Rtd TO G Sells 4/92

unexpurgated

SIGNIFICANT EVENTS IN THE HISTORY OF GENERAL SHALE
YEARS 1976 - 1984
BY E. B. TOLLIVER

Year 1976

The year 1976 was entered into with optimism. A marked rebound from the depressed business conditions of 1974 had taken place and 1975 had ended on a strong note. The near term future would indeed justify optimism. An upturn in the construction economy was in its early stages and the company was destined for three full years of rising sales and profits before the dark shadow of recession would be seen again in mid-1979.

The biggest problem facing the company was an assured supply of fuel for its kilns at prices which were affordable. The groundwork for solving this problem had already been laid in the research and development of coal firing for existing tunnel kilns. One kiln at Johnson City had been converted to coal and was operating successfully. Coal firing installations were in progress for the second kiln at Johnson City, two kilns at Knoxville and plant #15 at Kingsport. A clear pattern of action had emerged. Natural gas would be used where available at a reasonable cost and conversions to coal would take place as rapidly as funds and improving technology suggested. Priority would be assigned to those locations with a tenuous gas supply.

There were problems in Chattanooga. A militant labor force made it difficult to get and retain competent supervisors. One kiln had been shut down and the plant had operated at a loss for 1975. The local Chattanooga economy was depressed and it appeared that this plant could hang on during the anticipated upturn but would be shut down eventually. And so it came to pass.

Although plant #19 at Knoxville and a Rustique brick operation at Sparta had been shut down for several months, it was decided to keep these plants in a stand-by condition in the expectation that improving business activity might call them back into operation. It was felt that plant #19 could be fired with coal if it went back into production. As it developed, neither of these plants ever operated again and were eventually abandoned.

The two brick plants at Richmond, Virginia which had also been previously shut down, were not considered feasible for future operation and were cannibalized and abandoned. Sale of the land was authorized and the first 14 acres were sold for $1,226,000.

Meanwhile, construction was progressing on the new lightweight aggregate kiln at West Memphis, Arkansas with completion scheduled for the Spring of 1976.

Roy Meade was elected Treasurer in March, 1976 following the resignation of Robert L. Knight.

The Board directed management to make a study detailing plans for future growth and the feasibility of diversification into lines of business less dependent on the building industry. The lines selected for study were coal mining, steel foundry, commercial banking, refractories, lightweight aggregate, sand, and resale merchandise. After discussion of the studies, no further interest was expressed in commercial banking, steel foundries or refractories. It was felt that further studies should be made regarding possible entry into coal mining or expansion of lightweight aggregate, sand and resale of purchased merchandise.

In September, 1976, the President announced the closing of a brick distribution yard in Memphis. This yard had originally been established as a market probe and was no longer needed for that purpose. It was felt that a new brick manufacturing facility near Memphis was not currently feasible and that sales volume in the area could be maintained through existing distributor outlets.

Hay Associates were employed to study the company compensation program for directors, officers and salaried personnel.

The new lightweight aggregate plant at West Memphis, Arkansas came on stream in April, 1976. By September it was apparent that production capacity was greater than current sales. In order to establish new outlets for this product, barge yards were established in Cincinnati, Ohio, Evansville, Indiana, and St. Louis, Missouri. The two yards in St. Louis turned out to be successful but the Cincinnati and Evansville yards were soon closed.

Expenditures for coal firing conversions were approved as follows: Huntsville, Arkansas - $350,000, anticipated ROI 12.5%; Mooresville, Indiana - $390,000, anticipated ROI 32.0%.

A ninety day option was obtained on Nolichucky Sand Company, near Greeneville, Tennessee at a purchase price of $1,000,000. After thorough investigation, it was decided not to exercise the option.

As a guide to future growth, a management report was prepared entitled "General Shale Alternatives." Upon study and review the Board of Directors ranked the suggested alternatives in the following order of priority.

1. Expand in present fields of endeavor.
2. Diversification in non-related industries.
3. No growth policy but keep plants modern and retire debt.
4. Upstream merger.

Year 1977

The year 1977 was a good one for General Shale. Total sales increased by 19% and earning per share rose by 11%. For the second year in a row, brick shipments exceeded 500 million units.

Robert F. Doss resigned as Director and was replaced by Frances Sells Doss.

