

The ISEW for the Netherlands 1980-2008

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Outline

- ▶ **Index of Sustainable Economic Welfare (ISEW)**
- ▶ Simplifying the ISEW
- ▶ The S-ISEW for the EU-15 and the Netherlands

ISEW

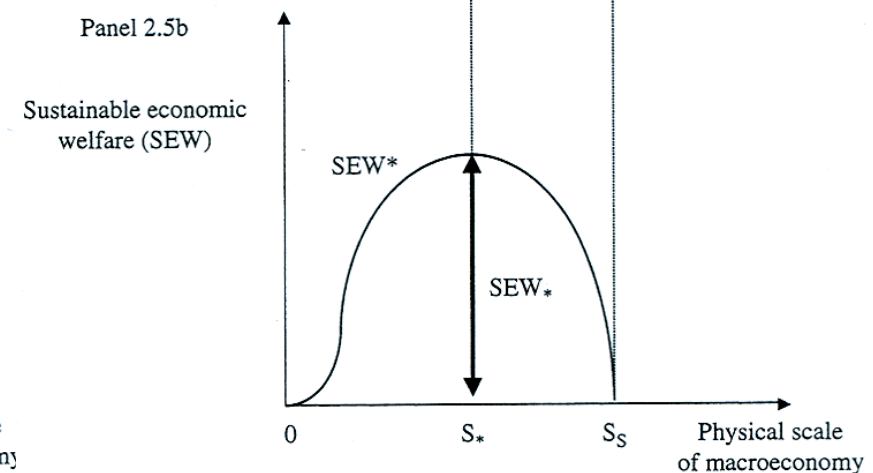
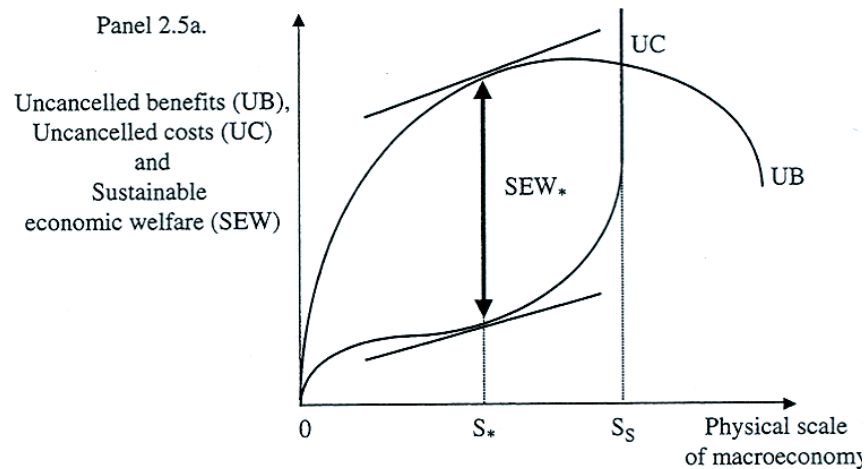
- first developed by Herman Daly and John Cobb in 1989
- based on earlier efforts to have an 'adjusted GDP'
- more recent efforts: GPI, MDP and NWI
- empirical translation of the criticism on GDP

ISEW

- a measure of economic welfare = the contribution of a nation's economy to the well-being of its citizens
- not a measure of well-being, nor one of sustainability
- looks at costs and benefits of economic activities to determine the optimal physical scale of the economic system

ISEW

- Optimal physical



- Threshold Hypothesis (Max-Neef):

“for every society there seems to be a period in which economic growth seems to bring about an improvement in the quality-of-life, but only up to a point - the threshold point - beyond which, if there is more economic growth, quality-of-life may begin to deteriorate.”

Methodology

- ISEW=

UB

- ▶ private consumption expenditures (+)
- ▶ welfare losses from income inequality (-)
- ▶ value of household work (+)
- ▶ non-defensive public expenditures (+)
- ▶ defensive private expenditures (-)
- ▶ capital adjustments (+/-)

UC

- ▶ costs of environmental degradation (-)
- ▶ depreciation of natural capital (-)

Methodology

- number of items in the ISEW methodology varies between 20 and 25
- e.g. in the Belgian ISEW study a total of 41 time series of data were needed
- lack of consistency among studies:
 - ▶ list of items
 - ▶ valuation methods

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A simplified ISEW?

