



# Opportunities in crisis

Innovation and economic competitiveness  
through policy rethinking

United Nations Economic Commission for Europe  
International Conference, Geneva 28-29 September 2009

Ass. Prof. Göran Marklund  
Head of Strategy Development Division  
VINNOVA

The word "Crisis" in Chinese...and the word innovation

危机 创新

Dangerous

Opportunity

New Solutions



# Simultaneous Challenges

- Financial Crisis – (Temporary?) Capitalist System Crisis
- Business Cycle Recession – (Severe!) Economic System Adjustment
- Climate Crisis – Need for Radical Innovation and Industrial Renewal
- Globalization Challenges – Increasing Opportunities and Competition
- Human Resources Challenges – Demography, Migration, Geographical Attractiveness
- Regional, National, Supranational Policy Challenges – Visions, Targets, Design, Cooperation
- Coinciding Challenges – Multidimensional and Interrelated



# Crisis and Policy Rethinking

- Crisis generate incentives and opportunities for policy rethinking
  
- Major policy rethinking has taken place
  - It has primarily generated focus on stabilizing the financial system
  
  - It has also generated focus on stimulating general economic demand
  
  - And it has generated some but important refocusing of innovation and competitiveness policy
  
- What is such policy rethinking about and why – is it a sign of fundamental rethinking?



# Which Opportunities?

- Structural change for competitiveness – in a globalizing competition?
  - Radical industrial renewal
  - Radical research renewal
  - Radical policy (governance) renewal
  
- Meeting Grand (Global) Challenges – Major opportunity for Innovation and Growth
  - New solutions (Innovation)
  - Business competitiveness
  - Science excellence
  
- Innovation for new business growth – for a growing and shifting (towards Grand Challenges) global demand?
  - Eco-efficiency innovation
  - Health innovation
  - Security innovation
  - Communication innovation
  - Transportation innovation
  - ....



VINNOVA ANALYSIS  
VA2009:14

# FIGHT THE CRISIS WITH RESEARCH AND INNOVATION?

Additional public investment in research and innovation  
for sustainable recovery from the crisis





# Some Innovation Policy Rethinking in responses to the financial crisis

## ➤ **General Tendencies**

- R&I investments mainly focus on a “low-carbon society” and a society of “healthy long life”
- Some countries have “national strategic technologies” which receive additional funding
- Regulatory measures to allow swift absorption of R&I in society are part of the agenda in some countries
- Temporary posting of private company R&D staff in universities or other public institutions

## ➤ **USA**

- The AAAS estimates the Recovery Act contains USD 21.5 billion (2,7%) in federal R&D funding.
- According to the President the biggest increase ever in R&D funding in the United States.
- The R&I investments in the American Recovery and Reinvestment Act inspire other countries

## ➤ **Germany**

- As part of the EUR 50 billion recovery package EUR 1.4 billion will be spent on public R&D
- Of which EUR 500 million is allocated to mission-oriented research to develop clean car technologies
- Remaining EUR 900 million will be used to increase the budget of Zentralen (SME) Innovationsprogramms
- The R&D part of the recovery packages amounts to 0.26% of German GDP in 2008
- The EUR 1.4 billion is on top of very substantial investments in the German High-tech Strategy.

## ➤ **Finland**

- The Finnish Research and Innovation Council recommended increasing government R&D funding by EUR 760 million 2009-11
- The share of R&D&I in the Finnish stimulus package is fairly low even though some other measures, involve R&D&I
- The main focus is to reduce cyclical unemployment.