William H. Cammack, President of Equitable Securities Corporation in Nashville, Tennessee was elected to the Board to replace Thomas W. Goodloe who was approaching mandatory retirement age.

W. E. Hawkins was elected Senior Vice President and W. H. Hodges was elected Vice President of Manufacturing.

As a guide to future direction, David S. Miller and Associates prepared a report entitled "The Outlook for Brick." This was basically an update of a 1972 study entitled "The Brick Industry" which was prepared by Arthur D. Little, Inc., for the Structural Clay Products Institute (now Brick Institute of America). The main conclusions to this study were as follows:

1. Growth of the Brick Industry in the Northeast is very limited.
2. The most promising areas for growth are in the South and Southwest.
3. Because some areas of the country use virtually no brick, promotion monies should be spent regionally rather than nationally.

Due to early successes in coal firing, the company was approached by a Government Agency, Energy Research and Development Authority (ERDA), in regard to a cooperative effort toward developing a system to burn high ash steam coal (dirty coal) in brick manufacturing. After much work along these lines, ERDA decided it did not have the funding to support a $1,000,000 program at the Mooresville, Indiana plant and the matter was dropped.

An expenditure of $517,000 was approved for coal firing facilities at the Mooresville, Indiana plant.

The lightweight aggregate division did not enjoy the same high demand for its product that was experienced in the brick end of the business. High production costs and limited sales volume led to a pre-tax loss of $265,000--a negative return of roughly 4% on investment of $7,000,000.

An option to purchase a brick manufacturing plant at Hazelton, Pennsylvania was obtained but not exercised, primarily due to a lack of suitable raw material and the depressed business outlook in the Northeast. Within a short time, the Hazleton facility was purchased by a competitor, Webster Brick Company. The venture proved to be a disaster and the plant was closed.

A management directed study, the Miller-Drucker Report on the Concrete Block and Lightweight Aggregate Industries, painted a rather dark picture of the future potential for these industries. Steel studs were identified as making deep inroads into a traditional block market--exterior back-up material and interior partitions in commercial buildings. In addition, rapidly escalating energy costs coupled with the high energy content of lightweight aggregate would make lightweight aggregate less competitive in the remaining market for concrete block aggregates.

The Simkin brothers, Abie and Saul, acquired effective control of Glen-Gery Corporation, Reading, Pennsylvania and wanted to merge Glen-Gery into General Shale. The General Shale Board of Directors expressed some interest in buying the Simkin shares and tendering for the remaining Glen-Gery stock. The Simkins were not interested in this approach and the matter was dropped.

Plant #19 at Knoxville, Tennessee was abandoned and $750,000 was written off against 1977 earnings.

Some interest was expressed in the possible acquisition of a four tunnel kiln facility which Medusa Corporation had acquired from Marion Brick Company. Nothing ever came of this and an English firm, Ibstock-Johnson, eventually acquired both Marion Brick Company and Glen-Gery Corporation.

Year 1978

The best year ever for General Shale was 1978. Brick sales reached an all time high of 559 million and the record earnings of $2.42 per share represented a 66% gain from buoyant 1977.

It became apparent that the old Kingsport periodic kiln plant #1 could not long survive once the heyday of 1978 was passed. Although plant #1 would turn in a gross profit contribution exceeding $700,000 for 1978, the Board voted a $6,000,000 expenditure for a new coal fired tunnel kiln at Kingsport.

The block plant at Cohutta, Georgia, acquired in 1972, was never really successful and was sold to C&S Block Company of Dalton, Georgia.

W. E. Hawkins was elected to the Board of Directors.

John C. Bolinger, Jr. was elected to the Board of Directors to fill the vacancy created by the death of W. E. Newell.

C. C. Hyatt, Jr. resigned as Chairman of the Board and was elected Chairman Emeritus. George C. Sells was elected Chairman and Chief Executive Officer. Roy H. Meade was elected President and Treasurer. W. E. Hawkins was elected Executive Vice-President.

The possible acquisition of Continental Clay Products, Martinsville, West Virginia was discussed but never materialized.

The capital stock of Chattahoochee Brick Company in Atlanta, Georgia was acquired for $7,500,000 plus the assumption of a $5,000,000 outstanding bank loan. This loan, with the First National Bank of Atlanta, carried an interest rate of prime plus 2% but was renegotiated at prime plus 1/2%. Financing for the $7,500,000 needed to acquire the stock was arranged with Massachusetts Mutual Insurance Company.

