## Federal Expenditure: The Study on the Relationship between Government Spending and the American Economy

By:John Bellon

A World View of Mathematics and Data Analysis By:

Dr. John R. Taylor, Mrs. Desiré J. Taylor

July, 2011

## **Abstract**

The historic trend in American economics seems to be leading to increased spending, with fluctuations in taxation rates and gross domestic product. Post-modern American is struggling to find the balance between a de-industrialized nation with a capitalistic economy. The historic trend was catalyzed in post war America commencing in the nineteen fifties. The implementation of social spending and the misconception of a "Welfare" state continued to inflate the spending trends seen within American Economics. This paper attempted to correlate economic trends with the downfalls and ascensions of American prosperity. The essential purpose of the research conducted was to establish a concise, statistical, analysis of three primary economic factors: personal taxation rates of the highest earning economic tax bracket, total government spending, and the gross domestic product. The groundwork of the assessments conducted lied in establishing a trend within the spending habits of the American Government throughout history. Analyzing every decade since the nineteen fifties the means comparison tests proved that spending has been rising. Juxtaposed with spending Linear Regression tests were conducted to analyze the correlation existent between the data sets. The first linear regression compared personal income tax rates for the highest earning level of society and gross domestic product. The results indicated a strong negative correlation. The next test was ran to compare personal income taxes and total government spending, concluding in a strong negative correlation. The final test was conducted to analyze the relationship between total government spending and the gross domestic product which was the only positive correlation within the data sets analyzed. The results indicated a harmful relationship between government involvement, through taxation, and the overall productivity of the country while government spending was shown to have an affirmative relationship with the gross domestic product.