The development of Hungarian competitiveness on the basis of the World Economic Forum's Global Competitiveness Index: cause-and-effect relationships

Peter Vakhal

Kopint-Tárki Institution for Economic Research

FRIEDRICH EBERT STIFTUNG Büro Budapest

TÁRKI TÁRSADALOMKUTATÁSI INTÉZET ZRT. Social Research Institute Inc.

KOPINT-TÁRKI Konjunktúrakutató Intézet Zrt.

Global competitiveness

Macroeconomic concept

Productivity
Wages
Prices

$\underbrace{}$

"Hard" indicators

Institutional economic concept

Hard indicators +
Government efficiency
Human capital
Innovation

$\underbrace{}$

"Soft" indicators

WEF's Global Competitiveness Index

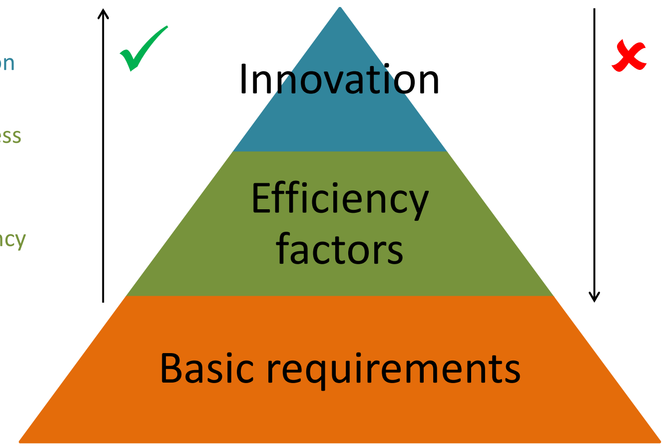
- World Economic Forum (WEF)
- Survey since 1990, comparable time series since 2005
- 140 countries, 112 indicators
- 12 main aggregates (aka. pillars)
- 1 final point of competitiveness for each country

The 12 pillars

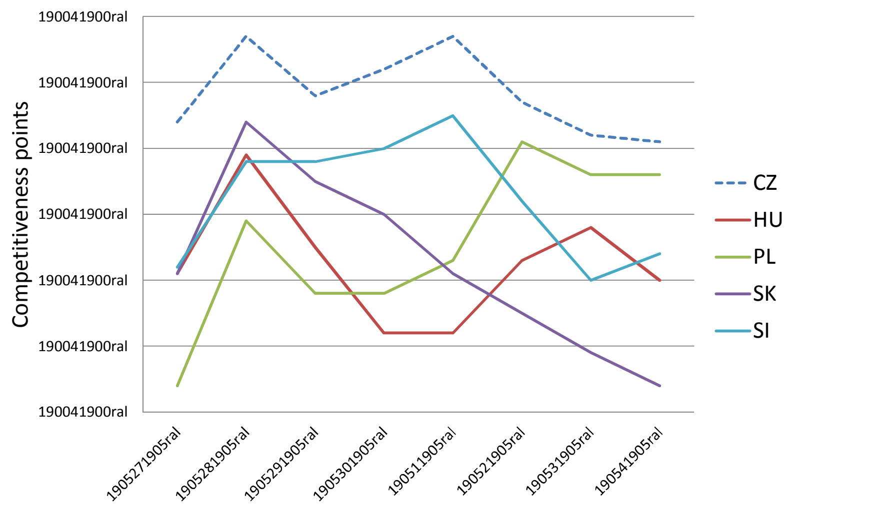
- Institutions
- Infrastructure
- Macroeconomic environment
- Health and primary education
- Higher education and training
- Goods market efficiency
- Labour market efficiency
- Financial market development
- Technological readiness
- Market size
- Business sophistication
- Innovation

Pyramid of competitiveness

- Innovation
- Business sophistication
- Market size
- Technological readiness
- Financial market development
- Goods market efficiency
- Higher education & training
- Health & primary education
- Macroeconomic environment
- Infrastructure
- Institutions



Competitiveness of Hungary and other countries in the region



Source: WEF

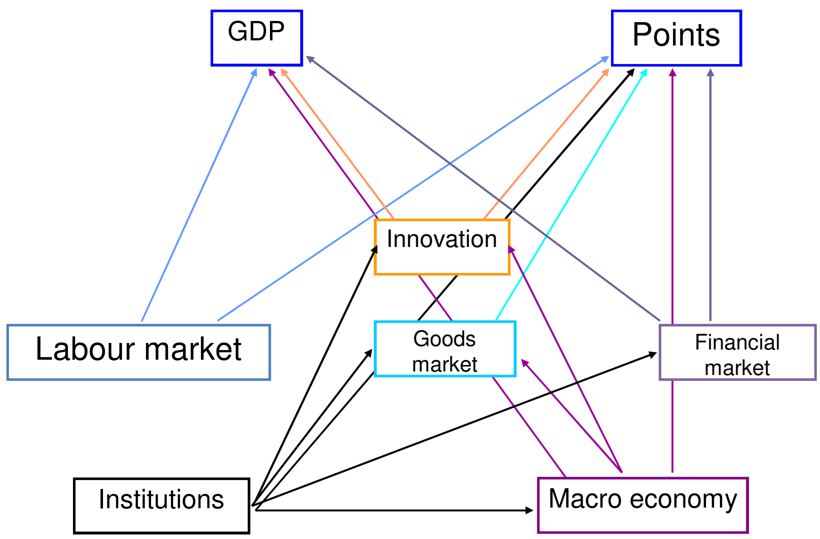
Cause-and-effect in the Hungarian competitiveness between 2005 and 2012

- Medium and strong correlations between the 112 indicators and the 12 pillars
- Partial correlations do not indicate clear cause-and-effect relationships
- The system of competitiveness is complex with strong mutual interdependencies

The model: presumptions

- The institutions are the substance of competitiveness
- Filter those pillars that do not change on the short run: infrastructure, health, education, technology, market size and business sophistication
- Include GDP volume change and final competitiveness points

The ”tower” of Hungarian competitiveness



Main results (total effects)

- Strongest effect: innovation
- Institutions on macroeconomics: strong negative effect
- Labour & financial market: marginal positive effect on GDP, strong negative effect on competitiveness
- No relationship between labour market and other variables, only with GDP and competitiveness

Conclusions

- Almost all changes in the pillars can be derived to the changes of institutional background.
- Hungary is still not on her long term equlibrium path of competitiveness.
- The effect of artifical impovement of one pillar on the whole system of competitiveness is unpredictible.

Thank you for your attention!

peter.vakhal@kopint-tarki.hu

FRIEDRICH EBERT STIFTUNG Büro Budapest

TÁRKI TÁRSADALOMKUTATÁSI INTÉZET ZRT. Social Research Institute Inc.

KOPINT-TÁRKI Konjunktúrakutató Intézet Zrt.