(APURPY\*28\*(CI7812/CI7802))+  
1(APURPY\*31\*(CI7812/CI7801))+  
1(APURPY\*31\*(CI7812/CI7712))+  
1(APURPY\*30\*(CI7812/CI7711))+  
1(APURPY\*31\*(CI7812/CI7710))+  
1(APURPY\*30\*(CI7812/CI7709))+  
1(APURPY\*31\*(CI7812/CI7708))+  
1(APURPY\*(DAYINB-518)\*(CI7812/CI7707))

GO TO 2170

2159 PFB I=(APURPY\*31)+

1(APURPY\*30\*(CI7812/CI7811))+  
1(APURPY\*31\*(CI7812/CI7810))+  
1(APURPY\*30\*(CI7812/CI7809))+  
1(APURPY\*31\*(CI7812/CI7808))+  
1(APURPY\*31\*(CI7812/CI7807))+  
1(APURPY\*30\*(CI7812/CI7806))+  
1(APURPY\*31\*(CI7812/CI7805))+  
1(APURPY\*30\*(CI7812/CI7804))+  
1(APURPY\*31\*(CI7812/CI7803))+  
1(APURPY\*28\*(CI7812/CI7802))+  
1(APURPY\*31\*(CI7812/CI7801))+  
1(APURPY\*31\*(CI7812/CI7712))+  
1(APURPY\*30\*(CI7812/CI7711))+  
1(APURPY\*31\*(CI7812/CI7710))+  
1(APURPY\*30\*(CI7812/CI7709))+  
1(APURPY\*31\*(CI7812/CI7708))+  
1(APURPY\*31\*(CI7812/CI7707))+  
1(APURPY\*(DAYINB-549)\*(CI7812/CI7706))

GO TO 2170

2170 APFBI=PFBI\*(CI7912/CI7812)

PCOGSE=YEPUR+APFBI-PFEI

PCCGS=PCOGSE\*(CI7913/CI7912)

GO TO 3000

C

C PARKER LIFO WITH INVENTORY INCREASE

C

2200 PCOGS=HPURCY-(FCBICY-HCBICY)

GO TO 3000

C

C PARKER LIFO WITH INVENTORY DECREASE

C

2300 PCOGS=HPURCY+((FCBICY-HCEICY)\*(CI7913/CI7813))

GO TO 3000

C PARKER AVERAGE COST INVENTORY METHOD

C

2400 PCOGS=CHCOGS  
GO TO 3000

C

C PARKER MIXED INVENTORY METHODS

C

2500 IF(FEIF.GE.FEIL)GO TC 2100  
CHANGE=HCEICY-HCBICY  
IF(CHANGE.GE.0.)GO TC 2200  
IF(CHANGE.LT.0.)GO TO 2300

C

C DAVIDSON-WEIL DEPRECIATION METHODS

C

3000 IF(METDEP.EQ.1)GO TO 3100  
IF(METDEP.EQ.2)GO TO 3200  
IF(METDEP.EQ.3)GO TO 3300

C

C DAVIDSON-WEIL STRAIGHT-LINE DEPRECIATION

C

3100 AVGAGE=HCACDE/HCDEPR  
3299 IF(AVGAGE.LE.1.)GO TC 3101  
IF(AVGAGE.LE.2.)GO TC 3102  
IF(AVGAGE.LE.3.)GO TC 3103  
IF(AVGAGE.LE.4.)GO TC 3104  
IF(AVGAGE.LE.5.)GO TC 3105  
IF(AVGAGE.LE.6.)GO TC 3106  
IF(AVGAGE.LE.7.)GO TO 3107  
IF(AVGAGE.LE.8.)GO TC 3108  
IF(AVGAGE.LE.9.)GO TC 3109  
IF(AVGAGE.LE.10.)GO TO 3110  
IF(AVGAGE.LE.11.)GO TO 3111  
IF(AVGAGE.LE.12.)GO TO 3112  
IF(AVGAGE.LE.13.)GO TO 3113  
IF(AVGAGE.LE.14.)GO TO 3114  
IF(AVGAGE.LE.15.)GO TO 3115  
IF(AVGAGE.LE.16.)GO TO 3116  
IF(AVGAGE.LE.17.)GO TO 3117  
IF(AVGAGE.LE.18.)GO TO 3118  
IF(AVGAGE.LE.19.)GO TO 3119  
IF(AVGAGE.LE.20.)GO TO 3120  
IF(AVGAGE.LE.21.)GO TO 3121  
IF(AVGAGE.LE.22.)GO TO 3122  
IF(AVGAGE.LE.23.)GO TO 3123  
IF(AVGAGE.LE.24.)GO TO 3124  
IF(AVGAGE.LE.25.)GO TO 3125  
IF(AVGAGE.LE.26.)GO TO 3126  
IF(AVGAGE.LE.27.)GO TO 3127

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IF(AVGAGE.LE.28.)GO TO 3128
IF(AVGAGE.LE.29.)GO TO 3129
IF(AVGAGE.LE.30.)GO TO 3130
IF(AVGAGE.LE.31.)GO TO 3131
IF(AVGAGE.LE.32.)GO TO 3132
IF(AVGAGE.LE.33.)GO TO 3133
IF(AVGAGE.LE.34.)GO TO 3134
IF(AVGAGE.LE.35.)GO TO 3135
IF(AVGAGE.LE.36.)GO TO 3136
IF(AVGAGE.LE.37.)GO TO 3137
IF(AVGAGE.LE.38.)GO TO 3138
IF(AVGAGE.LE.39.)GO TO 3139
IF(AVGAGE.LE.40.)GO TO 3140
IF(AVGAGE.GT.40.)GO TO 3141
3101 DWDEPE=((CI7912/CI7812-1)*AVGAGE+1)*HCDEPR
GO TO 3150
3102 DWDEPE=(CI7912/CI7812)*((CI7812/CI7712-1)*(AVGAGE-1)+1)*HCDEPR
GO TO 3150
3103 DWDEPE=(CI7912/CI7712)*((CI7712/CI7612-1)*(AVGAGE-2)+1)*HCDEPR
GO TO 3150
3104 DWDEPE=(CI7912/CI7612)*((CI7612/CI7512-1)*(AVGAGE-3)+1)*HCDEPR
GO TO 3150
3105 DWDEPE=(CI7912/CI7512)*((CI7512/CI7412-1)*(AVGAGE-4)+1)*HCDEPR
GO TO 3150
3106 DWDEPE=(CI7912/CI7412)*((CI7412/CI7312-1)*(AVGAGE-5)+1)*HCDEPR
GO TO 3150
3107 DWDEPE=(CI7912/CI7312)*((CI7312/CI7212-1)*(AVGAGE-6)+1)*HCDEPR
GO TO 3150
3108 DWDEPE=(CI7912/CI7212)*((CI7212/CI7112-1)*(AVGAGE-7)+1)*HCDEPR
GO TO 3150
3109 DWDEPE=(CI7912/CI7112)*((CI7112/CI7012-1)*(AVGAGE-8)+1)*HCDEPR
GO TO 3150
3110 DWDEPE=(CI7912/CI7012)*((CI7012/CI6912-1)*(AVGAGE-9)+1)*HCDEPR
GO TO 3150
3111 DWDEPE=(CI7912/CI6912)*((CI6912/CI6812-1)*(AVGAGE-10)+1)*HCDEPR
GO TO 3150
3112 DWDEPE=(CI7912/CI6812)*((CI6812/CI6712-1)*(AVGAGE-11)+1)*HCDEPR
GO TO 3150
3113 DWDEPE=(CI7912/CI6712)*((CI6712/CI6612-1)*(AVGAGE-12)+1)*HCDEPR
GO TO 3150
3114 DWDEPE=(CI7912/CI6612)*((CI6612/CI6512-1)*(AVGAGE-13)+1)*HCDEPR
GO TO 3150
3115 DWDEPE=(CI7912/CI6512)*((CI6512/CI6412-1)*(AVGAGE-14)+1)*HCDEPR
GO TO 3150
3116 DWDEPE=(CI7912/CI6412)*((CI6412/CI6312-1)*(AVGAGE-15)+1)*HCDEPR
GO TO 3150
3117 DWDEPE=(CI7912/CI6312)*((CI6312/CI6212-1)*(AVGAGE-16)+1)*HCDEPR
GO TO 3150

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3118 DWDEPE=(CI7912/CI6212)\*((CI6212/CI6112-1)\*(AVGAGE-17)+1)\*HCDEPR  
 GO TO 3150  
 3119 DWDEPE=(CI7912/CI6112)\*((CI6112/CI6012-1)\*(AVGAGE-18)+1)\*HCDEPR  
 GO TO 3150  
 3120 DWDEPE=(CI7912/CI6012)\*((CI6012/CI5912-1)\*(AVGAGE-19)+1)\*HCDEPR  
 GO TO 3150  
 3121 DWDEPE=(CI7912/CI5912)\*((CI5912/CI5812-1)\*(AVGAGE-20)+1)\*HCDEPR  
 GO TO 3150  
 3122 DWDEPE=(CI7912/CI5812)\*((CI5812/CI5712-1)\*(AVGAGE-21)+1)\*HCDEPR  
 GO TO 3150  
 3123 DWDEPE=(CI7912/CI5712)\*((CI5712/CI5612-1)\*(AVGAGE-22)+1)\*HCDEPR  
 GO TO 3150  
 3124 DWDEPE=(CI7912/CI5612)\*((CI5612/CI5512-1)\*(AVGAGE-23)+1)\*HCDEPR  
 GO TO 3150  
 3125 DWDEPE=(CI7912/CI5512)\*((CI5512/CI5412-1)\*(AVGAGE-24)+1)\*HCDEPR  
 GO TO 3150  
 3126 DWDEPE=(CI7912/CI5412)\*((CI5412/CI5312-1)\*(AVGAGE-25)+1)\*HCDEPR  
 GO TO 3150  
 3127 DWDEPE=(CI7912/CI5312)\*((CI5312/CI5212-1)\*(AVGAGE-26)+1)\*HCDEPR  
 GO TO 3150  
 3128 DWDEPE=(CI7912/CI5212)\*((CI5212/CI5112-1)\*(AVGAGE-27)+1)\*HCDEPR  
 GO TO 3150  
 3129 DWDEPE=(CI7912/CI5112)\*((CI5112/CI5012-1)\*(AVGAGE-28)+1)\*HCDEPR  
 GO TO 3150  
 3130 DWDEPE=(CI7912/CI5012)\*((CI5012/CI4912-1)\*(AVGAGE-29)+1)\*HCDEPR  
 GO TO 3150  
 3131 DWDEPE=(CI7912/CI4912)\*((CI4912/CI4812-1)\*(AVGAGE-30)+1)\*HCDEPR  
 GO TO 3150  
 3132 DWDEPE=(CI7912/CI4812)\*((CI4812/CI4712-1)\*(AVGAGE-31)+1)\*HCDEPR  
 GO TO 3150  
 3133 DWDEPE=(CI7912/CI4712)\*((CI4712/CI4612-1)\*(AVGAGE-32)+1)\*HCDEPR  
 GO TO 3150  
 3134 DWDEPE=(CI7912/CI4612)\*((CI4612/CI4512-1)\*(AVGAGE-33)+1)\*HCDEPR  
 GO TO 3150  
 3135 DWDEPE=(CI7912/CI4512)\*((CI4512/CI4412-1)\*(AVGAGE-34)+1)\*HCDEPR  
 GO TO 3150  
 3136 DWDEPE=(CI7912/CI4412)\*((CI4412/CI4312-1)\*(AVGAGE-35)+1)\*HCDEPR  
 GO TO 3150  
 3137 DWDEPE=(CI7912/CI4312)\*((CI4312/CI4212-1)\*(AVGAGE-36)+1)\*HCDEPR  
 GO TO 3150  
 3138 DWDEPE=(CI7912/CI4212)\*((CI4212/CI4112-1)\*(AVGAGE-37)+1)\*HCDEPR  
 GO TO 3150  
 3139 DWDEPE=(CI7912/CI4112)\*((CI4112/CI4012-1)\*(AVGAGE-38)+1)\*HCDEPR  
 GO TO 3150  
 3140 DWDEPE=(CI7912/CI4012)\*((CI4012/CI3912-1)\*(AVGAGE-39)+1)\*HCDEPR  
 GO TO 3150  
 3141 DWDEPE=(CI7912/CI3912)\*HCDEPR  
 GO TO 3150

3150 IF(JUMP.EQ.1.) GO TO 3410  
3151 DWDEP=DWDEPE\*(C17913/C17912)  
GO TO 3400

C  
C DAVIDSON-WEIL DOUBLE-DECLINING BALANCE METHOD

C  
3200 GROWTH=DEPACY/CEPAPY-1  
AVGAGE=HCACDE/HCDEPR

C  
C DDB AGE REDUCING FACTORS

C  
F(1,1)=.7488  
F(1,2)=.7647  
F(1,3)=.7794  
F(1,4)=.7931  
F(1,5)=.8058  
F(1,6)=.8176  
F(1,7)=.8387  
F(2,1)=.7454  
F(2,2)=.7653  
F(2,3)=.7838  
F(2,4)=.8008  
F(2,5)=.8165  
F(2,6)=.8310  
F(2,7)=.8564  
F(3,1)=.7408  
F(3,2)=.7650  
F(3,3)=.7873  
F(3,4)=.8078  
F(3,5)=.8265  
F(3,6)=.8434  
F(3,7)=.8727  
F(4,1)=.7362  
F(4,2)=.7646  
F(4,3)=.7908  
F(4,4)=.8146  
F(4,5)=.8362  
F(4,6)=.8555  
F(4,7)=.8880  
F(5,1)=.7315  
F(5,2)=.7643  
F(5,3)=.7943  
F(5,4)=.8215  
F(5,5)=.8457  
F(5,6)=.8671  
F(5,7)=.9021  
F(6,1)=.7269  
F(6,2)=.7640

F(6,3)=-.7979  
F(6,4)=-.8283  
F(6,5)=-.8550  
F(6,6)=-.8782  
F(6,7)=-.9150  
F(7,1)=-.7223  
F(7,2)=-.7638  
F(7,3)=-.8015  
F(7,4)=-.8350  
F(7,5)=-.8640  
F(7,6)=-.8888  
F(7,7)=-.9267  
F(8,1)=-.7178  
F(8,2)=-.7636  
F(8,3)=-.8051  
F(8,4)=-.8416  
F(8,5)=-.8727  
F(8,6)=-.8987  
F(8,7)=-.9371  
F(9,1)=-.7133  
F(9,2)=-.7634  
F(9,3)=-.8087  
F(9,4)=-.8481  
F(9,5)=-.8812  
F(9,6)=-.9081  
F(9,7)=-.9464  
F(10,1)=-.7088  
F(10,2)=-.7633  
F(10,3)=-.8124  
F(10,4)=-.8545  
F(10,5)=-.8892  
F(10,6)=-.9169  
F(10,7)=-.9545  
F(11,1)=-.7043  
F(11,2)=-.7632  
F(11,3)=-.8160  
F(11,4)=-.8608  
F(11,5)=-.8969  
F(11,6)=-.9250  
F(11,7)=-.9616  
F(12,1)=-.6558  
F(12,2)=-.7631  
F(12,3)=-.8156  
F(12,4)=-.8669  
F(12,5)=-.9043  
F(12,6)=-.9326  
F(12,7)=-.9678  
F(13,1)=-.6954  
F(13,2)=-.7630

F(13,3)=.8231  
F(13,4)=.8728  
F(13,5)=.9113  
F(13,6)=.9395  
F(13,7)=.9731  
F(14,1)=.6735  
F(14,2)=.7626  
F(14,3)=.8406  
F(14,4)=.9002  
F(14,5)=.9408  
F(14,6)=.9662  
F(14,7)=.9897  
F(15,1)=.6521  
F(15,2)=.7624  
F(15,3)=.8573  
F(15,4)=.9233  
F(15,5)=.9621  
F(15,6)=.9822  
F(15,7)=.9963  
F(16,1)=.6314  
F(16,2)=.7623  
F(16,3)=.8730  
F(16,4)=.9422  
F(16,5)=.9765  
F(16,6)=.9910  
F(16,7)=.9988

3399 CONTINUE

C  
C INTERPOLATION FOR AGE REDUCING FACTORS  
C

IF(GROWTH.GT.-.05) GO TO 3201  
K=1  
L=1  
TRP2=0.0  
GO TO 3210  
3201 IF(GROWTH.GT.0) GO TO 3202  
K=1  
L=2  
DFF=GROWTH+.05  
TRP2=DFF/.05  
GO TO 3210  
3202 IF(GROWTH.GT..05) GO TO 3203  
K=2  
L=3  
DFF=GROWTH  
TRP2=DFF/.05  
GO TO 3210  
3203 IF(GROWTH.GT..1) GO TO 3204

```

K=3
L=4
DFF=GROWTH-.05
TRP2=DFF/.05
GO TO 3210
3204 IF(GROWTH.GT..15) GO TO 3205
K=4
L=5
DFF=GROWTH-.1
TRP2=DFF/.05
GO TO 3210
3205 IF(GROWTH.GT..2) GO TO 3206
K=5
L=6
DFF=GROWTH-.15
TRP2=DFF/.05
GO TO 3210
3206 IF(GROWTH.GT..3) GO TO 3207
K=6
L=7
DFF=GROWTH-.2
TRP2=DFF/.1
GO TO 3210
3207 K=7
L=7
TRP2=0.0
3210 CONTINUE
IF(AVGAGE.GT.3) GO TO 3211
I=1
J=1
TRP1=0.0
GO TO 3250
3211 IF(AVGAGE.GT.4) GO TO 3212
I=1
J=2
TRP1=AVGAGE-3
GO TO 3250
3212 IF(AVGAGE.GT.5) GO TO 3213
I=2
J=3
TRP1=AVGAGE-4
GO TO 3250
3213 IF(AVGAGE.GT.6) GO TO 3214
I=3
J=4
TRP1=AVGAGE-5
GO TO 3250
3214 IF(AVGAGE.GT.7) GO TO 3215

```

```
I=4
J=5
TRP1=AVGAGE-6
GO TC 3250
3215 IF(AVGAGE.GT.8) GO TC 3216
I=5
J=6
TRP1=AVGAGE-7
GO TO 3250
3216 IF(AVGAGE.GT.9) GO TC 3217
I=6
J=7
TRP1=AVGAGE-8
GO TO 3250
3217 IF(AVGAGE.GT.10) GO TO 3218
I=7
J=8
TRP1=AVGAGE-9
GO TC 3250
3218 IF(AVGAGE.GT.11) GO TO 3219
I=8
J=9
TRP1=AVGAGE-10
GO TO 3250
3219 IF(AVGAGE.GT.12) GO TO 3220
I=9
J=10
TRP1=AVGAGE-11
GO TO 3250
3220 IF(AVGAGE.GT.13) GO TO 3221
I=10
J=11
TRP1=AVGAGE-12
GO TO 3250
3221 IF(AVGAGE.GT.14) GO TO 3222
I=11
J=12
TRP1=AVGAGE-13
GO TO 3250
3222 IF(AVGAGE.GT.15) GO TO 3223
I=12
J=13
TRP1=AVGAGE-14
GO TO 3250
3223 IF(AVGAGE.GT.20) GO TO 3224
I=13
J=14
OFF=AVGAGE-15
```

```

TRP1=DFF/5
GU TC 3250
3224 IF(AVGAGE.GT.25) GO TO 3225
I=14
J=15
DFF=AVGAGE-20
TRP1=DFF/5
GO TO 3250
3225 IF(AVGAGE.GT.30) GO TO 3226
I=15
J=16
DFF=AVGAGE-25
TRP1=DFF/5
GO TO 3250
3226 I=16
J=16
TRP1=0.0
3250 CONTINUE
DFFF1=F(I,L)-F(I,K)
ADD1=DFFF1*TRP2
FACT1=F(I,K)+ADD1
DFFF2=F(J,L)-F(J,K)
ADD2=DFFF2*TRP2
FACT2=F(J,K)+ADD2
DFFF3=FACT2-FACT1
ADD3=DFFF3*TRP1
FACT3=FACT1+ADD3
ARF=FACT3
AVGAGE=AVGAGE*ARF
GO TO 3299

```

C  
C DAVIDSON-WEIL SUM-OF-THE-YEARS DIGITS METHOD  
C

```

3300 GROWTH=DEPACY/DEPAPY-1
AVGAGE=HCACDE/HCGEPR

```

C  
C SYD AGE REDUCING FACTORS  
C

```

F(1,1)=.8476
F(1,2)=.8571
F(1,3)=.8660
F(1,4)=.8742
F(1,5)=.8818
F(1,6)=.8889
F(1,7)=.9016
F(2,1)=.8189
F(2,2)=.8333
F(2,3)=.8467

```

F(2,4)=.8589  
F(2,5)=.8702  
F(2,6)=.8805  
F(2,7)=.8986  
F(3,1)=.7988  
F(3,2)=.8182  
F(3,3)=.8360  
F(3,4)=.8522  
F(3,5)=.8669  
F(3,6)=.8802  
F(3,7)=.9030  
F(4,1)=.7833  
F(4,2)=.8077  
F(4,3)=.8299  
F(4,4)=.8499  
F(4,5)=.8679  
F(4,6)=.8838  
F(4,7)=.9105  
F(5,1)=.7706  
F(5,2)=.8000  
F(5,3)=.8266  
F(5,4)=.8503  
F(5,5)=.8712  
F(5,6)=.8896  
F(5,7)=.9193  
F(6,1)=.7597  
F(6,2)=.7941  
F(6,3)=.8250  
F(6,4)=.8523  
F(6,5)=.8760  
F(6,6)=.8964  
F(6,7)=.9283  
F(7,1)=.7500  
F(7,2)=.7895  
F(7,3)=.8247  
F(7,4)=.8554  
F(7,5)=.8817  
F(7,6)=.9038  
F(7,7)=.9372  
F(8,1)=.7412  
F(8,2)=.7857  
F(8,3)=.8252  
F(8,4)=.8592  
F(8,5)=.8878  
F(8,6)=.9113  
F(8,7)=.9455  
F(9,1)=.7330  
F(9,2)=.7826



F(9,3)=.8263  
F(9,4)=.8634  
F(9,5)=.8941  
F(9,6)=.9187  
F(9,7)=.9531  
F(10,1)=.7254  
F(10,2)=.7800  
F(10,3)=.8278  
F(10,4)=.8680  
F(10,5)=.9004  
F(10,6)=.9259  
F(10,7)=.9600  
F(11,1)=.7180  
F(11,2)=.7778  
F(11,3)=.8298  
F(11,4)=.8727  
F(11,5)=.9068  
F(11,6)=.9328  
F(11,7)=.9661  
F(12,1)=.7110  
F(12,2)=.7759  
F(12,3)=.8319  
F(12,4)=.8776  
F(12,5)=.9130  
F(12,6)=.9393  
F(12,7)=.9714  
F(13,1)=.7043  
F(13,2)=.7742  
F(13,3)=.8343  
F(13,4)=.8825  
F(13,5)=.9190  
F(13,6)=.9453  
F(13,7)=.9760  
F(14,1)=.6728  
F(14,2)=.7683  
F(14,3)=.8479  
F(14,4)=.9005  
F(14,5)=.9454  
F(14,6)=.9692  
F(14,7)=.9907  
F(15,1)=.6436  
F(15,2)=.7647  
F(15,3)=.8626  
F(15,4)=.9278  
F(15,5)=.9649  
F(15,6)=.9837  
F(15,7)=.9967  
F(16,1)=.6159  
F(16,2)=.7623

F(16,3)=.8772  
F(16,4)=.9455  
F(16,5)=.9782  
F(16,6)=.9918  
F(16,7)=.9989  
GO TO 3399

C  
C PARKER DEPRECIATION METHOD

C  
3400 JUMP=1.  
GO TO 3100  
3410 PDEP=DWDEPE\*(C17913/C17912)  
GO TO 4000

C  
C PURCHASING POWER GAIN OR LOSS

C  
4000 DWPUP=(BEGNMP+ENDNMF)/2)\*(C17912/C17812-1)\*(C17913/C17912)\*(1-2)  
PPUP=DWPUP  
GO TO 5000  
5000 CONTINUE  
PDWDEP=(DWDEP-CDDEPR)/CDDEPR  
PPDEP=(PDEP-CDCEPR)/CDCEPR  
PDWCOG=(DWCOGS-CCCOGS)/CCCOGS  
PPCOG=(PCOGS-CCCOGS)/CCCOGS  
PDWPUP=(DWPUP-PUPGL)/PUPGL  
PPPUP=(PPUP-PUPGL)/PLPGL  
WRITE(6,6000)  
6000 FORMAT(5X,14HCOMPANY NUMBER,28X,4HCOGS,6X,5HERROR,6X,12HDEPRECIATI  
ION,2X,5HERROR,7X,10HGAIN(LOSS),3X,5HERROR,2X,3HINV,1X,3HDEP)  
WRITE(6,6001)NUMCO,HCGSCY,HCEPR,INVMET,METDEP  
6001 FORMAT(10X,15,6X,22HACTUAL HISTORICAL COST,1X,F11.2,14X,F11.2,35X,  
11,3X,11)  
WRITE(6,6002)ICCODE,CCCOGS,CDDEPR,PUPGL  
6002 FORMAT(10X,12,5),22HACTUAL CONSTANT DOLLAR,1X,F11.2,14X,F11.2,  
113X,F12.2)  
WRITE(6,6003)DWCOGS,FCWCOG,CWDEP,PDWDEP,DWPUP,PDWPUP  
6003 FORMAT(21X,22HWEIL CONSTANT DOLLAR,1X,F11.2,1X,F8.5,5X,F11.2,1X,  
1F8.5,4X,F12.2,1X,F8.5)  
WRITE(6,6004)PCOGS,PPCOG,PDEP,PPDEP,PPUP,PPPUP  
6004 FORMAT(21X,22HPARKER CONSTANT DOLLAR,1X,F11.2,1X,F8.5,5X,F11.2,1X,  
1F8.5,4X,F12.2,1X,F8.5)  
WRITE(7,6005)NUMCG,INVMET,METDEP,PDWCOG,PDWDEP,PDWPUP,PPCOG,PPDEP,  
1PPPUP,ICCODE  
6005 FORMAT(1X,15,11,1X,11,1X,6F8.5,1X,12)  
6010 CONTINUE  
GO TO 10  
9999 CONTINUE  
STOP

NUMCO	Company Number
INVMET	Inventory Method
METDEP	Depreciation Method
HCGSCY	Historical Cost of Goods Sold - Current Year
HCGSPY	Historical Cost of Goods Sold - Prior Year
HCBICY	Historical Cost of Beginning Inventory - Current Year
HCEICY	Historical Cost of Ending Inventory - Current Year
HCBIPY	Historical Cost of Beginning Inventory - Prior Year
HCDEPR	Historical Cost Depreciation Expense
HCACDE	Historical Cost Accumulated Depreciation
DEPACY	Depreciable Assets - End of Current Year
NUM	IBM Card Reference Number
FEIF	Fraction of Ending Inventory Valued at FIFO
FEIL	Fraction of Ending Inventory Valued at LIFO
DEPAPY	Depreciable Assets - End of Prior Year
EFIFOV	Increase in Carrying Value of Inventory if Valued at FIFO instead of LIFO
BEGNMP	Beginning Net Monetary Position
ENDNMP	Ending Net Monetary Position
CDCOGS	Constant Dollar Cost of Goods Sold
CDDEPR	Constant Dollar Depreciation
PUPGL	Purchasing Power Gain/Loss
ICODE	Industry Code
HPURCY	Historical Cost of Purchases - Current Year
AJBICY	Constant Dollar Adjusted Beginning Inventory - Current Year
DWFCE	Davidson-Weil FIFO Cost of Ending Inventory
DWCOGS	Davidson-Weil Cost of Goods Sold
DWLICE	Davidson-Weil LIFO Cost of Ending Inventory when Inventory Increased During the Current Year
DWLDCE	Davidson-Weil LIFO Cost of Ending Inventory when Inventory Decreased During the Current Year
G	Inventory Growth Rate
S	Davidson-Weil Specified Adjustment Variable
TW	Davidson-Weil Specified Adjustment Variable

BITW	Beginning Inventory Adjusted for "TW" Years
DWACE	Davidson-Weil Average Cost of Ending Inventory
DWFTPL	Davidson-Weil Portion of Total Purchases Valued at LIFO
DWFTPF	Davidson-Weil Portion of Total Purchases Valued at FIFO
AFBICY	Amount of Constant Dollar Adjusted Beginning Inventory Valued at FIFO
FFCGS	Amount of FIFO Cost of Goods Sold
DWFFCE	Davidson-Weil Amount of Constant Dollar Adjusted FIFO Cost of Goods Sold in End of Year Dollars
DWFFCA	Davidson-Weil Amount of Constant Dollar Adjusted FIFO Cost of Goods Sold in Average for the Year Dollars
DWFLIC	Davidson-Weil Amount of Constant Dollar Adjusted LIFO Cost of Goods Sold in End of Year Dollars (when LIFO inventories increased during the year)
DWFLIA	Davidson-Weil Amount of Constant Dollar Adjusted LIFO Cost of Goods Sold in Average for the Year Dollars (when LIFO inventories increased during the year)
BILIFO	Beginning Inventory Valued at LIFO
EILIFO	Ending Inventory Valued at LIFO
DWFLDC	Davidson-Weil Amount of Constant Dollar Adjusted LIFO Cost of Goods Sold in End of Year Dollars (when LIFO inventories decreased during the year)
DWFLDA	Davidson-Weil Amount of Constant Dollar Adjusted LIFO Cost of Goods Sold in Average for the Year Dollars (when LIFO inventories decreased during the year)
APURCY	Average Daily Purchases During the Current Year
DAYINE	Number of Days Purchases in Ending Inventory
PFEI	Parker FIFO Cost of Ending Inventory
YEPUR	Historical Cost of Purchases Adjusted to End of Year Dollars
BEINAJ	Constant Dollar Adjusted Beginning Inventory - Prior Year
HPURPY	Historical Cost of Purchases - Prior Year
APURPY	Average Daily Purchases During the Prior Year
DAYINB	Number of Days Purchases in Beginning Inventory

PFBI	Parker FIFO Cost of Beginning Inventory
APFBI	Parker FIFO Cost of Beginning Inventory Adjusted to End of Current Year Constant Dollars
PCOGSE	Parker Cost of Goods Sold in End of Year Constant Dollars
PCOGS	Parker Cost of Goods Sold in Average for the Year Constant Dollars
CHANGE	Increase or Decrease in Carrying Value of Inventory During the Current Year
DWDEPE	Davidson-Weil Depreciation Expense in End of Year Constant Dollars
DWDEP	Davidson-Weil Depreciation Expense in Average for the Year Constant Dollars
AVGAGE	Average Age of Assets
ARF	Age Reducing Factor
GROWTH	Fixed Asset Rate of Growth
I	Matrix Location
J	Matrix Location
K	Matrix Location
L	Matrix Location
TRP1	Interpolation Factor
TRP2	Interpolation Factor
DFF	Difference Factor
DFF1	Difference Factor
ADD1	Adjustment Factor
FACT1	Adjustment Factor
DFFF2	Difference Factor
Add2	Adjustment Factor
FACT2	Adjustment Factor
DFFF3	Difference Factor
Add3	Adjustment Factor
FACT3	Adjustment Factor
PPUP	Parker Purchasing Power Gain/Loss
DWPUP	Davidson-Weil Purchasing Power Gain/Loss
PDEP	Parker Depreciation Expense in Average for the Year Constant Dollars

PDWDEP	'P' Value for Davidson-Weil Depreciation
PPDEP	'P' Value for Parker Depreciation
PDWCOG	'P' Value for Davidson-Weil Cost of Goods Sold
PPCOG	'P' Value for Parker Cost of Goods Sold
PDWPUP	'P' Value for Davidson-Weil Purchasing Power Gain/Loss
PPPUP	'P' Value for Parker Purchasing Power Gain/Loss
JUMP	A Counter

APPENDIX B

COMPUTER GENERATED PRINT-OUT

## Description of Data on Computer

## Generated Print-Out

This appendix contains a copy of the computer print-out of model generated data. Following is a description of the data presented on the print-out. The five digit company number provides information about the industry group and relative size of specific companies. The first digit of the company number indicates the Fortune industry group (i.e., 1 - industrials, 2 - banking, 5 - utility, 6 - transportation, 7 - retail), the second digit is an IBM card reference number (meaningless for company identification), and the last three digits represent a company's size ranking within its specific industry group. Listings of companies included in this study, by company number and alphabetically, may be found in Appendixes C and D, respectively. Also found in the computer print-out are each company's actual historical cost, actual historical cost/constant dollar, and Davidson-Weil and Parker model generated historical cost/constant dollar data for cost of goods sold, depreciation expense, and purchasing power gain/loss (all amounts in millions of dollars). Immediately to the right of each model generated estimate is the error term ('P' value) associated with that estimate. In the right hand margin are found the inventory method code (1 - FIFO, 2 - LIFO with inventory increase, 3 - LIFO with inventory decrease, 4 - lower-of-cost-or-market, 5 - average, 6 - specific identification, 7 - retail, 8 - mixed method) and the depreciation method code (1 - straight-line, 2 double-declining balance, 3 - sum-of-the-year's digits).