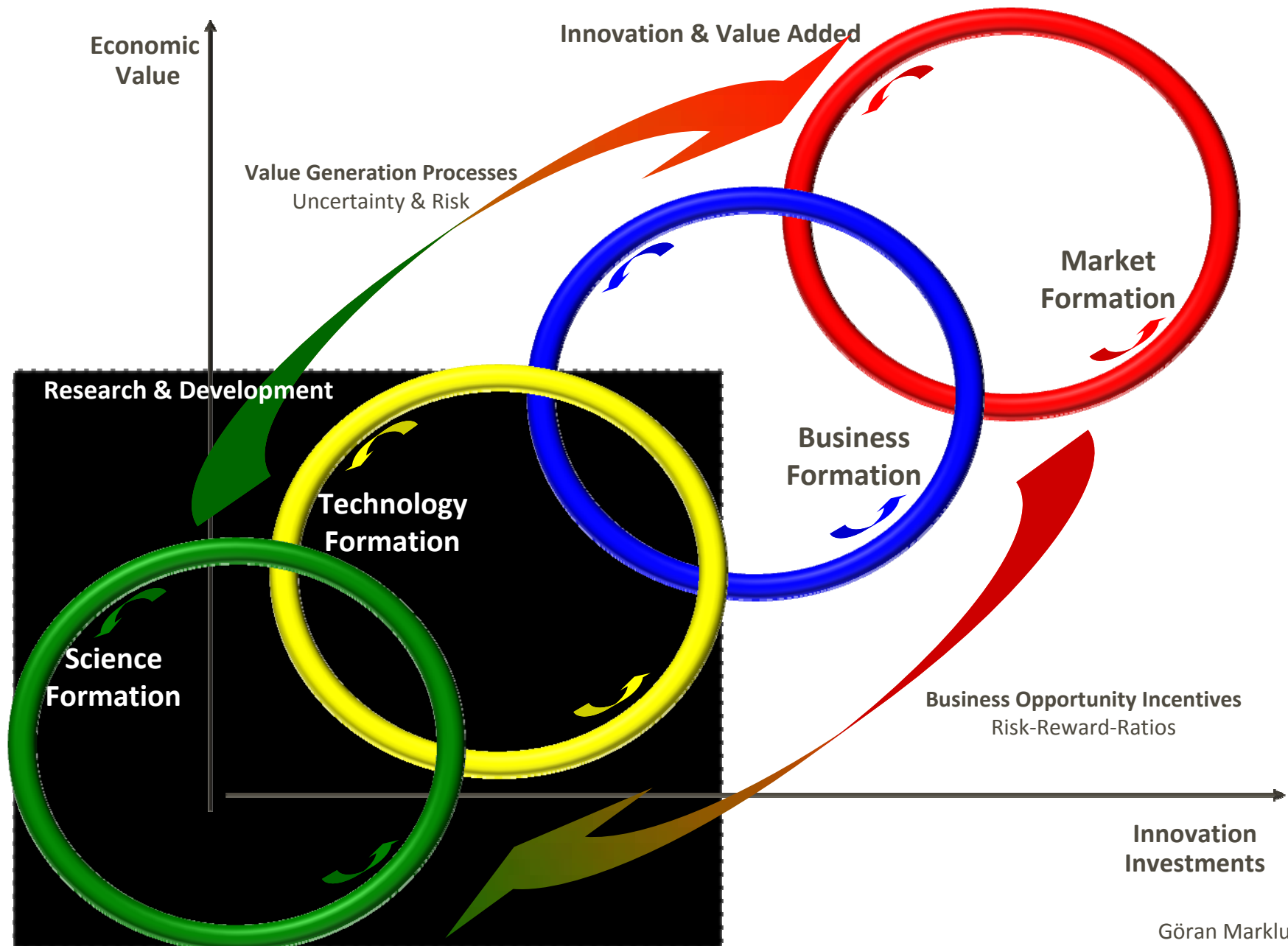
# Fundamental Rethinking in Innovation and Competitiveness Policy in Europe?

- **In some cases yes.....**
  - Finland and Germany are good examples where innovation policy is high on the political agenda and...
  - ....based on and backed by ambitious and broad based strategies for innovation and competitiveness....
  - ....which in turn are backed by substantial political commitment and long-term funding and structural reforms....
  - ....including high-level political processes to continuously review and renew strategies and policies
  
- **....but overall probably not, yet, major political rethinking**
  - Innovation is considerably more present in political declarations than in political programs, incl. EU-commission
  - Economic dynamics, and the imperative role of innovation, is not well understood and appreciated
  - Research policy is in many countries, and the EU, taking the place of innovation policy in actual politics – supply push thinking
  - Linear perspectives on innovation processes still dominate, in political practice, despite some changes in rethorics
  - National perspectives still drive most of the political agendas, despite the challenges and opportunities of globalization
  - Supply thinking and acting strongly dominates over demand thinking and policies
  - General macro economics often strongly dominates general political priorities – disregarding meso and micro perspectives