- Would it be possible to reduce the number of items in the ISEW without affecting the outcome too much?
- Benefits:
 - ▶ easier compilation
 - ▶ highlight items that most urgently need an internationally agreed upon methodology (manual)

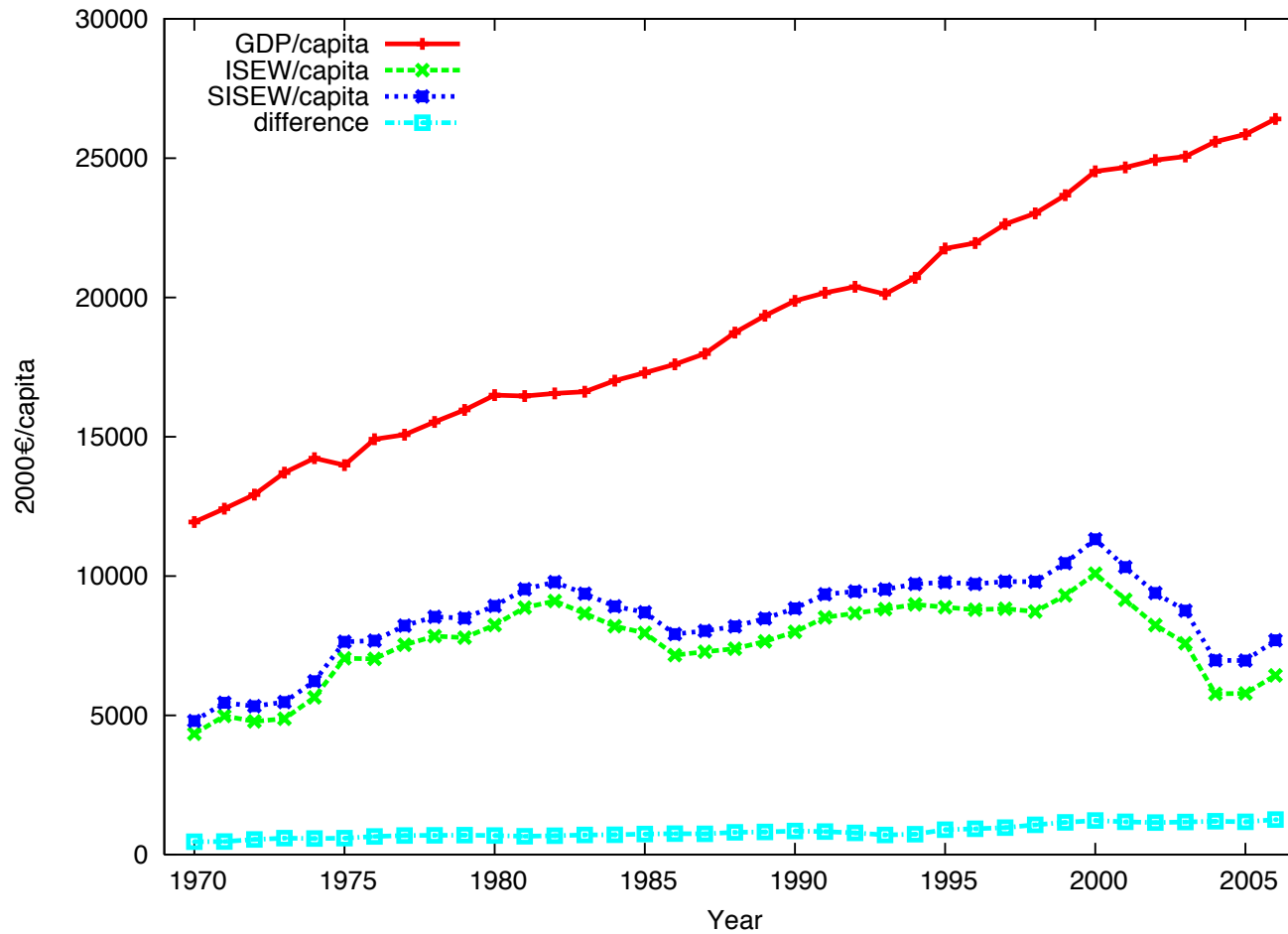
A simplified ISEW?

- proposal: omit those items that have low relative importances compared to others
- it was found that 11 items make up most of the ISEW totals in Belgium, the UK and the US (consistent set)
- each of the 8 categories of items is represented by at least one item in the S-ISEW
- important note: historical observations!

