CALIFORNIA STATE SCIENCE FAIR
2003 PROJECT SUMMARY

Name(s)
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Project Number
S1218

Project Title
The Effect of Capital Investment, Exports, Imports, GDP, & Industrial Production on the Performance of the S&P 500

Abstract

Objectives/Goals
The objective of this project was to determine the effect that investment capital (equipment & software) expenditures, Gross Domestic Product, exports, imports, and industrial production had on the performance of the S&P 500. The project also looked to determine the percentage correlation that each of these variables actually had on the S&P 500.

Methods/Materials
Data was gathered on the performance of the S&P 500, Gross Domestic Product, exports, imports, industrial production, and capital investment (equipment & software) expenditures for the past 52 two years. The percent change annually by quarter was calculated for each the above. Each variable was compared to the S&P 500 by deriving a correlation coefficient. Then the data was compared to see if there was a lead or lag affect.

Results
Industrial production had the largest correlation on the S&P 500, a 55.36% correlation after 3 quarters. Other variables also had a minor correlation with the S&P 500.

Conclusions/Discussion
Conclusions about the stock market's performance can't be drawn from these variables. However, the fluctuation in the stock market has a close correlation with historical events of the past 52 years.

Summary Statement
This project tests the effect different variables have on the performance of the S&P 500.

Help Received
Father provided some minor assistance with excel.