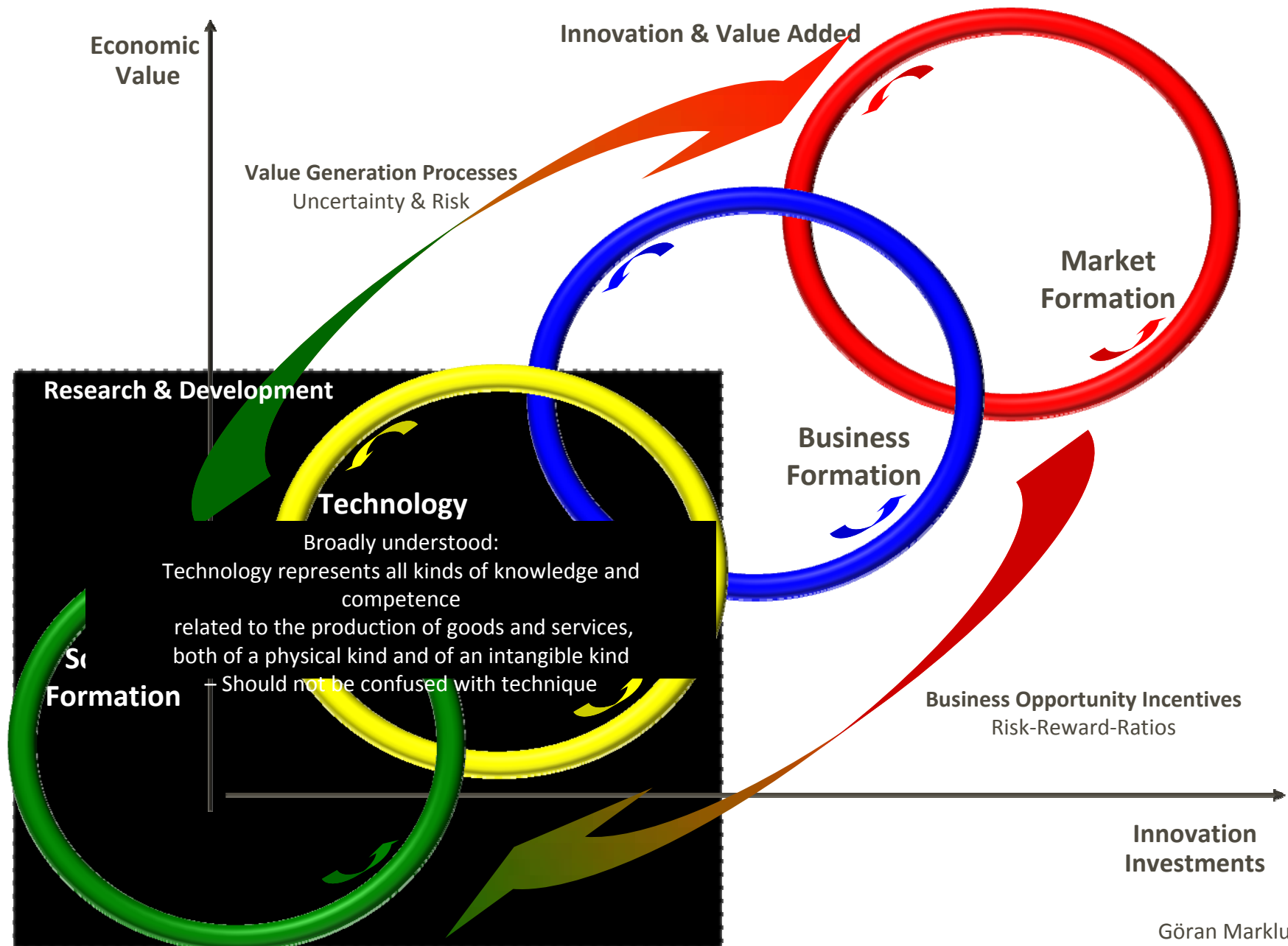
# Multidimensional formation processes in global contexts