The Board authorized management to investigate the feasibility of building a brick manufacturing facility in the growth area of Middle Tennessee-Southern Kentucky. This project was put on the back burner after it was decided to acquire Chattahoochee Brick Company and build the new coal-fired plant at Kingsport.

Another project that got sidetracked for the same reasons was a $740,000 extension to the kiln at Huntsville, Alabama which was calculated to increase production by 6,950,000 brick per year and provide a 19.8% return on average investment. This project got underway again and was completed in 1984.

A $475,000 expenditure was approved for conversion of the Glasgow, Virginia plant to coal firing with an anticipated return of 7.9% on average investment.

Financing for the $6,000,000 coal-fired plant at Kingsport was arranged as follows:

Sullivan County Industrial Revenue Bonds	$1,000,000
Massachusetts Mutual Insurance Company	$4,000,000
Working Capital	$1,000,000

The lightweight aggregate division enjoyed a good year. Pre-tax profits came in at $922,000 compared to a year earlier loss of $265,000.

Year 1979

Although 1979 earnings were the second best in the history of the company, the year was somewhat a disappointment. Earnings per share fell 25% from 1978 and by year end the direction of the construction economy was all too evident. The near term future just didn't look good.

Nevertheless, capital expenditures remained high. Much of this was due to projects begun in 1978 and carried over into 1979. Additionally, the fuel costs at coal-fired plants were so attractive that coal firing expenditures were approved at four plants as follows.

Marion - Plant #6	$1,233,000
Atlanta - Plant #30	$1,502,000
Atlanta - Plant #31	$1,026,000
Louisville - Plant #14	$1,066,000

The Teamsters Union went on strike at Cumberland Mountain Sand Company. Little was it known by either management or union that two full years would elapse before sand mining resumed on Cumberland Mountain.

Gunnar Oleson was hired as Chief Financial Officer. Frank Hutchins replaced H. D. Jeter as General Manager and President of McMinnville Concrete Products and Cumberland Mountain Sand Company.

Upon completion of the new coal-fired plant at Kingsport, the old periodic kiln plant #1 was abandoned with $215,000 written off against 1979 earnings.

A $5,000,000 revolving line of credit was established with the First National Bank in Sullivan County.

Years 1980, 1981, 1982

The Great Volker Depression began in late 1979 and was destined to run its devastating course for at least three full years. This self-induced "cure for inflation" closed the doors forever for thousands of business establishments and brought the wolf to the door of many thousands more. The Brick Industry did not escape. The years 1980, 1981 and 1982 were little short of a nightmare. Only the strong survived.

The financial strength of General Shale stood it in good stead during this time frame. Although operating losses would approximate $11,000,000 before the red ink stayed, cash flow remained strong as emphasis was shifted toward management of the balance sheet. Several factors were contributors to a strong positive cash flow.

1. High depreciation resulting from a high level of capital expenditures in earlier years.
2. Sale of surplus real estate.

3. Tax refunds resulting from high profitability and high federal income tax in earlier years.
4. Five year deferral of principal payments on $5,000,000 note assumed and renegotiated at purchase of Chattahoochee Brick Company.
5. Excellent condition of plant and equipment at beginning of period requiring minimum replacements during period.

Significant happenings during 1980 were as follows.

1. Authorized shares of common stock increased from 3,000,000 to 6,000,000.
2. C. C. Hyatt, Jr. retired as Director.
3. Joe Edwards and Gunnar Oleson elected Vice-Presidents.
4. Sale authorized for 213 acres along Barrett Road in Atlanta to Atlanta Economic Development Corporation for $2,250,000.
5. Repurchase of up to 200,000 shares of the companys common stock authorized.

Happenings of significance during 1981 are detailed below.

1. End of two year strike at Cumberland Mountain Sand Company.
2. Chattanooga plant abandoned.
3. Roy Meade resigned as Treasurer--Gunnar Oleson elected Treasurer.
4. ~~Roy Meade resigned as President.~~ President Roy made Retired [illegible]
5. Rebound From the [illegible] Depression in [illegible]

The significant happenings during 1982 were as follows.

