

# Position in the World Economy 1820-2007

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## Overview

In this project we present a new measure for evaluating position in the world economy. We seek to build a more comprehensive measure which provides additional insight into relative global power at the country level.

## Previous Measures:

		Econ & Non-Econ	C/P Structure	Zonal Boundaries	Discrete or Cont.	Unequal Exchange	Other
Snyder & Kick	1979	Y	X	X	DISCRETE	---	Growth
Breiger	1981	N	X	---	---	---	Intra-core competition
Nemeth & Smith	1985	N	X	X	---	X	Growth
Smith & White	1992	N	X	X	X	X	Mobility
Van Rossem	1996	Y	X	X	CONT	---	Growth
Kick & Davis	2001	Y	X	X	DISCRETE	---	Growth
Mahuta	2006	N	X	X	X	X	Mobility
Us	2011	Y	---	---	CONT	---	---

## Key Features of New Measure:

Longer Temporal scope: 1820-2007  
 Includes Economic & Coercive Measures: Tilly (1994)

## Measurement Construction

Analysis using standardization and aggregate measures to determine relative position in the world economy based on four economic and military variables.

### Economic power:

- Gross Domestic Product
- Gross Domestic Product per capita
  - Data: Angus Madison
  - Constant Year 2000 \$USD

### Coercive power:

- Total Military Expenditure
- Military Expenditure per Soldier
  - Data: Correlates of War
  - Constant 1990 Int'l Geary-Khamis Dollars

## Standardization:

$$Z = \frac{(x - \mu)}{\sigma}$$

Z = Number of Standard Deviations from the Mean

### Standardized using 8 core countries:

United States, United Kingdom, Netherlands, Belgium, France, Italy, Sweden, Denmark)