Computer Print-Out

COMPANY NUMBER		COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEF
11001	ACTUAL HISTORICAL COST	55848.70		1236.90				2 2
	ACTUAL CONSTANT DOLLAR	56462.20		1740.00		182.20		
	D-WEIL CONSTANT DOLLAR	56294.80	-0.00296	2391.51	0.37443	205.68	0.12885	
	PARKER CONSTANT DOLLAR	55848.70	-0.01087	2594.10	0.49086	205.08	0.12885	
11002	ACTUAL HISTORICAL COST	40831.00		2027.00				2 1
	ACTUAL CONSTANT DOLLAR	40831.00		3270.00		998.00		
	D-WEIL CONSTANT DOLLAR	41107.54	0.00677	3468.56	0.06072	1500.21	0.50322	
	PARKER CONSTANT DOLLAR	40831.00	0.0	3468.56	0.06072	1500.21	0.50322	
11003	ACTUAL HISTORICAL COST	38448.30		1004.40				2 2
	ACTUAL CONSTANT DOLLAR	38907.80		1939.00		451.80		
	D-WEIL CONSTANT DOLLAR	38761.55	-0.00376	2173.12	0.12074	1004.13	1.22252	
	PARKER CONSTANT DOLLAR	38448.30	-0.01181	2348.72	0.21130	1004.13	1.22252	
11004	ACTUAL HISTORICAL COST	28133.06		1085.77				0 1
	ACTUAL CONSTANT DOLLAR	28459.06		1632.77		1044.00		
	D-WEIL CONSTANT DOLLAR	28766.86	0.01082	1850.47	0.13333	1070.24	0.02513	
	PARKER CONSTANT DOLLAR	28684.01	0.00790	1850.47	0.13333	1070.24	0.02513	
11005	ACTUAL HISTORICAL COST	32350.30		1086.20				2 1
	ACTUAL CONSTANT DOLLAR	32367.80		1698.00		621.50		
	D-WEIL CONSTANT DOLLAR	32587.14	0.00678	1862.84	-0.01852	747.72	0.20309	
	PARKER CONSTANT DOLLAR	32350.30	-0.00054	1862.84	-0.01852	747.72	0.20309	
11006	ACTUAL HISTORICAL COST	25769.00		707.00				2 2
	ACTUAL CONSTANT DOLLAR	25785.00		1167.00		220.00		
	D-WEIL CONSTANT DOLLAR	26001.55	0.00840	1232.03	0.05572	346.20	0.53184	
	PARKER CONSTANT DOLLAR	25768.99	-0.00062	1302.95	0.11649	346.20	0.53184	
11007	ACTUAL HISTORICAL COST	6443.00		1970.00				5 3
	ACTUAL CONSTANT DOLLAR	6740.00		2343.00		455.00		
	D-WEIL CONSTANT DOLLAR	6635.46	-0.01551	2701.78	0.15313	625.59	0.37493	
	PARKER CONSTANT DOLLAR	6635.46	-0.01551	2875.66	0.22734	625.59	0.37493	
11008	ACTUAL HISTORICAL COST	15991.00		624.00				6 1
	ACTUAL CONSTANT DOLLAR	16093.00		880.00		-209.00		
	D-WEIL CONSTANT DOLLAR	16204.61	0.00694	1088.05	0.23642	-170.16	-0.15712	
	PARKER CONSTANT DOLLAR	15990.99	-0.00634	1088.05	0.23642	-170.16	-0.15712	

COMPANY NUMBER			COGS	ERROR	DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV	DEP
11009	ACTUAL	HISTORICAL	14489.00		1054.00				2	1
	ACTUAL	CONSTANT DOLLAR	14557.00		1659.00		421.00			
	D-WEIL	CONSTANT DOLLAR	14594.32	0.00256	1808.79	0.09029	356.62	-0.15295		
	PARKER	CONSTANT DOLLAR	14489.00	-0.00467	1808.79	0.09029	356.62	-0.15295		
11010	ACTUAL	HISTORICAL	11631.50		400.60				2	1
	ACTUAL	CONSTANT DOLLAR	11870.50		526.00		408.90			
	D-WEIL	CONSTANT DOLLAR	11737.69	-0.01119	684.47	0.30128	399.67	-0.02257		
	PARKER	CONSTANT DOLLAR	11631.50	-0.02013	684.47	0.30128	399.67	-0.02257		
11012	ACTUAL	HISTORICAL	12590.30		1054.60				6	1
	ACTUAL	CONSTANT DOLLAR	12650.50		1389.90		428.20			
	D-WEIL	CONSTANT DOLLAR	12747.25	0.00765	1727.90	0.24316	447.56	0.04521		
	PARKER	CONSTANT DOLLAR	12590.29	-0.00476	1727.90	0.24316	447.56	0.04521		
11013	ACTUAL	HISTORICAL	11777.00		684.00				2	1
	ACTUAL	CONSTANT DOLLAR	11803.00		997.00		577.00			
	D-WEIL	CONSTANT DOLLAR	11877.63	0.00632	1152.70	0.15617	671.29	0.16341		
	PARKER	CONSTANT DOLLAR	11776.99	-0.00220	1152.70	0.15617	671.29	0.16341		
11014	ACTUAL	HISTORICAL	11626.00		704.00				2	1
	ACTUAL	CONSTANT DOLLAR	11666.22		1046.81		337.00			
	D-WEIL	CONSTANT DOLLAR	11722.57	0.00483	1229.83	0.17484	532.82	0.56108		
	PARKER	CONSTANT DOLLAR	11625.99	-0.00345	1229.83	0.17484	532.82	0.56108		
11015	ACTUAL	HISTORICAL	10705.30		531.50				3	1
	ACTUAL	CONSTANT DOLLAR	10812.10		659.70		283.30			
	D-WEIL	CONSTANT DOLLAR	10797.82	-0.00132	1183.38	0.37650	330.57	0.16686		
	PARKER	CONSTANT DOLLAR	10706.03	-0.00981	1183.38	0.37650	330.57	0.16686		
11016	ACTUAL	HISTORICAL	8999.40		787.00				6	3
	ACTUAL	CONSTANT DOLLAR	9091.00		1213.00		90.00			
	D-WEIL	CONSTANT DOLLAR	9143.53	0.00578	1378.97	0.13683	176.37	0.95967		
	PARKER	CONSTANT DOLLAR	8999.39	-0.01008	1457.04	0.20119	176.37	0.95967		
11017	ACTUAL	HISTORICAL	9423.00		266.00				1	1
	ACTUAL	CONSTANT DOLLAR	9710.00		404.00		129.00			
	D-WEIL	CONSTANT DOLLAR	9812.92	0.01060	393.71	-0.02547	160.85	0.24691		
	PARKER	CONSTANT DOLLAR	9728.00	0.00185	393.71	-0.02547	160.85	0.24691		
11018	ACTUAL	HISTORICAL	7835.78		398.31				2	1
	ACTUAL	CONSTANT DOLLAR	7871.04		639.96		215.20			
	D-WEIL	CONSTANT DOLLAR	7897.07	0.00331	719.29	0.12397	294.93	0.37051		
	PARKER	CONSTANT DOLLAR	7835.78	-0.00448	719.29	0.12397	294.93	0.37051		

COMPANY NUMBER			COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
11019	ACTUAL	HISTORICAL	8366.00		549.00				2	1
	ACTUAL	CONSTANT DOLLAR	8462.00		749.00		650.00			
	D-WEIL	CONSTANT DOLLAR	8423.23	-0.00458	947.36	0.26483	681.52	0.04849		
	PARKER	CONSTANT DOLLAR	8366.00	-0.01134	947.36	0.26483	681.52	0.04849		
11021	ACTUAL	HISTORICAL	6490.70		469.70				2	1
	ACTUAL	CONSTANT DOLLAR	6631.40		490.40		263.90			
	D-WEIL	CONSTANT DOLLAR	6532.04	-0.01498	861.77	0.75728	329.82	0.24980		
	PARKER	CONSTANT DOLLAR	6490.70	-0.02122	861.77	0.75728	329.82	0.24980		
11022	ACTUAL	HISTORICAL	6376.20		227.40				2	1
	ACTUAL	CONSTANT DOLLAR	6479.20		350.70		224.50			
	D-WEIL	CONSTANT DOLLAR	6428.40	-0.00784	449.73	0.28239	227.06	0.01139		
	PARKER	CONSTANT DOLLAR	6376.19	-0.01590	449.73	0.28239	227.06	0.01139		
11023	ACTUAL	HISTORICAL	8179.10		458.20				8	1
	ACTUAL	CONSTANT DOLLAR	8220.60		772.50		161.90			
	D-WEIL	CONSTANT DOLLAR	8287.45	0.00813	769.11	-0.00439	248.73	0.53633		
	PARKER	CONSTANT DOLLAR	8257.91	0.00454	769.11	-0.00439	248.73	0.53633		
11024	ACTUAL	HISTORICAL	5860.50		311.80				2	2
	ACTUAL	CONSTANT DOLLAR	5860.50		393.40		153.10			
	D-WEIL	CONSTANT DOLLAR	5901.50	0.00700	418.14	0.06290	161.36	0.18456		
	PARKER	CONSTANT DOLLAR	5860.50	-0.00000	449.68	0.14307	131.36	0.18456		
11025	ACTUAL	HISTORICAL	4502.09		361.32				8	3
	ACTUAL	CONSTANT DOLLAR	4603.07		436.36		-122.37			
	D-WEIL	CONSTANT DOLLAR	4623.86	0.00452	622.46	0.42648	-32.15	-0.73731		
	PARKER	CONSTANT DOLLAR	4660.19	0.01241	649.37	0.48816	-32.15	-0.73731		
11026	ACTUAL	HISTORICAL	6348.00		647.00				2	1
	ACTUAL	CONSTANT DOLLAR	6358.00		868.00		116.00			
	D-WEIL	CONSTANT DOLLAR	6396.50	0.00606	881.55	0.01561	161.12	0.38894		
	PARKER	CONSTANT DOLLAR	6347.99	-0.00157	881.55	0.01561	161.12	0.38894		
11027	ACTUAL	HISTORICAL	6617.00		634.45				8	2
	ACTUAL	CONSTANT DOLLAR	6645.00		668.00		435.00			
	D-WEIL	CONSTANT DOLLAR	6671.96	0.00406	871.75	0.30501	452.15	0.03942		
	PARKER	CONSTANT DOLLAR	6617.00	-0.00421	973.03	0.45663	452.15	0.03942		
11029	ACTUAL	HISTORICAL	5688.20		160.20				2	1
	ACTUAL	CONSTANT DOLLAR	5744.80		238.60		-126.00			
	D-WEIL	CONSTANT DOLLAR	5726.62	-0.00317	300.72	0.26036	2.36	-1.01870		
	PARKER	CONSTANT DOLLAR	5688.19	-0.00985	300.72	0.26036	2.36	-1.01870		

COMPANY NUMBER		COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
11030	ACTUAL HISTORICAL COST	5317.21		438.40				8	1
	ACTUAL CONSTANT DOLLAR	5356.01		522.50		201.60			
	D-WEIL CONSTANT DOLLAR	5415.08	0.01103	555.04	0.06229	310.27	0.53902		
	PARKER CCNSTANT DOLLAR	5395.70	0.00741	555.04	0.06229	310.27	0.53902		
11032	ACTUAL HISTORICAL COST	6412.04		155.99				2	1
	ACTUAL CONSTANT DOLLAR	6457.57		194.29		32.58			
	D-WEIL CCNSTANT DOLLAR	6404.73	-0.00818	299.32	0.54057	200.91	5.16654		
	PARKER CCNSTANT DOLLAR	6412.04	-0.00705	299.32	0.54057	200.91	5.16654		
11033	ACTUAL HISTORICAL COST	6497.95		403.00				2	1
	ACTUAL CONSTANT DOLLAR	6502.60		524.54		240.08			
	D-WEIL CCNSTANT DOLLAR	6548.16	0.00701	548.18	0.04506	263.69	0.09836		
	PARKER CONSTANT DOLLAR	6497.95	-0.00072	548.18	0.04506	263.69	0.09836		
11034	ACTUAL HISTORICAL COST	6077.00		351.00				8	1
	ACTUAL CONSTANT DOLLAR	6102.00		548.00		194.00			
	D-WEIL CCNSTANT DOLLAR	6144.28	0.00693	714.75	0.30429	164.20	-0.15358		
	PARKER CONSTANT DOLLAR	6077.00	-0.00410	714.75	0.30429	164.20	-0.15358		
11035	ACTUAL HISTORICAL COST	5661.05		323.00				3	1
	ACTUAL CCNSTANT DOLLAR	5693.15		558.70		162.20			
	D-WEIL CCNSTANT DOLLAR	5724.35	0.00548	680.42	0.21786	191.47	0.18044		
	PARKER CONSTANT DOLLAR	5671.57	-0.00379	680.42	0.21786	191.47	0.18044		
11036	ACTUAL HISTORICAL COST	2175.10		753.00				5	1
	ACTUAL CONSTANT DOLLAR	2270.40		885.60		12.10			
	D-WEIL CCNSTANT DOLLAR	2244.38	-0.01146	1034.47	0.16810	74.40	5.14846		
	PARKER CONSTANT DOLLAR	2244.38	-0.01146	1034.47	0.16810	74.40	5.14846		
11039	ACTUAL HISTORICAL COST	5060.72		69.70				5	1
	ACTUAL CCNSTANT DOLLAR	5192.92		81.20		50.60			
	D-WEIL CCNSTANT DOLLAR	5190.51	-0.00046	126.61	0.55924	87.35	0.72619		
	PARKER CONSTANT DOLLAR	5190.51	-0.00046	126.61	0.55924	87.35	0.72619		
11040	ACTUAL HISTORICAL COST	7572.90		132.90				2	2
	ACTUAL CONSTANT DOLLAR	7572.90		168.90		-62.00			
	D-WEIL CCNSTANT DOLLAR	7620.12	0.00624	228.81	0.35472	-43.88	-0.29233		
	PARKER CONSTANT DOLLAR	7572.89	-0.00000	234.09	0.38596	-43.88	-0.29233		
11042	ACTUAL HISTORICAL COST	7230.60		132.44				8	1
	ACTUAL CONSTANT DOLLAR	7266.30		176.84		258.90			
	D-WEIL CCNSTANT DOLLAR	7328.75	0.00859	255.86	0.44684	292.76	0.13079		
	PARKER CONSTANT DOLLAR	7230.60	-0.00491	255.86	0.44684	292.76	0.13079		

COMPANY NUMBER			COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
11043	ACTUAL	HISTORICAL	4211.60		486.00				3	1
	ACTUAL	CONSTANT DOLLAR	4238.00		667.00		535.00			
	D-WEIL	CONSTANT DOLLAR	4257.60	0.00462	626.89	-0.06014	598.09	0.11793		
	PARKER	CONSTANT DOLLAR	4218.66	-0.00456	626.89	-0.06014	598.09	0.11793		
11045	ACTUAL	HISTORICAL	4637.10		294.90				2	1
	ACTUAL	CONSTANT DOLLAR	4693.80		399.00		122.70			
	D-WEIL	CONSTANT DOLLAR	4665.29	-0.00607	543.99	0.36339	154.80	0.26163		
	PARKER	CONSTANT DOLLAR	4637.10	-0.01208	543.99	0.36339	154.80	0.26163		
11046	ACTUAL	HISTORICAL	5815.00		134.00				5	1
	ACTUAL	CONSTANT DOLLAR	6009.00		175.00		368.00			
	D-WEIL	CONSTANT DOLLAR	6039.91	0.00514	180.64	0.03222	383.87	0.04313		
	PARKER	CONSTANT DOLLAR	6039.91	0.00514	180.64	0.03222	383.87	0.04313		
11047	ACTUAL	HISTORICAL	6226.34		292.40				8	1
	ACTUAL	CONSTANT DOLLAR	6310.54		385.60		216.90			
	D-WEIL	CONSTANT DOLLAR	6324.65	0.00224	396.71	0.02880	234.89	0.08294		
	PARKER	CONSTANT DOLLAR	6226.34	-0.01334	396.71	0.02880	234.89	0.08294		
11050	ACTUAL	HISTORICAL	2731.29		222.00				1	1
	ACTUAL	CONSTANT DOLLAR	3062.00		298.00		-9.00			
	D-WEIL	CONSTANT DOLLAR	2891.09	-0.05582	351.53	0.17964	2.87	-1.31892		
	PARKER	CONSTANT DOLLAR	2866.58	-0.06382	351.53	0.17964	2.87	-1.31892		
11051	ACTUAL	HISTORICAL	4885.00		240.50				8	1
	ACTUAL	CONSTANT DOLLAR	4892.50		391.60		154.00			
	D-WEIL	CONSTANT DOLLAR	4937.16	0.00913	442.68	0.13043	182.77	0.18685		
	PARKER	CONSTANT DOLLAR	4887.90	-0.00094	442.68	0.13043	182.77	0.18685		
11052	ACTUAL	HISTORICAL	4172.53		258.81				2	1
	ACTUAL	CONSTANT DOLLAR	4172.53		399.55		227.36			
	D-WEIL	CONSTANT DOLLAR	4201.65	0.00698	437.08	0.09393	214.74	-0.05550		
	PARKER	CONSTANT DOLLAR	4172.53	-0.00000	437.08	0.09393	214.74	-0.05550		
11053	ACTUAL	HISTORICAL	4100.00		228.00				2	1
	ACTUAL	CONSTANT DOLLAR	4139.00		323.00		167.00			
	D-WEIL	CONSTANT DOLLAR	4129.55	-0.00228	385.09	0.19223	184.60	0.10534		
	PARKER	CONSTANT DOLLAR	4100.00	-0.00942	385.09	0.19223	184.60	0.10534		
11054	ACTUAL	HISTORICAL	4145.10		141.00				2	1
	ACTUAL	CONSTANT DOLLAR	4155.00		234.60		84.20			
	D-WEIL	CONSTANT DOLLAR	4172.41	0.00419	290.18	0.23690	117.49	0.39532		
	PARKER	CONSTANT DOLLAR	4145.10	-0.00238	290.18	0.23690	117.49	0.39532		

COMPANY NUMBER			COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
11055	ACTUAL	HISTORICAL	4441.23		68.04				1	1
	ACTUAL	CONSTANT DOLLAR	4477.08		106.62		84.17			
	D-WEIL	CONSTANT DOLLAR	4513.77	0.00819	112.36	0.05383	86.16	0.02366		
	PARKER	CONSTANT DOLLAR	4475.86	-0.00027	112.36	0.05383	86.16	0.02366		
11056	ACTUAL	HISTORICAL	2733.62		114.15				2	1
	ACTUAL	CONSTANT DOLLAR	2773.03		154.28		20.74			
	D-WEIL	CONSTANT DOLLAR	2749.69	-0.00863	183.64	0.19031	50.49	1.43433		
	PARKER	CONSTANT DOLLAR	2733.62	-0.01421	183.64	0.19031	50.49	1.43433		
11057	ACTUAL	HISTORICAL	2842.69		61.64				6	1
	ACTUAL	CONSTANT DOLLAR	2883.74		92.10		38.39			
	D-WEIL	CONSTANT DOLLAR	2969.81	0.02585	116.89	0.26911	71.02	0.84996		
	PARKER	CONSTANT DOLLAR	2938.06	0.01984	116.89	0.26911	71.02	0.84996		
11059	ACTUAL	HISTORICAL	3475.46		168.59				3	1
	ACTUAL	CONSTANT DOLLAR	3541.45		225.44		109.80			
	D-WEIL	CONSTANT DOLLAR	3596.04	0.01542	264.01	0.17107	126.87	0.15548		
	PARKER	CONSTANT DOLLAR	3565.15	0.00669	264.01	0.17107	126.87	0.15548		
11060	ACTUAL	HISTORICAL	2048.46		142.05				1	1
	ACTUAL	CONSTANT DOLLAR	2075.07		179.14		79.26			
	D-WEIL	CONSTANT DOLLAR	2110.46	0.01706	188.80	0.05395	99.41	0.25424		
	PARKER	CONSTANT DOLLAR	2093.03	0.00865	188.80	0.05395	99.41	0.25424		
11062	ACTUAL	HISTORICAL	3366.80		196.80				8	1
	ACTUAL	CONSTANT DOLLAR	3386.10		297.00		118.10			
	D-WEIL	CONSTANT DOLLAR	3406.58	0.00605	365.70	0.23130	159.98	0.35461		
	PARKER	CONSTANT DOLLAR	3366.80	-0.00570	365.70	0.23130	159.98	0.35461		
11063	ACTUAL	HISTORICAL	4368.43		77.05				2	1
	ACTUAL	CONSTANT DOLLAR	4368.43		98.68		-16.61			
	D-WEIL	CONSTANT DOLLAR	4382.92	0.00332	135.64	0.35426	-70.56	3.24781		
	PARKER	CONSTANT DOLLAR	4368.43	-0.00000	133.64	0.35426	-70.56	3.24781		
11065	ACTUAL	HISTORICAL	3452.90		247.00				2	1
	ACTUAL	CONSTANT DOLLAR	3481.60		383.20		214.40			
	D-WEIL	CONSTANT DOLLAR	3481.09	-0.00015	469.02	0.22394	166.13	-0.22512		
	PARKER	CONSTANT DOLLAR	3452.90	-0.00824	469.02	0.22394	166.13	-0.22512		
11066	ACTUAL	HISTORICAL	3503.32		95.70				1	1
	ACTUAL	CONSTANT DOLLAR	3555.52		187.70		85.50			
	D-WEIL	CONSTANT DOLLAR	3615.85	0.01697	196.60	0.04741	111.54	0.30452		
	PARKER	CONSTANT DOLLAR	3585.47	0.00842	196.60	0.04741	111.54	0.30452		

COMPANY NUMBER			COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
11067	ACTUAL	HISTORICAL COST	3698.00		164.00				2	1
	ACTUAL	CONSTANT DOLLAR	3698.00		227.00		152.00			
	D-WEIL	CONSTANT DOLLAR	3725.85	0.00753	284.20	0.25198	186.08	0.22948		
	PARKER	CONSTANT DOLLAR	3698.00	-0.00000	284.20	0.25198	186.88	0.22948		
11068	ACTUAL	HISTORICAL COST	3456.37		100.78				1	1
	ACTUAL	CONSTANT DOLLAR	3506.24		157.31		73.44			
	D-WEIL	CONSTANT DOLLAR	3550.46	0.01261	170.97	0.08684	79.13	0.07752		
	PARKER	CONSTANT DOLLAR	3520.84	0.00416	170.97	0.08684	79.13	0.07752		
11069	ACTUAL	HISTORICAL COST	3003.81		332.59				8	1
	ACTUAL	CONSTANT DOLLAR	3013.35		501.16		174.01			
	D-WEIL	CONSTANT DOLLAR	3032.67	0.00641	485.93	-0.03039	191.49	0.10044		
	PARKER	CONSTANT DOLLAR	3003.81	-0.00317	485.93	-0.03039	191.49	0.10044		
11070	ACTUAL	HISTORICAL COST	3336.80		111.60				8	1
	ACTUAL	CONSTANT DOLLAR	3378.80		168.70		69.60			
	D-WEIL	CONSTANT DOLLAR	3423.74	0.01330	196.84	0.16681	83.31	0.19693		
	PARKER	CONSTANT DOLLAR	3417.95	0.01159	196.84	0.16681	83.31	0.19693		
11071	ACTUAL	HISTORICAL COST	3736.35		155.60				2	1
	ACTUAL	CONSTANT DOLLAR	3736.35		242.95		127.26			
	D-WEIL	CONSTANT DOLLAR	3763.20	0.00719	338.07	0.39154	133.31	0.04758		
	PARKER	CONSTANT DOLLAR	3736.35	-0.00000	338.07	0.39154	133.31	0.04758		
11074	ACTUAL	HISTORICAL COST	2957.91		132.17				5	1
	ACTUAL	CONSTANT DOLLAR	3022.59		188.58		117.33			
	D-WEIL	CONSTANT DOLLAR	3024.11	0.00050	226.25	0.19978	132.15	0.12630		
	PARKER	CONSTANT DOLLAR	3024.11	0.00050	226.25	0.19978	132.15	0.12630		
11076	ACTUAL	HISTORICAL COST	3350.40		53.80				8	1
	ACTUAL	CONSTANT DOLLAR	3396.44		74.80		76.00			
	D-WEIL	CONSTANT DOLLAR	3446.31	0.01468	82.01	0.09635	112.57	0.48125		
	PARKER	CONSTANT DOLLAR	3471.14	0.02199	82.01	0.09635	112.57	0.48125		
11077	ACTUAL	HISTORICAL COST	2443.80		244.70				1	1
	ACTUAL	CONSTANT DOLLAR	2490.80		320.40		50.60			
	D-WEIL	CONSTANT DOLLAR	2539.83	0.01968	317.24	-0.00987	70.84	0.51853		
	PARKER	CONSTANT DOLLAR	2517.18	0.01059	317.24	-0.00987	70.84	0.51853		
11079	ACTUAL	HISTORICAL COST	2424.68		360.57				2	1
	ACTUAL	CONSTANT DOLLAR	2426.31		521.68		83.42			
	D-WEIL	CONSTANT DOLLAR	2444.05	0.00731	639.12	0.22512	149.64	0.79386		
	PARKER	CONSTANT DOLLAR	2424.68	-0.00067	639.12	0.22512	149.64	0.79386		

COMPANY NUMBER 11091	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	3891.50		43.50				5	2
	D-WEIL CONSTANT DOLLAR	3891.50		60.30		41.80			
	PARKER CONSTANT DOLLAR	3973.78	0.02114	92.27	0.53018	50.76	0.21424		
COMPANY NUMBER 11082	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	3390.00		111.00				3	1
	D-WEIL CONSTANT DOLLAR	3410.00		198.00		66.00			
	PARKER CONSTANT DOLLAR	3423.73	0.00403	256.28	0.29436	96.68	0.46489		
COMPANY NUMBER 11083	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	3393.35	-0.00468	256.28	0.29436	96.68	0.46489		
	D-WEIL CONSTANT DOLLAR	4478.35		68.29				4	1
	PARKER CONSTANT DOLLAR	4627.65		97.55		145.39			
COMPANY NUMBER 11084	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	4670.71	0.00930	120.44	0.23464	152.66	0.05000		
	D-WEIL CONSTANT DOLLAR	4632.28	0.00100	120.44	0.23464	152.66	0.05000		
	PARKER CONSTANT DOLLAR	3115.00		225.00				2	3
COMPANY NUMBER 11065	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	3148.00		361.00		187.00			
	D-WEIL CONSTANT DOLLAR	3126.06	-0.00697	344.48	-0.04576	296.11	0.58349		
	PARKER CONSTANT DOLLAR	3115.00	-0.01048	386.49	0.07060	296.11	0.58349		
COMPANY NUMBER 11087	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	2165.92		129.39				2	1
	D-WEIL CONSTANT DOLLAR	2165.92		199.74		104.19			
	PARKER CONSTANT DOLLAR	2180.08	0.00654	278.51	0.39435	122.12	0.17208		
COMPANY NUMBER 11089	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	2165.92	0.0	278.51	0.39435	122.12	0.17208		
	D-WEIL CONSTANT DOLLAR	2350.35		40.20				5	1
	PARKER CONSTANT DOLLAR	2374.65		64.80		6.70			
COMPANY NUMBER 11090	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	2398.32	0.00997	67.97	0.04886	22.10	2.29809		
	D-WEIL CONSTANT DOLLAR	2398.32	0.00997	67.97	0.04886	22.10	2.29809		
	PARKER CONSTANT DOLLAR	2525.68		62.84				8	2
COMPANY NUMBER 11092	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	2562.18		85.63		21.07			
	D-WEIL CONSTANT DOLLAR	2600.94	0.01513	109.03	0.27325	40.99	0.94524		
	PARKER CONSTANT DOLLAR	2614.66	0.02048	114.45	0.33656	40.99	0.94524		
COMPANY NUMBER 11092	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	2628.24		67.10				1	1
	D-WEIL CONSTANT DOLLAR	2688.24		110.70		57.00			
	PARKER CONSTANT DOLLAR	2717.25	0.01079	121.25	0.09533	67.10	0.17722		
COMPANY NUMBER 11092	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	2694.17	0.00220	121.25	0.09533	67.10	0.17722		
	D-WEIL CONSTANT DOLLAR	3662.47		100.11		14.00		2	2
	PARKER CONSTANT DOLLAR	3703.47		130.11		10.06	-0.26135		
		3691.61	-0.00315	172.22	0.32368	10.06	-0.26135		
		3662.47	-0.01107	179.38	0.37869	10.06	-0.26135		



COMPANY NUMBER			COGS	ERROR	DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV	DEP
11093	ACTUAL	HISTORICAL COST	2858.30		124.00				2	1
	ACTUAL	CONSTANT DOLLAR	2898.94		185.43		101.45			
	D-WEIL	CONSTANT DOLLAR	2880.84	-0.00624	217.09	0.17073	131.43	0.29550		
	PARKER	CONSTANT DOLLAR	2858.30	-0.01402	217.09	0.17073	131.43	0.29550		
11094	ACTUAL	HISTORICAL COST	1612.41		44.05				1	1
	ACTUAL	CONSTANT DOLLAR	1659.00		61.83		-44.96			
	D-WEIL	CONSTANT DOLLAR	1683.01	0.01447	80.04	0.29455	-35.22	-0.21668		
	PARKER	CONSTANT DOLLAR	1668.64	0.00581	80.04	0.29455	-35.22	-0.21668		
11097	ACTUAL	HISTORICAL COST	2514.08		109.51				2	1
	ACTUAL	CONSTANT DOLLAR	2514.08		152.81		32.40			
	D-WEIL	CONSTANT DOLLAR	2532.60	0.00737	184.34	0.20637	75.90	1.34247		
	PARKER	CONSTANT DOLLAR	2514.08	0.0	184.34	0.20637	75.90	1.34247		
11098	ACTUAL	HISTORICAL COST	1484.00		62.00				1	1
	ACTUAL	CONSTANT DOLLAR	1556.00		93.00		42.00			
	D-WEIL	CONSTANT DOLLAR	1568.94	0.00832	110.17	0.18466	61.30	0.45950		
	PARKER	CONSTANT DOLLAR	1556.91	0.00058	110.17	0.18466	61.30	0.45950		
11099	ACTUAL	HISTORICAL COST	2684.50		82.90				8	1
	ACTUAL	CONSTANT DOLLAR	2706.90		140.10		116.40			
	D-WEIL	CONSTANT DOLLAR	2727.38	0.00757	150.11	0.35693	150.97	0.29700		
	PARKER	CONSTANT DOLLAR	2684.50	-0.00828	150.11	0.35693	150.97	0.29700		
11100	ACTUAL	HISTORICAL COST	2072.10		118.60				2	1
	ACTUAL	CONSTANT DOLLAR	2109.10		173.10		41.60			
	D-WEIL	CONSTANT DOLLAR	2087.81	-0.01010	223.94	0.29373	80.74	0.46011		
	PARKER	CONSTANT DOLLAR	2072.10	-0.01754	223.94	0.29373	60.74	0.46011		
11101	ACTUAL	HISTORICAL COST	2408.82		86.00				8	1
	ACTUAL	CONSTANT DOLLAR	2450.82		130.00		92.00			
	D-WEIL	CONSTANT DOLLAR	2473.85	0.00940	117.71	-0.09456	111.37	0.16010		
	PARKER	CONSTANT DOLLAR	2408.82	-0.01714	117.71	-0.09456	111.37	0.16010		
11102	ACTUAL	HISTORICAL COST	1908.00		141.00				2	1
	ACTUAL	CONSTANT DOLLAR	1946.00		214.00		60.00			
	D-WEIL	CONSTANT DOLLAR	1922.71	-0.01197	241.97	0.13071	82.17	0.36950		
	PARKER	CONSTANT DOLLAR	1908.00	-0.01953	241.97	0.13071	82.17	0.36950		
11103	ACTUAL	HISTORICAL COST	2100.20		73.10				5	1
	ACTUAL	CONSTANT DOLLAR	2178.70		118.30		77.60			
	D-WEIL	CONSTANT DOLLAR	2170.96	-0.00355	145.74	0.23193	96.33	0.24135		
	PARKER	CONSTANT DOLLAR	2170.96	-0.00355	145.74	0.23193	96.33	0.24135		

COMPANY NUMBER		COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
11104	ACTUAL HISTORICAL COST	1167.25		209.67				1	1
	ACTUAL CONSTANT DOLLAR	1225.24		266.47		-34.08			
	D-WEIL CONSTANT DOLLAR	1255.33	0.02456	279.75	0.04982	-10.81	-0.68275		
	PARKER CONSTANT DOLLAR	1245.32	0.01639	279.75	0.04982	-10.81	-0.68275		
11106	ACTUAL HISTORICAL COST	2664.60		123.30				1	1
	ACTUAL CONSTANT DOLLAR	2723.70		200.70		196.70			
	D-WEIL CONSTANT DOLLAR	2753.82	0.01106	220.02	0.09629	199.00	0.01167		
	PARKER CONSTANT DOLLAR	2731.14	0.00273	220.02	0.09629	199.00	0.01167		
11107	ACTUAL HISTORICAL COST	2343.00		220.00				2	1
	ACTUAL CONSTANT DOLLAR	2360.00		309.00		60.00			
	D-WEIL CONSTANT DOLLAR	2360.91	0.00039	388.24	0.25643	62.35	0.03915		
	PARKER CONSTANT DOLLAR	2343.00	-0.00720	388.24	0.25643	62.35	0.03915		
11108	ACTUAL HISTORICAL COST	2207.01		83.57				2	1
	ACTUAL CONSTANT DOLLAR	2225.47		138.20		64.01			
	D-WEIL CONSTANT DOLLAR	2221.39	-0.00183	163.22	0.18101	71.70	0.12018		
	PARKER CONSTANT DOLLAR	2207.01	-0.00829	163.22	0.18101	71.70	0.12018		
11110	ACTUAL HISTORICAL COST	2082.00		37.00				1	1
	ACTUAL CONSTANT DOLLAR	2141.00		52.00		5.70			
	D-WEIL CONSTANT DOLLAR	2161.28	0.00947	67.26	0.29349	19.31	2.38716		
	PARKER CONSTANT DOLLAR	2142.95	0.00091	67.26	0.29349	19.31	2.38716		
11112	ACTUAL HISTORICAL COST	2160.82		187.24				5	2
	ACTUAL CONSTANT DOLLAR	2344.24		214.00		0.30			
	D-WEIL CONSTANT DOLLAR	2208.39	-0.05795	219.84	0.02727	25.45	83.82094		
	PARKER CONSTANT DOLLAR	2208.39	-0.05795	225.74	0.05487	25.45	83.82094		
11113	ACTUAL HISTORICAL COST	1718.80		49.80				1	1
	ACTUAL CONSTANT DOLLAR	1778.60		71.00		31.10			
	D-WEIL CONSTANT DOLLAR	1794.12	0.00872	95.32	0.34258	62.84	1.02064		
	PARKER CONSTANT DOLLAR	1779.15	0.00031	95.32	0.34258	62.84	1.02064		
11114	ACTUAL HISTORICAL COST	2380.20		72.90				2	2
	ACTUAL CONSTANT DOLLAR	2439.50		137.00		119.70			
	D-WEIL CONSTANT DOLLAR	2399.18	-0.01669	151.57	0.10925	134.67	0.12505		
	PARKER CONSTANT DOLLAR	2380.20	-0.02447	164.48	0.20056	134.67	0.12505		
11115	ACTUAL HISTORICAL COST	2188.49		110.20				5	1
	ACTUAL CONSTANT DOLLAR	2221.19		179.70		78.10			
	D-WEIL CONSTANT DOLLAR	2236.42	0.00686	193.10	0.07458	84.46	0.08146		
	PARKER CONSTANT DOLLAR	2236.42	0.00686	193.10	0.07458	84.46	0.08146		