1. W. E. Hawkins elected President.
2. John Stone retired--W. L. DeBoard elected Vice-President of Personnel.
3. Gunnar Oleson resigned as Vice-President and Treasurer.
4. James L. Perkins elected Vice-President and Treasurer.
5. Walter Banyas elected Vice-President.
6. Richlands, Virginia plant abandoned.

Year 1983

~~The rebound from the Volker Depression began in 1983.~~ 1982 Earnings returned to a healthy level but failed to rebound to the hefty levels of 1978 and 1979.

James L. Perkins was elected to the Board of Directors following the retirement of Charles M. Gore. Phillip E. Garland was elected Vice-President. H. E. Hainey was elected Controller.

W. E. Hawkins was elected President of McMinnville Concrete Products and Cumberland Mountain Sand Company to replace Frank Hutchins who was transferred to Johnson City as Assistant Sales Manager.

An offer of $2,700,000 was made for the fixed assets of Continental Clay Products, Martinsburg, West Virginia which was operating under Chapter 11 bankruptcy. It was estimated that an additional $4,000,000 would be required for coal firing and other improvements. A counteroffer of $4,500,000 was promptly rejected by the company. Continental Clay was later acquired by a four way consortium at a reported price of about $6,000,000 for 90% of equity.

Capital expenditures of $1,200,000 were approved for automation and kiln modifications at Huntsville, Alabama. Return on investment was estimated at 11.8%.

An automatic mechanical unloader was approved for installation at the Knoxville plant at an estimated cost of $525,000.

Year 1984

Earnings continued to improve in 1984 and the year became the third best in company history--exceeded only by 1978 and 1979.

This year marked the first time that all tunnel kilns operated with coal as the primary fuel. Even as this occurred, one kiln was being converted back to natural gas in order to produce a line of Buffs and Grays for the architectural market. Plant #15 at Kingsport will be fired alternately with coal and natural gas until volume of Buffs and Grays is large enough to run this plant at capacity on these units alone.

The importance of coal firing is quite apparent when it is realized that coal vs. gas fuel savings approximated half of 1984 earnings.

The Board discussed the feasibility of forming a separate corporation to manage company real estate and engage in real estate development.

Although the future of the Concrete Block Industry is clouded by the increasing use of steel studs in commercial building, the Board authorized $577,000 in capital improvements for the Kingsport block plant.

It was voted to merge Chattahoochee Brick Company into General Shale at the close of business on December 31, 1984.

Management was authorized to spend up to $50,000 for a 90 day option to investigate the acquisition of the Somerset, Virginia plant of Webster Brick Company. Total cost of acquisition and modifications would be $7,000,000 to $8,000,000 with an annual production capacity of 86 million brick. After thorough investigation of plant facilities, raw materials and market potential, it was decided in early 1985 not to proceed with this acquisition.

List Of Companies Involved In The History Of General Shale

1. Kingsport Brick Corporation, Kingsport, Tennessee
2. Johnson City Shale Brick Corporation, Johnson City, Tennessee
3. Cherokee Brick Company, Knoxville, Tennessee
4. Oliver Springs Brick Company, Oliver Springs, Tennessee
5. Richlands Brick Corporation, Richlands, Virginia
6. Bristol Brick Corporation, Bristol, Virginia
7. Jellico Brick and Coal Company, Jellico, Tennessee

8. Knoxville Brick Company, Knoxville, Tennessee

9. Key-James Brick Company, Chattanooga, Tennessee

10. Appalachian Shale Products Company, Marion, Virginia

11. Elizabethton Cinder Block Company, Elizabethton, Tennessee

12. Coral Ridge Brick & Tile Company, Louisville, Kentucky

13. Southside Brick Works, Richmond, Virginia

14. Daniels Brick Company, Richmond, Virginia

15. Richmond Clay Products Company, Richmond, Virginia

16. Huntsville Brick and Tile Company, Huntsville, Alabama

17. Standard Brick and Tile Company, Evansville, Indiana

18. California Clay Products Company, Stockton, California

19. McMinnville Concrete Products Comapny, McMinnville, Tennessee

20. Smithville Concrete Company, Smithville, Tennessee

21. Sparta Concrete Company, Sparta, Tennessee

22. Cumberland Mountain Sand Company, Hillsboro, Tennessee

23. Locher Brick Company, Glasgow, Virginia

24. Maples Block Company, Cohutta, Georgia

25. Arkansas Lightweight Aggregate Company, West Memphis, Arkansas

26. Chattahoochee Brick Company, Atlanta, Georgia

A BRIEF 30 YEAR FINANCIAL HISTORY

General Shale was fifty years old in 1978. The financial records of the first twenty-five years are pretty obscure and largely meaningless today. It seems appropriate however, with many years extant materials available, that a review of financial performance should be included in the history of the company.