## Standardization Alternatives:

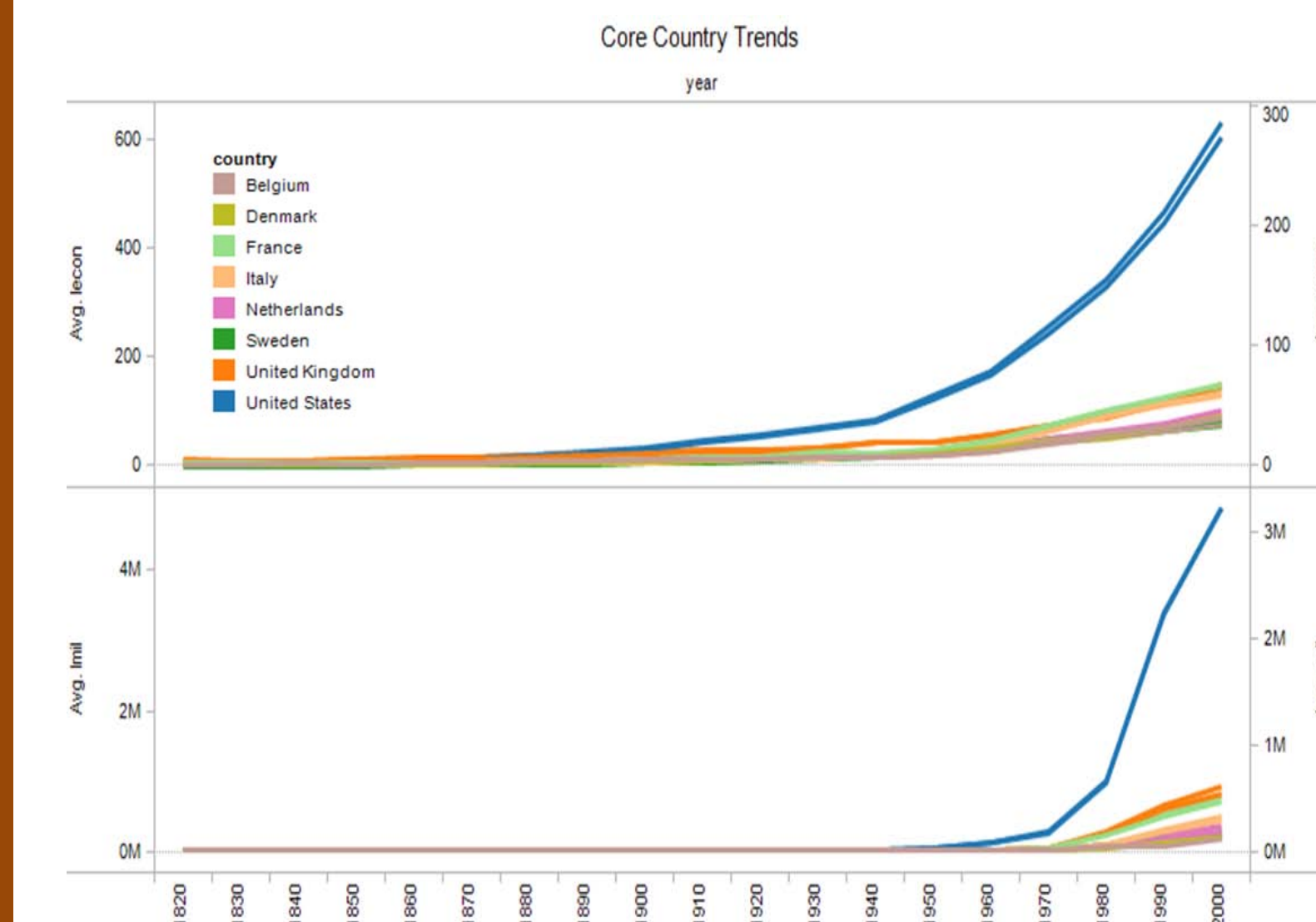
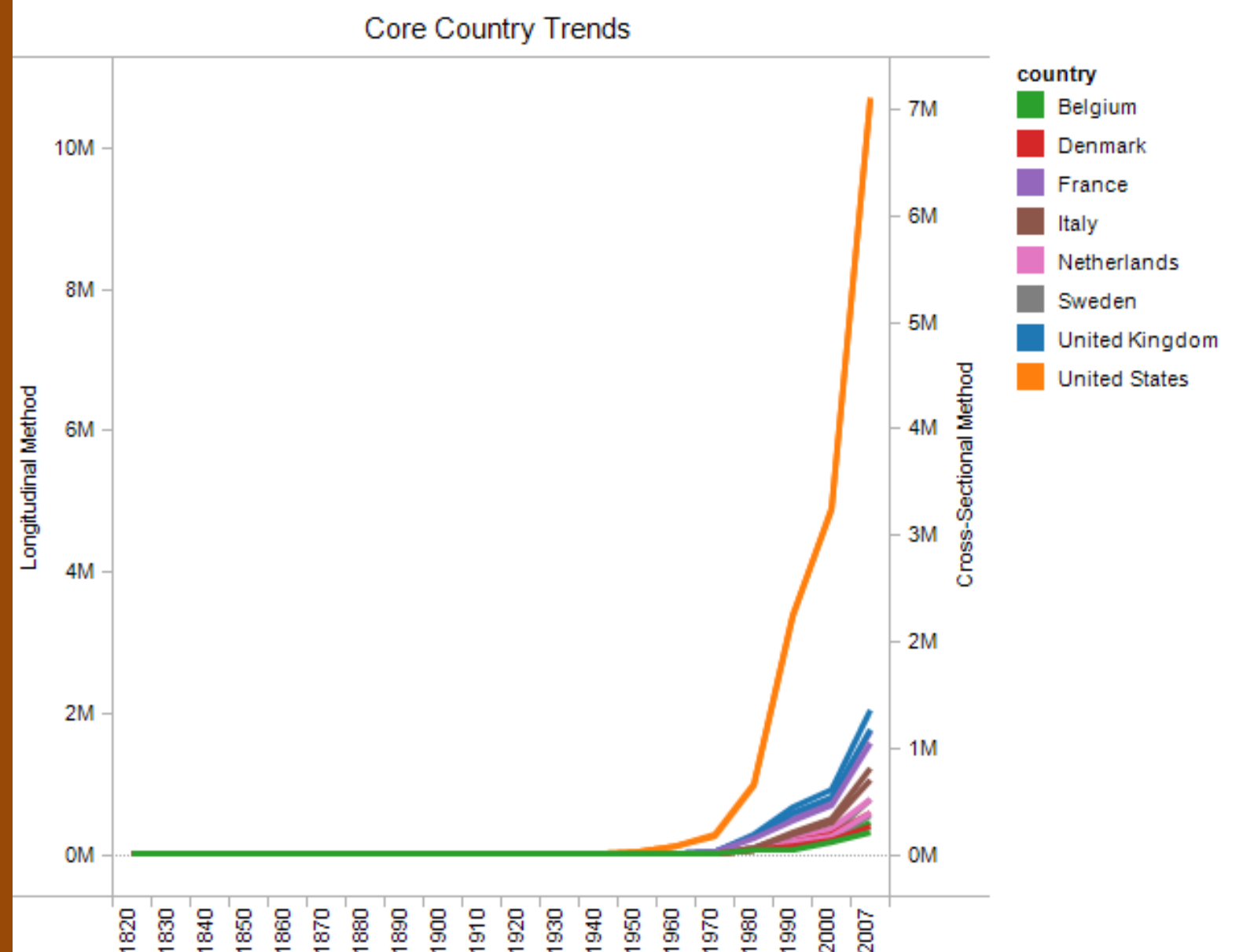
### 1. Longitudinal:

- Earliest year's (1820) standard deviation and mean
- Allows comparison across country and over time