COMPANY NUMBER			COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
11116	ACTUAL	HISTORICAL COST	1024.63		40.00				5	1
	ACTUAL	CONSTANT DOLLAR	1063.00		64.00		-20.00			
	D-WEIL	CONSTANT DOLLAR	1065.33	0.00219	69.32	0.08311	-7.10	-0.64521		
	PARKER	CONSTANT DOLLAR	1065.33	0.00219	69.32	0.08311	-7.10	-0.64521		
11117	ACTUAL	HISTORICAL COST	1937.52		67.41				8	1
	ACTUAL	CONSTANT DOLLAR	1956.86		87.63		21.42			
	D-WEIL	CONSTANT DOLLAR	1957.53	0.00034	97.67	0.11452	33.56	0.56674		
	PARKER	CONSTANT DOLLAR	1938.03	-0.00962	97.67	0.11452	33.56	0.56674		
11118	ACTUAL	HISTORICAL COST	710.65		233.57				1	1
	ACTUAL	CONSTANT DOLLAR	765.49		291.47		-33.79			
	D-WEIL	CONSTANT DOLLAR	785.03	0.02552	316.82	0.08699	-14.91	-0.55885		
	PARKER	CONSTANT DOLLAR	781.40	0.02079	316.82	0.08699	-14.91	-0.55885		
11122	ACTUAL	HISTORICAL COST	1793.10		67.60				8	1
	ACTUAL	CONSTANT DOLLAR	1828.30		93.90		104.80			
	D-WEIL	CONSTANT DOLLAR	1845.36	0.00933	115.93	0.23460	99.15	-0.05396		
	PARKER	CONSTANT DOLLAR	1851.58	0.01273	115.93	0.23460	99.15	-0.05396		
11123	ACTUAL	HISTORICAL COST	1946.63		37.37				5	1
	ACTUAL	CONSTANT DOLLAR	1994.77		56.79		57.47			
	D-WEIL	CONSTANT DOLLAR	2000.17	0.00271	66.34	0.16809	59.85	0.04148		
	PARKER	CONSTANT DOLLAR	2000.17	0.00271	66.34	0.16809	59.85	0.04148		
11124	ACTUAL	HISTORICAL COST	2312.80		66.14				2	1
	ACTUAL	CONSTANT DOLLAR	2321.49		82.74		25.80			
	D-WEIL	CONSTANT DOLLAR	2328.31	0.00294	101.16	0.22263	74.95	1.90500		
	PARKER	CONSTANT DOLLAR	2312.80	-0.00374	101.16	0.22263	74.95	1.90500		
11125	ACTUAL	HISTORICAL COST	1700.12		69.80				2	2
	ACTUAL	CONSTANT DOLLAR	1738.62		89.00		21.00			
	D-WEIL	CONSTANT DOLLAR	1712.93	-0.01478	91.50	0.02809	44.49	1.11840		
	PARKER	CONSTANT DOLLAR	1700.12	-0.02214	98.14	0.10269	44.49	1.11840		
11126	ACTUAL	HISTORICAL COST	2133.80		59.60				2	1
	ACTUAL	CONSTANT DOLLAR	2133.80		88.60		18.00			
	D-WEIL	CONSTANT DOLLAR	2150.00	0.00759	85.70	-0.03273	40.10	1.22762		
	PARKER	CONSTANT DOLLAR	2133.80	0.0	85.70	-0.03273	40.10	1.22762		
11127	ACTUAL	HISTORICAL COST	2030.15		63.10				2	1
	ACTUAL	CONSTANT DOLLAR	2043.00		100.70		63.50			
	D-WEIL	CONSTANT DOLLAR	2047.42	0.00216	110.80	0.10032	66.16	0.04185		
	PARKER	CONSTANT DOLLAR	2030.15	-0.00629	110.80	0.10032	66.16	0.04185		

COMPANY NUMBER			COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
11128	ACTUAL	HISTORICAL	1923.70		96.00				5 1
	ACTUAL	CONSTANT DOLLAR	1952.90		158.90		40.90		
	D-WEIL	CONSTANT DOLLAR	1965.43	0.00642	195.95	0.23319	59.79	0.46191	
	PARKER	CONSTANT DOLLAR	1965.43	0.00642	195.95	0.23319	59.79	0.46191	
11129	ACTUAL	HISTORICAL	2097.04		75.38				2 3
	ACTUAL	CONSTANT DOLLAR	2097.04		110.60		83.66		
	D-WEIL	CONSTANT DOLLAR	2112.30	0.00728	133.08	0.20325	93.55	0.11825	
	PARKER	CONSTANT DOLLAR	2097.04	-0.00000	136.29	0.23224	93.55	0.11825	
11131	ACTUAL	HISTORICAL	1959.46		75.97				8 1
	ACTUAL	CONSTANT DOLLAR	1972.57		102.66		68.48		
	D-WEIL	CONSTANT DOLLAR	1992.76	0.01024	103.08	0.00409	72.53	0.05918	
	PARKER	CONSTANT DOLLAR	1959.46	-0.00665	103.08	0.00409	72.53	0.05918	
11135	ACTUAL	HISTORICAL	1528.00		42.30				5 1
	ACTUAL	CONSTANT DOLLAR	1558.20		65.90		40.50		
	D-WEIL	CONSTANT DOLLAR	1571.25	0.00838	78.99	0.19863	50.33	0.24269	
	PARKER	CONSTANT DOLLAR	1571.25	0.00838	78.99	0.19863	50.33	0.24269	
11136	ACTUAL	HISTORICAL	1758.59		38.44				8 1
	ACTUAL	CONSTANT DOLLAR	1812.69		48.82		7.81		
	D-WEIL	CONSTANT DOLLAR	1830.22	0.00967	64.87	0.32872	8.31	0.06355	
	PARKER	CONSTANT DOLLAR	1812.17	-0.00029	64.87	0.32872	8.31	0.06355	
11140	ACTUAL	HISTORICAL	2099.00		52.00				2 1
	ACTUAL	CONSTANT DOLLAR	2095.00		76.00		22.00		
	D-WEIL	CONSTANT DOLLAR	2112.44	0.00833	93.40	0.22899	45.13	1.05116	
	PARKER	CONSTANT DOLLAR	2099.00	0.00191	93.40	0.22899	45.13	1.05116	
11141	ACTUAL	HISTORICAL	1789.23		47.27				8 1
	ACTUAL	CONSTANT DOLLAR	1799.20		62.74		-3.42		
	D-WEIL	CONSTANT DOLLAR	1815.60	0.00912	61.07	-0.02660	0.44	-1.12859	
	PARKER	CONSTANT DOLLAR	1789.23	-0.00554	61.07	-0.02660	0.44	-1.12859	
11142	ACTUAL	HISTORICAL	2051.90		116.30				8 1
	ACTUAL	CONSTANT DOLLAR	2070.40		169.50		82.60		
	D-WEIL	CONSTANT DOLLAR	2092.64	0.01074	196.72	0.16061	89.56	0.08429	
	PARKER	CONSTANT DOLLAR	2087.26	0.00814	196.72	0.16061	89.56	0.08429	
11143	ACTUAL	HISTORICAL	889.20		23.40				2 2
	ACTUAL	CONSTANT DOLLAR	919.10		34.60		-2.00		
	D-WEIL	CONSTANT DOLLAR	896.06	-0.02507	39.55	0.14297	9.18	-5.59014	
	PARKER	CONSTANT DOLLAR	889.20	-0.03253	40.99	0.18456	9.18	-5.59014	

COMPANY NUMBER			COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
11146	ACTUAL	HISTORICAL COST	1695.00		82.00				1	1
	ACTUAL	CONSTANT DOLLAR	1747.00		110.00		2.00			
	D-WEIL	CONSTANT DOLLAR	1772.26	0.01446	140.26	0.27510	25.78	11.88768		
	PARKER	CONSTANT DOLLAR	1757.72	0.00614	140.26	0.27510	25.78	11.88768		
11147	ACTUAL	HISTORICAL COST	1751.68		106.52				2	1
	ACTUAL	CONSTANT DOLLAR	1764.13		162.59		42.95			
	D-WEIL	CONSTANT DOLLAR	1766.38	0.00127	192.77	0.18271	47.00	0.09432		
	PARKER	CONSTANT DOLLAR	1751.68	-0.00706	192.77	0.18271	47.00	0.09432		
11148	ACTUAL	HISTORICAL COST	1402.00		71.40				1	1
	ACTUAL	CONSTANT DOLLAR	1429.20		110.80		53.00			
	D-WEIL	CONSTANT DOLLAR	1442.68	0.00943	134.80	0.21662	50.51	-0.04704		
	PARKER	CONSTANT DOLLAR	1440.41	0.00785	134.80	0.21662	50.51	-0.04704		
11149	ACTUAL	HISTORICAL COST	1164.91		73.82				5	1
	ACTUAL	CONSTANT DOLLAR	1207.41		98.42		52.45			
	D-WEIL	CONSTANT DOLLAR	1201.46	-0.00493	111.56	0.13352	56.46	0.07652		
	PARKER	CONSTANT DOLLAR	1201.46	-0.00493	111.56	0.13352	56.46	0.07652		
11150	ACTUAL	HISTORICAL COST	1818.61		98.64				2	1
	ACTUAL	CONSTANT DOLLAR	1849.11		146.76		71.13			
	D-WEIL	CONSTANT DOLLAR	1834.02	-0.00816	170.49	0.16168	78.30	0.10078		
	PARKER	CONSTANT DOLLAR	1818.61	-0.01649	170.49	0.16168	78.30	0.10078		
11151	ACTUAL	HISTORICAL COST	1677.19		33.09				3	1
	ACTUAL	CONSTANT DOLLAR	1718.78		43.21		40.80			
	D-WEIL	CONSTANT DOLLAR	1725.17	0.00371	47.26	0.09364	46.69	0.14446		
	PARKER	CONSTANT DOLLAR	1737.13	0.01068	47.26	0.09364	46.69	0.14446		
11155	ACTUAL	HISTORICAL COST	1654.14		90.10				3	2
	ACTUAL	CONSTANT DOLLAR	1659.14		97.10		22.00			
	D-WEIL	CONSTANT DOLLAR	1673.46	0.00863	125.84	0.29598	28.39	0.29041		
	PARKER	CONSTANT DOLLAR	1657.80	-0.00081	138.74	0.42884	28.39	0.29041		
11156	ACTUAL	HISTORICAL COST	808.89		48.30				1	1
	ACTUAL	CONSTANT DOLLAR	825.99		75.60		-35.60			
	D-WEIL	CONSTANT DOLLAR	875.61	0.06007	85.86	0.13573	-7.49	-0.78965		
	PARKER	CONSTANT DOLLAR	868.91	0.05196	85.86	0.13573	-7.49	-0.78965		
11157	ACTUAL	HISTORICAL COST	45.00		23.90				1	1
	ACTUAL	CONSTANT DOLLAR	47.69		31.35		-11.47			
	D-WEIL	CONSTANT DOLLAR	47.68	-0.00020	37.43	0.19393	12.97	-2.13037		
	PARKER	CONSTANT DOLLAR	47.96	0.00556	37.43	0.19393	12.97	-2.13037		

COMPANY NUMBER 11158	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1404.38		146.60				1	1
	D-WEIL CONSTANT DOLLAR	1455.18		210.60		-15.50			
	PARKER CONSTANT DOLLAR	1471.65	0.01132	192.13	-0.08769	56.10	-4.61958		
COMPANY NUMBER 11159	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1662.17		46.01				4	1
	D-WEIL CONSTANT DOLLAR	1665.84		62.30		48.82			
	PARKER CONSTANT DOLLAR	1699.45	0.02018	74.46	0.19515	59.65	0.22178		
COMPANY NUMBER 11161	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1414.55		78.61				1	1
	D-WEIL CONSTANT DOLLAR	1462.00		98.90		33.60			
	PARKER CONSTANT DOLLAR	1477.50	0.01060	107.37	0.08563	47.72	0.42015		
COMPANY NUMBER 11162	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1683.67		47.88				8	1
	D-WEIL CONSTANT DOLLAR	1685.10		69.07		26.61			
	PARKER CONSTANT DOLLAR	1731.96	0.02781	94.05	0.36170	39.21	0.47339		
COMPANY NUMBER 11164	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1738.15	0.03148	94.05	0.36170	39.21	0.47339		
	D-WEIL CONSTANT DOLLAR	1474.47		39.00				8	1
	PARKER CONSTANT DOLLAR	1498.47		53.00		27.00			
COMPANY NUMBER 11165	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1517.03	0.01239	63.99	0.20744	65.62	1.43022		
	D-WEIL CONSTANT DOLLAR	1526.33	0.01859	63.99	0.20744	65.62	1.43022		
	PARKER CONSTANT DOLLAR	1711.00		83.00				8	1
COMPANY NUMBER 11166	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1712.00		150.00		14.00			
	D-WEIL CONSTANT DOLLAR	1740.61	0.01671	151.78	0.01189	29.35	1.09663		
	PARKER CONSTANT DOLLAR	1737.74	0.01504	151.78	0.01189	29.35	1.09663		
COMPANY NUMBER 11168	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1874.00		171.18				8	1
	D-WEIL CONSTANT DOLLAR	1909.00		235.00		137.00			
	PARKER CONSTANT DOLLAR	1907.50	-0.00079	223.02	-0.05099	161.82	0.18114		
COMPANY NUMBER 11168	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1170.70		104.30				2	1
	D-WEIL CONSTANT DOLLAR	1173.80		149.00		69.20			
	PARKER CONSTANT DOLLAR	1179.55	0.00490	183.17	0.22933	70.98	0.02573		
COMPANY NUMBER 11170	ACTUAL HISTORICAL COST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1170.70	-0.00264	183.17	0.22933	70.98	0.02573		
	D-WEIL CONSTANT DOLLAR	1393.13		92.73				5	1
	PARKER CONSTANT DOLLAR	1429.13		130.73		120.00			
		1433.61	0.00313	123.96	-0.05180	131.59	0.09655		
		1433.61	0.00313	123.96	-0.05180	131.59	0.09655		



COMPANY NUMBER		COGS	ERROR	DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV	DEP
11189	ACTUAL HISTORICAL COST	1220.10		42.70				8	1
	ACTUAL CONSTANT DOLLAR	1233.30		58.80		26.70			
	D-WEIL CONSTANT DOLLAR	1245.37	0.00578	68.86	0.17117	38.74	0.45106		
	PARKER CONSTANT DOLLAR	1220.10	-0.01070	68.86	0.17117	38.74	0.45106		
11190	ACTUAL HISTORICAL COST	640.60		27.76				4	1
	ACTUAL CONSTANT DOLLAR	675.00		39.00		24.00			
	D-WEIL CONSTANT DOLLAR	689.75	0.02185	48.40	0.24095	45.56	0.89853		
	PARKER CONSTANT DOLLAR	684.99	0.01480	48.40	0.24095	45.56	0.89853		
11191	ACTUAL HISTORICAL COST	1714.53		42.95				6	1
	ACTUAL CONSTANT DOLLAR	1737.62		63.96		38.22			
	D-WEIL CONSTANT DOLLAR	1750.42	0.00737	80.84	0.26385	40.47	0.05885		
	PARKER CONSTANT DOLLAR	1714.53	-0.01329	80.84	0.26385	40.47	0.05885		
11193	ACTUAL HISTORICAL COST	1342.85		42.64				2	2
	ACTUAL CONSTANT DOLLAR	1360.13		55.69		19.28			
	D-WEIL CONSTANT DOLLAR	1352.05	-0.00594	57.17	0.02653	39.06	1.02569		
	PARKER CONSTANT DOLLAR	1342.85	-0.01270	62.92	0.12981	39.06	1.02569		
11195	ACTUAL HISTORICAL COST	618.53		32.40				1	1
	ACTUAL CONSTANT DOLLAR	653.39		40.90		2.75			
	D-WEIL CONSTANT DOLLAR	659.54	0.00941	41.16	0.00624	20.98	6.62764		
	PARKER CONSTANT DOLLAR	653.86	0.00071	41.16	0.00624	20.98	6.62764		
11197	ACTUAL HISTORICAL COST	917.80		39.90				1	1
	ACTUAL CONSTANT DOLLAR	953.00		55.70		-7.00			
	D-WEIL CONSTANT DOLLAR	962.23	0.00968	64.05	0.14985	-1.36	-0.80541		
	PARKER CONSTANT DOLLAR	954.37	0.00144	64.05	0.14985	-1.36	-0.80541		
11200	ACTUAL HISTORICAL COST	1267.34		59.00				2	1
	ACTUAL CONSTANT DOLLAR	1272.13		87.37		14.10			
	D-WEIL CONSTANT DOLLAR	1276.53	0.00346	99.42	0.13788	14.18	0.00547		
	PARKER CONSTANT DOLLAR	1267.34	-0.00377	99.42	0.13788	14.18	0.00547		
11201	ACTUAL HISTORICAL COST	959.00		56.00				8	1
	ACTUAL CONSTANT DOLLAR	969.00		74.00		20.37			
	D-WEIL CONSTANT DOLLAR	979.36	0.01069	73.50	-0.00682	27.50	0.35017		
	PARKER CONSTANT DOLLAR	975.37	0.00657	73.50	-0.00682	27.50	0.35017		
11202	ACTUAL HISTORICAL COST	1114.91		39.06				2	1
	ACTUAL CONSTANT DOLLAR	1122.67		62.72		14.31			
	D-WEIL CONSTANT DOLLAR	1124.01	0.00119	73.36	0.16968	16.15	0.12842		
	PARKER CONSTANT DOLLAR	1114.91	-0.00691	73.36	0.16968	16.15	0.12842		



COMPANY NUMBER 11203	ACTUAL HISTORICAL COST	CGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1139.01		34.86				1	1
	D-WEIL CONSTANT DOLLAR	1168.70		46.82		42.06			
	PARKER CONSTANT DOLLAR	1178.54	0.00842	57.04	0.21820	44.61	0.06056		
COMPANY NUMBER 11204	ACTUAL HISTORICAL COST	CGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1527.31		21.82				8	2
	D-WEIL CONSTANT DOLLAR	1531.65		27.12		25.60			
	PARKER CONSTANT DOLLAR	1552.19	0.01341	26.66	-0.01668	24.33	-0.04943		
COMPANY NUMBER 11205	ACTUAL HISTORICAL COST	CGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1530.01	-0.00107	27.62	0.01848	24.33	-0.04943		
	D-WEIL CONSTANT DOLLAR	842.61		51.71				1	2
	PARKER CONSTANT DOLLAR	891.74		68.45		-22.00			
COMPANY NUMBER 11206	ACTUAL HISTORICAL COST	CGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	898.25	0.00730	83.54	0.22052	-12.87	-0.41513		
	D-WEIL CONSTANT DOLLAR	890.74	-0.00112	89.25	0.30381	-12.87	-0.41513		
	PARKER CONSTANT DOLLAR	946.56		24.66				1	1
COMPANY NUMBER 11209	ACTUAL HISTORICAL COST	CGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	971.51		36.21		5.70			
	D-WEIL CONSTANT DOLLAR	981.74	0.01053	39.58	0.09305	15.64	1.74320		
	PARKER CONSTANT DOLLAR	973.37	0.00192	39.58	0.09305	15.64	1.74320		
COMPANY NUMBER 11210	ACTUAL HISTORICAL COST	CGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1101.29		26.10		1.68		2	1
	D-WEIL CONSTANT DOLLAR	1103.06		29.80		22.65	12.48153		
	PARKER CONSTANT DOLLAR	1106.39	0.00302	37.69	0.26485	22.65	12.48153		
COMPANY NUMBER 11211	ACTUAL HISTORICAL COST	CGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1101.29	-0.00160	37.69	0.26485	22.65	12.48153		
	D-WEIL CONSTANT DOLLAR	1311.50		32.80		47.90		1	1
	PARKER CONSTANT DOLLAR	1350.40		41.00		49.67	0.03694		
COMPANY NUMBER 11212	ACTUAL HISTORICAL COST	CGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1362.69	0.00910	57.14	0.39369	49.67	0.03694		
	D-WEIL CONSTANT DOLLAR	1351.31	0.00067	57.14	0.39369	49.67	0.03694		
	PARKER CONSTANT DOLLAR	666.00		36.00		3.00		2	1
COMPANY NUMBER 11214	ACTUAL HISTORICAL COST	CGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	685.00		54.00		23.44	6.81280		
	D-WEIL CONSTANT DOLLAR	670.26	-0.02151	63.92	0.18370	23.44	6.81280		
	PARKER CONSTANT DOLLAR	666.00	-0.02774	63.92	0.18370	23.44	6.81280		
COMPANY NUMBER 11212	ACTUAL HISTORICAL COST	CGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1025.47		93.06		65.00		8	1
	D-WEIL CONSTANT DOLLAR	1033.47		120.06		69.09	0.06297		
	PARKER CONSTANT DOLLAR	1041.85	0.00811	151.95	0.26564	69.09	0.06297		
COMPANY NUMBER 11214	ACTUAL HISTORICAL COST	CGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1025.47	-0.00774	151.95	0.26564	69.09	0.06297		
	D-WEIL CONSTANT DOLLAR	1008.88		42.16		16.60		2	1
	PARKER CONSTANT DOLLAR	1017.97		55.92		21.42	0.29022		
COMPANY NUMBER 11214	ACTUAL HISTORICAL COST	CGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
	ACTUAL CONSTANT DOLLAR	1016.73	-0.00122	68.27	0.22080	21.42	0.29022		
	D-WEIL CONSTANT DOLLAR	1008.88	-0.00893	68.27	0.22080	21.42	0.29022		
	PARKER CONSTANT DOLLAR	1008.88	-0.00893	68.27	0.22080	21.42	0.29022		

COMPANY NUMBER		COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
11215	ACTUAL HISTORICAL COST	646.70		27.72				5	1
	ACTUAL CONSTANT DOLLAR	680.45		37.14		-6.24			
	D-WEIL CONSTANT DOLLAR	672.88	-0.01112	47.85	0.28829	-2.63	-0.57773		
	PARKER CONSTANT DOLLAR	672.88	-0.01112	47.85	0.28829	-2.63	-0.57773		
11216	ACTUAL HISTORICAL COST	1121.24		22.75				4	1
	ACTUAL CONSTANT DOLLAR	1155.65		28.87		37.79			
	D-WEIL CONSTANT DOLLAR	1161.21	0.00481	28.81	-0.00219	60.53	0.60184		
	PARKER CONSTANT DOLLAR	1152.44	-0.00277	28.81	-0.00219	60.53	0.60184		
11219	ACTUAL HISTORICAL COST	1065.10		78.90				2	2
	ACTUAL CONSTANT DOLLAR	1083.40		107.60		20.20			
	D-WEIL CONSTANT DOLLAR	1071.34	-0.01113	129.72	0.20560	24.00	0.18808		
	PARKER CONSTANT DOLLAR	1065.10	-0.01689	139.43	0.29584	24.00	0.18808		
11220	ACTUAL HISTORICAL COST	934.46		61.10				2	2
	ACTUAL CONSTANT DOLLAR	948.46		78.40		2.99			
	D-WEIL CONSTANT DOLLAR	941.38	-0.00747	104.85	0.33739	25.58	7.55676		
	PARKER CONSTANT DOLLAR	934.46	-0.01476	109.86	0.40123	25.58	7.55676		
11222	ACTUAL HISTORICAL COST	941.10		41.60				8	1
	ACTUAL CONSTANT DOLLAR	955.40		66.40		11.00			
	D-WEIL CONSTANT DOLLAR	953.57	-0.00191	74.62	0.12376	14.61	0.32784		
	PARKER CONSTANT DOLLAR	941.10	-0.01497	74.62	0.12376	14.61	0.32784		
11223	ACTUAL HISTORICAL COST	1272.21		73.87				2	2
	ACTUAL CONSTANT DOLLAR	1272.21		86.14		43.43			
	D-WEIL CONSTANT DOLLAR	1281.22	0.00708	126.92	0.47344	43.29	-0.10611		
	PARKER CONSTANT DOLLAR	1272.21	-0.00000	129.86	0.50753	43.29	-0.10611		
11225	ACTUAL HISTORICAL COST	917.38		65.68				8	1
	ACTUAL CONSTANT DOLLAR	921.55		105.73		34.90			
	D-WEIL CONSTANT DOLLAR	928.88	0.00795	123.26	0.16582	51.40	0.47288		
	PARKER CONSTANT DOLLAR	917.33	-0.00453	123.26	0.16582	51.40	0.47288		
11226	ACTUAL HISTORICAL COST	886.00		121.00				8	1
	ACTUAL CONSTANT DOLLAR	893.00		174.00		81.00			
	D-WEIL CONSTANT DOLLAR	903.43	0.01168	169.59	-0.02535	114.10	0.40860		
	PARKER CONSTANT DOLLAR	902.87	0.01105	169.59	-0.02535	114.10	0.40860		
11229	ACTUAL HISTORICAL COST	1458.00		56.00				8	1
	ACTUAL CONSTANT DOLLAR	1487.00		85.00		57.00			
	D-WEIL CONSTANT DOLLAR	1468.38	-0.01252	99.56	0.17131	61.89	0.08585		
	PARKER CONSTANT DOLLAR	1458.00	-0.01950	99.56	0.17131	61.89	0.08585		

COMPANY NUMBER		ACTUAL	HISTORICAL	CGST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
11230	ACTUAL			1262.52			19.34				1	1
	ACTUAL	CONSTANT	DOLLAR	1286.54			25.45		35.69			
	D-WEIL	CONSTANT	DOLLAR	1299.04	0.00971		30.03	0.18002	32.40	-0.09226		
	PARKER	CONSTANT	DOLLAR	1287.96	0.00111		30.03	0.18002	32.40	-0.09226		
11233	ACTUAL			1682.03			16.50				3	1
	ACTUAL	CONSTANT	DOLLAR	1682.03			22.00		29.57			
	D-WEIL	CONSTANT	DOLLAR	1700.94	0.01124		22.59	0.02672	28.93	-0.02169		
	PARKER	CONSTANT	DOLLAR	1685.23	0.00190		22.59	0.02672	28.93	-0.02169		
11235	ACTUAL			1092.57			35.70				3	1
	ACTUAL	CONSTANT	DOLLAR	1093.08			62.45		20.72			
	D-WEIL	CONSTANT	DOLLAR	1102.61	0.00872		84.97	0.36065	28.82	0.39080		
	PARKER	CONSTANT	DOLLAR	1093.07	-0.00001		84.97	0.36065	28.82	0.39080		
11236	ACTUAL			922.67			27.34				2	1
	ACTUAL	CONSTANT	DOLLAR	925.43			31.91		6.84			
	D-WEIL	CONSTANT	DOLLAR	913.62	-0.01276		37.29	0.16864	42.11	5.15605		
	PARKER	CONSTANT	DOLLAR	922.67	-0.00298		37.29	0.16864	42.11	5.15605		
11239	ACTUAL			811.76			19.46				4	1
	ACTUAL	CONSTANT	DOLLAR	832.82			29.25		21.43			
	D-WEIL	CONSTANT	DOLLAR	848.22	0.01850		34.97	0.19545	27.98	0.30544		
	PARKER	CONSTANT	DOLLAR	841.28	0.01016		34.97	0.19545	27.98	0.30544		
11240	ACTUAL			866.00			36.80				8	1
	ACTUAL	CONSTANT	DOLLAR	877.10			48.20		34.10			
	D-WEIL	CONSTANT	DOLLAR	886.43	0.01064		59.89	0.24243	35.27	0.03430		
	PARKER	CONSTANT	DOLLAR	866.00	-0.01266		59.89	0.24243	35.27	0.03430		
11242	ACTUAL			434.01			26.57				5	1
	ACTUAL	CONSTANT	DOLLAR	457.35			35.00		-13.44			
	D-WEIL	CONSTANT	DOLLAR	450.62	-0.01473		40.11	0.14605	-9.42	-0.29920		
	PARKER	CONSTANT	DOLLAR	450.62	-0.01473		40.11	0.14605	-9.42	-0.29920		
11243	ACTUAL			1049.00			36.00				8	1
	ACTUAL	CONSTANT	DOLLAR	1063.00			52.00		10.00			
	D-WEIL	CONSTANT	DOLLAR	1075.22	0.01149		67.59	0.29977	11.70	0.17045		
	PARKER	CONSTANT	DOLLAR	1069.47	0.00609		67.59	0.29977	11.70	0.17045		
11244	ACTUAL			966.47			20.03				8	1
	ACTUAL	CONSTANT	DOLLAR	972.22			29.63		14.02			
	D-WEIL	CONSTANT	DOLLAR	981.75	0.00980		36.21	0.22199	14.80	0.05568		
	PARKER	CONSTANT	DOLLAR	966.47	-0.00591		36.21	0.22199	14.80	0.05568		

COMPANY NUMBER		ACTUAL	HISTORICAL	CCST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
11245	ACTUAL			932.21			37.17				8	1
	ACTUAL		CONSTANT	DOLLAR	941.00		54.00		11.00			
	D-WEIL		CONSTANT	DOLLAR	950.71	0.01032	80.30	0.48708	16.43	0.49360		
	PARKER		CONSTANT	DOLLAR	932.21	-0.00934	80.30	0.48708	16.43	0.49360		
11246	ACTUAL		HISTORICAL	COST	875.64		60.19				2	2
	ACTUAL		CONSTANT	DOLLAR	932.34		79.21		1.92			
	D-WEIL		CONSTANT	DOLLAR	880.51	-0.05559	91.63	0.15683	4.95	1.57797		
	PARKER		CONSTANT	DOLLAR	875.64	-0.06082	102.20	0.29028	4.95	1.57797		
11247	ACTUAL		HISTORICAL	COST	1012.78		13.94				1	1
	ACTUAL		CONSTANT	DOLLAR	1053.05		19.43		32.10			
	D-WEIL		CONSTANT	DOLLAR	1057.20	0.00394	21.00	0.08082	36.95	0.15107		
	PARKER		CONSTANT	DOLLAR	1048.79	-0.00404	21.00	0.08082	36.95	0.15107		
11248	ACTUAL		HISTORICAL	COST	614.22		26.56				5	1
	ACTUAL		CONSTANT	DOLLAR	626.05		40.71		34.77			
	D-WEIL		CONSTANT	DOLLAR	633.87	0.01249	52.64	0.29294	35.45	0.01947		
	PARKER		CONSTANT	DOLLAR	633.87	0.01249	52.64	0.29294	35.45	0.01947		
11249	ACTUAL		HISTORICAL	CCST	860.00		29.19				5	1
	ACTUAL		CONSTANT	DOLLAR	888.18		44.74		22.21			
	D-WEIL		CONSTANT	DOLLAR	885.68	-0.00281	44.31	-0.00950	29.39	0.32319		
	PARKER		CONSTANT	DOLLAR	885.68	-0.00281	44.31	-0.00950	29.39	0.32319		
11250	ACTUAL		HISTORICAL	CCST	456.70		29.70				1	1
	ACTUAL		CONSTANT	DOLLAR	480.10		40.60		-39.00			
	D-WEIL		CONSTANT	DOLLAR	489.29	0.01913	46.66	0.14938	-20.11	-0.48448		
	PARKER		CONSTANT	DOLLAR	485.79	0.01184	46.66	0.14938	-20.11	-0.48448		
11251	ACTUAL		HISTORICAL	COST	976.52		74.25				5	1
	ACTUAL		CONSTANT	DOLLAR	994.52		101.25		27.00			
	D-WEIL		CONSTANT	DOLLAR	1001.22	0.00674	95.43	-0.05749	42.72	0.58209		
	PARKER		CONSTANT	DOLLAR	1001.22	0.00674	95.43	-0.05749	42.72	0.58209		
11253	ACTUAL		HISTORICAL	COST	903.15		22.66				8	1
	ACTUAL		CONSTANT	DOLLAR	921.08		30.96		3.46			
	D-WEIL		CONSTANT	DOLLAR	927.76	0.00726	33.10	0.06902	16.07	3.64570		
	PARKER		CONSTANT	DOLLAR	903.15	-0.01947	33.10	0.06902	16.07	3.64570		
11256	ACTUAL		HISTORICAL	CCST	988.00		67.30				2	1
	ACTUAL		CONSTANT	DOLLAR	996.80		105.20		100.90			
	D-WEIL		CONSTANT	DOLLAR	995.97	-0.00083	126.15	0.19917	98.62	-0.02264		
	PARKER		CONSTANT	DOLLAR	988.00	-0.00883	126.15	0.19917	98.62	-0.02264		

COMPANY NUMBER		COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
11257	ACTUAL HISTORICAL COST	658.60		35.50				1	1
	ACTUAL CONSTANT DOLLAR	708.40		47.10		35.10			
	D-WEIL CONSTANT DOLLAR	711.95	0.00502	47.98	0.01866	37.55	0.06986		
	PARKER CONSTANT DOLLAR	706.14	-0.00320	47.98	0.01866	37.55	0.06986		
11259	ACTUAL HISTORICAL COST	903.00		16.00				8	1
	ACTUAL CONSTANT DOLLAR	905.00		22.00		4.00			
	D-WEIL CONSTANT DOLLAR	915.80	0.01193	30.92	0.40567	14.43	2.60627		
	PARKER CONSTANT DOLLAR	903.00	-0.00221	30.92	0.40567	14.43	2.60627		
11260	ACTUAL HISTORICAL COST	1028.40		14.23				2	1
	ACTUAL CONSTANT DOLLAR	1028.40		22.73		12.15			
	D-WEIL CONSTANT DOLLAR	1037.08	0.00844	28.96	0.27393	11.66	-0.03998		
	PARKER CONSTANT DOLLAR	1028.40	-0.00000	28.96	0.27393	11.66	-0.03998		
11263	ACTUAL HISTORICAL COST	877.90		53.70				2	1
	ACTUAL CONSTANT DOLLAR	882.90		94.60		32.00			
	D-WEIL CONSTANT DOLLAR	884.44	0.00175	97.83	0.03416	40.47	0.26484		
	PARKER CONSTANT DOLLAR	877.90	-0.00566	97.83	0.03416	40.47	0.26484		
11264	ACTUAL HISTORICAL COST	710.41		31.95				8	1
	ACTUAL CONSTANT DOLLAR	727.47		43.67		10.86			
	D-WEIL CONSTANT DOLLAR	735.96	0.01167	56.39	0.29136	16.12	0.48464		
	PARKER CONSTANT DOLLAR	738.88	0.01568	56.39	0.29136	16.12	0.48464		
11266	ACTUAL HISTORICAL COST	489.19		8.67				1	1
	ACTUAL CONSTANT DOLLAR	494.19		12.47		10.73			
	D-WEIL CONSTANT DOLLAR	498.99	0.00970	14.64	0.17374	9.67	-0.09887		
	PARKER CONSTANT DOLLAR	494.81	0.00126	14.64	0.17374	9.67	-0.09887		
11269	ACTUAL HISTORICAL COST	1054.00		11.00				5	1
	ACTUAL CONSTANT DOLLAR	1079.00		20.00		47.00			
	D-WEIL CONSTANT DOLLAR	1075.75	-0.00301	20.99	0.04945	41.70	-0.11287		
	PARKER CONSTANT DOLLAR	1075.75	-0.00301	20.99	0.04945	41.70	-0.11287		
11270	ACTUAL HISTORICAL COST	733.93		33.69				8	1
	ACTUAL CONSTANT DOLLAR	739.65		47.12		23.03			
	D-WEIL CONSTANT DOLLAR	747.69	0.01114	59.92	0.27166	23.24	0.00927		
	PARKER CONSTANT DOLLAR	733.93	-0.00773	59.92	0.27166	23.24	0.00927		
11271	ACTUAL HISTORICAL COST	888.77		25.02				2	1
	ACTUAL CONSTANT DOLLAR	901.34		35.52		19.46			
	D-WEIL CONSTANT DOLLAR	895.03	-0.00700	53.77	0.51374	44.93	1.30890		
	PARKER CONSTANT DOLLAR	888.77	-0.01395	53.77	0.51374	44.93	1.30890		

