

CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s)

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Project Number

J1703

Project Title

A Statistical Analysis of Government Change in Hungary

Objectives/Goals Abstract

The aim of this project was to find the social and economic effects on Hungary of the country's varying regimes and policies of the past twenty years. I hypothesized that there would be no growth during the eighties, but some growth, more economically than socially, in the nineties.

Methods/Materials

To find out, I gathered eight social and economic indicators for Hungary from 1980-1999. The indicators studied were GNP per capita, life expectancy, population per physician, percent of relevant age group in primary and secondary education, percent of GDP in services, infant mortality, and commercial energy consumption per GNP. I also created social, economic, and overall averages by creating a weighted average, with more important indicators receiving greater weights. Because infant mortality shows high development when it is low, I used a linear function to "reverse" the numbers. Also, for years in which I lacked data and there were no significant policy changes, I interpolated data based on the previous and next years. I did not use interpolated data in the averages.

Results

(because of the nature of the conclusions, results are included there.)

Conclusions/Discussion

My results showed that my hypothesis was mostly correct; there was stagnation in the eighties under communism and there was strong growth in the nineties. However, the social indicators showed less and more erratic growth than I expected. Still, the policies of the democratic governments of the nineties were successful, and there was no slide immediately after the revolution, as in many other Eastern European countries.

Summary Statement

The project examines the effects of the changing political systems and government policies in Hungary in the past twenty years by analyzing development statistics from 1980-1999.

Help Received

Ms. Baumgart provided support and structure, Prof. Peter Kenez gave advice, Prof. Isibill Grun helped with data collection, father helped use spreadsheet program.