

WELCOME

We're glad you're here!

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Wilcoxon signed rank test



\$ 83,623,131
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Earnings
\$ 67,228,166
\$ 13,946,511
\$ 6,504,606
1,960,477
7,736,223
7,325,769
3,254,330
\$ 3,599,569
\$ 27,655,014

Dividends
41%

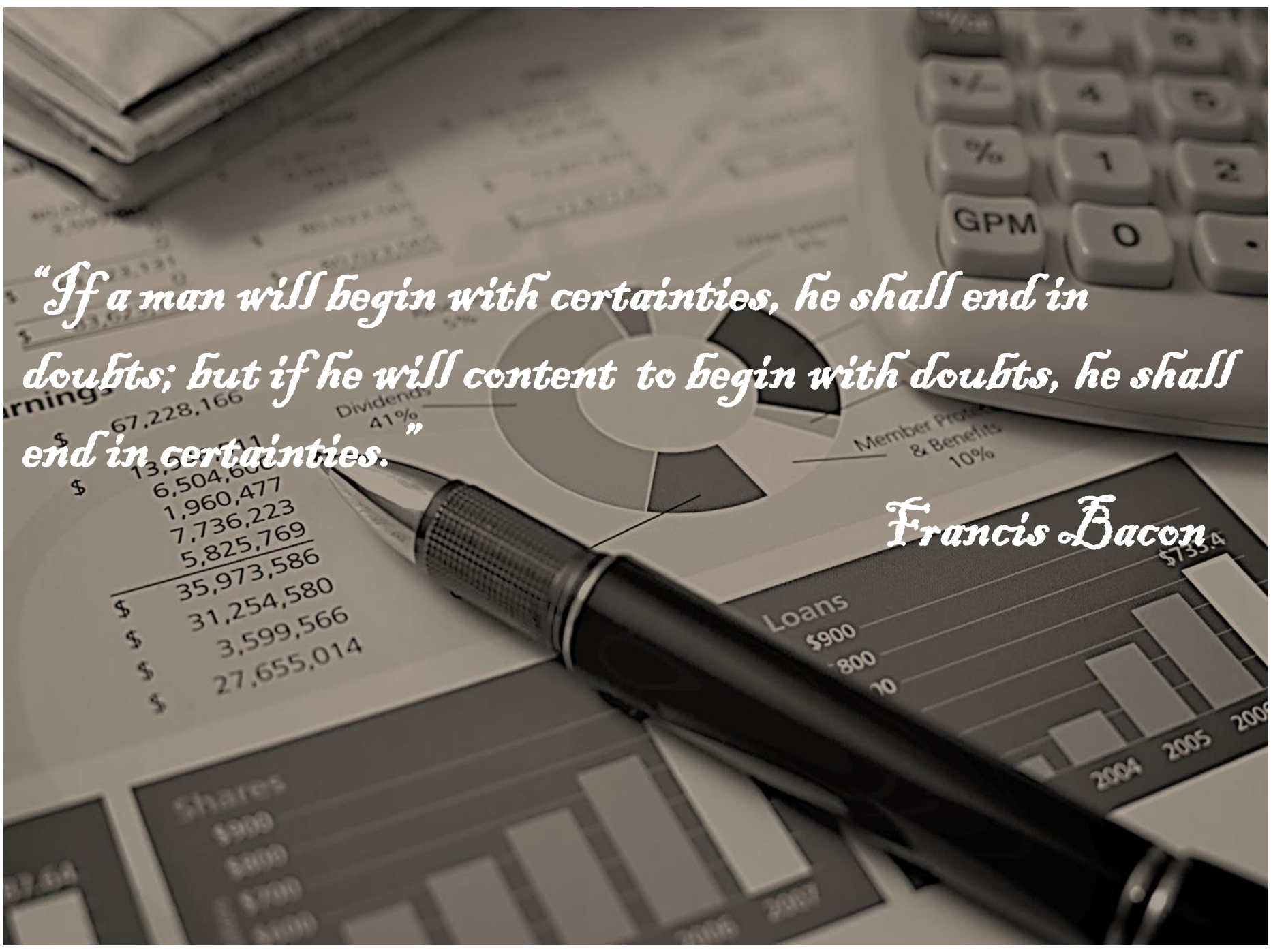
Member Protections
& Benefits
10%

Shares
\$900
\$800
\$700
\$600

LO
\$900
800
700
2004 2005 2006
\$733.4

"If a man will begin with certainties, he shall end in doubts; but if he will content to begin with doubts, he shall end in certainties."

Francis Bacon



\$	67,228,166
\$	13,500,000
\$	6,504,600
\$	1,960,477
\$	7,736,223
\$	5,825,769
\$	35,973,586
\$	31,254,580
\$	3,599,566
\$	27,655,014



THINGS TO REMEMBER

Parametric- assuming the value of a parameter for the purpose of analysis.

Parameter- is any numerical quality that characterizes a given population or some aspect of it, most common are *mean, median, mode, standard deviation*

Rank- is a number assigned to an individual sample items according to its order in the slotted list.

WILCOXON RANK SUM AND SIGNED RANK TEST

- The Rank Sum and Signed Rank tests were both proposed by American statistician Frank Wilcoxon in a groundbreaking research paper published in 1945. The tests laid the foundation for [hypothesis testing of nonparametric statistics](#), which are used for population data that can be ranked but do not have numerical values, such as customer satisfaction or music reviews.

WILCOXON SIGNED RANK TEST

- Is a non parametric test, that test the median difference, requires that the difference are approximately symmetric and that the data are measured on an ordinal, interval, or ratio scale.
- Is usually more powerful in detecting a difference between the two population

Uses of Wilcoxon signed rank test

- You use the Wilcoxon signed-rank test when there are two nominal variables and one measurement variable. One of the nominal variables has only two values, such as "before" and "after," and the other nominal variable often represents individuals. This is the non-parametric analogue to the paired t-test, and should be used if the distribution of differences between pairs may be non-normally distributed.

Requirements

- Data are paired and come from the same population.
- Each pair is chosen randomly and independent.
- The data are measured at least on an ordinal scale, but need not be normal.
- The distribution of the differences is symmetric around the median

STEPS IN WILCOXON SIGNED RANK TEST

- Calculate the difference between two scores by taking one from the other.
- Rank the differences
- Add up ranks of + differences
- Add up ranks of – differences
- T- the smallest total rank can be + or –
- W- number of scores (excluding 0 differences)

WILCOXON SIGNED RANK TEST

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