COMPANY NUMBER		ACTUAL	HISTORICAL	CCST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LCSS)	ERROR	INV	DEP
11273	ACTUAL				898.67		27.03				8	1
	ACTUAL			CONSTANT DCLLAR	907.04		42.68		22.81			
	D-WEIL			CONSTANT DCLLAR	913.65	0.00729	49.21	0.15301	25.12	0.10118		
	PARKER			CONSTANT DCLLAR	898.67	-0.00923	49.21	0.15301	25.12	0.10118		
11274	ACTUAL				697.06		35.63				3	1
	ACTUAL			CONSTANT DOLLAR	699.98		55.97		30.40			
	D-WEIL			CONSTANT DCLLAR	703.44	0.00494	64.98	0.16106	25.35	-0.16610		
	PARKER			CONSTANT DOLLAR	697.36	-0.00375	64.98	0.16106	25.35	-0.16610		
11275	ACTUAL				603.57		20.26				2	1
	ACTUAL			CONSTANT DCLLAR	606.07		34.85		0.14			
	D-WEIL			CONSTANT DOLLAR	607.79	0.00285	48.72	0.39791	10.13	71.37746		
	PARKER			CONSTANT DOLLAR	603.57	-0.00413	48.72	0.39791	10.13	71.37746		
11276	ACTUAL				736.25		44.90				2	1
	ACTUAL			CONSTANT DCLLAR	740.46		56.68		26.18			
	D-WEIL			CONSTANT DCLLAR	742.24	0.00240	59.11	0.04279	31.56	0.20567		
	PARKER			CONSTANT DCLLAR	736.25	-0.00569	59.11	0.04279	31.56	0.20567		
11277	ACTUAL				668.70		20.70				3	1
	ACTUAL			CONSTANT DCLLAR	692.00		25.40		20.40			
	D-WEIL			CONSTANT DCLLAR	682.73	-0.01340	28.83	0.13498	24.45	0.19867		
	PARKER			CONSTANT DCLLAR	674.56	-0.02520	28.83	0.13498	24.45	0.19867		
11279	ACTUAL				518.55		29.08				1	1
	ACTUAL			CONSTANT DCLLAR	522.86		39.51		12.60			
	D-WEIL			CONSTANT DOLLAR	528.69	0.01115	47.65	0.20595	8.09	-0.35799		
	PARKER			CONSTANT DOLLAR	524.28	0.00272	47.65	0.20595	8.09	-0.35799		
11281	ACTUAL				237.62		22.26				1	1
	ACTUAL			CONSTANT DCLLAR	240.81		34.61		1.67			
	D-WEIL			CONSTANT DCLLAR	243.41	0.01080	38.49	0.11199	5.79	2.46498		
	PARKER			CONSTANT DCLLAR	241.41	0.00248	38.49	0.11199	5.79	2.46498		
11285	ACTUAL				799.31		44.78				5	1
	ACTUAL			CONSTANT DCLLAR	821.13		70.44		31.58			
	D-WEIL			CONSTANT DOLLAR	820.76	-0.00044	83.79	0.18957	34.16	0.08185		
	PARKER			CONSTANT DCLLAR	820.76	-0.00044	83.79	0.18957	34.16	0.08185		
11289	ACTUAL				883.83		22.93				8	1
	ACTUAL			CONSTANT DCLLAR	905.57		29.83		24.80			
	D-WEIL			CONSTANT DOLLAR	909.60	0.00445	31.05	0.04094	27.67	0.11574		
	PARKER			CONSTANT DOLLAR	904.74	-0.00092	31.05	0.04094	27.67	0.11574		

COMPANY NUMBER		COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEF
11292	ACTUAL HISTORICAL COST	732.37		42.58				5
	ACTUAL CONSTANT DOLLAR	742.15		64.51		62.85		1
	D-WEIL CONSTANT DOLLAR	755.84	0.01844	77.97	0.20870	63.26	0.00652	
	PARKER CONSTANT DOLLAR	755.84	0.01844	77.97	0.20870	63.26	0.00652	
11294	ACTUAL HISTORICAL COST	724.40		33.67				6
	ACTUAL CONSTANT DOLLAR	731.16		43.34		-2.85		2
	D-WEIL CONSTANT DOLLAR	736.21	0.00691	53.15	0.22635	6.49	-3.27893	
	PARKER CONSTANT DOLLAR	724.40	-0.00925	57.86	0.33502	6.49	-3.27893	
11296	ACTUAL HISTORICAL COST	715.51		19.21				2
	ACTUAL CONSTANT DOLLAR	716.50		27.99		6.73		1
	D-WEIL CONSTANT DOLLAR	720.28	0.00527	34.33	0.22664	14.61	1.17042	
	PARKER CONSTANT DOLLAR	715.51	-0.00138	34.33	0.22664	14.61	1.17042	
11297	ACTUAL HISTORICAL COST	553.85		33.94				5
	ACTUAL CONSTANT DOLLAR	577.35		44.00		-2.10		1
	D-WEIL CONSTANT DOLLAR	573.07	-0.00741	51.51	0.17063	4.54	-3.16226	
	PARKER CONSTANT DOLLAR	573.07	-0.00741	51.51	0.17063	4.54	-3.16226	
11298	ACTUAL HISTORICAL COST	856.66		63.82				2
	ACTUAL CONSTANT DOLLAR	861.00		88.74		29.42		1
	D-WEIL CONSTANT DOLLAR	862.86	0.00216	94.21	0.06166	37.11	0.26130	
	PARKER CONSTANT DOLLAR	856.66	-0.00504	94.21	0.06166	37.11	0.26130	
11300	ACTUAL HISTORICAL COST	611.42		40.45				5
	ACTUAL CONSTANT DOLLAR	619.42		58.65		31.90		1
	D-WEIL CONSTANT DOLLAR	624.50	0.00821	65.85	0.12282	41.92	0.31403	
	PARKER CONSTANT DOLLAR	624.50	0.00821	65.85	0.12282	41.92	0.31403	
11301	ACTUAL HISTORICAL COST	937.00		32.00				8
	ACTUAL CONSTANT DOLLAR	949.00		38.00		29.00		1
	D-WEIL CONSTANT DOLLAR	947.12	-0.00158	40.79	0.07351	32.68	0.12689	
	PARKER CONSTANT DOLLAR	937.00	-0.01264	40.79	0.07351	32.68	0.12689	
11302	ACTUAL HISTORICAL COST	704.36		16.32				1
	ACTUAL CONSTANT DOLLAR	713.31		20.93		6.25		1
	D-WEIL CONSTANT DOLLAR	727.05	0.01927	22.45	0.07018	13.90	1.22425	
	PARKER CONSTANT DOLLAR	721.01	0.01080	22.45	0.07018	13.90	1.22425	
11303	ACTUAL HISTORICAL COST	734.91		35.30				3
	ACTUAL CONSTANT DOLLAR	737.66		50.18		-7.22		1
	D-WEIL CONSTANT DOLLAR	742.76	0.00691	60.90	0.21366	-5.33	-0.26111	
	PARKER CONSTANT DOLLAR	736.02	-0.00223	60.90	0.21366	-5.33	-0.26111	

COMPANY NUMBER			COGS	ERRR	DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV	DEP
11304	ACTUAL	HISTORICAL COST	799.24		14.07				2	1
	ACTUAL	CONSTANT DOLLAR	800.84		24.37		12.98			
	D-WEIL	CONSTANT DOLLAR	805.59	0.00643	32.68	0.34092	12.53	-0.03491		
	PARKER	CONSTANT DOLLAR	799.24	-0.00200	32.68	0.34092	12.53	-0.03491		
11305	ACTUAL	HISTORICAL COST	669.20		35.14				2	1
	ACTUAL	CONSTANT DOLLAR	673.58		50.43		20.22			
	D-WEIL	CONSTANT DOLLAR	674.70	0.00166	49.72	-0.01402	20.56	0.01691		
	PARKER	CONSTANT DOLLAR	669.20	-0.00650	49.72	-0.01402	20.56	0.01691		
11306	ACTUAL	HISTORICAL COST	588.60		10.87				1	1
	ACTUAL	CONSTANT DOLLAR	602.65		16.02		-14.03			
	D-WEIL	CONSTANT DOLLAR	604.20	0.00258	16.06	0.00251	-11.24	-0.19889		
	PARKER	CONSTANT DOLLAR	599.09	-0.00591	16.06	0.00251	-11.24	-0.19889		
11307	ACTUAL	HISTORICAL COST	835.88		20.52				8	1
	ACTUAL	CONSTANT DOLLAR	844.62		25.91		26.59			
	D-WEIL	CONSTANT DOLLAR	846.60	0.00234	30.56	0.17962	23.25	-0.12573		
	PARKER	CONSTANT DOLLAR	835.88	-0.01035	30.56	0.17962	23.25	-0.12573		
11308	ACTUAL	HISTORICAL COST	133.45		11.42				1	1
	ACTUAL	CONSTANT DOLLAR	142.21		15.34		1.14			
	D-WEIL	CONSTANT DOLLAR	146.84	0.03256	18.55	0.20916	11.35	8.95584		
	PARKER	CONSTANT DOLLAR	145.88	0.02579	18.55	0.20916	11.35	8.95584		
11310	ACTUAL	HISTORICAL COST	658.23		24.65				2	1
	ACTUAL	CONSTANT DOLLAR	666.84		34.40		17.80			
	D-WEIL	CONSTANT DOLLAR	661.53	-0.00797	36.90	0.07277	20.07	0.12742		
	PARKER	CONSTANT DOLLAR	658.23	-0.01291	36.90	0.07277	20.07	0.12742		
11311	ACTUAL	HISTORICAL COST	705.80		19.60				3	1
	ACTUAL	CONSTANT DOLLAR	704.60		28.40		14.40			
	D-WEIL	CONSTANT DOLLAR	715.35	0.01526	28.81	0.01435	15.06	0.04570		
	PARKER	CONSTANT DOLLAR	705.80	0.00170	28.81	0.01435	15.06	0.04570		
11312	ACTUAL	HISTORICAL COST	572.01		21.77				8	1
	ACTUAL	CONSTANT DOLLAR	582.15		29.78		2.09			
	D-WEIL	CONSTANT DOLLAR	586.96	0.00826	38.12	0.27997	5.83	1.78914		
	PARKER	CONSTANT DOLLAR	589.03	0.01182	38.12	0.27997	5.83	1.78914		
11313	ACTUAL	HISTORICAL COST	798.32		21.33				8	1
	ACTUAL	CONSTANT DOLLAR	798.32		29.73		9.98			
	D-WEIL	CONSTANT DOLLAR	808.27	0.01246	37.93	0.27582	13.04	0.30695		
	PARKER	CONSTANT DOLLAR	798.32	-0.00000	37.93	0.27582	13.04	0.30695		



COMPANY NUMBER			COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
11315	ACTUAL	HISTORICAL COST	661.92		7.90				1	1
	ACTUAL	CONSTANT DOLLAR	667.65		10.91		10.05			
	D-WEIL	CONSTANT DOLLAR	673.64	0.00897	11.30	0.03538	12.88	0.28114		
	PARKER	CONSTANT DOLLAR	668.01	0.00054	11.30	0.03538	12.83	0.28114		
11316	ACTUAL	HISTORICAL COST	560.38		33.09				1	1
	ACTUAL	CONSTANT DOLLAR	574.59		45.54		10.66			
	D-WEIL	CONSTANT DOLLAR	597.56	0.03998	51.20	0.12435	27.73	1.60145		
	PARKER	CONSTANT DOLLAR	592.39	0.03098	51.20	0.12435	27.73	1.60145		
11320	ACTUAL	HISTORICAL COST	540.11		14.87				2	1
	ACTUAL	CONSTANT DOLLAR	545.60		20.56		5.87			
	D-WEIL	CONSTANT DOLLAR	543.10	-0.00459	24.54	0.19377	7.01	0.19479		
	PARKER	CONSTANT DOLLAR	540.11	-0.01006	24.54	0.19377	7.01	0.19479		
11322	ACTUAL	HISTORICAL COST	632.78		25.52				2	1
	ACTUAL	CONSTANT DOLLAR	634.27		35.59		3.48			
	D-WEIL	CONSTANT DOLLAR	637.92	0.00576	40.57	0.13994	13.97	0.64691		
	PARKER	CONSTANT DOLLAR	632.78	-0.00235	40.57	0.13994	13.97	0.64691		
11325	ACTUAL	HISTORICAL COST	569.39		17.08				3	1
	ACTUAL	CONSTANT DOLLAR	574.72		24.30		12.56			
	D-WEIL	CONSTANT DOLLAR	574.85	0.00022	29.52	0.21475	13.11	0.04395		
	PARKER	CONSTANT DOLLAR	569.81	-0.00855	29.52	0.21475	13.11	0.04395		
11326	ACTUAL	HISTORICAL COST	898.29		45.29				2	1
	ACTUAL	CONSTANT DOLLAR	906.69		75.59		50.47			
	D-WEIL	CONSTANT DOLLAR	905.43	-0.00139	105.46	0.39512	37.25	0.13425		
	PARKER	CONSTANT DOLLAR	898.29	-0.00926	105.46	0.39512	37.25	0.13425		
11327	ACTUAL	HISTORICAL COST	324.19		47.45				1	1
	ACTUAL	CONSTANT DOLLAR	341.19		61.54		8.56			
	D-WEIL	CONSTANT DOLLAR	345.55	0.01279	73.82	0.19955	19.79	1.31206		
	PARKER	CONSTANT DOLLAR	344.02	0.00829	73.82	0.19955	19.79	1.31206		
11332	ACTUAL	HISTORICAL COST	666.21		21.90				3	1
	ACTUAL	CONSTANT DOLLAR	680.21		35.90		2.03			
	D-WEIL	CONSTANT DOLLAR	680.80	0.00087	46.45	0.29383	4.25	1.04431		
	PARKER	CONSTANT DOLLAR	684.73	0.00664	46.45	0.29383	4.25	1.04431		
11333	ACTUAL	HISTORICAL COST	502.01		16.19				2	1
	ACTUAL	CONSTANT DOLLAR	515.17		24.15		3.06			
	D-WEIL	CONSTANT DOLLAR	505.46	-0.01885	28.19	0.16727	5.77	0.86465		
	PARKER	CONSTANT DOLLAR	502.01	-0.02555	28.19	0.16727	5.77	0.86465		

COMPANY NUMBER			COGS	ERROR	DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV	DEP
11334	ACTUAL	HISTORICAL COST	534.24		17.74				2	1
	ACTUAL	CONSTANT DOLLAR	547.78		31.87		-4.33			
	D-WEIL	CONSTANT DOLLAR	537.99	-0.01787	31.79	-0.00248	-2.24	-0.48199		
	PARKER	CONSTANT DOLLAR	534.24	-0.02472	31.79	-0.00248	-2.24	-0.48199		
11335	ACTUAL	HISTORICAL COST	570.18		35.23				1	1
	ACTUAL	CONSTANT DOLLAR	572.25		52.52		23.81			
	D-WEIL	CONSTANT DOLLAR	577.35	0.00892	53.71	0.02257	31.07	0.30493		
	PARKER	CONSTANT DOLLAR	572.47	0.00038	53.71	0.02257	31.07	0.30493		
11336	ACTUAL	HISTORICAL COST	589.01		51.40				5	1
	ACTUAL	CONSTANT DOLLAR	604.67		84.65		39.56			
	D-WEIL	CONSTANT DOLLAR	608.40	0.00616	86.57	0.04636	42.52	0.07492		
	PARKER	CONSTANT DOLLAR	608.40	0.00616	88.57	0.04636	42.52	0.07492		
11338	ACTUAL	HISTORICAL COST	664.34		12.22				8	1
	ACTUAL	CONSTANT DOLLAR	699.42		25.44		22.08			
	D-WEIL	CONSTANT DOLLAR	707.00	0.01083	26.35	0.03583	26.72	0.20998		
	PARKER	CONSTANT DOLLAR	702.19	0.00395	26.35	0.03583	26.72	0.20998		
11340	ACTUAL	HISTORICAL COST	654.04		24.64				8	1
	ACTUAL	CONSTANT DOLLAR	657.25		43.94		22.27			
	D-WEIL	CONSTANT DOLLAR	666.51	0.01409	37.32	-0.15075	24.20	0.08657		
	PARKER	CONSTANT DOLLAR	654.77	-0.00377	37.32	-0.15075	24.20	0.08657		
11341	ACTUAL	HISTORICAL COST	511.38		14.61				8	1
	ACTUAL	CONSTANT DOLLAR	513.54		19.79		9.83			
	D-WEIL	CONSTANT DOLLAR	517.56	0.00782	23.98	0.21171	11.52	0.17181		
	PARKER	CONSTANT DOLLAR	511.65	-0.00368	23.98	0.21171	11.52	0.17181		
11344	ACTUAL	HISTORICAL COST	507.15		33.25				8	1
	ACTUAL	CONSTANT DOLLAR	516.08		42.49		20.63			
	D-WEIL	CONSTANT DOLLAR	525.64	0.01852	42.19	-0.00714	21.75	0.05413		
	PARKER	CONSTANT DOLLAR	534.84	0.03636	42.19	-0.00714	21.75	0.05413		
11345	ACTUAL	HISTORICAL COST	856.02		17.85				2	1
	ACTUAL	CONSTANT DOLLAR	856.02		24.65		19.14			
	D-WEIL	CONSTANT DOLLAR	862.77	0.00789	25.34	0.02814	22.53	0.17712		
	PARKER	CONSTANT DOLLAR	856.02	-0.00000	25.34	0.02814	22.53	0.17712		
11350	ACTUAL	HISTORICAL COST	564.98		38.42				2	1
	ACTUAL	CONSTANT DOLLAR	567.61		52.43		12.39			
	D-WEIL	CONSTANT DOLLAR	569.27	0.00293	64.13	0.22322	13.73	0.10799		
	PARKER	CONSTANT DOLLAR	564.98	-0.00463	64.13	0.22322	13.73	0.10799		

COMPANY NUMBER		COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
11351	ACTUAL HISTORICAL COST	520.90		12.90				2 1
	ACTUAL CONSTANT DOLLAR	525.60		16.60		10.70		
	D-WEIL CONSTANT DOLLAR	522.47	-0.00595	25.40	0.52984	17.37	0.62327	
	PARKER CONSTANT DOLLAR	520.90	-0.00894	25.40	0.52984	17.37	0.62327	
11352	ACTUAL HISTORICAL COST	435.13		46.81				1 1
	ACTUAL CONSTANT DOLLAR	453.41		59.03		18.34		
	D-WEIL CONSTANT DOLLAR	457.69	0.00945	52.43	-0.11187	21.21	0.15642	
	PARKER CONSTANT DOLLAR	453.61	0.00045	52.43	-0.11187	21.21	0.15642	
11353	ACTUAL HISTORICAL COST	520.29		13.69				8 1
	ACTUAL CONSTANT DOLLAR	536.48		18.55		18.55		
	D-WEIL CONSTANT DOLLAR	542.99	0.01214	21.66	0.16751	19.98	0.07726	
	PARKER CONSTANT DOLLAR	538.04	0.00290	21.66	0.16751	19.98	0.07726	
11354	ACTUAL HISTORICAL COST	513.41		17.99				3 3
	ACTUAL CONSTANT DOLLAR	515.38		22.92		-1.75		
	D-WEIL CONSTANT DOLLAR	519.08	0.00719	26.26	0.14559	-0.24	-0.36122	
	PARKER CONSTANT DOLLAR	514.32	-0.00206	28.74	0.25403	-0.24	-0.86122	
11355	ACTUAL HISTORICAL COST	475.72		45.26				8 1
	ACTUAL CONSTANT DOLLAR	496.33		67.46		-3.30		
	D-WEIL CONSTANT DOLLAR	486.68	-0.01944	72.29	0.07165	-0.12	-0.96301	
	PARKER CONSTANT DOLLAR	475.72	-0.01153	72.29	0.07165	-0.12	-0.96301	
11356	ACTUAL HISTORICAL COST	545.69		18.63				3 2
	ACTUAL CONSTANT DOLLAR	551.30		25.90		-2.30		
	D-WEIL CONSTANT DOLLAR	550.57	-0.00132	33.66	0.29968	1.78	-1.63546	
	PARKER CONSTANT DOLLAR	545.84	-0.00990	36.60	0.41315	1.78	-1.63546	
11357	ACTUAL HISTORICAL COST	473.18		15.39				8 1
	ACTUAL CONSTANT DOLLAR	485.92		17.08		4.49		
	D-WEIL CONSTANT DOLLAR	492.31	0.01315	26.49	0.55118	4.94	0.10056	
	PARKER CONSTANT DOLLAR	493.32	0.01523	26.49	0.55118	4.94	0.10056	
11359	ACTUAL HISTORICAL COST	447.90		13.76				2 1
	ACTUAL CONSTANT DOLLAR	456.69		19.02		6.64		
	D-WEIL CONSTANT DOLLAR	449.71	-0.01528	24.80	0.30390	13.31	1.00473	
	PARKER CONSTANT DOLLAR	447.90	-0.01925	24.80	0.30390	13.31	1.00473	
11361	ACTUAL HISTORICAL COST	445.50		12.29				8 1
	ACTUAL CONSTANT DOLLAR	455.12		16.52		9.81		
	D-WEIL CONSTANT DOLLAR	450.57	-0.00959	17.01	0.02949	12.30	0.25411	
	PARKER CONSTANT DOLLAR	447.08	-0.01766	17.01	0.02949	12.30	0.25411	

COMPANY NUMBER			COGS	ERROR	DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV	DEP
11364	ACTUAL	HISTORICAL COST	564.39		13.79				5	1
	ACTUAL	CONSTANT DOLLAR	578.23		22.60		7.79			
	D-WEIL	CONSTANT DOLLAR	579.69	0.00253	30.44	0.34703	6.94	-0.10898		
	PARKER	CONSTANT DOLLAR	579.69	0.00253	30.44	0.34703	6.94	-0.10898		
11365	ACTUAL	HISTORICAL COST	521.03		41.62				5	1
	ACTUAL	CONSTANT DOLLAR	538.83		70.55		69.80			
	D-WEIL	CONSTANT DOLLAR	543.58	0.00892	72.23	0.02666	67.68	-0.03032		
	PARKER	CONSTANT DOLLAR	543.58	0.00882	72.23	0.02666	67.68	-0.03032		
11368	ACTUAL	HISTORICAL COST	520.94		30.01				5	1
	ACTUAL	CONSTANT DOLLAR	530.31		43.07		10.67			
	D-WEIL	CONSTANT DOLLAR	532.62	0.00436	49.52	0.14966	12.36	0.15834		
	PARKER	CONSTANT DOLLAR	532.62	0.00436	49.52	0.14966	12.36	0.15834		
11370	ACTUAL	HISTORICAL COST	558.10		4.99				5	1
	ACTUAL	CONSTANT DOLLAR	563.78		7.43		8.68			
	D-WEIL	CONSTANT DOLLAR	568.51	0.00839	6.53	-0.12092	12.30	0.41680		
	PARKER	CONSTANT DOLLAR	568.51	0.00839	6.53	-0.12092	12.30	0.41680		
11373	ACTUAL	HISTORICAL COST	640.92		24.23				5	1
	ACTUAL	CONSTANT DOLLAR	650.71		37.60		32.01			
	D-WEIL	CONSTANT DOLLAR	653.81	0.00477	34.54	-0.08144	28.18	-0.11959		
	PARKER	CONSTANT DOLLAR	653.81	0.00477	34.54	-0.08144	28.18	-0.11959		
11374	ACTUAL	HISTORICAL COST	494.81		18.41				2	1
	ACTUAL	CONSTANT DOLLAR	503.56		24.56		-7.07			
	D-WEIL	CONSTANT DOLLAR	496.79	-0.01344	31.66	0.28924	-2.55	-0.63949		
	PARKER	CONSTANT DOLLAR	494.81	-0.01738	31.66	0.28924	-2.55	-0.63949		
11375	ACTUAL	HISTORICAL COST	452.11		24.87				1	1
	ACTUAL	CONSTANT DOLLAR	466.16		30.02		16.42			
	D-WEIL	CONSTANT DOLLAR	474.61	0.01814	31.43	0.04699	20.69	0.26015		
	PARKER	CONSTANT DOLLAR	470.66	0.00966	31.43	0.04699	20.69	0.26015		
11377	ACTUAL	HISTORICAL COST	602.42		18.11				8	1
	ACTUAL	CONSTANT DOLLAR	611.22		24.70		4.86			
	D-WEIL	CONSTANT DOLLAR	621.17	0.01628	30.60	0.23900	7.36	0.51403		
	PARKER	CONSTANT DOLLAR	616.39	0.00847	30.60	0.23900	7.36	0.51403		
11379	ACTUAL	HISTORICAL COST	511.33		8.42				5	1
	ACTUAL	CONSTANT DOLLAR	525.42		12.34		6.00			
	D-WEIL	CONSTANT DOLLAR	527.39	0.00375	14.40	0.16659	6.91	0.15097		
	PARKER	CONSTANT DOLLAR	527.39	0.00375	14.40	0.16659	6.91	0.15097		

COMPANY NUMBER			COGS	ERROR	DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV DEP
11381	ACTUAL	HISTORICAL	408.06		16.38				2 1
	ACTUAL	CONSTANT DOLLAR	411.56		22.68		1.80		
	D-WEIL	CONSTANT DOLLAR	410.26	-0.00216	23.10	0.01872	3.53	0.96127	
	PARKER	CONSTANT DOLLAR	408.06	-0.00850	23.10	0.01872	3.53	0.96127	
11382	ACTUAL	HISTORICAL	420.16		45.21				5 1
	ACTUAL	CONSTANT DOLLAR	424.88		67.48		40.42		
	D-WEIL	CONSTANT DOLLAR	427.58	0.00635	64.26	-0.04777	45.01	0.11348	
	PARKER	CONSTANT DOLLAR	427.58	0.00635	64.26	-0.04777	45.01	0.11348	
11384	ACTUAL	HISTORICAL	342.70		11.30				1 2
	ACTUAL	CONSTANT DOLLAR	352.60		15.20		1.50		
	D-WEIL	CONSTANT DOLLAR	358.34	0.01629	15.63	0.02833	7.13	3.75446	
	PARKER	CONSTANT DOLLAR	355.33	0.00775	17.74	0.16711	7.13	3.75446	
11385	ACTUAL	HISTORICAL	434.30		14.30				5 1
	ACTUAL	CONSTANT DOLLAR	439.10		16.90		1.50		
	D-WEIL	CONSTANT DOLLAR	443.84	0.01079	23.65	0.41129	6.47	3.31487	
	PARKER	CONSTANT DOLLAR	443.84	0.01079	23.85	0.41129	6.47	3.31487	
11387	ACTUAL	HISTORICAL	505.12		20.91				2 1
	ACTUAL	CONSTANT DOLLAR	505.12		30.95		11.94		
	D-WEIL	CONSTANT DOLLAR	509.27	0.00822	35.99	0.16297	14.45	0.21061	
	PARKER	CONSTANT DOLLAR	505.12	-0.00000	35.99	0.16297	14.45	0.21061	
11389	ACTUAL	HISTORICAL	282.06		19.19				3 3
	ACTUAL	CONSTANT DOLLAR	299.05		24.06		5.16		
	D-WEIL	CONSTANT DOLLAR	289.76	-0.03107	24.33	0.01107	7.10	0.37601	
	PARKER	CONSTANT DOLLAR	285.79	-0.04434	25.24	0.04903	7.10	0.37601	
11391	ACTUAL	HISTORICAL	510.54		18.20				2 3
	ACTUAL	CONSTANT DOLLAR	510.54		25.70		-11.66		
	D-WEIL	CONSTANT DOLLAR	513.90	0.00657	36.77	0.43063	-9.95	-0.14630	
	PARKER	CONSTANT DOLLAR	510.54	-0.00000	39.59	0.54052	-9.95	-0.14630	
11392	ACTUAL	HISTORICAL	526.99		17.37				2 1
	ACTUAL	CONSTANT DOLLAR	528.87		22.01		9.70		
	D-WEIL	CONSTANT DOLLAR	531.19	0.00438	37.25	0.69237	8.98	-0.07434	
	PARKER	CONSTANT DOLLAR	526.99	-0.00356	37.25	0.69237	8.98	-0.07434	
11395	ACTUAL	HISTORICAL	576.06		11.76				2 1
	ACTUAL	CONSTANT DOLLAR	576.06		13.31		-4.68		
	D-WEIL	CONSTANT DOLLAR	579.63	0.00620	14.57	0.09448	-4.25	-0.09254	
	PARKER	CONSTANT DOLLAR	576.06	-0.00000	14.57	0.09448	-4.25	-0.09254	

COMPANY NUMBER		ACTUAL	HISTORICAL	CGST	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
11396	ACTUAL				454.26		10.60				1	1
	ACTUAL	CONSTANT	DOLLAR		458.37		13.65		-1.80			
	D-WEIL	CONSTANT	DOLLAR		465.22	0.01495	15.49	0.13465	8.45	-5.69259		
	PARKER	CONSTANT	DOLLAR		461.14	0.00605	15.49	0.13465	8.45	-5.69259		
11397	ACTUAL				377.20		12.72				2	1
	ACTUAL	CONSTANT	DOLLAR		364.12		18.12		5.89			
	D-WEIL	CONSTANT	DOLLAR		379.14	-0.01296	18.49	0.02059	7.54	0.28057		
	PARKER	CONSTANT	DOLLAR		377.20	-0.01802	18.49	0.02059	7.54	0.28057		
11401	ACTUAL				133.84		69.64				1	1
	ACTUAL	CONSTANT	DOLLAR		135.96		107.98		131.94			
	D-WEIL	CONSTANT	DOLLAR		146.14	0.07486	125.99	0.16679	119.21	-0.09650		
	PARKER	CONSTANT	DOLLAR		145.17	0.06771	125.99	0.16679	119.21	-0.09650		
11402	ACTUAL				472.31		15.89				1	1
	ACTUAL	CONSTANT	DOLLAR		483.09		24.35		7.62			
	D-WEIL	CONSTANT	DOLLAR		488.51	0.01121	37.03	0.52082	8.30	0.08863		
	PARKER	CONSTANT	DOLLAR		484.41	0.00272	37.03	0.52082	8.30	0.08863		
11406	ACTUAL				441.64		11.23				2	2
	ACTUAL	CONSTANT	DOLLAR		444.40		15.04		-1.40			
	D-WEIL	CONSTANT	DOLLAR		443.17	-0.00277	16.49	0.09634	-0.12	-0.91371		
	PARKER	CONSTANT	DOLLAR		441.64	-0.00621	18.08	0.20206	-0.12	-0.91371		
11407	ACTUAL				94.71		69.83				2	1
	ACTUAL	CONSTANT	DOLLAR		96.13		97.07		9.90			
	D-WEIL	CONSTANT	DOLLAR		95.12	-0.01050	108.08	0.11343	10.71	0.08161		
	PARKER	CONSTANT	DOLLAR		94.71	-0.01477	108.08	0.11343	10.71	0.08161		
11408	ACTUAL				391.31		14.74				1	1
	ACTUAL	CONSTANT	DOLLAR		412.83		20.17		-0.28			
	D-WEIL	CONSTANT	DOLLAR		418.01	0.01256	20.06	-0.00525	-0.17	-0.38431		
	PARKER	CONSTANT	DOLLAR		414.33	0.00364	20.06	-0.00525	-0.17	-0.38431		
11410	ACTUAL				391.50		7.69				1	1
	ACTUAL	CONSTANT	DOLLAR		393.74		11.02		-1.60			
	D-WEIL	CONSTANT	DOLLAR		396.35	0.00663	13.53	0.22792	-4.94	2.08610		
	PARKER	CONSTANT	DOLLAR		392.98	-0.00193	13.53	0.22792	-4.94	2.08610		
11413	ACTUAL				443.07		3.26				8	1
	ACTUAL	CONSTANT	DOLLAR		454.94		9.67		15.00			
	D-WEIL	CONSTANT	DOLLAR		454.50	-0.00096	9.83	0.01703	14.55	-0.03019		
	PARKER	CONSTANT	DOLLAR		455.58	0.00228	9.83	0.01703	14.55	-0.03019		

COMPANY NUMBER			COGS	ERROR	DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV	DEP
11414	ACTUAL	HISTORICAL COST	513.95		28.72				8	1
	ACTUAL	CONSTANT DOLLAR	518.62		38.78		16.30			
	D-WEIL	CONSTANT DOLLAR	521.28	0.00512	49.44	0.27487	17.86	0.09549		
	PARKER	CONSTANT DOLLAR	513.95	-0.00901	49.44	0.27487	17.86	0.09549		
11415	ACTUAL	HISTORICAL COST	301.83		10.19				1	1
	ACTUAL	CONSTANT DOLLAR	304.99		14.79		6.72			
	D-WEIL	CONSTANT DOLLAR	307.55	0.00838	18.27	0.23529	7.06	0.05115		
	PARKER	CONSTANT DOLLAR	304.98	-0.00003	18.27	0.23529	7.06	0.05115		
11417	ACTUAL	HISTORICAL COST	501.47		21.52				2	1
	ACTUAL	CONSTANT DOLLAR	501.47		32.39		-21.34			
	D-WEIL	CONSTANT DOLLAR	505.72	0.00848	32.82	0.01333	-21.59	0.01151		
	PARKER	CONSTANT DOLLAR	501.47	-0.00000	32.82	0.01333	-21.59	0.01151		
11418	ACTUAL	HISTORICAL COST	379.62		18.60				8	1
	ACTUAL	CONSTANT DOLLAR	390.22		24.40		6.00			
	D-WEIL	CONSTANT DOLLAR	394.37	0.01064	22.96	-0.05884	7.67	0.27890		
	PARKER	CONSTANT DOLLAR	390.38	0.00040	22.96	-0.05884	7.67	0.27890		
11425	ACTUAL	HISTORICAL COST	427.67		9.99				8	1
	ACTUAL	CONSTANT DOLLAR	436.25		14.11		0.93			
	D-WEIL	CONSTANT DOLLAR	441.30	0.01158	17.76	0.25844	5.24	4.63212		
	PARKER	CONSTANT DOLLAR	438.65	0.00550	17.76	0.25844	5.24	4.63212		
11428	ACTUAL	HISTORICAL COST	398.52		13.38				8	1
	ACTUAL	CONSTANT DOLLAR	402.50		17.86		3.76			
	D-WEIL	CONSTANT DOLLAR	406.95	0.01105	18.88	0.05704	6.83	0.81707		
	PARKER	CONSTANT DOLLAR	399.85	-0.00659	18.88	0.05704	6.83	0.81707		
11429	ACTUAL	HISTORICAL COST	375.84		8.87				1	1
	ACTUAL	CONSTANT DOLLAR	387.25		15.03		-4.82			
	D-WEIL	CONSTANT DOLLAR	390.70	0.00890	14.73	-0.02009	-0.02	-0.99687		
	PARKER	CONSTANT DOLLAR	387.57	0.00084	14.73	-0.02009	-0.02	-0.99687		
11432	ACTUAL	HISTORICAL COST	315.72		17.23				2	2
	ACTUAL	CONSTANT DOLLAR	317.93		21.14		-7.02			
	D-WEIL	CONSTANT DOLLAR	317.87	-0.00019	27.90	0.31998	-1.94	-0.72324		
	PARKER	CONSTANT DOLLAR	315.72	-0.00695	29.84	0.41139	-1.94	-0.72324		
11438	ACTUAL	HISTORICAL COST	478.60		4.87				2	1
	ACTUAL	CONSTANT DOLLAR	478.60		8.10		12.00			
	D-WEIL	CONSTANT DOLLAR	480.60	0.00418	8.50	0.04914	13.39	0.15721		
	PARKER	CONSTANT DOLLAR	478.60	-0.00000	8.50	0.04914	13.89	0.15721		