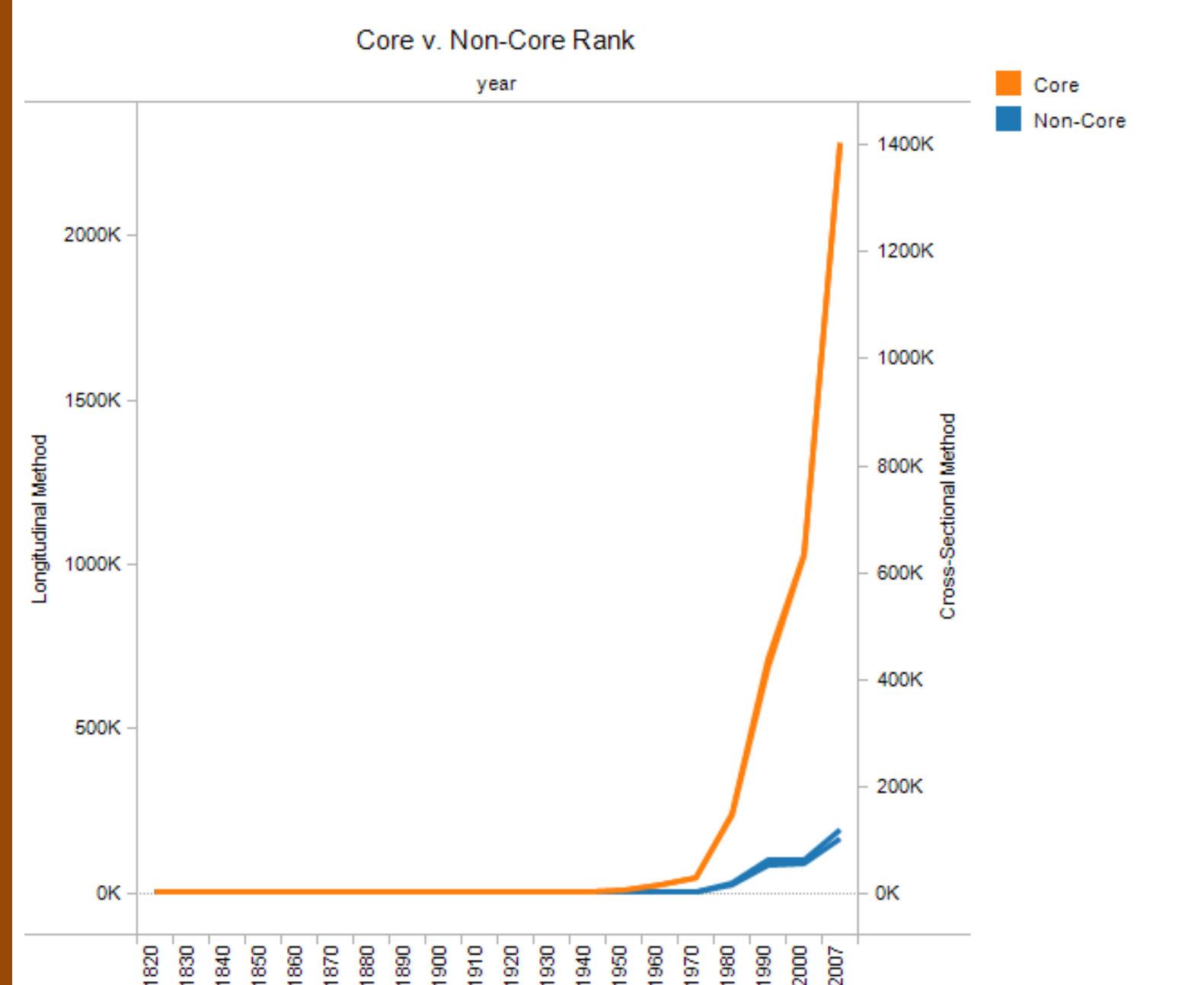
### 2. Cross-Sectional:

- Each year's standard deviation and mean
- Allows comparison between countries at one time point

## Measure in Practice



The trends of average of econ, average of vecon, average of mil and average of xmil for year. Color shows details about country. The data is filtered on core, which keeps 1. The view is filtered on year, which has multiple members selected.



## Some Potential Uses

- Independent v. Dependent Variable
- Longitudinal v. Cross Sectional Use
- Country Trends
- Econ/Military Balance
- Use of Aggregates (i.e. Inequality)

## Considerations

- Because national boundaries shift throughout history, it is difficult to gather precise data.
- Standardizing the unit conversion to the 2000 US dollar may create limitations in comparing nations.

Despite this, we do not feel there has been systematic error in any of our data transformation process; however it is not without limitations.

## Preliminary Findings

Our research suggests that following World War II, there was a sharp divergence in world power in which non-core countries began to lag behind core countries in both economic and military expenditures. Further, we found that the United States, especially since the 1940s, has led all other countries in economic and coercive measures suggesting that the United States is currently the world's greatest superpower.