The past thirty years have been selected for this review. These have been years of relative calm and stability--no world wars or great depressions such as haunted the earlier years. Although considerably smaller thirty years ago, the company began this period in good financial health and has remained healthy throughout. Always conservatively managed, the debt load has remained small and generally in the 25% to 30% range as related to equity. These thirty years, largely free of extraneous influences, are therefore ideally suited for the purpose selected.

Attention should be directed toward two major factors that have impacted performance--one doubtless continuing, the other perhaps temporary. The continuing factor is the relentless effect of ever present inflation. The temporary one is the devastating effect of the Volker prescription for curbing the first. More about these later.

The bottom line of business performance is earnings. The chart in Figure #1 shows earnings performance and seeks to interpret this performance in the light of both inflation and its antidote. A five year moving average is used to smooth out normal oscillations in the business cycle with earnings plotted on an index basis in both current and constant collars. The consumer price index is also plotted.

INDEX OF CURRENT AND CONSTANT EARNINGS

FIVE YEAR MOVING AVERAGE

1952 - 1956 = 100

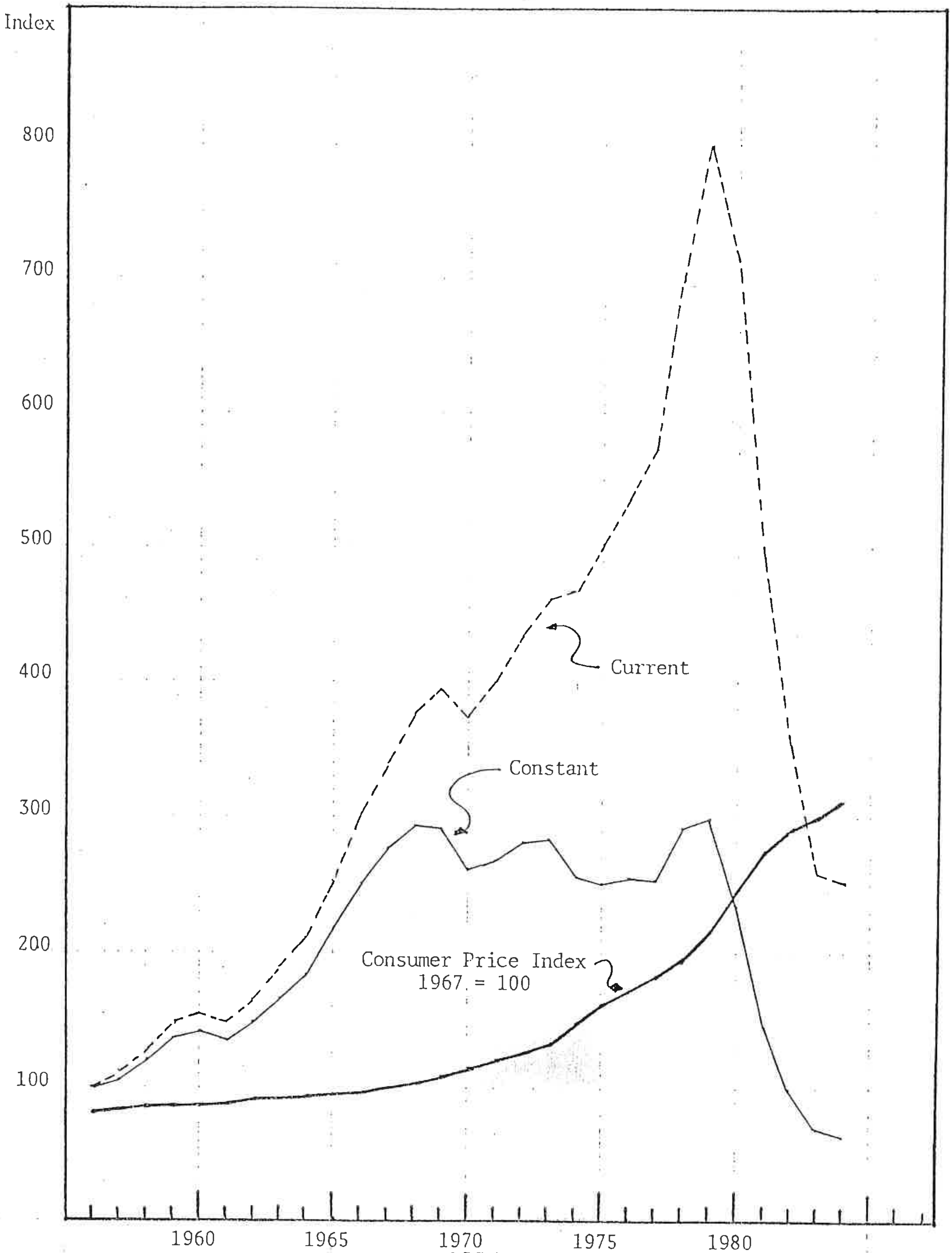


FIGURE 1

Observation #1 - The line showing earnings in current dollars indicates a strong and almost uninterrupted pattern through 1979. Beyond this, the Volker devastation is clearly seen.