COMPANY NUMBER			COGS	ERROR	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
11439	ACTUAL	HISTORICAL COST	535.50		6.09				2	1
	ACTUAL	CONSTANT DOLLAR	542.23		8.59		8.33			
	D-WEIL	CONSTANT DOLLAR	539.33	-0.00535	9.81	0.14194	8.46	0.01589		
	PARKER	CONSTANT DOLLAR	535.50	-0.01241	9.81	0.14194	8.46	0.01589		
11441	ACTUAL	HISTORICAL COST	384.17		11.17				8	1
	ACTUAL	CONSTANT DOLLAR	385.05		17.67		7.25			
	D-WEIL	CONSTANT DOLLAR	390.15	0.01323	21.78	0.23257	7.95	0.09711		
	PARKER	CONSTANT DOLLAR	384.81	-0.00062	21.78	0.23257	7.95	0.09711		
11445	ACTUAL	HISTORICAL COST	283.83		21.19				1	1
	ACTUAL	CONSTANT DOLLAR	303.49		25.19		8.61			
	D-WEIL	CONSTANT DOLLAR	306.95	0.01139	26.41	0.04847	9.90	0.14990		
	PARKER	CONSTANT DOLLAR	304.35	0.00284	26.41	0.04847	9.90	0.14990		
11449	ACTUAL	HISTORICAL COST	377.00		9.23				1	1
	ACTUAL	CONSTANT DOLLAR	388.00		12.93		14.64			
	D-WEIL	CONSTANT DOLLAR	394.85	0.01765	16.81	0.29985	22.45	0.53378		
	PARKER	CONSTANT DOLLAR	391.68	0.00950	16.81	0.29985	22.45	0.53378		
11450	ACTUAL	HISTORICAL COST	431.04		14.51				8	1
	ACTUAL	CONSTANT DOLLAR	437.48		20.18		0.10			
	D-WEIL	CONSTANT DOLLAR	443.36	0.01344	25.73	0.27521	1.39	12.92989		
	PARKER	CONSTANT DOLLAR	442.45	0.01135	25.73	0.27521	1.39	12.92989		
11453	ACTUAL	HISTORICAL COST	234.83		9.44				2	1
	ACTUAL	CONSTANT DOLLAR	235.93		13.04		-0.60			
	D-WEIL	CONSTANT DOLLAR	235.66	0.00013	15.79	0.21088	2.73	-5.54892		
	PARKER	CONSTANT DOLLAR	234.83	-0.00466	15.79	0.21088	2.73	-5.54892		
11458	ACTUAL	HISTORICAL COST	577.00		147.00				1	1
	ACTUAL	CONSTANT DOLLAR	577.00		194.00		25.00			
	D-WEIL	CONSTANT DOLLAR	585.43	0.01460	197.94	0.02031	39.45	0.57789		
	PARKER	CONSTANT DOLLAR	580.48	0.00603	197.94	0.02031	39.45	0.57789		
11461	ACTUAL	HISTORICAL COST	320.22		10.02				1	1
	ACTUAL	CONSTANT DOLLAR	333.12		13.50		5.15			
	D-WEIL	CONSTANT DOLLAR	335.95	0.00850	17.00	0.25957	6.33	0.22964		
	PARKER	CONSTANT DOLLAR	333.21	0.00028	17.00	0.25957	6.33	0.22964		
11462	ACTUAL	HISTORICAL COST	203.68		17.67				1	1
	ACTUAL	CONSTANT DOLLAR	209.70		19.27		9.82			
	D-WEIL	CONSTANT DOLLAR	214.00	0.02050	20.60	0.06893	13.15	0.33933		
	PARKER	CONSTANT DOLLAR	212.16	0.01174	20.60	0.06893	13.15	0.33933		



COMPANY NUMBER		COGS	ERROR	DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV	DEP
11464	ACTUAL HISTORICAL COST	336.50		19.46				1	1
	ACTUAL CONSTANT DOLLAR	341.40		30.25		19.74			
	D-WEIL CONSTANT DOLLAR	345.73	0.01269	28.45	-0.05941	21.13	0.07058		
	PARKER CONSTANT DOLLAR	342.87	0.00431	28.45	-0.05941	21.13	0.07058		
11465	ACTUAL HISTORICAL COST	281.67		37.91				8	1
	ACTUAL CONSTANT DOLLAR	288.05		50.74		18.59			
	D-WEIL CONSTANT DOLLAR	292.43	0.01520	52.29	0.03054	18.62	0.00140		
	PARKER CONSTANT DOLLAR	290.15	0.00728	52.29	0.03054	18.62	0.00140		
11467	ACTUAL HISTORICAL COST	324.66		14.60				8	1
	ACTUAL CONSTANT DOLLAR	331.88		19.07		13.62			
	D-WEIL CONSTANT DOLLAR	336.10	0.01273	23.18	0.21565	16.16	0.16642		
	PARKER CONSTANT DOLLAR	333.48	0.00483	23.18	0.21565	16.16	0.16642		
11470	ACTUAL HISTORICAL COST	398.38		9.00				8	1
	ACTUAL CONSTANT DOLLAR	402.51		13.35		6.43			
	D-WEIL CONSTANT DOLLAR	405.37	0.00710	16.67	0.24852	12.33	0.46285		
	PARKER CONSTANT DOLLAR	398.81	-0.00919	16.67	0.24852	12.33	0.46285		
11474	ACTUAL HISTORICAL COST	347.53		12.86				5	1
	ACTUAL CONSTANT DOLLAR	356.47		19.14		10.92			
	D-WEIL CONSTANT DOLLAR	358.17	0.00476	28.00	0.46313	16.08	0.47297		
	PARKER CONSTANT DOLLAR	358.17	0.00476	28.00	0.46313	16.08	0.47297		
11475	ACTUAL HISTORICAL COST	345.07		7.00				2	1
	ACTUAL CONSTANT DOLLAR	346.56		9.39		-1.24			
	D-WEIL CONSTANT DOLLAR	347.25	0.00200	12.04	0.28198	1.69	-2.36592		
	PARKER CONSTANT DOLLAR	345.07	-0.00430	12.04	0.28198	1.69	-2.36592		
11477	ACTUAL HISTORICAL COST	222.08		9.65				5	1
	ACTUAL CONSTANT DOLLAR	228.82		11.69		6.24			
	D-WEIL CONSTANT DOLLAR	229.80	0.00427	16.16	0.35921	7.93	0.27035		
	PARKER CONSTANT DOLLAR	229.80	0.00427	16.16	0.35921	7.93	0.27035		
11478	ACTUAL HISTORICAL COST	343.80		18.65				8	1
	ACTUAL CONSTANT DOLLAR	345.89		32.90		12.98			
	D-WEIL CONSTANT DOLLAR	348.79	0.00840	42.86	0.30268	23.20	0.78747		
	PARKER CONSTANT DOLLAR	346.85	0.00277	42.86	0.30268	23.20	0.78747		
11481	ACTUAL HISTORICAL COST	277.91		12.58				8	2
	ACTUAL CONSTANT DOLLAR	279.80		18.58		0.97			
	D-WEIL CONSTANT DOLLAR	282.03	0.00797	22.01	0.18451	1.78	0.83498		
	PARKER CONSTANT DOLLAR	277.91	-0.00676	23.24	0.25090	1.78	0.83498		

COMPANY NUMBER		COGS	ERROR	DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV	DEP
11490	ACTUAL HISTORICAL COST	265.25		11.23				2	2
	ACTUAL CONSTANT DOLLAR	268.75		14.65		-10.86			
	D-WEIL CONSTANT DOLLAR	266.05	-0.01006	14.70	0.00351	-2.23	-0.79427		
	PARKER CONSTANT DOLLAR	265.25	-0.01302	15.64	0.06769	-2.23	-0.79427		
11492	ACTUAL HISTORICAL COST	317.13		8.43				8	1
	ACTUAL CONSTANT DOLLAR	320.58		11.74		11.06			
	D-WEIL CONSTANT DOLLAR	325.28	0.01466	12.84	0.09353	15.74	0.42315		
	PARKER CONSTANT DOLLAR	326.61	0.01880	12.84	0.09353	15.74	0.42315		
11493	ACTUAL HISTORICAL COST	411.58		15.01				2	1
	ACTUAL CONSTANT DOLLAR	411.58		18.16		8.57			
	D-WEIL CONSTANT DOLLAR	414.66	0.00748	19.53	0.07566	7.83	-0.08641		
	PARKER CONSTANT DOLLAR	411.58	-0.00000	19.53	0.07566	7.83	-0.08641		
11494	ACTUAL HISTORICAL COST	259.28		13.06				1	1
	ACTUAL CONSTANT DOLLAR	244.90		17.39		7.69			
	D-WEIL CONSTANT DOLLAR	247.06	0.00883	17.04	-0.01985	8.26	0.07467		
	PARKER CONSTANT DOLLAR	244.95	0.00020	17.04	-0.01985	8.26	0.07467		
11495	ACTUAL HISTORICAL COST	306.97		16.14				8	1
	ACTUAL CONSTANT DOLLAR	309.61		28.49		1.67			
	D-WEIL CONSTANT DOLLAR	312.66	0.00986	31.19	0.09476	4.08	1.44360		
	PARKER CONSTANT DOLLAR	306.97	-0.00853	31.19	0.09476	4.08	1.44360		
11496	ACTUAL HISTORICAL COST	373.13		7.08				4	1
	ACTUAL CONSTANT DOLLAR	374.28		9.00		-2.40			
	D-WEIL CONSTANT DOLLAR	384.88	0.02832	12.38	0.37608	6.16	-3.56467		
	PARKER CONSTANT DOLLAR	381.56	0.01946	12.38	0.37608	6.16	-3.56467		
11499	ACTUAL HISTORICAL COST	295.30		18.51				1	1
	ACTUAL CONSTANT DOLLAR	308.65		22.82		7.51			
	D-WEIL CONSTANT DOLLAR	309.57	0.00299	32.82	0.43831	6.34	-0.15644		
	PARKER CONSTANT DOLLAR	306.87	-0.00578	32.82	0.43831	6.34	-0.15644		
21001	ACTUAL HISTORICAL COST							2	1
	ACTUAL CONSTANT DOLLAR					-272.00			
	D-WEIL CONSTANT DOLLAR					-274.86	0.01050		
	PARKER CONSTANT DOLLAR					-274.86	0.01050		
21002	ACTUAL HISTORICAL COST							2	1
	ACTUAL CONSTANT DOLLAR					-119.00			
	D-WEIL CONSTANT DOLLAR					-13.59	-0.88580		
	PARKER CONSTANT DOLLAR					-13.59	-0.88580		

COMPANY NUMBER	ACTUAL	HISTORICAL COST	GAIN (LOSS)	ERROR	INV	DEP
21003	ACTUAL CONSTANT DOLLAR		-120.90		2	1
	D-WEIL CONSTANT DOLLAR		-176.15	0.45702		
	PARKER CONSTANT DOLLAR		-176.15	0.45702		
COMPANY NUMBER	ACTUAL	HISTORICAL COST	GAIN (LOSS)	ERROR	INV	DEP
21004	ACTUAL CONSTANT DOLLAR		-135.00		2	1
	D-WEIL CONSTANT DOLLAR		-143.35	0.06185		
	PARKER CONSTANT DOLLAR		-143.35	0.06185		
COMPANY NUMBER	ACTUAL	HISTORICAL COST	GAIN (LOSS)	ERROR	INV	DEP
21005	ACTUAL CONSTANT DOLLAR		-166.80		2	1
	D-WEIL CONSTANT DOLLAR		-155.88	-0.06549		
	PARKER CONSTANT DOLLAR		-155.88	-0.06549		
COMPANY NUMBER	ACTUAL	HISTORICAL COST	GAIN (LOSS)	ERROR	INV	DEP
21006	ACTUAL CONSTANT DOLLAR		-111.00		2	1
	D-WEIL CONSTANT DOLLAR		-134.49	0.21164		
	PARKER CONSTANT DOLLAR		-134.49	0.21164		
COMPANY NUMBER	ACTUAL	HISTORICAL COST	GAIN (LOSS)	ERROR	INV	DEP
21007	ACTUAL CONSTANT DOLLAR		-111.00		2	1
	D-WEIL CONSTANT DOLLAR		-117.20	0.05586		
	PARKER CONSTANT DOLLAR		-117.20	0.05586		
COMPANY NUMBER	ACTUAL	HISTORICAL COST	GAIN (LOSS)	ERROR	INV	DEP
21008	ACTUAL CONSTANT DOLLAR		-83.84		2	1
	D-WEIL CONSTANT DOLLAR		-65.94	-0.21350		
	PARKER CONSTANT DOLLAR		-65.94	-0.21350		
COMPANY NUMBER	ACTUAL	HISTORICAL COST	GAIN (LOSS)	ERROR	INV	DEP
21009	ACTUAL CONSTANT DOLLAR		-51.00		2	1
	D-WEIL CONSTANT DOLLAR		-30.94	-0.39341		
	PARKER CONSTANT DOLLAR		-30.94	-0.39341		
COMPANY NUMBER	ACTUAL	HISTORICAL COST	GAIN (LOSS)	ERROR	INV	DEP
21011	ACTUAL CONSTANT DOLLAR		-47.20		2	1
	D-WEIL CONSTANT DOLLAR		-58.99	0.24968		
	PARKER CONSTANT DOLLAR		-58.99	0.24968		
COMPANY NUMBER	ACTUAL	HISTORICAL COST	GAIN (LOSS)	ERROR	INV	DEP
21012	ACTUAL CONSTANT DOLLAR		-66.02		2	1
	D-WEIL CONSTANT DOLLAR		-66.36	0.00519		
	PARKER CONSTANT DOLLAR		-66.36	0.00519		

COMPANY NUMBER	ACTUAL	HISTORICAL COST	GAIN (LOSS)	ERROR	INV	DEP
21013	ACTUAL CONSTANT DOLLAR		-23.70		2	1
	D-WEIL CONSTANT DOLLAR		-42.08	0.77536		
	PARKER CONSTANT DOLLAR		-42.08	0.77526		
COMPANY NUMBER 21014	ACTUAL CONSTANT DOLLAR		-29.60		2	1
	D-WEIL CONSTANT DOLLAR		-44.92	0.51758		
	PARKER CONSTANT DOLLAR		-44.92	0.51758		
COMPANY NUMBER 21015	ACTUAL CONSTANT DOLLAR		-53.85		2	1
	D-WEIL CONSTANT DOLLAR		-45.97	-0.14639		
	PARKER CONSTANT DOLLAR		-45.97	-0.14639		
COMPANY NUMBER 21016	ACTUAL CONSTANT DOLLAR		-52.00		2	1
	D-WEIL CONSTANT DOLLAR		-81.63	0.56985		
	PARKER CONSTANT DOLLAR		-81.63	0.56985		
COMPANY NUMBER 21017	ACTUAL CONSTANT DOLLAR		-37.09		2	1
	D-WEIL CONSTANT DOLLAR		-47.31	0.27558		
	PARKER CONSTANT DOLLAR		-47.31	0.27558		
COMPANY NUMBER 21018	ACTUAL CONSTANT DOLLAR		-45.70		2	1
	D-WEIL CONSTANT DOLLAR		-47.37	0.03661		
	PARKER CONSTANT DOLLAR		-47.37	0.03661		
COMPANY NUMBER 21019	ACTUAL CONSTANT DOLLAR		-54.33		2	1
	D-WEIL CONSTANT DOLLAR		-29.99	-0.44798		
	PARKER CONSTANT DOLLAR		-29.99	-0.44798		
COMPANY NUMBER 21020	ACTUAL CONSTANT DOLLAR		-53.90		2	1
	D-WEIL CONSTANT DOLLAR		-53.49	-0.00766		
	PARKER CONSTANT DOLLAR		-53.49	-0.00766		
COMPANY NUMBER 21021	ACTUAL CONSTANT DOLLAR		-15.00		2	1
	D-WEIL CONSTANT DOLLAR		-11.27	-0.24864		
	PARKER CONSTANT DOLLAR		-11.27	-0.24864		

COMPANY NUMBER	ACTUAL	HISTORICAL COST	GAIN (LOSS)	ERROR	INV DEF
21022	ACTUAL CONSTANT DOLLAR		-54.86		2 1
	D-WEIL CONSTANT DOLLAR		-54.96	0.00188	
	PARKER CONSTANT DOLLAR		-54.96	0.00188	
COMPANY NUMBER 21023	ACTUAL HISTORICAL COST		GAIN (LOSS)	ERROR	INV DEF
	ACTUAL CONSTANT DOLLAR		-43.40		2 1
	D-WEIL CONSTANT DOLLAR		-39.46	-0.09089	
	PARKER CONSTANT DOLLAR		-39.46	-0.09089	
COMPANY NUMBER 21024	ACTUAL HISTORICAL COST		GAIN (LOSS)	ERROR	INV DEF
	ACTUAL CONSTANT DOLLAR		-41.30		2 1
	D-WEIL CONSTANT DOLLAR		-41.94	0.01556	
	PARKER CONSTANT DOLLAR		-41.94	0.01556	
COMPANY NUMBER 21025	ACTUAL HISTORICAL COST		GAIN (LOSS)	ERROR	INV DEF
	ACTUAL CONSTANT DOLLAR		-23.07		2 1
	D-WEIL CONSTANT DOLLAR		-33.46	0.19195	
	PARKER CONSTANT DOLLAR		-33.46	0.19195	
COMPANY NUMBER 21026	ACTUAL HISTORICAL COST		GAIN (LOSS)	ERROR	INV DEF
	ACTUAL CONSTANT DOLLAR		-16.20		2 1
	D-WEIL CONSTANT DOLLAR		-31.85	0.96621	
	PARKER CONSTANT DOLLAR		-31.85	0.96621	
COMPANY NUMBER 21027	ACTUAL HISTORICAL COST		GAIN (LOSS)	ERROR	INV DEF
	ACTUAL CONSTANT DOLLAR		-27.06		2 1
	D-WEIL CONSTANT DOLLAR		-32.33	0.19489	
	PARKER CONSTANT DOLLAR		-32.33	0.19489	
COMPANY NUMBER 21028	ACTUAL HISTORICAL COST		GAIN (LOSS)	ERROR	INV DEF
	ACTUAL CONSTANT DOLLAR		-8.44		2 1
	D-WEIL CONSTANT DOLLAR		-24.68	1.92416	
	PARKER CONSTANT DOLLAR		-24.68	1.92416	
COMPANY NUMBER 21030	ACTUAL HISTORICAL COST		GAIN (LOSS)	ERROR	INV DEF
	ACTUAL CONSTANT DOLLAR		-25.77		2 1
	D-WEIL CONSTANT DOLLAR		-18.11	-0.29744	
	PARKER CONSTANT DOLLAR		-18.11	-0.29744	
COMPANY NUMBER 21032	ACTUAL HISTORICAL COST		GAIN (LOSS)	ERROR	INV DEF
	ACTUAL CONSTANT DOLLAR		-19.32		2 1
	D-WEIL CONSTANT DOLLAR		-20.21	0.04624	
	PARKER CONSTANT DOLLAR		-20.21	0.04624	

COMPANY NUMBER	ACTUAL	HISTORICAL	CGST	GAIN (LOSS)	ERROR	INV	DEP
21033	ACTUAL	HISTORICAL	CGST			2	1
	ACTUAL	CONSTANT	DOLLAR	-52.82			
	D-WEIL	CONSTANT	DOLLAR	-53.12	0.00565		
	PARKER	CONSTANT	DOLLAR	-53.12	0.00565		
COMPANY NUMBER	ACTUAL	HISTORICAL	CGST	GAIN (LOSS)	ERROR	INV	DEP
21034	ACTUAL	HISTORICAL	CGST			2	1
	ACTUAL	CONSTANT	DOLLAR	-16.90			
	D-WEIL	CONSTANT	DOLLAR	-18.06	0.06848		
	PARKER	CONSTANT	DOLLAR	-18.06	0.06848		
COMPANY NUMBER	ACTUAL	HISTORICAL	CGST	GAIN (LOSS)	ERROR	INV	DEP
21036	ACTUAL	HISTORICAL	CGST			2	1
	ACTUAL	CONSTANT	DOLLAR	1.22			
	D-WEIL	CONSTANT	DOLLAR	1.00	-0.18414		
	PARKER	CONSTANT	DOLLAR	1.00	-0.18414		
COMPANY NUMBER	ACTUAL	HISTORICAL	COST	GAIN (LOSS)	ERROR	INV	DEP
21037	ACTUAL	HISTORICAL	COST			2	1
	ACTUAL	CONSTANT	DOLLAR	-21.21			
	D-WEIL	CONSTANT	DOLLAR	-20.47	-0.03470		
	PARKER	CONSTANT	DOLLAR	-20.47	-0.03470		
COMPANY NUMBER	ACTUAL	HISTORICAL	COST	GAIN (LOSS)	ERROR	INV	DEP
21038	ACTUAL	HISTORICAL	COST			2	1
	ACTUAL	CONSTANT	DOLLAR	-37.30			
	D-WEIL	CONSTANT	DOLLAR	-30.14	-0.19204		
	PARKER	CONSTANT	DOLLAR	-30.14	-0.19204		
COMPANY NUMBER	ACTUAL	HISTORICAL	COST	GAIN (LOSS)	ERROR	INV	DEP
21039	ACTUAL	HISTORICAL	COST			2	1
	ACTUAL	CONSTANT	DOLLAR	-12.82			
	D-WEIL	CONSTANT	DOLLAR	-16.35	0.27547		
	PARKER	CONSTANT	DOLLAR	-16.35	0.27547		
COMPANY NUMBER	ACTUAL	HISTORICAL	COST	GAIN (LOSS)	ERROR	INV	DEP
21040	ACTUAL	HISTORICAL	COST			2	1
	ACTUAL	CONSTANT	DOLLAR	-33.27			
	D-WEIL	CONSTANT	DOLLAR	-25.41	-0.23610		
	PARKER	CONSTANT	DOLLAR	-25.41	-0.23610		
COMPANY NUMBER	ACTUAL	HISTORICAL	COST	GAIN (LOSS)	ERROR	INV	DEP
21041	ACTUAL	HISTORICAL	COST			2	1
	ACTUAL	CONSTANT	DOLLAR	-17.93			
	D-WEIL	CONSTANT	DOLLAR	-16.73	-0.06880		
	PARKER	CONSTANT	DOLLAR	-16.73	-0.06880		
COMPANY NUMBER	ACTUAL	HISTORICAL	COST	GAIN (LOSS)	ERROR	INV	DEP
21042	ACTUAL	HISTORICAL	COST			2	1
	ACTUAL	CONSTANT	DOLLAR	-28.40			
	D-WEIL	CONSTANT	DOLLAR	-24.68	-0.13081		
	PARKER	CONSTANT	DOLLAR	-24.68	-0.13081		



COMPANY NUMBER	ACTUAL	HISTORICAL COST	DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV	DEP
51003	ACTUAL	561.76	304.19		736.35		2	1
	ACTUAL CONSTANT DOLLAR	561.76	561.76		736.35			
	D-WEIL CONSTANT DOLLAR	527.69	527.69	-0.06064	807.80	0.09703		
	PARKER CONSTANT DOLLAR	527.69	527.69	-0.06064	807.80	0.09703		
51004	ACTUAL	494.00	251.00		634.00		2	1
	ACTUAL CONSTANT DOLLAR	494.00	494.00		634.00			
	D-WEIL CONSTANT DOLLAR	516.01	516.01	0.04455	612.14	-0.03448		
	PARKER CONSTANT DOLLAR	516.01	516.01	0.04455	612.14	-0.03448		
51005	ACTUAL	405.00	223.56		535.00		2	1
	ACTUAL CONSTANT DOLLAR	405.00	405.00		535.00			
	D-WEIL CONSTANT DOLLAR	403.67	403.67	-0.00328	634.98	0.18686		
	PARKER CONSTANT DOLLAR	403.67	403.67	-0.00328	634.98	0.18686		
51006	ACTUAL	478.00	250.00		755.00		2	1
	ACTUAL CONSTANT DOLLAR	478.00	478.00		755.00			
	D-WEIL CONSTANT DOLLAR	447.23	447.23	-0.06438	606.97	-0.19607		
	PARKER CONSTANT DOLLAR	447.23	447.23	-0.06438	606.97	-0.19607		
51008	ACTUAL	332.94	178.64		452.00		2	1
	ACTUAL CONSTANT DOLLAR	332.94	332.94		452.55	0.00121		
	D-WEIL CONSTANT DOLLAR	332.94	332.94	-0.04875	452.55	0.00121		
	PARKER CONSTANT DOLLAR	332.94	332.94	-0.04875	452.55	0.00121		
51009	ACTUAL	318.78	162.99		272.48		2	1
	ACTUAL CONSTANT DOLLAR	318.78	318.78		272.48			
	D-WEIL CONSTANT DOLLAR	309.76	309.76	-0.02830	344.58	0.26461		
	PARKER CONSTANT DOLLAR	309.76	309.76	-0.02830	344.58	0.26461		
51010	ACTUAL	224.33	119.30		272.48		2	1
	ACTUAL CONSTANT DOLLAR	224.33	224.33		493.74	0.81201		
	D-WEIL CONSTANT DOLLAR	224.33	224.33	-0.04999	493.74	0.81201		
	PARKER CONSTANT DOLLAR	224.33	224.33	-0.04999	493.74	0.81201		
51011	ACTUAL	246.18	136.28		371.36		2	1
	ACTUAL CONSTANT DOLLAR	246.18	246.18		428.35	0.15345		
	D-WEIL CONSTANT DOLLAR	235.42	235.42	-0.04372	428.35	0.15345		
	PARKER CONSTANT DOLLAR	235.42	235.42	-0.04372	428.35	0.15345		
51012	ACTUAL	295.44	172.36		365.16		2	1
	ACTUAL CONSTANT DOLLAR	295.44	295.44		436.56	0.19554		
	D-WEIL CONSTANT DOLLAR	294.78	294.78	-0.00222	436.56	0.19554		
	PARKER CONSTANT DOLLAR	294.78	294.78	-0.00222	436.56	0.19554		



COMPANY NUMBER		ACTUAL	HISTORICAL	CGST	DEPRECIATION	ERROR	GAIN(LOSS)	ERRR	INV	DEP
51013		ACTUAL	HISTORICAL	CGST	190.11				2	1
		ACTUAL	CONSTANT	DCLLAR	302.28		387.03			
		D-WEIL	CONSTANT	DCLLAR	328.95	0.08822	347.78	-0.10142		
		PARKER	CONSTANT	DOLLAR	328.95	0.08822	347.78	-0.10142		
51014		ACTUAL	HISTORICAL	COST	113.30				2	1
		ACTUAL	CONSTANT	DCLLAR	222.50		357.50			
		D-WEIL	CONSTANT	DCLLAR	223.35	0.00382	367.35	0.02756		
		PARKER	CONSTANT	DOLLAR	223.35	0.00382	367.35	0.02756		
51015		ACTUAL	HISTORICAL	COST	120.61				2	1
		ACTUAL	CONSTANT	DCLLAR	233.00		384.00			
		D-WEIL	CONSTANT	DCLLAR	226.03	-0.02990	567.18	0.47702		
		PARKER	CONSTANT	DCLLAR	226.03	-0.02990	567.18	0.47702		
51016		ACTUAL	HISTORICAL	COST	130.00				2	1
		ACTUAL	CONSTANT	DCLLAR	256.00		352.00			
		D-WEIL	CONSTANT	DCLLAR	231.32	-0.09642	375.45	0.06663		
		PARKER	CONSTANT	DCLLAR	231.32	-0.09642	375.45	0.06663		
51017		ACTUAL	HISTORICAL	COST	141.22				2	1
		ACTUAL	CONSTANT	DCLLAR	248.90		281.60			
		D-WEIL	CONSTANT	DCLLAR	239.09	-0.03940	373.40	0.32600		
		PARKER	CONSTANT	DOLLAR	239.09	-0.03940	373.40	0.32600		
51018		ACTUAL	HISTORICAL	CGST	150.20				2	1
		ACTUAL	CONSTANT	DCLLAR	262.90		363.10			
		D-WEIL	CONSTANT	DCLLAR	249.87	-0.04955	341.62	-0.05916		
		PARKER	CONSTANT	DCLLAR	249.87	-0.04955	341.62	-0.05916		
51019		ACTUAL	HISTORICAL	CGST	171.69				2	1
		ACTUAL	CONSTANT	DCLLAR	317.26		204.84			
		D-WEIL	CONSTANT	DCLLAR	313.19	-0.01282	207.21	0.01155		
		PARKER	CONSTANT	DCLLAR	313.19	-0.01282	207.21	0.01155		
51020		ACTUAL	HISTORICAL	COST	76.15				2	1
		ACTUAL	CONSTANT	DCLLAR	141.37		252.75			
		D-WEIL	CONSTANT	DCLLAR	135.79	-0.03950	264.75	0.04748		
		PARKER	CONSTANT	DCLLAR	135.79	-0.03950	264.75	0.04748		
51021		ACTUAL	HISTORICAL	COST	109.45				2	1
		ACTUAL	CONSTANT	DCLLAR	181.19		265.53			
		D-WEIL	CONSTANT	DCLLAR	165.99	-0.08389	247.19	-0.06905		
		PARKER	CONSTANT	DCLLAR	165.99	-0.08389	247.19	-0.06905		

COMPANY NUMBER		ACTUAL	HISTORICAL COST	DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV	DEP
51022	ACTUAL			245.87				2	1
	ACTUAL CONSTANT DOLLAR			371.97		259.23			
	D-WEIL CONSTANT DOLLAR			320.71	-0.13781	266.05	0.02633		
	PARKER CONSTANT DOLLAR			320.71	-0.13781	266.05	0.02633		
51023	ACTUAL			179.04				2	1
	ACTUAL CONSTANT DOLLAR			314.20		194.24			
	D-WEIL CONSTANT DOLLAR			311.82	-0.00757	219.54	0.13026		
	PARKER CONSTANT DOLLAR			311.82	-0.00757	219.54	0.13026		
51024	ACTUAL			84.21				2	1
	ACTUAL CONSTANT DOLLAR			186.43		227.26			
	D-WEIL CONSTANT DOLLAR			186.84	0.00221	244.90	0.07763		
	PARKER CONSTANT DOLLAR			186.84	0.00221	244.90	0.07763		
51025	ACTUAL			88.40				2	1
	ACTUAL CONSTANT DOLLAR			138.92		272.33			
	D-WEIL CONSTANT DOLLAR			154.51	0.11225	261.28	-0.04058		
	PARKER CONSTANT DOLLAR			154.51	0.11225	261.28	-0.04058		
51026	ACTUAL			94.81				2	1
	ACTUAL CONSTANT DOLLAR			200.79		256.56			
	D-WEIL CONSTANT DOLLAR			174.81	-0.12939	232.10	-0.09535		
	PARKER CONSTANT DOLLAR			174.81	-0.12939	232.10	-0.09535		
51027	ACTUAL			120.00				2	1
	ACTUAL CONSTANT DOLLAR			211.00		246.00			
	D-WEIL CONSTANT DOLLAR			193.05	-0.08509	247.41	0.00573		
	PARKER CONSTANT DOLLAR			193.05	-0.08509	247.41	0.00573		
51028	ACTUAL			149.34				2	1
	ACTUAL CONSTANT DOLLAR			280.56		250.44			
	D-WEIL CONSTANT DOLLAR			291.96	0.04063	236.79	-0.05450		
	PARKER CONSTANT DOLLAR			291.96	0.04063	236.79	-0.05450		
51029	ACTUAL			54.06				2	1
	ACTUAL CONSTANT DOLLAR			100.07		194.00			
	D-WEIL CONSTANT DOLLAR			102.73	0.02662	213.33	0.15938		
	PARKER CONSTANT DOLLAR			102.73	0.02662	213.33	0.15938		
51030	ACTUAL			81.22				2	1
	ACTUAL CONSTANT DOLLAR			144.52		247.27			
	D-WEIL CONSTANT DOLLAR			149.69	0.03578	259.12	0.04793		
	PARKER CONSTANT DOLLAR			149.69	0.03578	259.12	0.04793		

COMPANY NUMBER 51032	ACTUAL HISTORICAL COST	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP	
	ACTUAL CONSTANT DOLLAR	76.30				2	1
	D-WEIL CONSTANT DOLLAR	152.67		192.27			
	PARKER CONSTANT DOLLAR	149.65	-0.01981	222.23	0.15582		
COMPANY NUMBER 51033	ACTUAL HISTORICAL COST	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP	
	ACTUAL CONSTANT DOLLAR	165.46				2	1
	D-WEIL CONSTANT DOLLAR	299.46		138.00			
	PARKER CONSTANT DOLLAR	336.61	0.12405	178.48	0.29334		
COMPANY NUMBER 51034	ACTUAL HISTORICAL COST	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP	
	ACTUAL CONSTANT DOLLAR	79.62				2	1
	D-WEIL CONSTANT DOLLAR	152.00		184.00			
	PARKER CONSTANT DOLLAR	151.60	-0.00263	196.59	0.06845		
COMPANY NUMBER 51035	ACTUAL HISTORICAL COST	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP	
	ACTUAL CONSTANT DOLLAR	151.60	-0.00263			2	1
	D-WEIL CONSTANT DOLLAR	80.34		160.93			
	PARKER CONSTANT DOLLAR	153.56		186.02	0.15588		
COMPANY NUMBER 51036	ACTUAL HISTORICAL COST	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP	
	ACTUAL CONSTANT DOLLAR	139.88	-0.08910			2	1
	D-WEIL CONSTANT DOLLAR	139.88	-0.08910	186.02	0.15588		
	PARKER CONSTANT DOLLAR	155.46		186.02	0.15588		
COMPANY NUMBER 51037	ACTUAL HISTORICAL COST	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP	
	ACTUAL CONSTANT DOLLAR	251.72				2	1
	D-WEIL CONSTANT DOLLAR	207.79	-0.17451	206.51			
	PARKER CONSTANT DOLLAR	207.79	-0.17451	212.55	0.02925		
COMPANY NUMBER 51038	ACTUAL HISTORICAL COST	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP	
	ACTUAL CONSTANT DOLLAR	85.76				2	1
	D-WEIL CONSTANT DOLLAR	146.98		211.14			
	PARKER CONSTANT DOLLAR	130.34	-0.11324	197.46	-0.06477		
COMPANY NUMBER 51039	ACTUAL HISTORICAL COST	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP	
	ACTUAL CONSTANT DOLLAR	130.34	-0.11324			2	1
	D-WEIL CONSTANT DOLLAR	93.83		197.46	-0.06477		
	PARKER CONSTANT DOLLAR	163.45		184.94			
COMPANY NUMBER 51040	ACTUAL HISTORICAL COST	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP	
	ACTUAL CONSTANT DOLLAR	167.83	0.02683			2	1
	D-WEIL CONSTANT DOLLAR	167.83	0.02683	181.53	-0.01846		
	PARKER CONSTANT DOLLAR	144.00		181.53	-0.01846		
COMPANY NUMBER 51041	ACTUAL HISTORICAL COST	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP	
	ACTUAL CONSTANT DOLLAR	257.28	0.02095			2	1
	D-WEIL CONSTANT DOLLAR	257.28	0.02095	124.00			
	PARKER CONSTANT DOLLAR	257.28	0.02095	111.40	-0.10159		
COMPANY NUMBER 51042	ACTUAL HISTORICAL COST	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP	
	ACTUAL CONSTANT DOLLAR	81.55				2	1
	D-WEIL CONSTANT DOLLAR	154.05		92.24			
	PARKER CONSTANT DOLLAR	182.86	0.18703	210.36	1.28078		
		182.86	0.18703	210.38	1.28078		