S-ISEW Items

S-ISEW =	Private Consumption Expenditures (+)
	Welfare Losses from Income Inequality (-)
	Value of Household Labour (+)
	Public Expenditures on Health and Education (+)
	Costs of Commuting (-)
	Costs of Air Pollution (-)
	Depletion of Non-renewable Energy Resources (-)
	Costs of Climate Change (-)
	Costs of Ozone Layer Depletion (-)
	Net Capital Growth (+/-)
	Changes in the Net International Investment Position (+/-)

S-ISEW for Belgium



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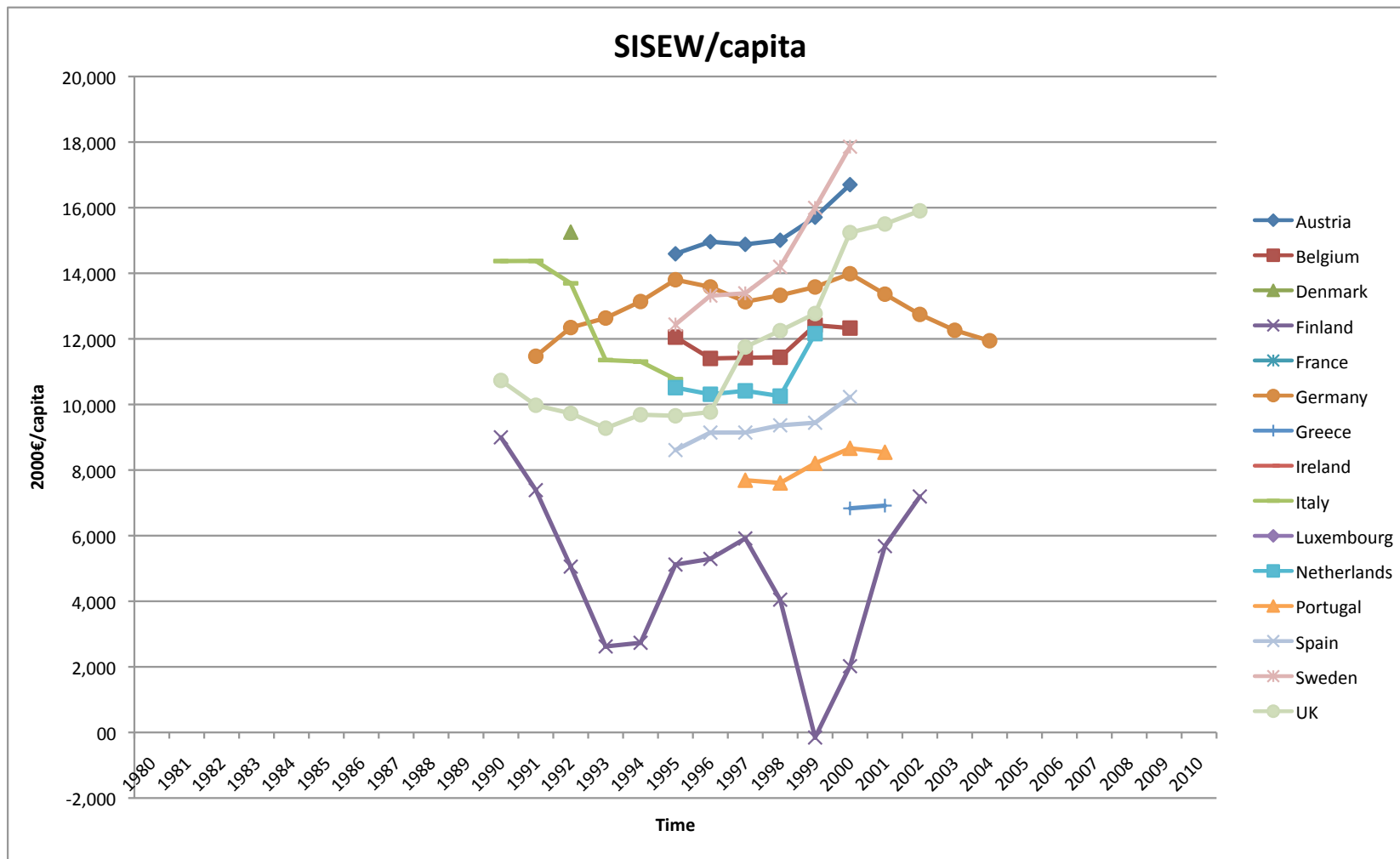
S-ISEW for EU-15

