

# U. of C. Study Puts Common Stocks in Illustrious Class

## Average Return on 1,700 Issues Looks Good

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 (Financial Editor)

Common stocks listed on the New York Stock exchange, on average, from 1926 thru 1960, provided investors with a higher rate of return than did other major types of investment.

This was one conclusion drawn by University of Chicago economists who yesterday released the first results of a monumental study that so far has consumed three and a half years and more than \$200,000. The work was performed at the university's graduate school of business with the investment firm of Merrill Lynch, Pierce, Fenner & Beane, Inc., supplying most of the supporting funds.

The study makes common stocks look so good that those responsible for it are as concerned with telling what the research did not show as they are with its positive findings.

### No Pattern Evidenced

For example, it does not indicate that any limited group of stocks generates a larger return than other investments. It provides, so far, no evidence that the record of the past is the pattern of the future. But it does tell a great deal about average return for common stocks of about 1,700 companies from 1926 thru 1960, and for 21 arbitrarily selected shorter periods within that span.

The study was described to newsmen by the team primarily responsible for it — James H. Lorie, professor of business administration and director of what the school now calls its Center for Research in Security Prices, and Lawrence Fisher, associate professor of finance and assistant director of the center.

Rate of return reflects changes in market price, cash dividends, stock dividends, and anything else that might add to or subtract from the value of one's original investment in a stock.

### Findings included these:

The average annual rate of return on common stocks bought in 1926 and held thru 1960 was 9.01 per cent. [In the last three years it has been about 10.5 per cent, Lorie estimated.]

### Highest Rate in 1932-40

Of the periods covered, the highest annual rate of return occurred from June, 1932, thru December, 1940, when it was 20.99 per cent.

The lowest annual rate of return was from September, 1929, thru June, 1932, when it dropped to the negative figure of minus 48.73 per cent.

In 12 of the 22 periods for which computations were made within the 35-year span, the annual rate of return was more than 10 per cent.

In six of the 22 periods, the annual rate of return was between 2 and 10 per cent.

In four periods, the rate dropped to a negative figure—1926-32, minus 16.76 per cent; 1929-32, minus 48.73 per cent; 1929-40, minus 3.04 per cent; and 1955-57, minus 4.19 per cent.

### Assume Reinvestment

These percentages assume reinvestment of dividends. The report also shows returns in each period assuming conversion of the stock to cash at the end of the period. In most cases such conversion lowered the return by a few hundredths of a percentage point.

These percentages also assume payment of no taxes on the return, but the study included similar computations for investors in the \$10,000 taxable income bracket and the \$50,000 taxable income bracket — and the returns remained astonishingly high. For the total period, 1926-60, the 9.03 per cent average annual return with payment of no taxes was reduced only to 8.44 per cent for an investor in the \$10,000 taxable income bracket and 7.42 per cent in the \$50,000 tax bracket.

Lorie himself considered the findings on stock purchased in high-flying 1929 and held thru the subsequent crash and depression and on thru 1960 to be the most remarkable of the study.

### 7.64% Average Annually

On a no-tax basis the average annual return for all common stocks on the New York Stock exchange in this period was 7.64 per cent. For the man with \$10,000 of taxable income it was 7.05 per cent, and for the fortunate in the \$50,000 bracket it was 5.97 per cent. These figures assumed reinvestment of dividends but were not much reduced in the com-

## Summarizes Some of Findings

The following table summarizes a portion of the findings of a study of common stocks listed on the New York Stock exchange. The study was conducted by the Center for Research in Security Prices at the University of Chicago's graduate school of business.

**RATES OF RETURN ON INVESTMENT IN COMMON STOCKS LISTED ON THE NEW YORK STOCK EXCHANGE WITH REINVESTMENT OF DIVIDENDS**  
 [Per Cent Per Annum Compounded Annually]

Period	Tax Bracket					
	No Tax		\$10,000		In 1960	
	Portfolio to Portfolio [rate]	Portfolio to Cash* [rate]	Portfolio to Portfolio [rate]	Portfolio to Cash* [rate]	Portfolio to Portfolio [rate]	Portfolio to Cash* [rate]
1926-60	9.03	9.01	8.44	8.20	7.42	6.84
1926-29	20.40	20.28	20.40	20.28	20.35	19.44
1926-32	-16.49	-16.76	-16.49	-16.76	-16.51	-13.37
1926-40	2.29	2.35	2.37	2.38	2.22	2.38
1926-50	6.80	6.77	6.32	6.15	5.53	5.14
1929-32	-48.36	-48.73	-48.36	-48.73	-48.19	-46.65
1929-40	-2.98	-3.04	-3.00	-2.85	-3.00	-2.28
1929-50	4.88	4.84	4.31	4.16	3.52	3.21
1929-60	7.74	7.71	7.05	6.81	5.97	5.39
1932-40	21.11	20.99	21.08	20.68	20.63	19.36
1932-50	18.61	18.56	17.83	17.43	16.48	15.47
1932-60	17.39	17.35	16.52	16.18	14.98	14.12
1950-52	12.50	11.97	11.09	10.00	8.99	7.12
1950-54	17.93	17.65	16.55	15.32	14.36	11.64
1950-56	16.98	16.79	15.78	14.80	13.72	11.43
1950-58	16.50	16.36	15.41	14.55	13.43	11.37
1950-60	14.84	14.72	13.85	13.09	12.01	10.30
1955-56	6.44	5.37	5.67	4.56	3.98	2.80
1955-57	-3.66	-4.19	-4.38	-3.98	-5.99	-4.22
1955-58	13.02	12.62	12.23	11.10	10.48	8.24
1955-59	14.00	13.70	13.26	12.16	11.58	9.23
1955-60	11.20	10.95	10.48	9.62	8.88	7.20

\* "Portfolio-to-Cash" means the net return which would have been realized after paying commissions and taxes (if any) if the portfolio were sold at the end of any period.

putations reflecting costs of selling the portfolio at the end of the period.

The data available on other investment media is all on realized rates of return before taxes, Lorie said. The most complete information is on savings in commercial banks, mutual savings banks, and savings and loan associations.

"Savings in these institutions never earned as much as 6 per cent per annum for any of the 22 periods listed," Lorie asserted. "For most of the period, 1926-1960, [they] earned less than 4 per cent."

### Never Exceeded 5 Pct.

Realized yields on all types of mortgages, in the aggregate, never exceeded 5 per cent, never fell below 4 per cent, and averaged about 5 per cent from 1920 thru 1947, the only years for which mortgage data are available.

Realized yields on state and United States government bonds in the periods covered by the stock study ranged from minus 7 per cent to a plus 7.8 per cent and averaged less than 4 per cent, said Lorie.

All of the data compiled in the course of the study is on magnetic tape which, if unreeled, would stretch for 3½ miles. Lorie and Fisher, whom Lorie credits with most of the work involved in the study, ran into immense unforeseen difficulties.

### These Affect Values

It developed, for example, that there are 39 different kinds of capital adjustments that can affect investment values. There are seven different possible tax treatments for dividends. There are 50 different kinds of security, said Lorie, which may be described as common stock.

The university will sell copies of its tapes to other educational institutions, Lorie said. It also will continue and update the study, hopefully, from the university's standpoint, with Merrill Lynch's continued help. One of the next projects will be an analysis of popular stock indexes and averages and the possible construction of a new and more accurate "average." Also to be computed are rates of return without reinvestment of dividends.