COMPANY NUMBER		ACTUAL HISTORICAL COST	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
51041	ACTUAL		93.65				2	1
	ACTUAL CONSTANT DOLLAR		169.45		119.64			
	D-WEIL CONSTANT DOLLAR		175.53	0.03588	116.05	-0.02999		
	PARKER CONSTANT DOLLAR		175.53	0.03588	116.05	-0.02999		
51042	ACTUAL		59.44				2	1
	ACTUAL CONSTANT DOLLAR		115.37		177.22			
	D-WEIL CONSTANT DOLLAR		107.68	-0.06664	182.80	0.03151		
	PARKER CONSTANT DOLLAR		107.68	-0.06664	182.80	0.03151		
51043	ACTUAL		138.24				2	1
	ACTUAL CONSTANT DOLLAR		249.43		139.96			
	D-WEIL CONSTANT DOLLAR		249.16	-0.00109	147.34	0.05272		
	PARKER CONSTANT DOLLAR		249.16	-0.00109	147.34	0.05272		
51044	ACTUAL		58.39				2	1
	ACTUAL CONSTANT DOLLAR		101.85		147.98			
	D-WEIL CONSTANT DOLLAR		96.81	-0.04953	153.53	0.03753		
	PARKER CONSTANT DOLLAR		96.81	-0.04953	153.53	0.03753		
51045	ACTUAL		68.56				2	1
	ACTUAL CONSTANT DOLLAR		130.00		149.00			
	D-WEIL CONSTANT DOLLAR		121.80	-0.06311	154.42	0.03638		
	PARKER CONSTANT DOLLAR		121.80	-0.06311	154.42	0.03638		
51046	ACTUAL		48.45				2	1
	ACTUAL CONSTANT DOLLAR		94.75		173.08			
	D-WEIL CONSTANT DOLLAR		85.50	-0.09763	142.94	-0.17411		
	PARKER CONSTANT DOLLAR		85.50	-0.09763	142.94	-0.17411		
51047	ACTUAL		62.89				2	1
	ACTUAL CONSTANT DOLLAR		125.46		158.65			
	D-WEIL CONSTANT DOLLAR		118.95	-0.05190	165.07	0.04049		
	PARKER CONSTANT DOLLAR		118.95	-0.05190	165.07	0.04049		
51048	ACTUAL		71.28				2	1
	ACTUAL CONSTANT DOLLAR		151.00		95.00			
	D-WEIL CONSTANT DOLLAR		134.96	-0.10623	88.16	-0.07200		
	PARKER CONSTANT DOLLAR		134.96	-0.10623	88.16	-0.07200		
51049	ACTUAL		64.80				2	1
	ACTUAL CONSTANT DOLLAR		115.30		118.70			
	D-WEIL CONSTANT DOLLAR		111.15	-0.03596	150.80	0.27046		
	PARKER CONSTANT DOLLAR		111.15	-0.03596	150.80	0.27046		

COMPANY NUMBER	ACTUAL	HISTORICAL COST	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV	DEP
51050	ACTUAL		57.02				2	1
	ACTUAL	CONSTANT DOLLAR	53.70		153.15			
	D-WEIL	CONSTANT DOLLAR	99.92	0.06635	166.40	0.08654		
	PARKER	CONSTANT DOLLAR	99.92	0.06635	166.40	0.08654		
61001	ACTUAL	HISTORICAL COST	283.52				2	1
	ACTUAL	CONSTANT DOLLAR	492.76		119.89			
	D-WEIL	CONSTANT DOLLAR	500.12	0.01494	227.36	0.89643		
	PARKER	CONSTANT DOLLAR	500.12	0.01494	227.36	0.89643		
61002	ACTUAL	HISTORICAL COST	206.74				2	1
	ACTUAL	CONSTANT DOLLAR	297.72		129.12			
	D-WEIL	CONSTANT DOLLAR	369.02	0.23948	169.52	0.46777		
	PARKER	CONSTANT DOLLAR	369.02	0.23948	169.52	0.46777		
61003	ACTUAL	HISTORICAL COST	200.18				2	1
	ACTUAL	CONSTANT DOLLAR	305.00		159.00			
	D-WEIL	CONSTANT DOLLAR	320.94	0.05225	234.89	0.18034		
	PARKER	CONSTANT DOLLAR	320.94	0.05225	234.89	0.18034		
61005	ACTUAL	HISTORICAL COST	198.82				2	1
	ACTUAL	CONSTANT DOLLAR	295.24		112.81			
	D-WEIL	CONSTANT DOLLAR	350.35	0.18668	90.45	-0.19818		
	PARKER	CONSTANT DOLLAR	350.35	0.18668	90.45	-0.19818		
61006	ACTUAL	HISTORICAL COST	220.20				2	1
	ACTUAL	CONSTANT DOLLAR	412.94		199.46			
	D-WEIL	CONSTANT DOLLAR	358.44	-0.13199	201.64	0.06430		
	PARKER	CONSTANT DOLLAR	358.44	-0.13199	201.64	0.06430		
61007	ACTUAL	HISTORICAL COST	180.40				2	1
	ACTUAL	CONSTANT DOLLAR	283.80		132.70			
	D-WEIL	CONSTANT DOLLAR	298.50	0.05181	171.69	0.29380		
	PARKER	CONSTANT DOLLAR	298.50	0.05181	171.69	0.29380		
61008	ACTUAL	HISTORICAL COST	158.60				2	1
	ACTUAL	CONSTANT DOLLAR	341.80		225.50			
	D-WEIL	CONSTANT DOLLAR	282.42	-0.17373	252.90	0.12152		
	PARKER	CONSTANT DOLLAR	282.42	-0.17373	252.90	0.12152		
61009	ACTUAL	HISTORICAL COST	174.49				2	1
	ACTUAL	CONSTANT DOLLAR	276.89		112.25			
	D-WEIL	CONSTANT DOLLAR	265.76	-0.04021	155.64	0.38654		
	PARKER	CONSTANT DOLLAR	265.76	-0.04021	155.64	0.38654		

COMPANY NUMBER		ACTUAL HISTORICAL COST	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
61012	ACTUAL	74.60					2 1
	ACTUAL CONSTANT DOLLAR	125.33			160.30		
	D-WEIL CONSTANT DOLLAR	141.59	0.12976		179.30	0.11650	
	PARKER CONSTANT DOLLAR	141.59	0.12976		179.30	0.11650	
61013	ACTUAL	60.76	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
	ACTUAL CONSTANT DOLLAR	145.15			120.11		2 1
	D-WEIL CONSTANT DOLLAR	88.73	-0.38866		135.09	0.12471	
	PARKER CONSTANT DOLLAR	88.73	-0.38868		135.09	0.12471	
61014	ACTUAL	82.00	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
	ACTUAL CONSTANT DOLLAR	208.00			197.00		2 1
	D-WEIL CONSTANT DOLLAR	186.83	-0.10180		201.66	0.02366	
	PARKER CONSTANT DOLLAR	186.83	-0.10180		201.66	0.02366	
61015	ACTUAL	43.97	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
	ACTUAL CONSTANT DOLLAR	56.86			22.47		2 1
	D-WEIL CONSTANT DOLLAR	59.35	0.04378		31.17	0.33712	
	PARKER CONSTANT DOLLAR	59.35	0.04378		31.17	0.33712	
61016	ACTUAL	92.57	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
	ACTUAL CONSTANT DOLLAR	168.36			129.11		2 1
	D-WEIL CONSTANT DOLLAR	177.35	0.05337		162.42	0.26785	
	PARKER CONSTANT DOLLAR	177.35	0.05337		162.42	0.26785	
61017	ACTUAL	69.31	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
	ACTUAL CONSTANT DOLLAR	91.24			100.68		2 1
	D-WEIL CONSTANT DOLLAR	158.14	0.73324		107.79	0.07066	
	PARKER CONSTANT DOLLAR	158.14	0.73324		107.79	0.07066	
61018	ACTUAL	46.71	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
	ACTUAL CONSTANT DOLLAR	61.89			-13.30		2 1
	D-WEIL CONSTANT DOLLAR	61.38	-0.00827		-7.83	-0.41127	
	PARKER CONSTANT DOLLAR	61.38	-0.00827		-7.83	-0.41127	
61019	ACTUAL	77.88	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
	ACTUAL CONSTANT DOLLAR	107.13			71.68		2 1
	D-WEIL CONSTANT DOLLAR	107.60	0.00622		30.95	0.12926	
	PARKER CONSTANT DOLLAR	107.80	0.00622		30.95	0.12926	
61020	ACTUAL	50.06	DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
	ACTUAL CONSTANT DOLLAR	70.67			36.76		2 1
	D-WEIL CONSTANT DOLLAR	79.72	0.12808		52.25	0.42141	
	PARKER CONSTANT DOLLAR	79.72	0.12808		52.25	0.42141	

COMPANY NUMBER			DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
61021	ACTUAL	HISTORICAL COST	160.06				2 1
	ACTUAL	CONSTANT DOLLAR	191.70		48.90		
	D-WEIL	CONSTANT DOLLAR	195.53	0.02000	44.03	-0.09954	
	PARKER	CONSTANT DOLLAR	195.53	0.02000	44.03	-0.09954	
COMPANY NUMBER			DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
61025	ACTUAL	HISTORICAL COST	43.58				2 1
	ACTUAL	CONSTANT DOLLAR	53.68		10.04		
	D-WEIL	CONSTANT DOLLAR	55.20	0.02448	19.11	0.14843	
	PARKER	CONSTANT DOLLAR	55.20	0.02448	19.11	0.14843	
COMPANY NUMBER			DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
61026	ACTUAL	HISTORICAL COST	55.01				2 1
	ACTUAL	CONSTANT DOLLAR	80.63		35.01		
	D-WEIL	CONSTANT DOLLAR	91.08	0.12964	44.58	0.27328	
	PARKER	CONSTANT DOLLAR	91.08	0.12964	44.58	0.27328	
COMPANY NUMBER			DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
61028	ACTUAL	HISTORICAL COST	24.52				2 1
	ACTUAL	CONSTANT DOLLAR	36.20		53.73		
	D-WEIL	CONSTANT DOLLAR	42.19	0.16555	55.63	0.03527	
	PARKER	CONSTANT DOLLAR	42.19	0.16555	55.63	0.03527	
COMPANY NUMBER			DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
51032	ACTUAL	HISTORICAL COST	36.16				2 1
	ACTUAL	CONSTANT DOLLAR	58.74		15.58		
	D-WEIL	CONSTANT DOLLAR	56.29	-0.04171	16.94	0.08752	
	PARKER	CONSTANT DOLLAR	56.29	-0.04171	16.94	0.08752	
COMPANY NUMBER			DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
61038	ACTUAL	HISTORICAL COST	18.03				2 1
	ACTUAL	CONSTANT DOLLAR	37.13		41.87		
	D-WEIL	CONSTANT DOLLAR	39.42	0.06161	35.93	-0.14195	
	PARKER	CONSTANT DOLLAR	39.42	0.06161	35.93	-0.14195	
COMPANY NUMBER			DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
61040	ACTUAL	HISTORICAL COST	20.67				2 1
	ACTUAL	CONSTANT DOLLAR	30.20		8.88		
	D-WEIL	CONSTANT DOLLAR	41.22	0.36500	17.23	0.93981	
	PARKER	CONSTANT DOLLAR	41.22	0.36500	17.23	0.93981	
COMPANY NUMBER			DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
61042	ACTUAL	HISTORICAL COST	29.44				2 1
	ACTUAL	CONSTANT DOLLAR	39.96		33.46		
	D-WEIL	CONSTANT DOLLAR	41.13	0.02918	34.06	0.01800	
	PARKER	CONSTANT DOLLAR	41.13	0.02918	34.06	0.01800	
COMPANY NUMBER			DEPRECIATION	ERROR	GAIN(LOSS)	ERROR	INV DEP
61043	ACTUAL	HISTORICAL COST	18.23				2 1
	ACTUAL	CONSTANT DOLLAR	28.55		14.31		
	D-WEIL	CONSTANT DOLLAR	28.81	0.00896	14.90	0.04110	
	PARKER	CONSTANT DOLLAR	28.81	0.00896	14.90	0.04110	

COMPANY NUMBER 61045	ACTUAL HISTORICAL COST		DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV DEP
	ACTUAL CONSTANT DOLLAR		16.83				2 1
	D-WEIL CCNSTANT DCLLAR		29.52		19.78		
	PARKER CCNSTANT DCLLAR		30.95	0.04828	22.77	0.15096	
COMPANY NUMBER 61046	ACTUAL HISTORICAL COST		30.95	0.04828	22.77	0.15096	
	ACTUAL CONSTANT DOLLAR		DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV DEP
	D-WEIL CCNSTANT DCLLAR		16.46				2 1
	PARKER CCNSTANT DCLLAR		20.17		16.90		
COMPANY NUMBER 61048	ACTUAL HISTORICAL COST		24.40	0.20978	20.33	0.20273	
	ACTUAL CONSTANT DOLLAR		24.40	0.20978	20.33	0.20273	
	D-WEIL CCNSTANT DCLLAR		DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV DEP
	PARKER CCNSTANT DCLLAR		8.16				2 1
COMPANY NUMBER 71002	ACTUAL HISTORICAL COST	COGS	15.36		17.12		
	ACTUAL CONSTANT DOLLAR	ERROR	18.79	0.22315	20.28	0.16462	
	D-WEIL CCNSTANT DCLLAR		18.79	0.22315	20.28	0.16462	
	PARKER CCNSTANT DCLLAR		DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV DEP
COMPANY NUMBER 71005	ACTUAL HISTORICAL COST	10741.19	8.16		17.12		
	ACTUAL CONSTANT DOLLAR	10810.63	15.36		20.28	0.16462	
	D-WEIL CCNSTANT DCLLAR	10829.42	18.79	0.22315	20.28	0.16462	
	PARKER CCNSTANT DCLLAR	10741.19	DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV DEP
COMPANY NUMBER 71015	ACTUAL HISTORICAL COST	COGS	71.00		108.00		
	ACTUAL CONSTANT DOLLAR	ERROR	95.00		122.81	0.13715	
	D-WEIL CCNSTANT DCLLAR		114.05	0.20048	122.81	0.13715	
	PARKER CCNSTANT DCLLAR		DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV DEP
COMPANY NUMBER 71029	ACTUAL HISTORICAL COST	7056.00	79.10		78.80		
	ACTUAL CONSTANT DOLLAR	7084.00	99.10		81.93	0.03972	
	D-WEIL CCNSTANT DCLLAR	7152.72	99.49	0.00390	81.93	0.03972	
	PARKER CCNSTANT DCLLAR	7056.00	DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV DEP
COMPANY NUMBER 71034	ACTUAL HISTORICAL COST	COGS	23.30		24.10		
	ACTUAL CONSTANT DOLLAR	ERROR	31.00		14.47	-0.39960	
	D-WEIL CCNSTANT DCLLAR		34.41	0.10996	14.47	-0.39960	
	PARKER CCNSTANT DCLLAR		DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV DEP
COMPANY NUMBER 71044	ACTUAL HISTORICAL COST	1203.48	19.80		23.13		
	ACTUAL CONSTANT DOLLAR	1242.36	28.56		24.79	0.07155	
	D-WEIL CCNSTANT DCLLAR	1253.16	27.40	-0.04047	24.79	0.07155	
	PARKER CCNSTANT DCLLAR	1242.91	DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV DEP
COMPANY NUMBER 71044	ACTUAL HISTORICAL COST	COGS	8.62		10.01		
	ACTUAL CONSTANT DOLLAR	ERROR	11.11		10.57	0.05596	
	D-WEIL CCNSTANT DCLLAR		15.04	0.35376	10.57	0.05596	
	PARKER CCNSTANT DCLLAR		DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV DEP
			8.62		10.01		2 1
			11.11		10.57	0.05596	
			15.04	0.35376	10.57	0.05596	
			DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV DEP
			8.62		10.01		2 1
			11.11		10.57	0.05596	
			15.04	0.35376	10.57	0.05596	
			DEPRECIATION	ERROR	GAIN (LOSS)	ERROR	INV DEP
			8.62		10.01		2 1
			11.11		10.57	0.05596	
			15.04	0.35376	10.57	0.05596	



COMPANY NUMBER  
71047

	COGS	ERROR	DEPRECIATION	ERROR	GAIN(LCSS)	ERROR	INV DEP
ACTUAL HISTORICAL COST	850.41		15.51				7 1
ACTUAL CONSTANT DOLLAR	858.11		21.51		16.00		
D-WEIL CONSTANT DOLLAR	863.76	0.00658	19.57	-0.08996	18.41	0.15048	
PARKER CONSTANT DOLLAR	863.76	0.00658	19.57	-0.08996	18.41	0.15048	

APPENDIX C

LIST OF COMPANIES INCLUDED IN STUDY

(BY COMPANY NUMBER)

Company Number	Company Name
11001	General Motors
11002	Exxon
11003	Ford Motor
11004	Mobil
11005	Texaco
11006	Standard Oil of California
11007	International Business Machines
11008	General Electric
11009	Gulf Oil
11010	Chrysler
11012	Standard Oil (Ind.)
11013	Atlantic Richfield
11014	Shell Oil
11015	U.S. Steel
11016	E. I. du Pont de Nemours
11017	Western Electric
11018	Continental Oil
11019	Tenneco
11021	Union Carbide
11022	Goodyear Tire and Rubber
11023	Sun
11024	Caterpillar Tractor
11025	Eastman Kodak
11026	Phillips Petroleum
11027	Dow Chemical
11029	Westinghouse Electric
11030	RCA
11032	United Technologies
11033	Occidental Petroleum
11034	Bethlehem Steel
11035	Union Oil of California
11036	Xerox
11039	Kraft
11040	Boeing
11042	LTV
11043	Standard Oil (Ohio)
11045	Monsanto
11046	Philip Morris
11047	R. J. Reynolds Industries
11050	Minnesota Mining and Manufacturing
11051	Cities Service
11052	Marathon Oil
11053	Georgia-Pacific
11054	Armco
11055	Greyhound
11056	Coca-Cola
11057	Colgate-Palmolive
11059	W. R. Grace
11060	PepsiCo
11062	International Paper
11063	McDonnell Douglas

11065	Aluminum Co. of America
11066	American Can
11067	Continental Group
11068	Borden
11069	Weyerhaeuser
11070	TRW
11071	National Steel
11074	Champion International
11076	Signal Companies
11077	Honeywell
11079	Getty Oil
11081	Lockheed
11082	Republic Steel
11083	American Brands
11084	Allied Chemical
11085	Inland Steel
11087	CBS
11089	Textron
11090	CPC International
11092	General Dynamics
11093	Owens-Illinois
11094	American Home Products
11097	FMC
11098	Warner-Lambert
11099	Reynolds Metals
11100	PPG Industries
11101	Eaton
11102	American Cyanamid
11103	Uniroyal
11104	NCR
11106	IC Industries
11107	Celanese
11108	B. F. Goodrich
11110	Carnation
11112	Texas Instruments
11113	Singer
11114	Kaiser Aluminum & Chemical
11115	Crown Zellerbach
11116	Bristol-Myers
11117	Teledyne
11118	Burroughs
11122	Northwest Industries
11123	Standard Brands
11124	Combustion Engineering
11125	Ingersoll-Rand
11126	Borg-Warner
11127	Mead
11128	St. Regis Paper
11129	Anheuser-Busch
11131	Fruehuf
11135	Nabisco
11136	North American Phillips
11140	American Standard

11141	Whirlpool
11142	Kerr-McGee
11143	Avon Products
11146	Merck
11147	Hercules
11148	Kimberly-Clark
11149	NL Industries
11150	Kennecott Copper
11151	Walter Kidde
11155	Owens-Corning Fiberglas
11156	Eli Lilly
11157	American Broadcasting
11158	Control Data
11159	Ogden
11161	Dart Industries
11162	Colt Industries
11164	Allis-Chalmers
11165	Martin Marietta
11166	AMAX
11168	Scott Paper
11170	Williams Companies
11171	Gillette
11174	Time Inc.
11175	Kellogg
11178	Diamond Shamrock
11180	White Consolidated Industries
11182	Johns-Manville
11183	Koppers
11186	Olin
11187	Pennzoil
11189	Cummins Engine
11190	Squibb
11191	National Distillers & Chemical
11193	Clark Equipment
11195	Revelon
11197	Abbott Laboratories
11200	Ethyl
11201	Times Mirror
11202	U. S. Gypsum
11203	Chromalloy American
11204	Marmon Group
11205	Polaroid
11206	U. S. Industries
11209	Emhart
11210	Castle & Cooke
11211	Upjohn
11212	Stauffer Chemical
11214	AMF
11215	Sterling Drug
11216	Warner Communications
11219	Rohm and Haas
11220	Corning Glass Works
11222	Armstrong Cork

11223	Crane
11225	Union Camp
11226	Murphy Oil
11229	Asarco
11230	Evans Products
11233	Tosco
11235	Wheeling-Pittsburgh Steel
11236	McGraw-Edison
11239	Sherwin-Williams
11240	Brunswick
11242	SmithKline
11243	Diamond International
11244	National Can
11245	Libbey-Owens-Ford
11246	Timken
11247	White Motor
11248	Lone Star Industries
11249	GAF
11250	Schering-Plough
11251	Louisiana-Pacific
11253	General Signal
11256	Phelps Dodge
11257	Baxter Travenol Laboratories
11259	Zenith Radio
11260	Clark Oil & Refining
11263	Great Northern Nekoosa
11264	Norton
11266	Kane-Miller
11269	Commonwealth Oil Refining
11270	Pennwalt
11271	Interlake
11273	Hammermill Paper
11274	Jos. Schlitz Brewing
11275	National Gypsum
11276	CertainTeed
11277	Liggett Group
11279	Campbell Taggart
11281	Knight-Ridder Newspapers
11285	Akzona
11289	General Cable
11292	ACF Industries
11294	Harsco
11296	A. O. Smith
11297	AMP
11298	St. Joe Minerals
11300	Potlatch
11301	Cooper Industries
11302	Wheelabrator-Frye
11303	R. R. Donnelley & Sons
11304	Cyclops
11305	Willamette Industries
11306	Tecumseh Products
11307	Hershey Foods

11308	McGraw-Hill
11310	Scovill Manufacturing
11311	Reichhold Chemicals
11312	Stanley Works
11313	Witco Chemical
11315	General Host
11316	Sundstrand
11320	Square D
11322	Anchor Hocking
11325	Mohasco
11326	Kaiser Steel
11327	Pitney-Bowes
11332	Spring Mills
11333	Champion Spark Plugs
11334	Hoover
11335	Gannett
11336	Newmont Mining
11338	Revere Copper & Brass
11340	McLouth Steel
11341	Bemis
11344	Hughes Tool
11345	Crown Central Petroleum
11350	Vulcan Materials
11351	Cincinnati Milacron
11352	Memorex
11353	A-T-O
11354	Norris Industries
11355	Adolph Coors
11356	Cone Mills
11357	Signode
11359	Sybron
11361	Twentieth Century-Fox Film
11364	M. Lowenstein & Sons
11365	Texasgulf
11368	Pabst Brewing
11370	Norin
11373	Southwest Forest Industries
11374	Lubrizol
11375	Masco
11377	Midland-Ross
11379	Cluett, Peabody
11381	Trane
11382	MAPCO
11384	Bell & Howell
11385	Thiokol
11387	Brockway Glass
11389	Macmillan
11391	Cannon Mills
11392	H. K. Porter
11395	Fairchild Industries
11396	U. S. Filter
11397	Hobart
11401	GATX

11402	Dan River
11406	Dover
11407	Louisiana Land & Exploration
11408	Bucyrus-Erie
11410	Washington Post
11413	Ball
11414	Quaker State Oil Refining
11415	American Bakeries
11417	Chicago Bridge & Iron
11418	Nashua
11425	Ferro
11428	Arvin Industries
11429	VF
11432	Nalco Chemical
11438	Pacific Resources
11439	Handy & Harman
11441	Fieldcrest Mills
11445	Smith International
11449	Insilco
11450	William Wrigley Jr.
11453	Bausch & Lomb
11458	Natomas
11461	Questor
11462	Harcourt Brace Jovanovich
11464	Federal Paper Board
11465	Big Three Industries
11467	Coca Cola Bottling Co. of New York
11470	Copperweld
11474	General Refractories
11475	Butler Manufacturing
11477	Interpace
11478	Ideal Basic Industries
11481	Dennison Manufacturing
11490	Foxboro
11492	Sun Chemical
11493	Tyler
11494	Royal Crown Companies
11495	Consolidated Papers
11496	H. H. Robertson
11499	Bunker Ramo
21001	BankAmerica Corp.
21002	Citicorp
21003	Chase Manhattan Corp.
21004	Manufacturers Hanover Corp.
21005	J. P. Morgan & Co.
21006	Chemical New York Corp.
21007	Continental Illinois Corp.
21008	Western Bancorp.
21009	Bankers Trust New York Corp.
21011	Security Pacific Corp.
21012	Wells Fargo & Co.
21013	Marine Midland Banks, Inc.
21014	Irving Bank Corp.



21015	Crocker National Corp.
21016	Mellon National Corp.
21017	First National Boston Corp.
21018	Northwest Bancorp.
21019	First Bank System, Inc.
21020	First International Bancshares, Inc.
21021	First Pennsylvania Corp.
21022	National Detroit Corp.
21023	Republic of Texas Corp.
21024	Texas Commerce Bancshares, Inc.
21025	First City Bancorp. of Texas, Inc.
21026	Bank of New York Co.
21027	Seafirst Corp.
21028	European American Bancorp
21030	Philadelphia National Corp.
21032	Michigan National Corp.
21033	Ameritrust Corp.
21034	NCNB Corp.
21036	First Wisconsin Corp.
21037	BancOhio Corp.
21038	DETROITBANK Corp.
21039	Wachovia Corp.
21040	National Bank of North America
21041	Valley National Bank of Arizona
21042	Pittsburgh National Corp.
21043	Manufacturers National Corp.
21044	Girard Co.
21045	Rainier Bancorp.
21046	Mercantile Texas Corp.
21047	Southeast Banking Corp.
21048	U. S. Bancorp
21049	National City Corp.
21050	Citizens & Southern National Bank
51002	General Telephone & Electronics
51003	Southern Company
51004	Pacific Gas & Electric
51005	American Electric Power
51006	Commonwealth Edison
51008	Southern California Edison
51009	Public Service Electric and Gas
51010	Middle South Utilities
51011	Virginia Electric and Power
51012	Texas Utilities
51013	Duke Power
51014	Consumers Power
51015	Philadelphia Electric
51016	Detroit Edison
51017	General Public Utilities
51018	Florida Power & Light
51019	Columbia Gas System
51020	Pennsylvania Gas & Light
51021	Houston Industries
51022	United Telecommunications

51023	American Natural Resources
51024	Niagara Mohawk Power
51025	Carolina Power & Light
51026	Central & South West
51027	Northeast Utilities
51028	El Paso
51029	Long Island Lighting
51030	Ohio Edison
51032	Union Electric
51033	Texas Eastern Corp.
51034	Allegheny Power System
51035	Baltimore Gas & Electric
51036	Continental Telephone
51037	Pacific Power & Light
51038	Northern States Power
51039	Northern Natural Gas
51040	Transco Companies
51041	Consolidated Natural Gas
51042	Cleveland Electric Illuminating
51043	Panhandle Eastern Pipe Line
51044	Northern Indiana Public Service
51045	Potomac Electric Power
51046	Duquesne Light
51047	Gulf States Utilities
51048	Pacific Lighting
51049	Public Service of Indiana
51050	Arizona Public Service
61001	UAL
61002	Trans World Corp
61003	Union Pacific
61005	American Airlines
61006	Burlington Northern
61007	Eastern Airlines
61008	Southern Pacific
61009	Pan American World Airways
61012	Seaboard Coast Line Industries
61013	Missouri Pacific Corp.
61014	Chessie System
61015	Consolidated Freightways
61016	Southern Ry
61017	Norfolk & Western Ry
61018	Roadway Express
61019	Braniff International
61020	Western Airlines
61021	Leaseway Transportation
61025	Yellow Freight System
61026	Continental Air Lines
61028	Chicago & Northwestern Transportation
61032	U. S. Air
61038	St. Louis-San Francisco Ry
61040	Alexander & Baldwin
61042	Republic Airlines
61043	Frontier Airlines

61045	Rio Grande Industries
61046	Piedmont Aviation
61048	Soo Line RR
71002	Safeway Stores
71005	Kroger
71015	Southland
71029	Melville
71034	Fisher Foods
71044	Waldbaum
71047	National Tea -

APPENDIX D

LIST OF COMPANIES INCLUDED IN STUDY  
(IN ALPHABETICAL ORDER)

## Industrial Companies

Company Name	Company Number
ACF Industries	11292
AMAX	11166
AMF	11214
AMP	11297
A-T-O	11353
Abbott Laboratories	11197
Akzona	11285
Allied Chemical	11084
Allis-Chalmers	11164
Aluminum Co. of America	11065
American Bakeries	11415
American Brands	11083
American Broadcasting	11157
American Can	11066
American Cyanamid	11102
American Home Products	11094
American Standard	11140
Anchor Hocking	11322
Anheuser-Busch	11129
Armco	11054
Armstrong Cork	11222
Arvin Industries	11428
Asarco	11229
Atlantic Richfield	11013
Avon Products	11143
Ball	11413
Bausch & Lomb	11453
Baxter Travenol Laboratories	11257
Bell & Howell	11384
Bemis	11341
Bethlehem Steel	11034
Big Three Industries	11465
Boeing	11040
Borden	11068
Borg-Warner	11126
Briggs & Stratton	11444
Bristol-Myers	11116
Brockway Glass	11387
Brunswick	11240
Bucyrus-Erie	11408
Bunker Ramo	11499
Burroughs	11118
Butler Manufacturing	11475
CBS	11087
CPC International	11090
Campbell Taggart	11279
Cannon Mills	11391
Carnation	11110
Castle & Cooke	11210

Caterpillar Tractor	11024
Celanese	11107
CertainTeed	11276
Champion International	11074
Champion Spark Plug	11333
Chicago Bridge & Iron	11417
Chromalloy American	11203
Chrysler	11010
Cincinnati Milacron	11351
Cities Service	11051
Clark Equipment	11193
Clark Oil and Refining	11260
Cluett, Peabody	11379
Coca-Cola	11056
Coca-Cola Bottling Co. of New York	11467
Colgate-Palmolive	11057
Colt Industries	11162
Combustion Engineering	11124
Commonwealth Oil Refining	11269
Cone Mills	11356
Consolidated Papers	11495
Continental Group	11067
Continental Oil	11018
Control Data	11158
Cooper Industries	11301
Coors (Adolph)	11355
Copperweld	11470
Corning Glass Works	11220
Crane	11223
Crown Central Petroleum	11345
Crown Zellerbach	11115
Cummins Engine	11189
Cyclops	11304
Dan River	11402
Dart Industries	11161
Dennison Manufacturing	11481
Diamond International	11243
Diamond Shamrock	11178
Donnelley	11303
Dover	11406
Dow Chemical	11027
Du Pont (E. I.) de Nemours	11016
Eastman Kodak	11025
Eaton	11101
Emhart	11209
Ethyl	11200
Evans Products	11230
Exxon	11002
FMC	11097
Fairchild Industries	11395
Federal Paper Board	11464
Ferro	11425
Fieldcrest Mills	11441

Ford Motor	11003
Foxboro	11490
Fruehauf	11131
GAF	11249
GATX	11401
Gannett	11335
General Cable	11289
General Dynamics	11092
General Electric	11008
General Host	11315
General Motors	11001
General Refractories	11474
General Signal	11253
Georgia-Pacific	11053
Getty Oil	11079
Gillette	11171
Goodrich (B. F.)	11108
Goodyear Tire and Rubber	11022
Grace (W. R.)	11059
Great Northern Nekoosa	11263
Greyhound	11055
Gulf Oil	11009
Hammermill Paper	11273
Handy & Herman	11439
Harcourt Brace Jovanovich	11462
Harsco	11294
Hercules	11147
Hershey Foods	11307
Hobart	11397
Honeywell	11077
Hoover	11334
Hughes Food	11344
IC Industries	11106
Ideal Basic Industries	11478
Ingersoll-Rand	11125
Inland Steel	11085
Insilco	11449
Interlake	11271
International Business Machines	11007
International Paper	11062
Interpace	11477
Johns-Manville	11182
Kaiser Aluminum	11114
Kaiser Steel	11326
Kane-Miller	11266
Kellogg	11175
Kennecott Copper	11150
Kerr-McGee	11142
Kidde (Walter)	11151
Kimberly-Clark	11148
Knight-Ridder Newspapers	11281
Koppers	11183
Kraft	11039

LTV	11042
Libbey-Owens-Ford	11245
Liggett Group	11277
Lilly (Eli)	11156
Lockheed	11081
Lone Star Industries	11248
Louisiana Land & Exploration	11407
Louisiana-Pacific	11251
Lowenstein (M.) & Sons	11364
Lubrizol	11374
MAPCO	11382
Macmillan	11389
Marathon Oil	11052
Marmon Group	11204
Martin Marietta	11165
Masco	11375
McDonnell Douglas	11063
McGraw-Edison	11236
McGraw-Hill	11308
McLouth Steel	11340
Mead	11127
Memorex	11352
Merck	11146
Midland-Ross	11377
Minnesota Mining & Manufacturing	11050
Mobil	11004
Mohasco	11325
Monsanto	11045
Murphy Oil	11226
NCR	11104
NL Industries	11149
Nabisco	11135
Nelco Chemical	11432
Nashua	11418
National Can	11244
National Distillers & Chemical	11191
National Gypsum	11275
National Steel	11071
Natomas	11458
Newmont Mining	11336
Norin	11370
Norris Industries	11354
North American Phillips	11136
Northwest Industries	11122
Norton	11264
Occidental Petroleum	11033
Ogden	11159
Olin	11186
Owens-Corning Fiberglas	11155
Owens-Illinois	11093
PPG Industries	11100
Pabst Brewing	11368
Pacific Resources	11438



Pennwalt	11270
Pennzoil	11187
PepsiCo	11060
Phelps Dodge	11256
Philip Morris	11046
Phillips Petroleum	11026
Pitney-Bowes	11327
Polaroid	11205
Porter (H. K.)	11392
Potlatch	11300
Quaker State Oil Refining	11414
Questor	11461
RCA	11030
Reichhold Chemicals	11311
Republic Steel	11082
Revere Copper & Brass	11338
Revelon	11195
Reynolds (R. J.) Industries	11047
Reynolds Metals	11099
Robertson (H. H.)	11496
Rohm and Haas	11219
Royal Crown Companies	11494
St. Joe Minerals	11298
St. Regis Paper	11128
Schering-Plough	11250
Schlitz (Jos.) Brewing	11274
Scott Paper	11168
Scovill Manufacturing	11310
Shell Oil	11014
Sherwin-Williams	11239
Signal Companies	11076
Signode	11357
Singer	11113
Smith (A. O.)	11296
Smith International	11445
SmithKline	11242
Southwest Forest Industries	11373
Spring Mills	11332
Square D	11320
Squibb	11190
Standard Brands	11123
Standard Oil of California	11006
Standard Oil (Ind.)	11012
Standard Oil (Ohio)	11043
Stanley Works	11312
Stauffer Chemical	11212
Sterling Drug	11215
Sun	11023
Sun Chemical	11492
Sundstrand	11316
Sybron	11359
TRW	11070
Tecumseh Products	11306