- work in progress
- initial goals:
 - ▶ EU-15: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, the United Kingdom
 - ▶ 1980-200?
 - ▶ consistent data sets (international agencies)
 - ▶ methodology: adapted from Jackson et al, 1997

Preliminary Results

- S-ISEW/capita figures for 12 countries (out of a total of 15)
- (very) limited time frame
- numbers are expressed 2000€/capita
- based on internationally available data

Preliminary Results



Preliminary Results

- similar results as the ones found in the existing ISEW studies in EU-15 countries (Germany, Portugal, ...)
- no (clear) evidence to support the Max-Neef's 'Threshold Hypothesis'

S-ISEW Netherlands

- full compilation for the Netherlands
- data gaps: income inequalities, public expenditures on health and education, and air pollution
- CBS data
- 1980-2008

S-ISEW: Methodology

- Private Consumption Expenditures
 - ▶ Eurostat
- Value of Household Labour
 - ▶ time use: various sources (IATUR)
 - ▶ population 15-64: UNEP
 - ▶ shadow price: hourly wage rate of cleaning personnel (CPI)

S-ISEW: Methodology

- Income Inequality
 - ▶ Atkinson Index (epsilon = 0,8)
 - ▶ income deciles: UNU-WIDER (WDII) + CBS
- Public Expenditures on Health and Education
 - ▶ OECD + CBS
- Costs of Commuting
 - ▶ private expenses on transport: OECD
 - ▶ % for commuting

S-ISEW: Methodology

- Costs of Air Pollution
 - ▶ emissions of pollutants: UNEP + regression
 - ▶ MSC estimates: Jackson et al, 1997
- Depletion of Non-Renewable Resources
 - ▶ TPES (non-renewable): OECD and UNEP
 - ▶ replacement costs: Daly and Cobb, 1989