Observation #2 - At first glance, the consumer price index appears to be a steady and gently upward sloping curve. A closer look reveals a steady and gentle curve through the first half of the period and a distinctly sharper increase in the latter half.

Observation #3 - The trumpet has sounded loud and long to herald victory in the war against inflation. Note, however, that only mild arrest in the rate of inflation has occurred and that the upward march continues.

Observation #4 - During the first half of the period, with inflation growing at a moderate rate, earnings in constant dollars are seen to be almost parallel with those in current dollars.

Observation #5 - During the second half of the period, with rapidly escalating inflation, earnings in current dollars continued their rapid climb while deflated earnings were hard pressed to retain the status quo.

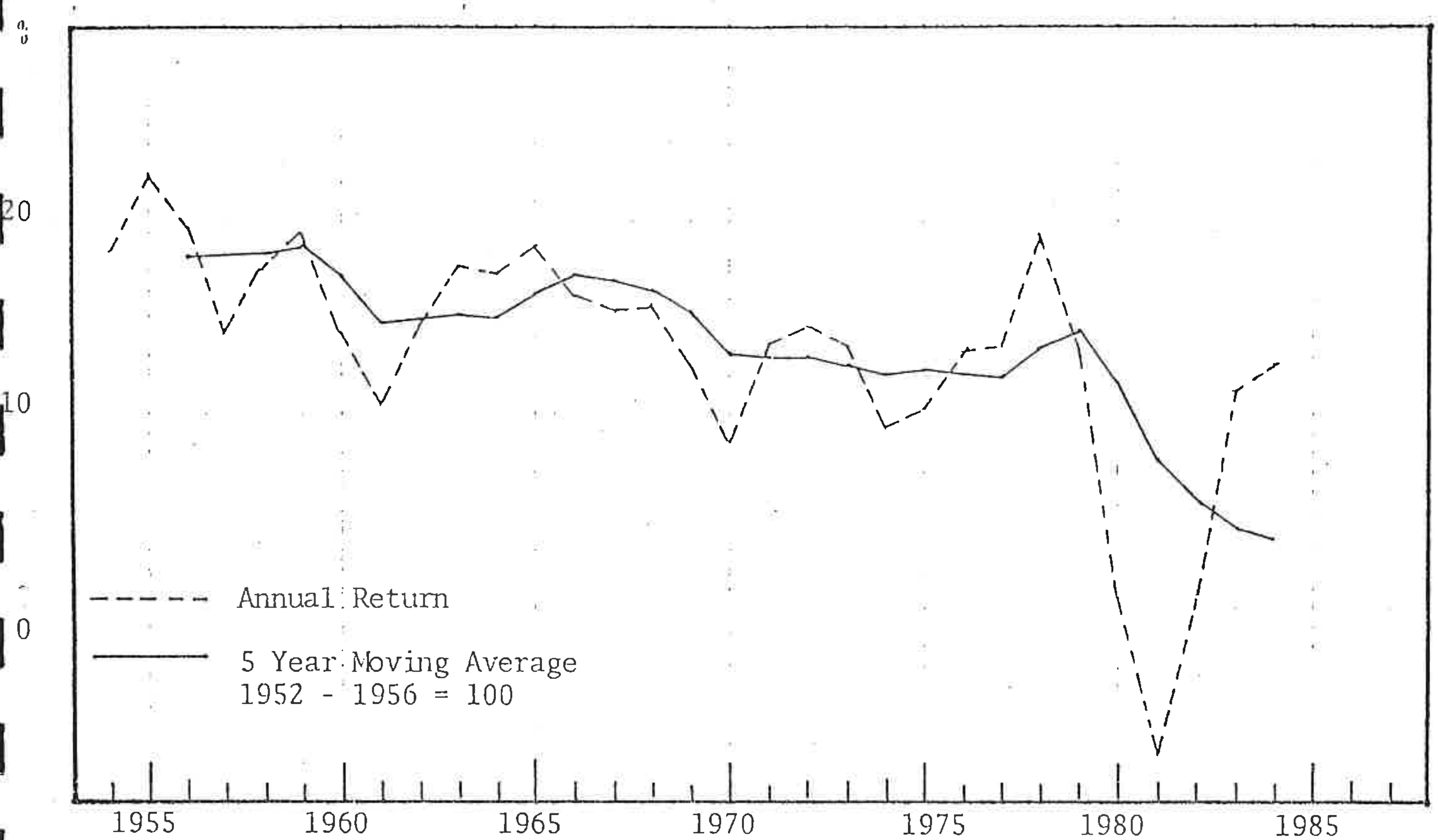
Observation #6 - The implications of even moderately high inflation are little realized but clearly evident in the lines of this chart. Behold the real life drama of the race between the hare and the tortoise. The speed of the hare is represented by the jack rabbit pace of current earnings; the slow but steady progress of the tortoise in the gentle pace of inflation as measured by the consumer price index. The scene at the finish line is represented by the earnings line in constant dollars. In real life, as in the fable, the tortoise wins.