Teledyne	11117
Tenneco	11019
Texaco	11005
Texas Instruments	11112
Texasgulf	11365
Textron	11089
Thiokol	11385
Time, Inc.	11174
Times Mirror	11201
Timken	11246
Tosco	11233
Trane	11381
Twentieth Century-Fox Film	11361
Tyler	11493
Union Camp	11225
Union Carbide	11021
Union Oil of California	11035
Uniroyal	11103
U. S. Filter	11396
U. S. Gypsum	11202
U. S. Industries	11206
U. S. Steel	11015
United Technologies	11032
Upjohn	11211
VF	11429
Vulcan Materials	11350
Warner Communications	11216
Warner-Lambert	11098
Washington Post	11410
Western Electric	11017
Westinghouse Electric	11029
Weyerhaeuser	11069
Wheelabrator-Frye	11302
Wheeling-Pittsburgh Steel	11235
Whirlpool	11141
White Consolidated Industries	11180
White Motor	11247
Willamette Industries	11305
Williams Companies	11170
Witco Chemical	11313
Wrigley (Wm.) Jr.	11450
Xerox	11036
Zenith Radio	11259

## Banking Companies

Company Name	Company Number
Ameritrust Corp.	21033
BancOhio	21037
Bank of New York Co.	21026
BankAmerica Corp.	21001
Bankers Trust New York Corp.	21009
Chase Manhattan Corp.	21003
Chemical New York Corp.	21006
Citicorp	21001
Citizens & Southern National Bank	21050
Continental Illinois Corp.	21007
Crocker National Corp.	21015
DETROITBANK Corp.	21038
European American Bancorp	21028
First Bank System, Inc.	21019
First City Bancorp. of Texas, Inc.	21025
First International Bancshares, Inc.	21020
First National Boston Corp.	21017
First Pennsylvania Corp.	21021
First Wisconsin Corp.	21036
Girard Co.	21044
Irving Bank Corp.	21014
Manufacturers Hanover Corp.	21004
Manufacturers National Corp.	21043
Marine Midland Banks, Inc.	21013
Mellon National Corp.	21016
Mercantile Texas Corp.	21046
Michigan National Corp.	21032
J. P. Morgan & Co.	21005
NCNB Corp.	21034
National Bank of North America	21040
National City Corp.	21049
National Detroit Corp.	21011
Northwest Bancorp.	21018
Philadelphia National Corp.	21030
Pittsburgh National Corp.	21024
Rainier Bancorp.	21045
Republic of Texas Corp.	21023
Seafirst Corp.	21027
Security Pacific Corp.	21011
Southeast Banking Corp.	21047
Texas Commerce Bancshares, Inc.	21024
U. S. Bancorp	21048
Valley National Bank of Arizona	21041
Wachovia Corp.	21039
Wells Fargo & Co.	21012
Western Bancorp.	21008

## Utility Companies

Company Name	Company Number
Allegheny Power System	51034
American Electric Power	51005
American Natural Resources	51023
Arizona Public Service	51050
Baltimore Gas & Electric	51035
Carolina Power & Light	51025
Central & South West	51026
Cleveland Electric Illuminating	51042
Columbia Gas System	51019
Commonwealth Edison	51006
Consolidated Natural Gas	51041
Consumers Power	51014
Continental Telephone	51036
Detroit Edison	51016
Duke Power	51013
Duquesne Light	51046
El Paso	51028
Florida Power & Light	51018
General Public Utilities	51017
General Telephone & Electronics	51002
Gulf States Utilities	51047
Houston Industries	51021
Long Island Lighting	51029
Middle South Utilities	51010
Niagara Mohawk Power	51024
Northeast Utilities	51027
Northern Indiana Public Service	51044
Northern Natural Gas	51039
Northern States Power	51038
Ohio Edison	51030
Pacific Gas & Electric	51004
Pacific Lighting	51048
Pacific Power and Light	51037
Panhandle Eastern Pipe Line	51043
Pennsylvania Gas & Light	51020
Philadelphia Electric	51015
Potomac Electric Power	51045
Public Electric and Gas	51009
Public Service of Indiana	51049
Southern California Edison	51008
Southern Company	51003
Texas Eastern Corp.	51033
Texas Utilities	51012
Transco Companies	51040
Union Electric	51032
United Telecommunications	51022
Virginia Electric and Power	51011

## Transportation Companies

Company Name	Company Number
Alexander & Baldwin	61040
American Airlines	61005
Braniff International	61019
Burlington Northern	61006
Chessie System	61014
Chicago & Northwestern Transportation	61028
Consolidated Freightways	61015
Continental Air Lines	61026
Eastern Airlines	61007
Frontier Airlines	61043
Leaseway Transportation	61021
Missouri Pacific Corp.	61013
Norfolk & Western Ry	61017
Pan American World Airways	61009
Piedmont Aviation	61046
Republic Airlines	61042
Rio Grande Industries	61045
Roadway Express	61018
St. Louis-San Francisco Ry	61038
Seaboard Coast Line Industries	61012
Soo Line RR	61048
Southern Pacific	61008
Southern Ry	61016
Trans World Corp.	61002
UAL	61001
Union Pacific	61003
U. S. Air	61032
Western Airlines	61020
Yellow Freight System	61025

## Retail Companies

Company Name	Company Number
Fisher Foods	71034
Kroger	71005
Melville	71029
National Tea	71047
Safeway Stores	71002
Southland	71015
Waldbaum	71044

APPENDIX E

HISTOGRAMS OF 'P' VALUE DISTRIBUTIONS

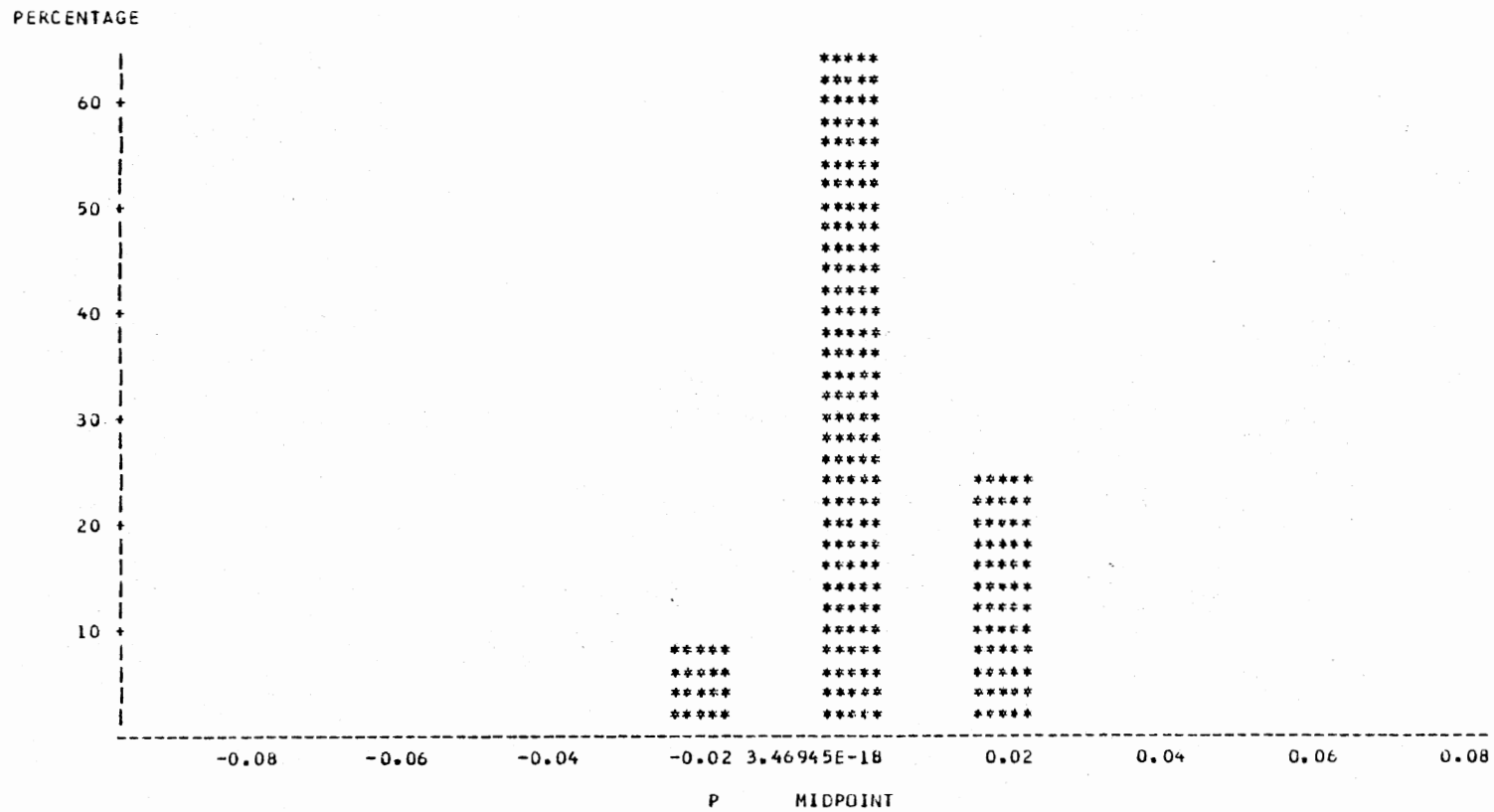


Figure 1. Histogram of Davidson-Weil Cost of Goods Sold 'P' Values for Industrial Companies



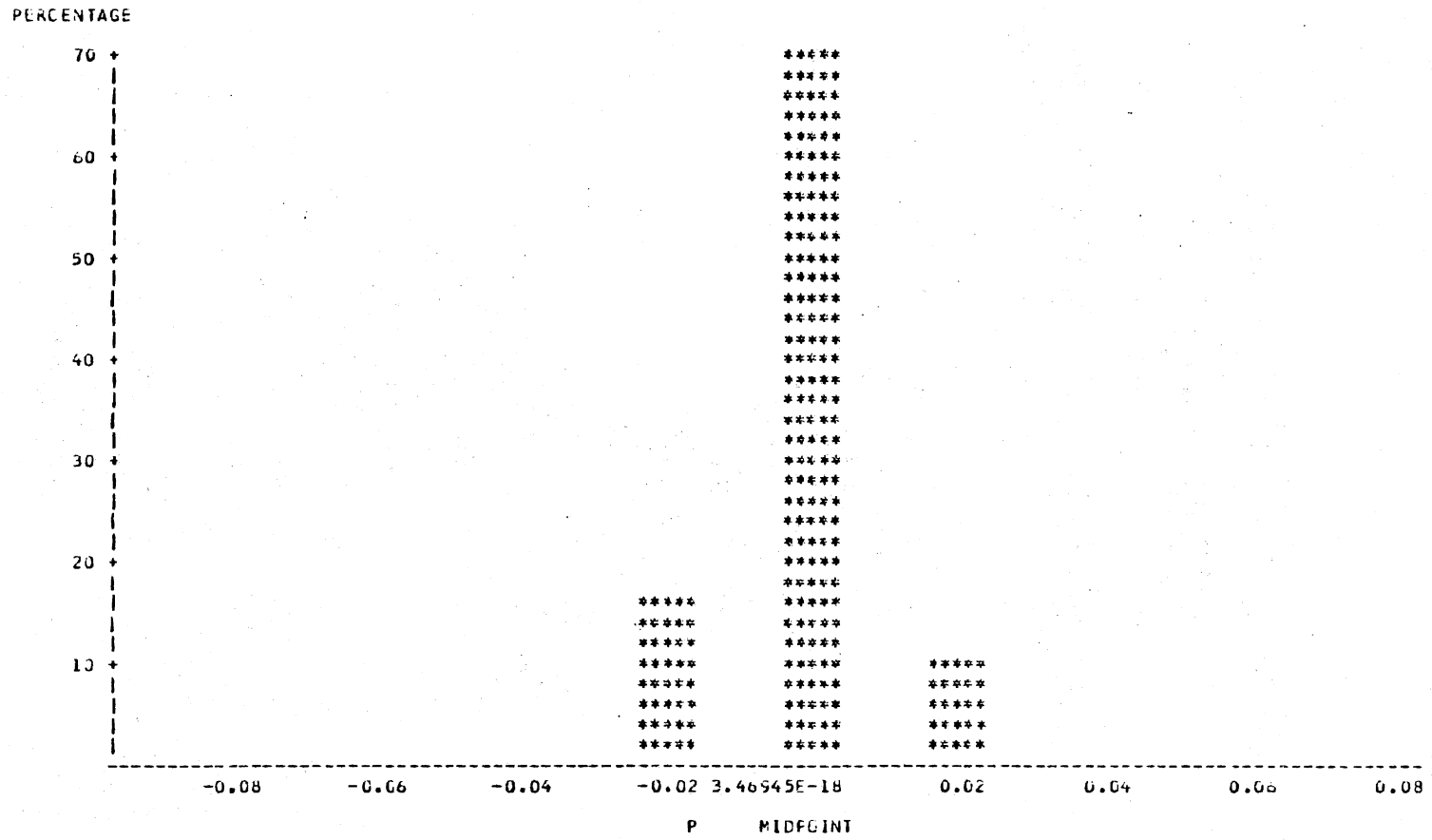


Figure 2. Histogram of Parker Cost of Goods Sold 'P' Values for Industrial Companies

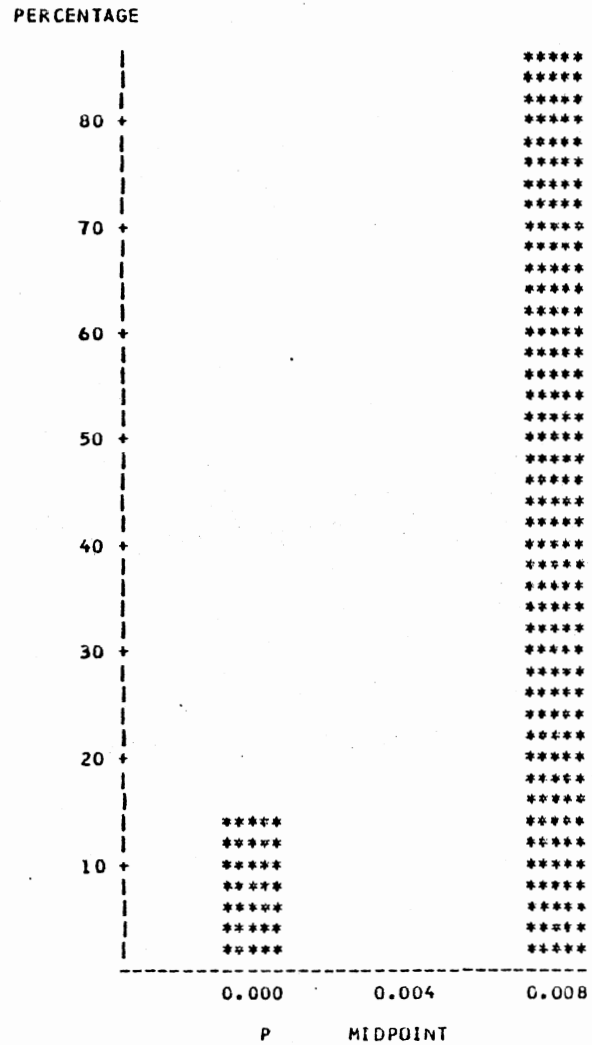


Figure 3. Histogram of Davidson-Weil  
 Cost of Goods Sold 'P'  
 Values for Retail  
 Companies

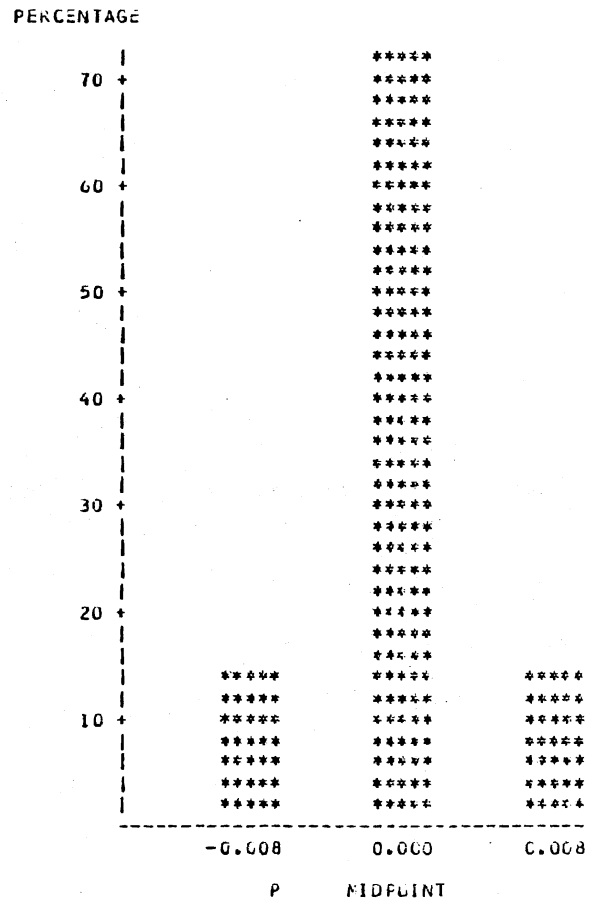


Figure 4. Histogram of Parker Cost of Goods Sold 'P' Values for Retail Companies

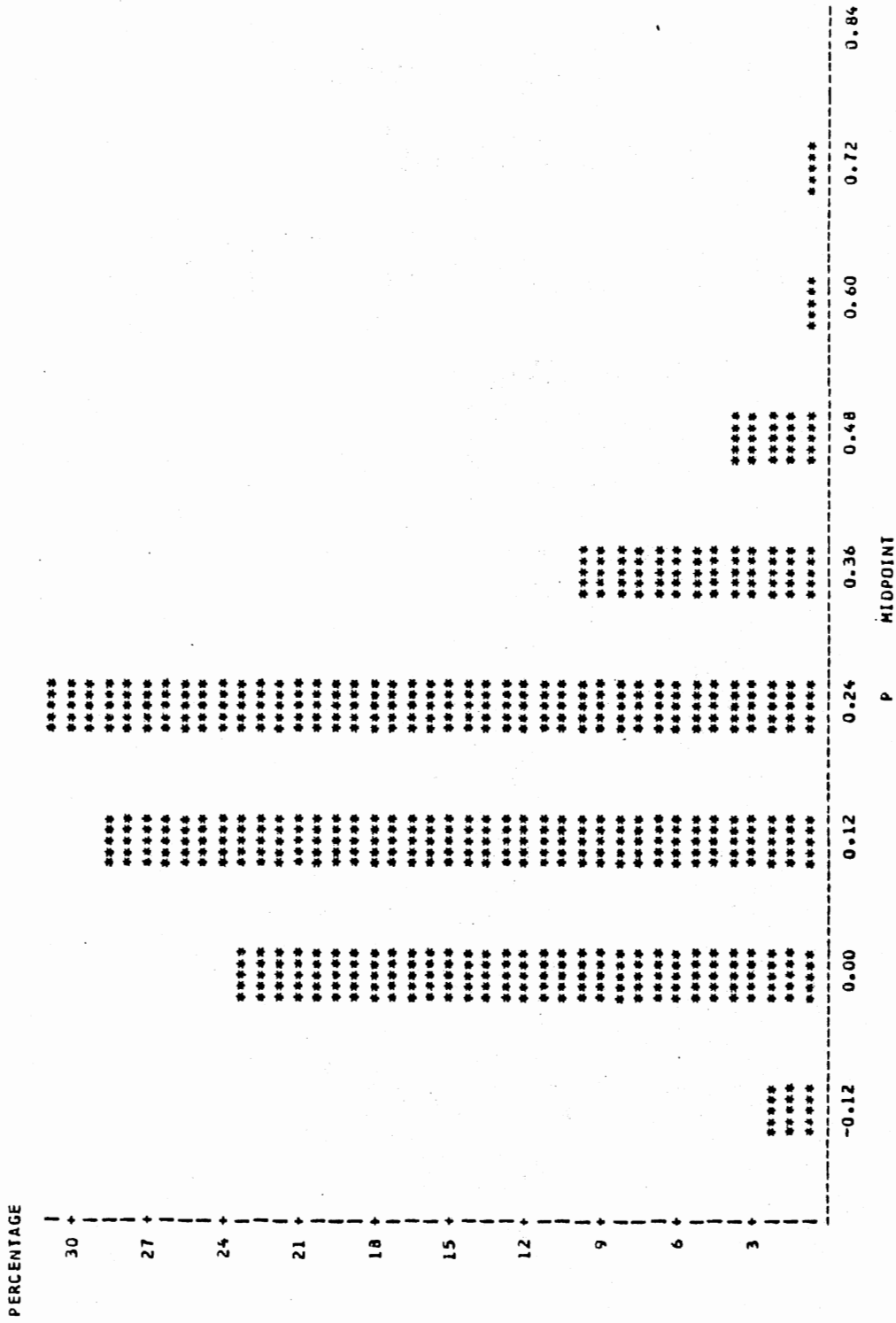


Figure 5. Histogram of Davidson-Weil Depreciation 'P' Values for Industrial Companies

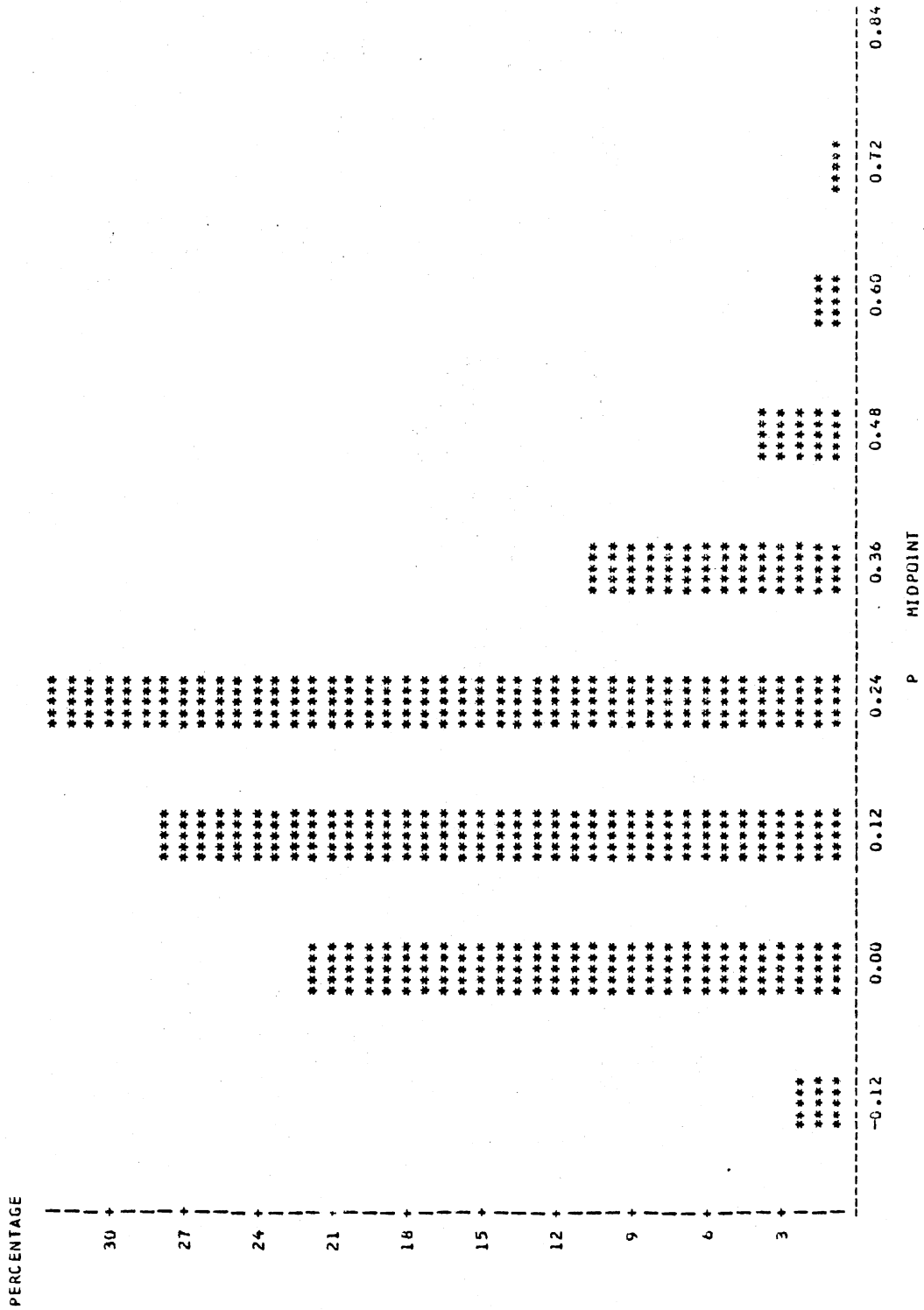


Figure 6. Histogram of Parker Depreciation 'P' Values for Industrial Companies

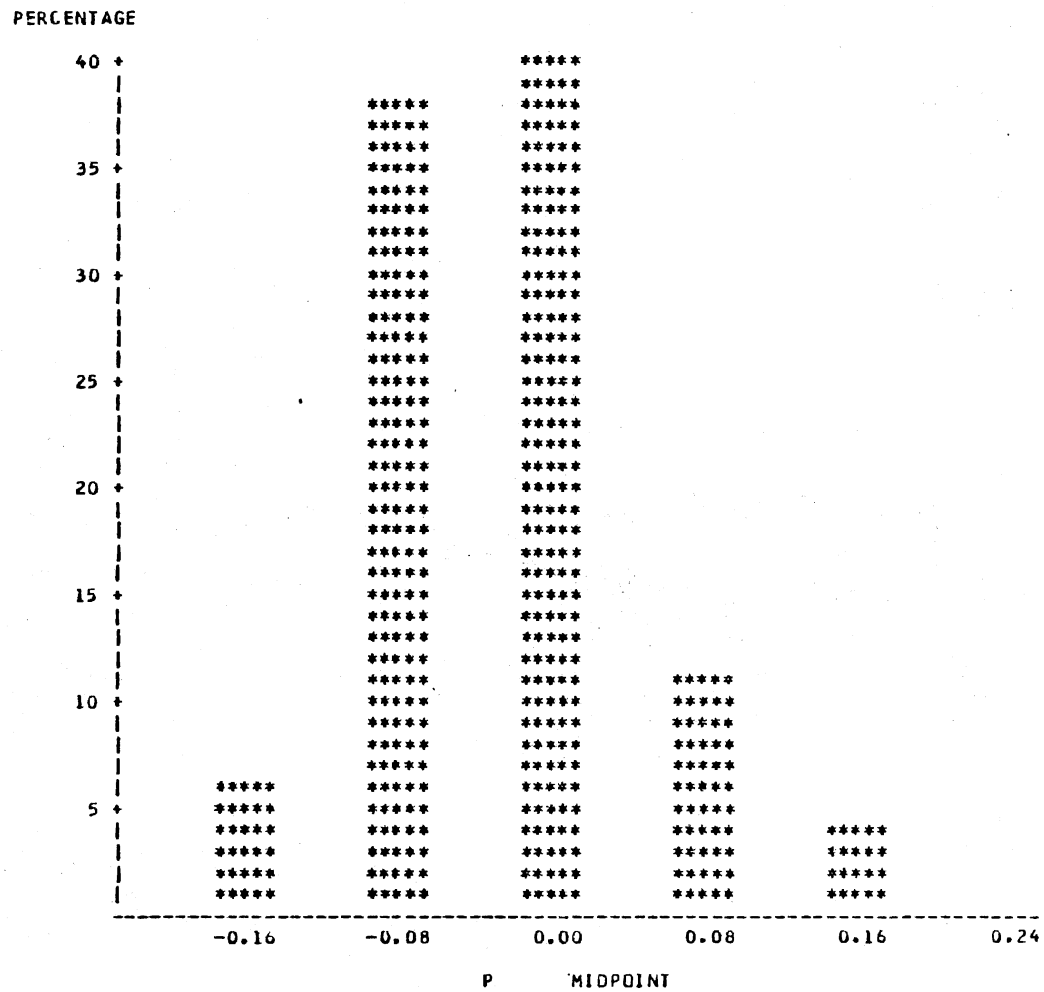


Figure 7. Histogram of Davidson-Weil Depreciation 'P' Values for Utility Companies

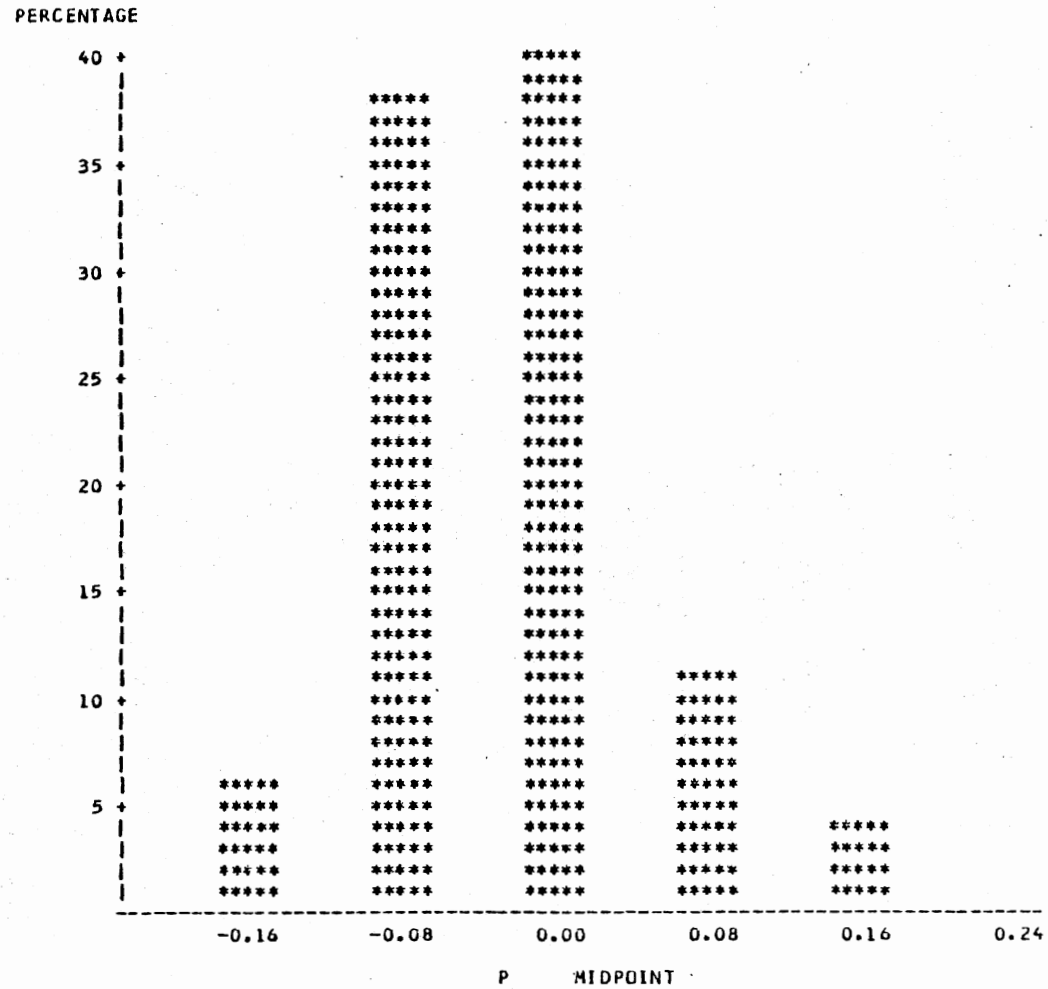


Figure 8. Histogram of Parker Depreciation 'P' Values for Utility Companies

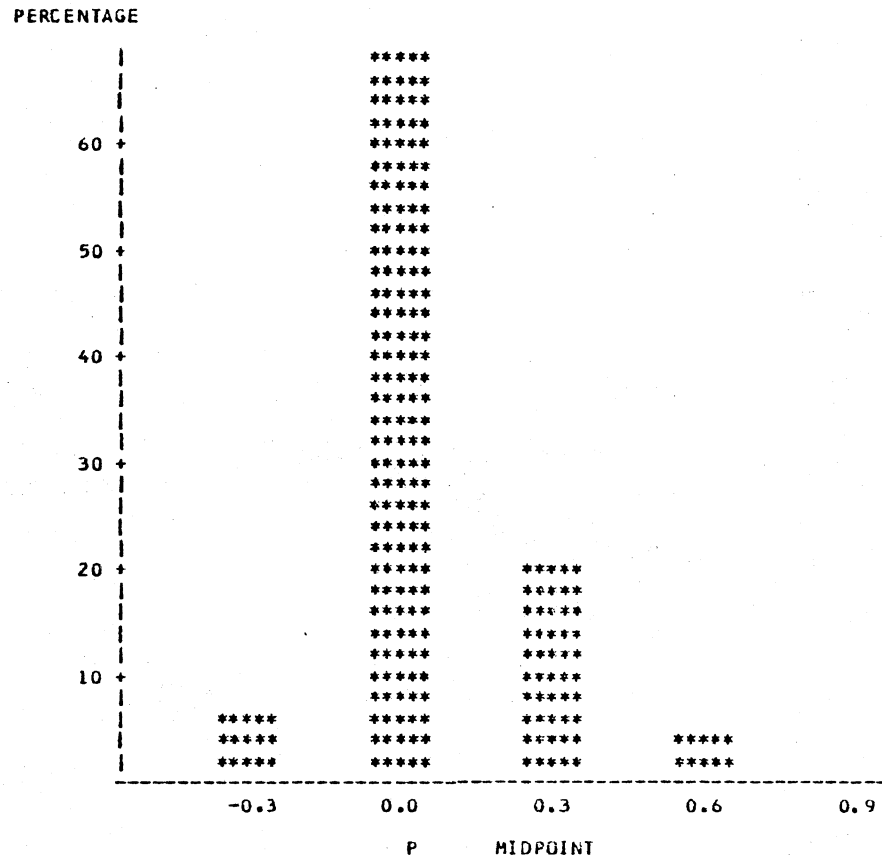


Figure 9. Histogram of Davidson-Weil Depreciation 'P' Values for Transportation Companies