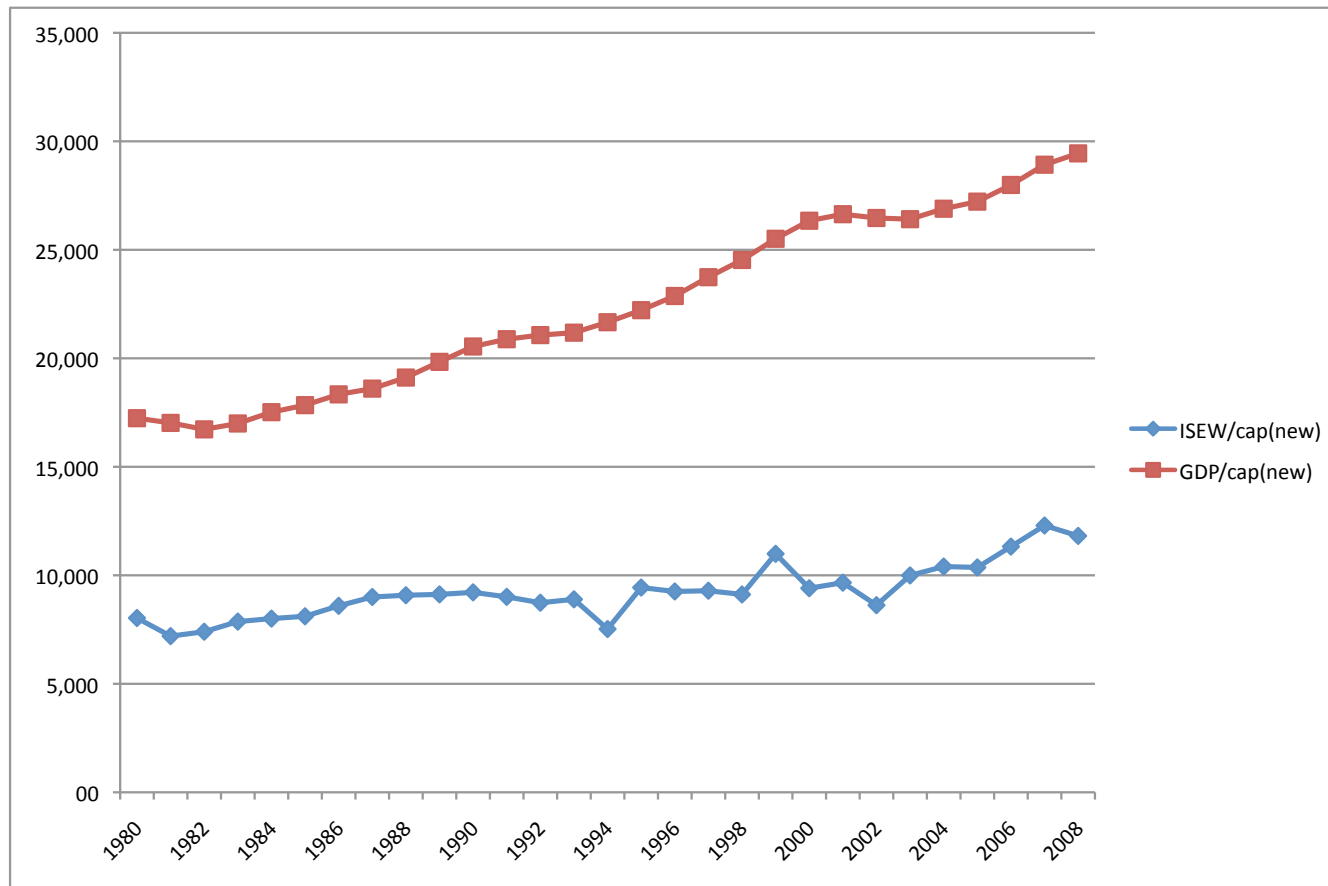
S-ISEW: Methodology

- Costs of Climate Change
 - ▶ cumulative emissions since 1900:WRI
 - ▶ MSC estimate: Cobb & Cobb, 1994 + time-dependent
- Costs of Ozone Layer Depletion
 - ▶ emissions: own calculations (EU average or country-specific)
 - ▶ MSC estimate: Jackson et al, 1997