And so the gremlin of inflation is shown to be a monster indeed. Here we see good, or shall we say excellent, earnings performance scaled down to mediocre by the relentless march of the gremlin.

Observation #7 - The Volker overdose has reduced the rate of inflation somewhat and, if lasting, will be beneficial in coming years. But at what price? Pre-tax operating losses for years 1980, 1981 and 1982 were $11,000,000. This is not all. We must add what might have been earned under a more normal economic scenario. If we take our reference point at the immediately preceding years, 1977, 1978 and 1979, we find operating earnings of $26,500,000 and the total price swells to $37,500,000. With an effective tax rate averaging 40%, the net billing from Mr. Volker to General Shale comes to $22,500,000. This comes into vivid perspective when it is realized that total equity at the end of 1984 was hardly twice this amount.

Observation #8 - A five year moving average was used to smooth out the fluctuations in the business cycle. This was hardly sufficient when the Volker recession ran for upwards of three years. The years 1983 and 1984 can be considered normal but it will take three more normal years, through 1987, before this chart will again reflect a meaningful trend. Indeed, with the high federal deficit and its probable effect on mortgage interest rates, one wonders if normalcy has not become a continuing series of abnormal events.

RETURN ON STOCKHOLDERS EQUITY



RETURN ON TOTAL ASSETS

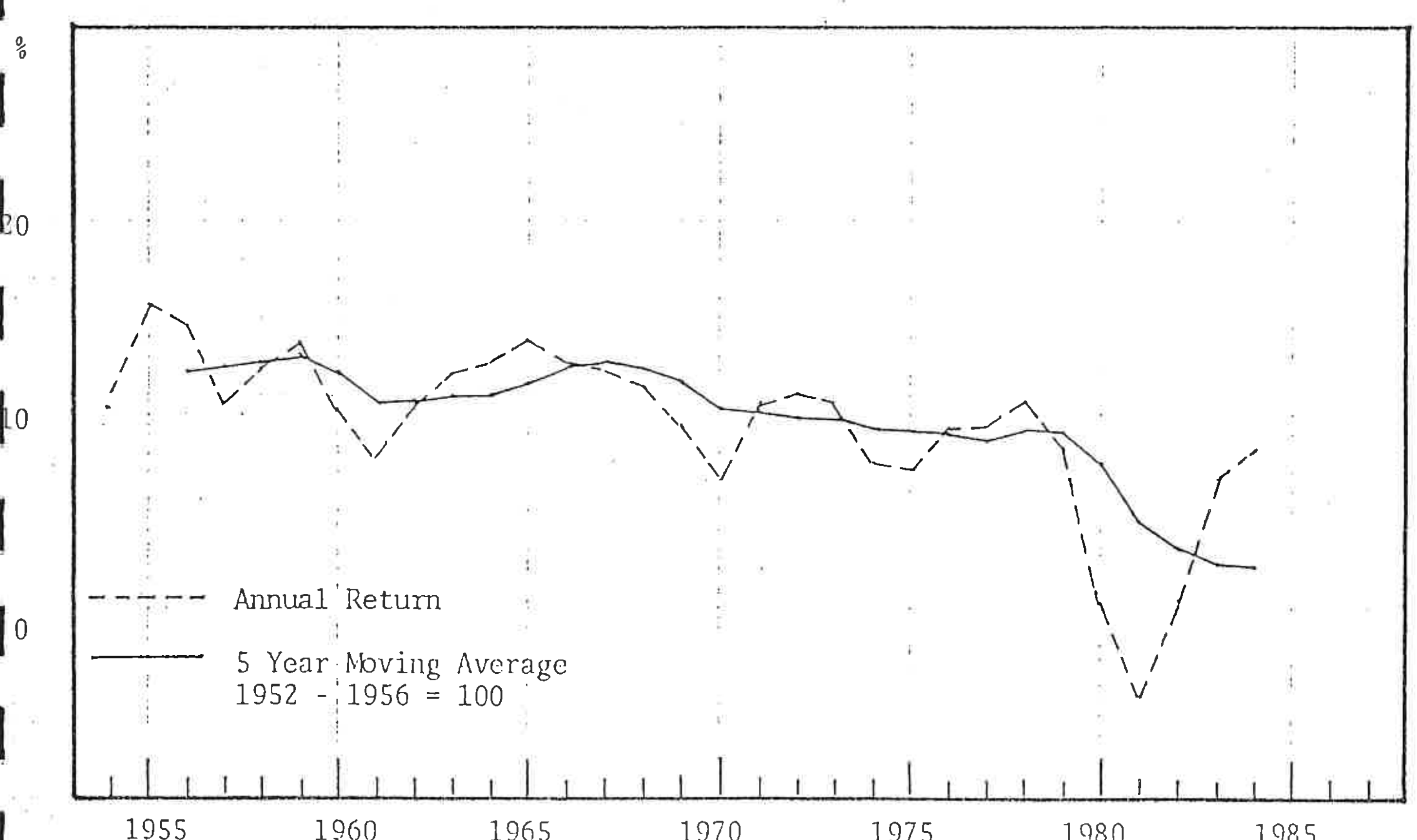


FIGURE 2

Figure #2

Earnings alone are not a good barometer of corporate performance. The two charts in Figure #2 relate earnings to both stockholders equity and total assets. The percentage return on these two items is a much better gauge of performance than dollar earnings alone.