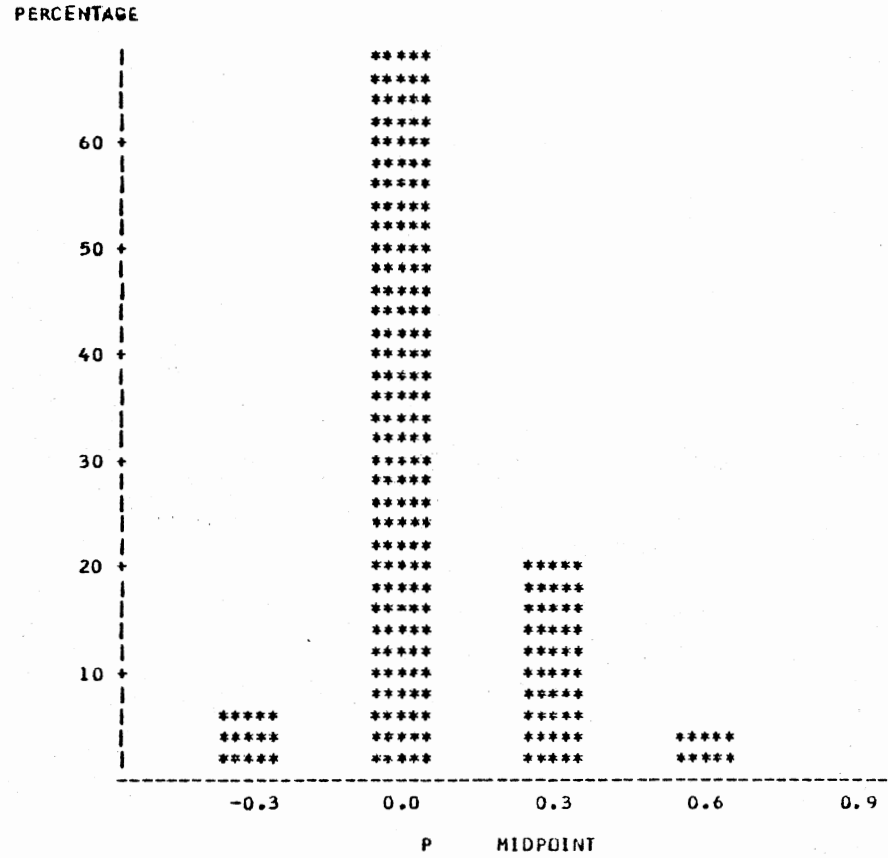


Figure 10. Histogram of Parker Depreciation 'P' Values for Transportation Companies

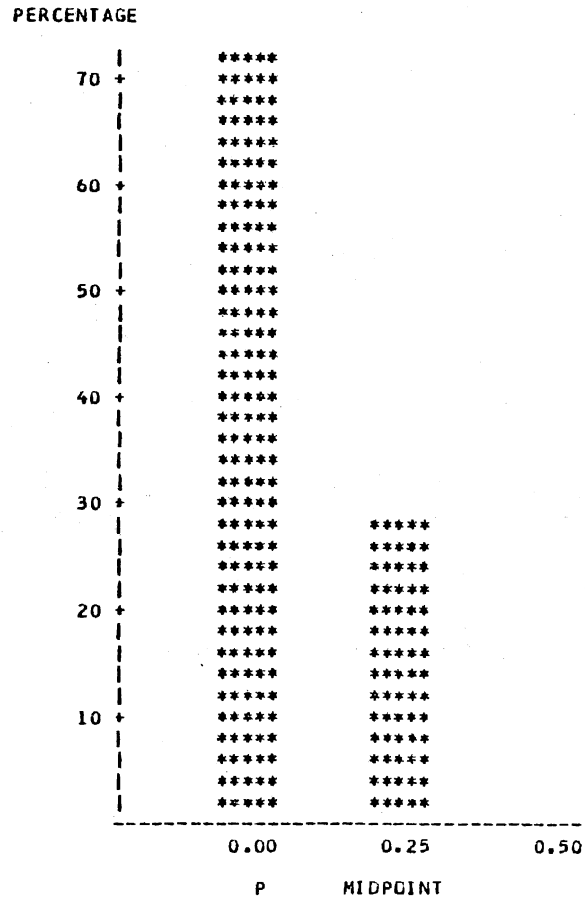


Figure 11. Histogram of Davidson-Weil Depreciation 'P' Values for Retail Companies

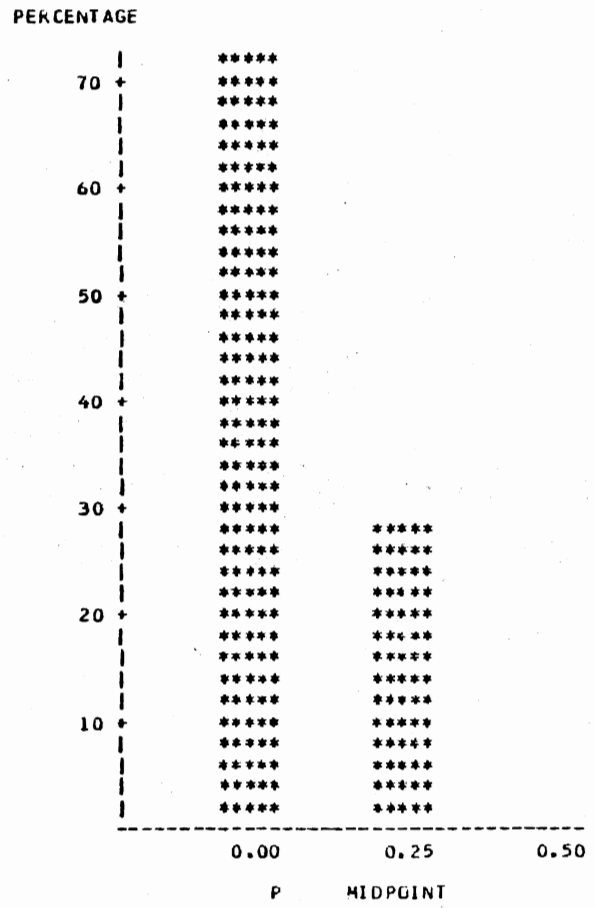


Figure 12. Histogram of Parker Depreciation 'P' Values for Retail Companies

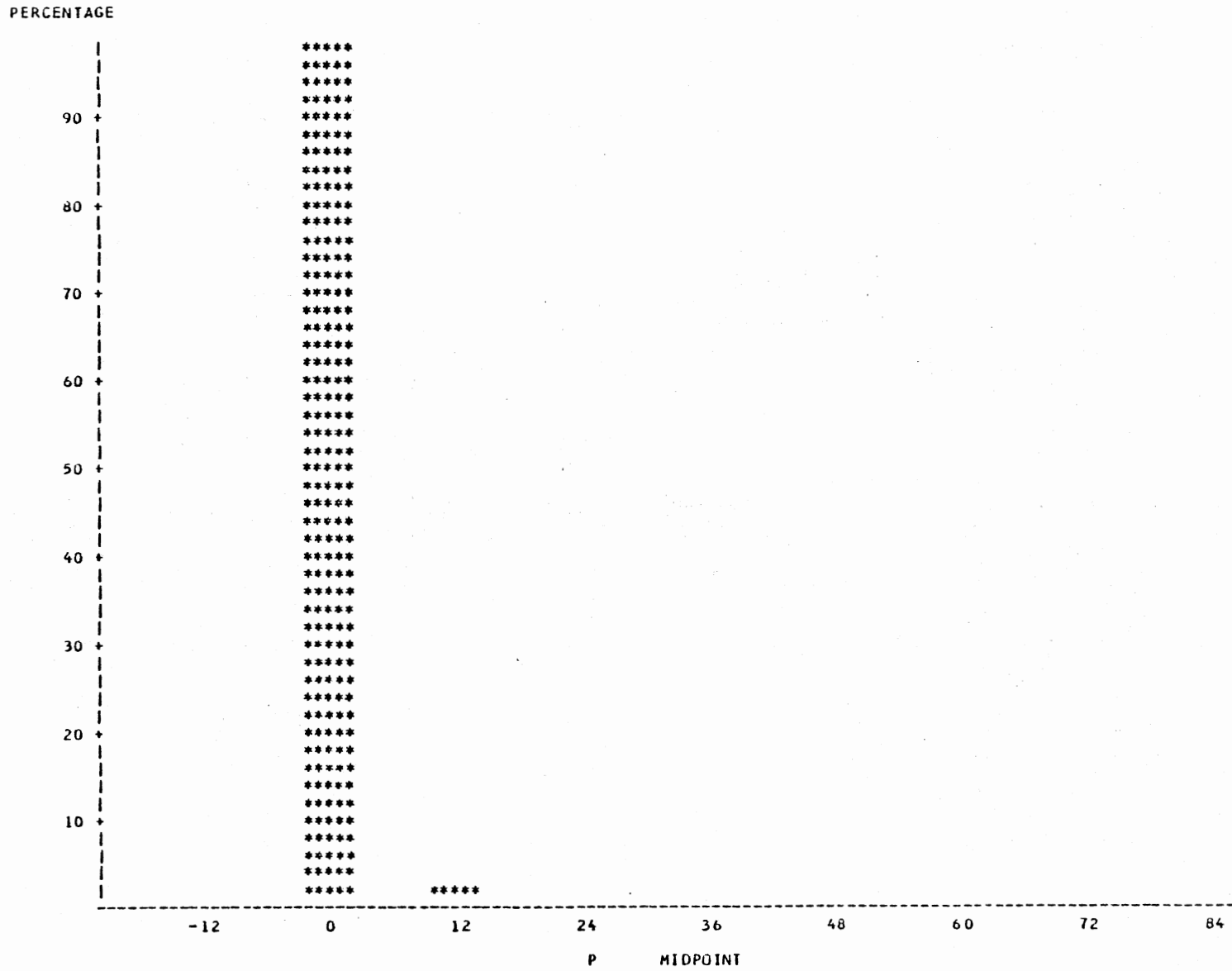


Figure 13. Histogram of Purchasing Power Gain/Loss 'P' Values for Industrial Companies

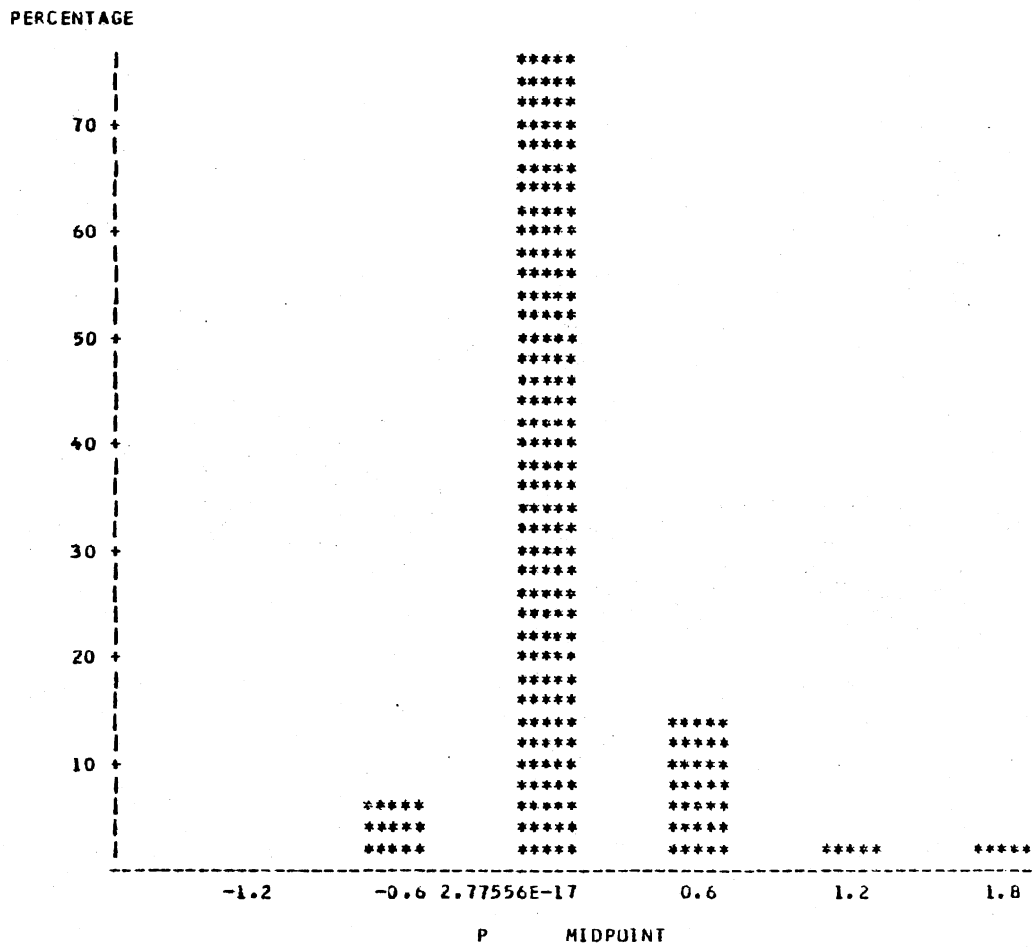


Figure 14. Histogram of Purchasing Power Gain/Loss 'p' Values for Banking Companies

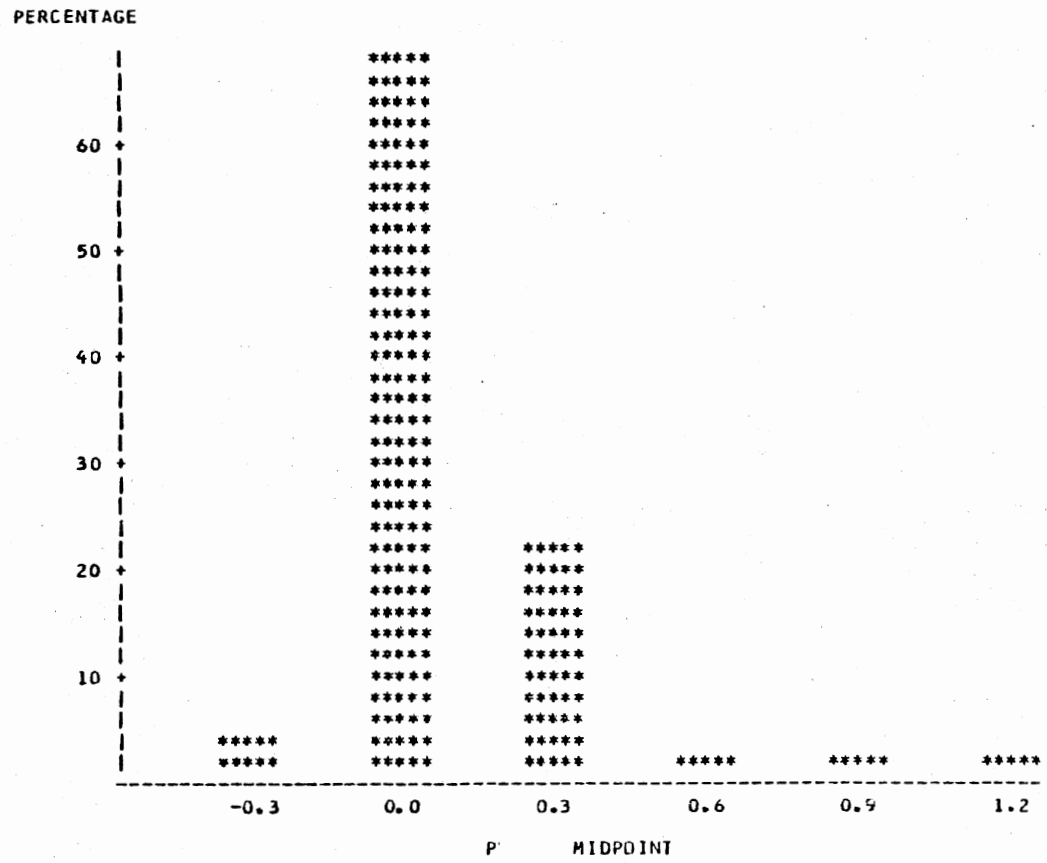


Figure 15. Histogram of Purchasing Power Gain/Loss 'P' Values for Utility Companies

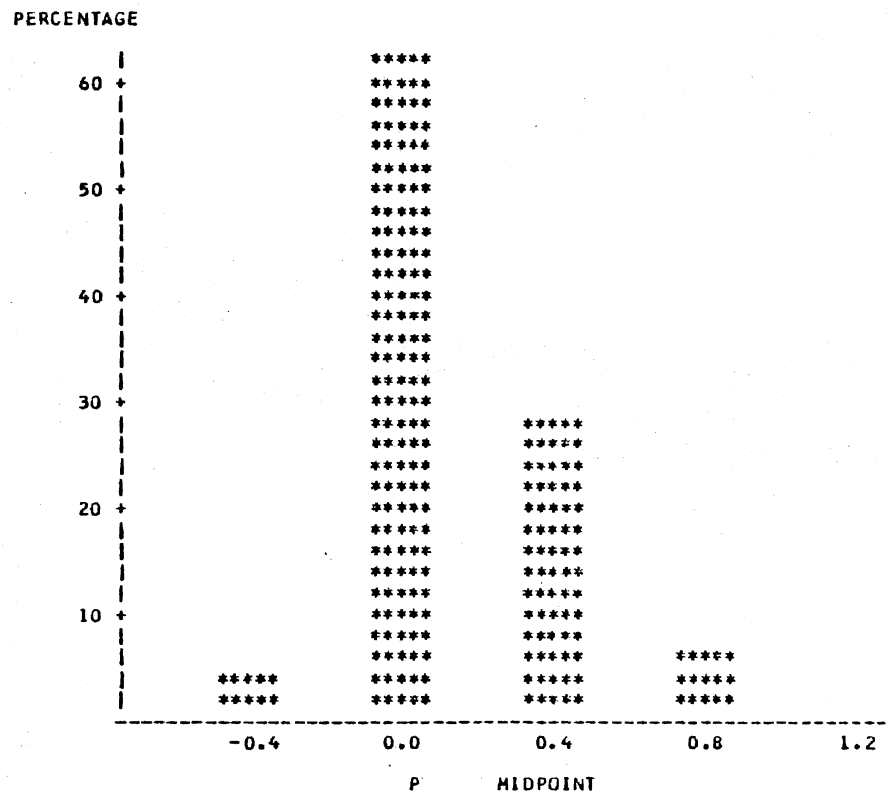


Figure 16. Histogram of Purchasing Power Gain/Loss 'P' Values for Transportation Companies

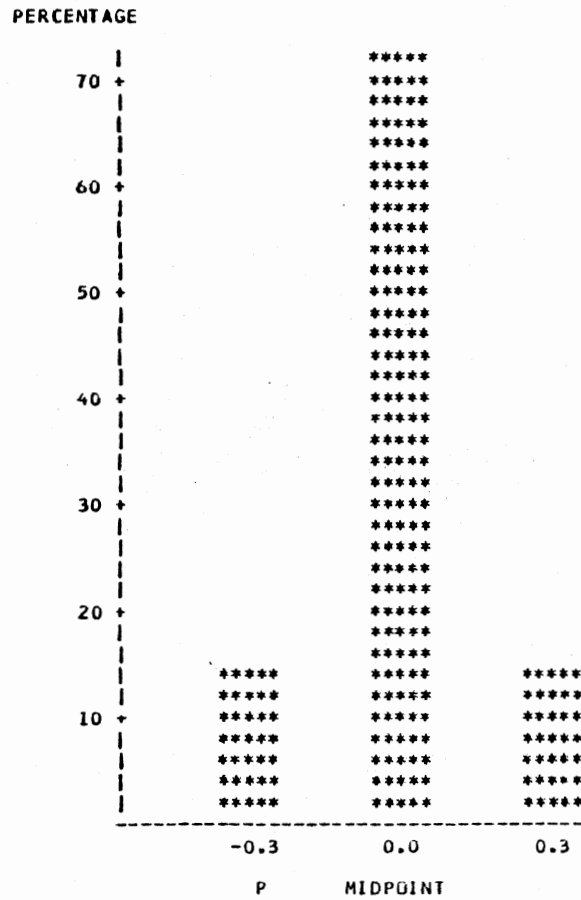


Figure 17. Histogram of Purchasing Power Gain/Loss 'P' Values for Retail Companies



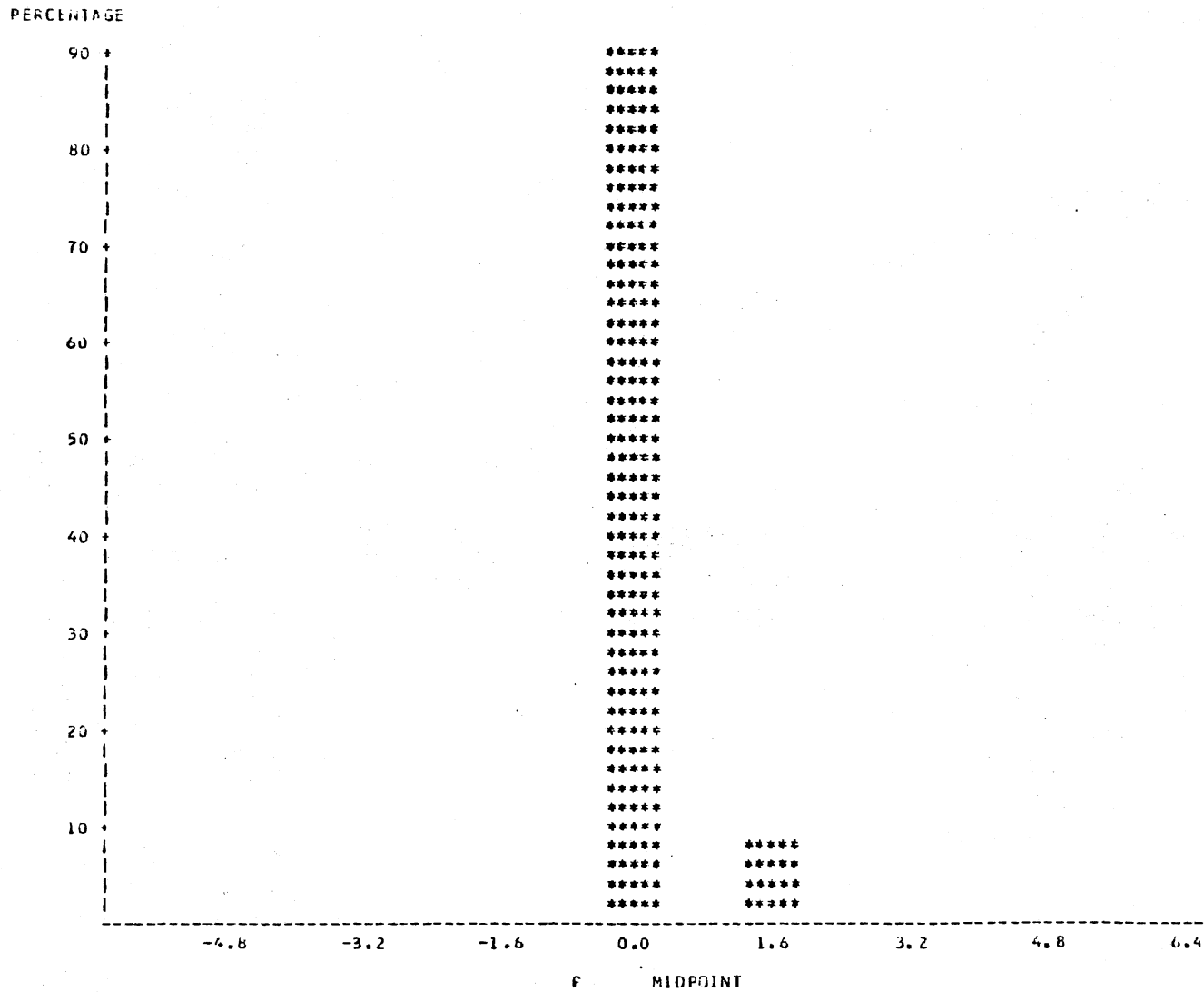


Figure 18: Histogram of Purchasing Power Gain/Loss 'P' Values for Industrial Companies (Excludes Companies With Actual Gain/Loss Less Than \$10 Million)

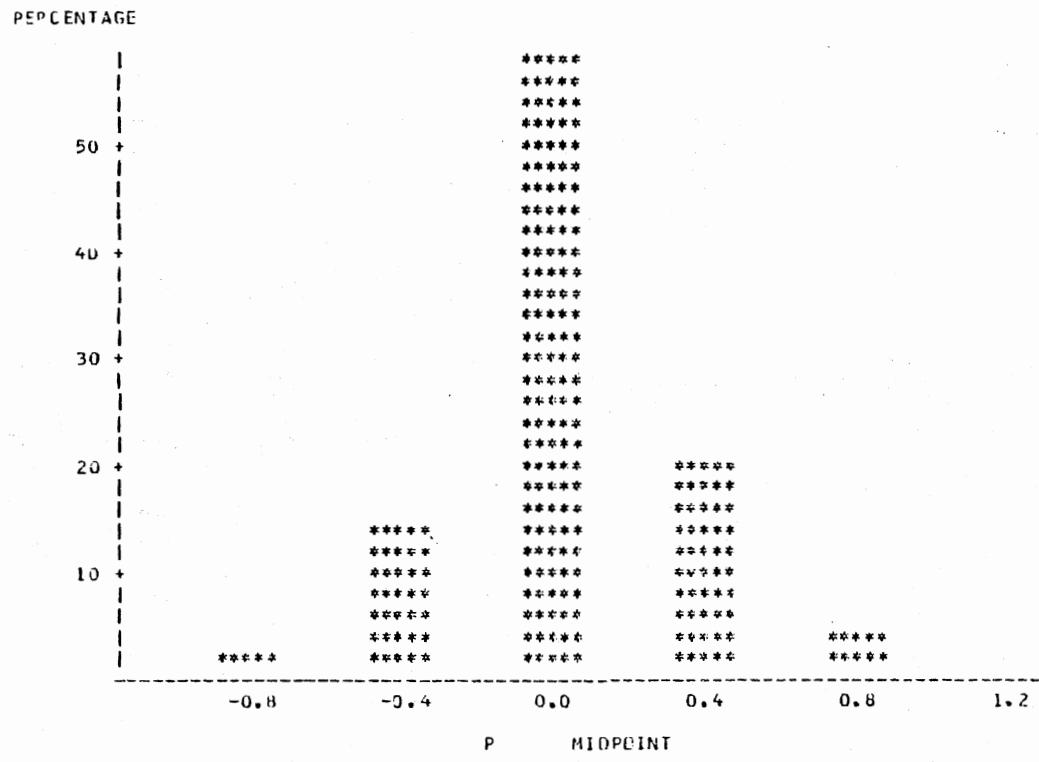


Figure 19. Histogram of Purchasing Power Gain/Loss 'P' Values for Banking Companies (Excludes Companies With Actual Gain/Loss Than \$10 Million)

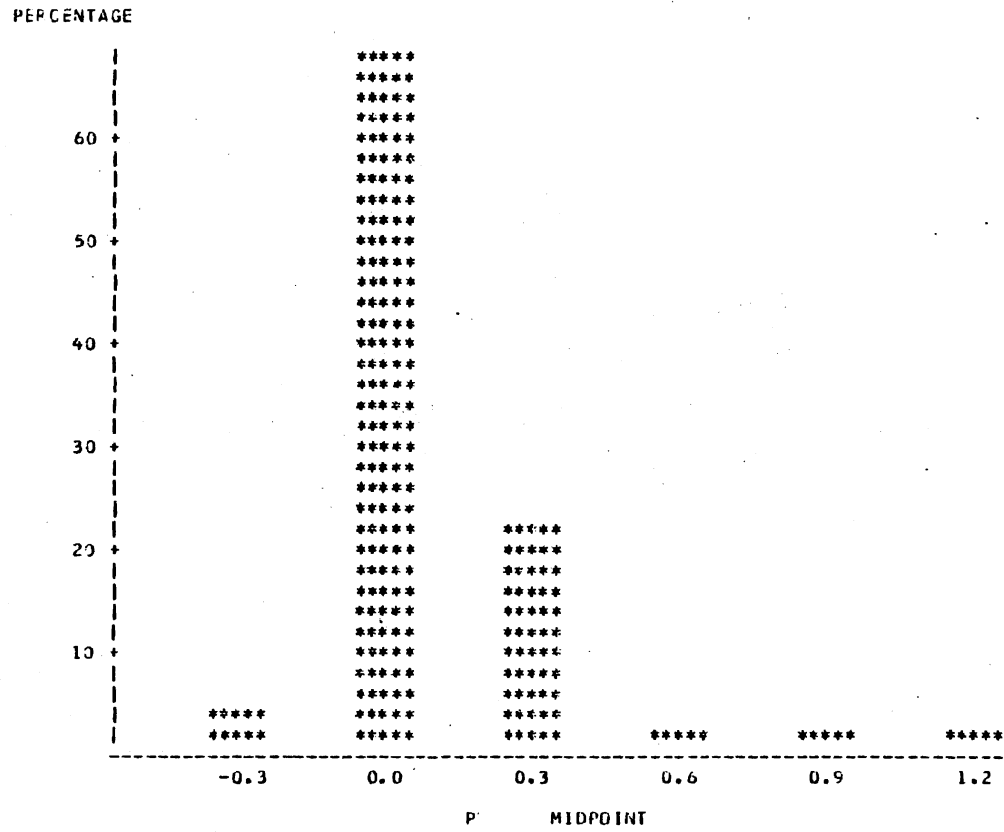


Figure 20. Histogram of Purchasing Power Gain/Loss 'P' Values for Utility Companies (Excludes Companies With Actual Gain/Loss Less Than \$10 Million)

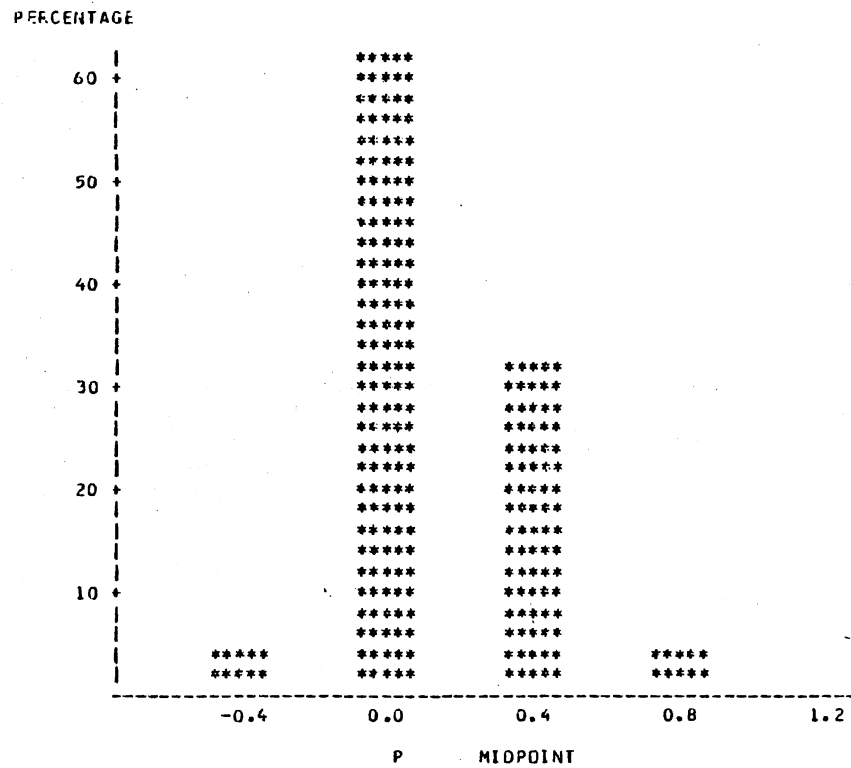


Figure 21. Histogram of Purchasing Power Gain/Loss 'P' Values for Transportation Companies (Excludes Companies With Actual Gain/Loss Less Than \$10 Million)

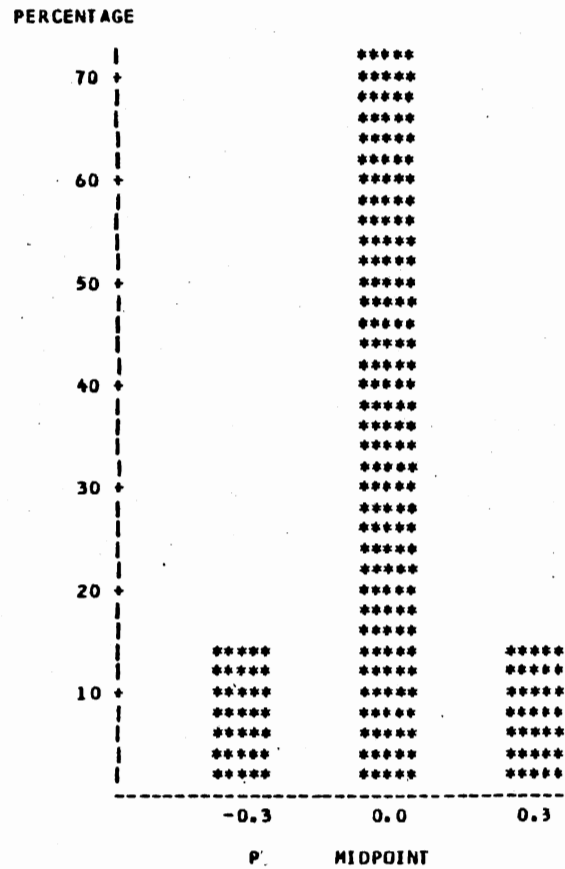


Figure 22. Histogram of Purchasing Power Gain/Loss 'P' Values for Retail Companies (Excludes Companies With Actual Gain/Loss Less Than \$10 Million)

APPENDIX F  
QUESTIONNAIRE

Oklahoma State University  
 College of Business Administration  
 Stillwater, Oklahoma 74074  
 April 21, 1980

Dear Sir:

In conjunction with research which I am conducting to complete my degree at Oklahoma State University, it would be most helpful if you would answer the following question:

<p>Did your company apply an <u>established formal estimation model</u>*          to develop the <u>historical cost/constant dollar disclosures</u>          presented pursuant to <u>Statement of Financial Accounting</u>  <u>Standards No. 33 reporting requirements?</u> (Please check.)</p>	
_____ Yes	_____ No
<p>If <u>yes</u>, was it the:</p>	
<p>_____ Davidson-Weil Model</p>	
<p>_____ Parker Model</p>	
<p>_____ Petersen Model</p>	
<p>_____ Other Model - Please specify _____</p>	
<p>_____</p>	

\* A formal estimation model should not be construed to mean:

- the use of general estimates regarding the age of fixed assets or the composition of inventory
- an estimation model or technique developed by your company
- an approach similar to that set forth in Appendix E to FASB Statement No. 33.

Thank you very much for your cooperation. Your reply will be strictly confidential. A stamped, self-addressed envelope is included for your convenience.

Sincerely,

Larry M. Walther

2  
VITA

Larry M. Walther

Candidate for the Degree of

Doctor of Philosophy

Thesis: AN EMPIRICAL INVESTIGATION OF THE VALIDITY OF HISTORICAL  
COST/CONSTANT DOLLAR DATA ESTIMATION MODELS

Major Field: Business Administration

Biographical:

Personal Data: Born in Fort Worth, Texas, April 15, 1956, the  
son of Mr. and Mrs. Raymond F. Walther.

Education: Graduated from Sam Houston High School, Arlington,  
Texas, in May, 1974; received Bachelor of Business Admin-  
istration from University of Texas at Arlington, Arlington,  
Texas, in 1976; received Master of Professional Accounting  
from University of Texas at Arlington, Arlington, Texas,  
in 1977; completed requirements for the Doctor of Philosophy  
degree at Oklahoma State University in December, 1980.

Professional Experience: Accountant, Arthur Young & Company,  
1977-78; part-time instructor, Department of Accounting,  
Oklahoma State University, 1978-80.

Professional Activities: Certified Public Accountant, Texas,  
1978; member American Institute of Certified Public  
Accountants; member of the American Accounting Association;  
member of Beta Alpha Psi; member of Beta Gamma Sigma;  
member of Alpha Chi.