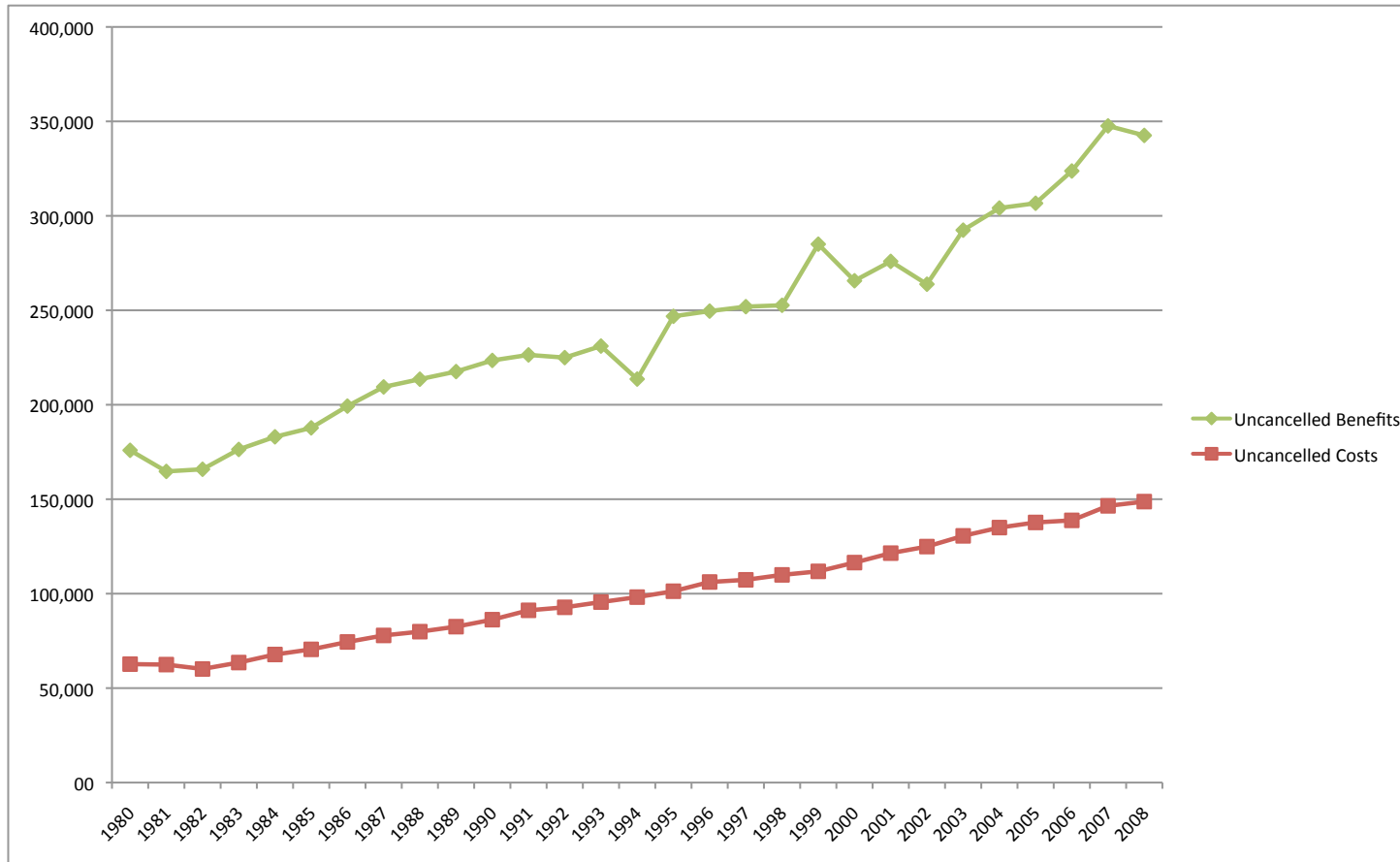
S-ISEW: Methodology

- Net Capital Growth
 - ▶ gross fixed capital formation and consumption of fixed capital: OECD
- Changes in the Net International Investment Position (NIIP)
 - ▶ assets and liabilities (IIP): OECD