Observation #1 - The two charts are almost identical. This is because the debt-equity ratio has remained in a very narrow range over the entire period. The return on stockholders equity is consistently higher, of course, simply because total assets includes equity plus all other liabilities shown on the balance sheet.

Observation #2 - The overall trend in either case is gently downhill prior to the Volker factor and then sharply downhill. The smoothing effect of the five year moving average is seen in the solid line as compared to the broken line of year by year returns.

Observation #3 - These two charts reflect a good return in early years, gradually worsening as time moves on and plunging dismally at the end. Taken alone, they are misleading. The chart is Figure #1, together with its commentary, must be used to explain and interpret Figure #2. Both inflation and its attempted cure must be reckoned with in an analysis of these charts. Given the size of these twin calamities, the wonder is that returns have remained so high. Few companies in construction related industries have done as well.

Overall Observation - Figures #1 & #2

While it is useless to speculate about what might have been, one wonders where the company might have been today if the rapid inflation of the 1970's and the Volker fix of the 1980's had not yet occurred. Given the pace of current earnings throughout the 1970's, can it not be reasoned that constant earnings would have continued to march alongside as they did for so many earlier years? And would not the near-level pace of returns on both equity and assets continued in the same near-level direction?

> "The race is not to the swift, nor the battle
> to the strong...but time and chance happeneth
> to them all." Ecclesiates 9:11

April, 1985 E. B. Tolliver