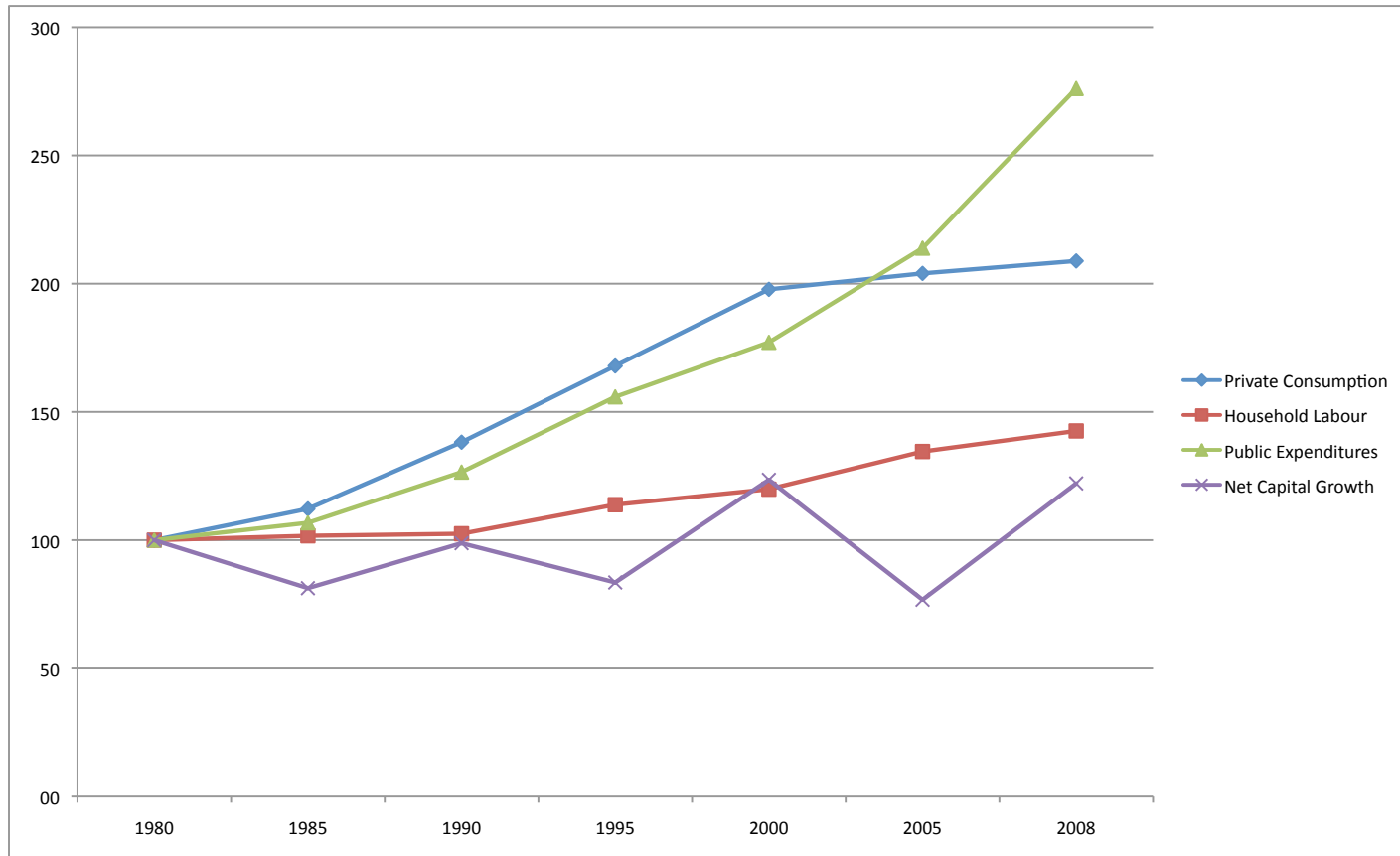
Results



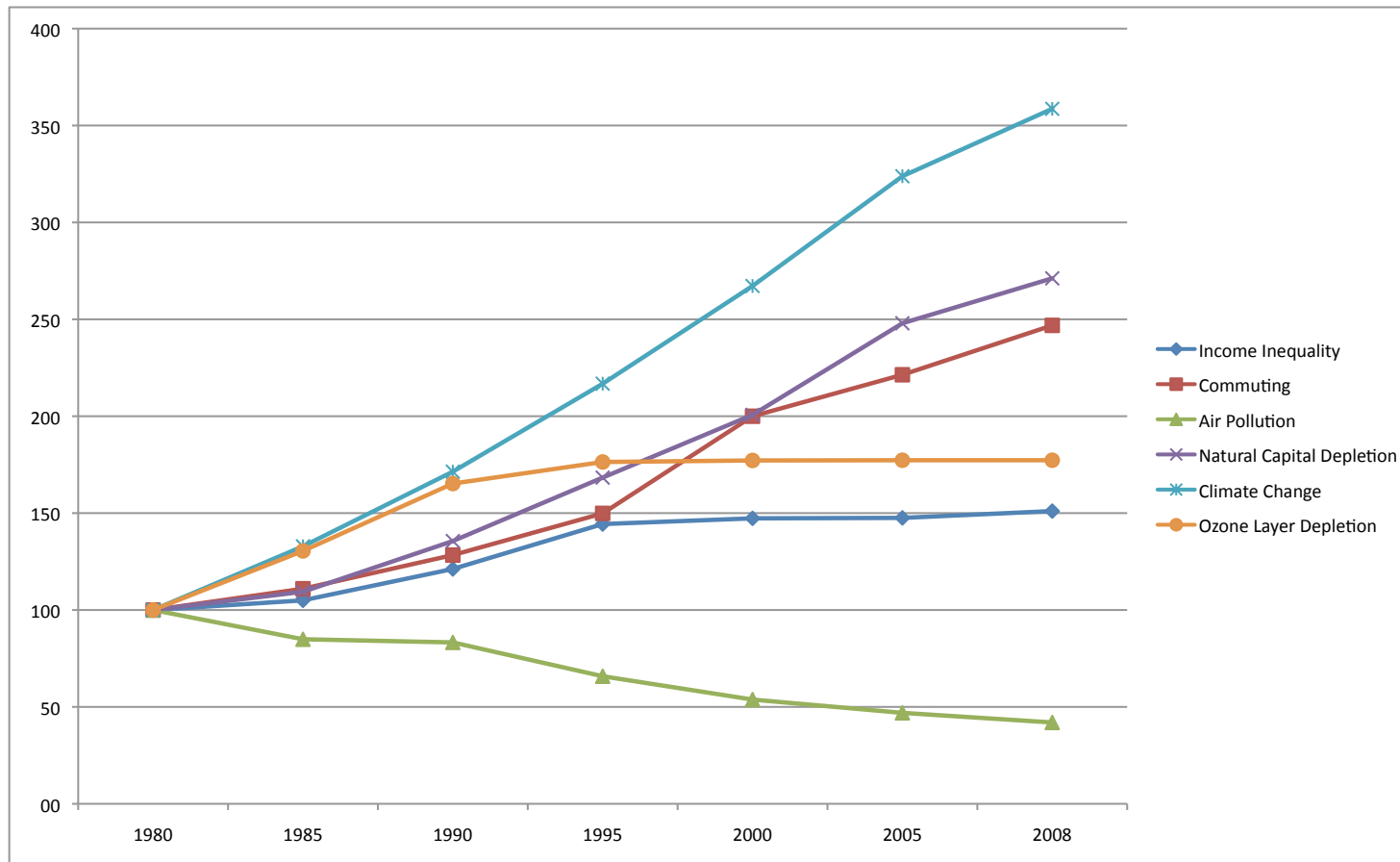
Results



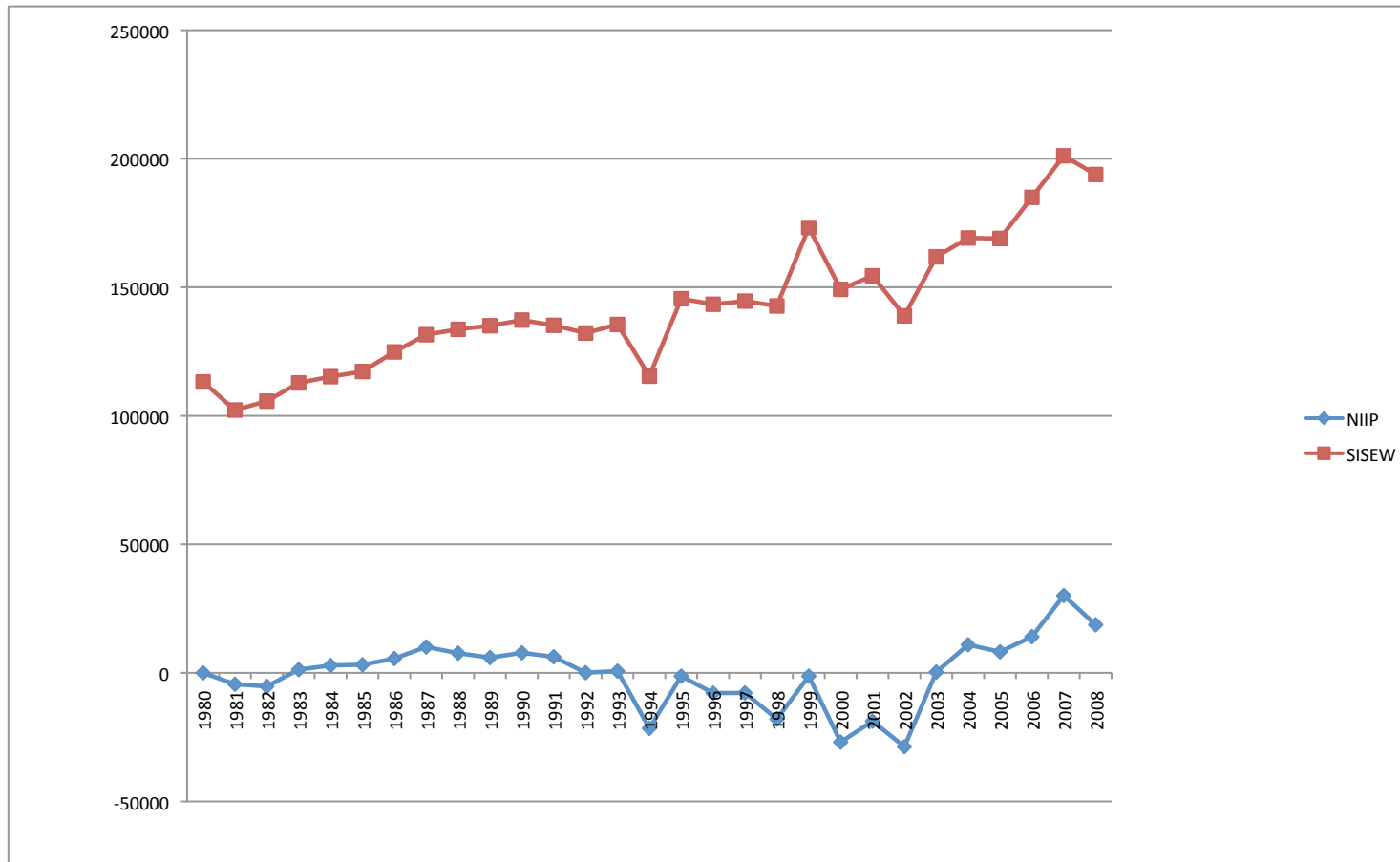
Positive Items



Negative Items



NIIP



Thank you!

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