Essence of the experimental economy and different dimensions of innovation policy



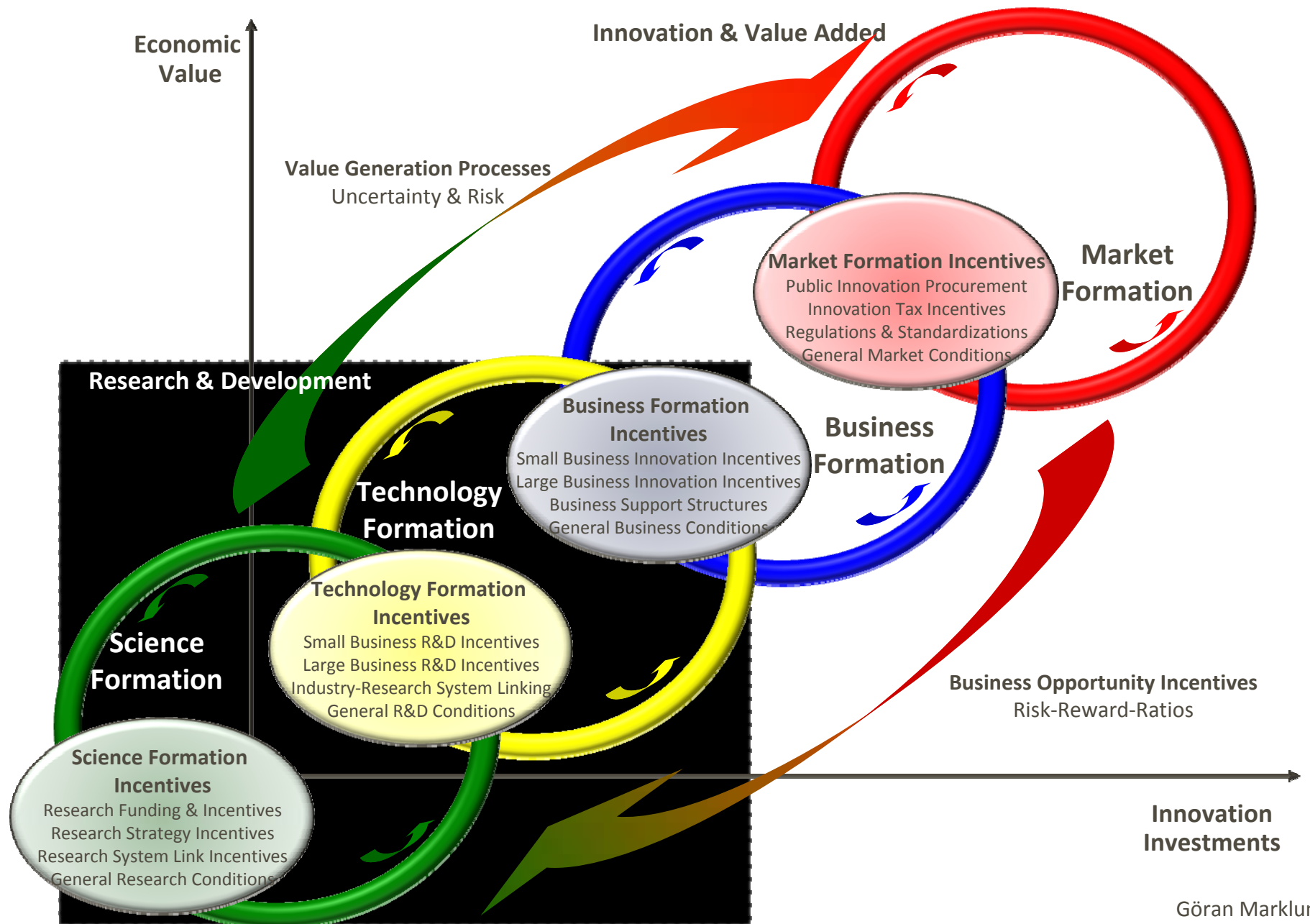
# Multidimensional formation processes in global contexts

Essence of the experimental economy and different dimensions of innovation policy



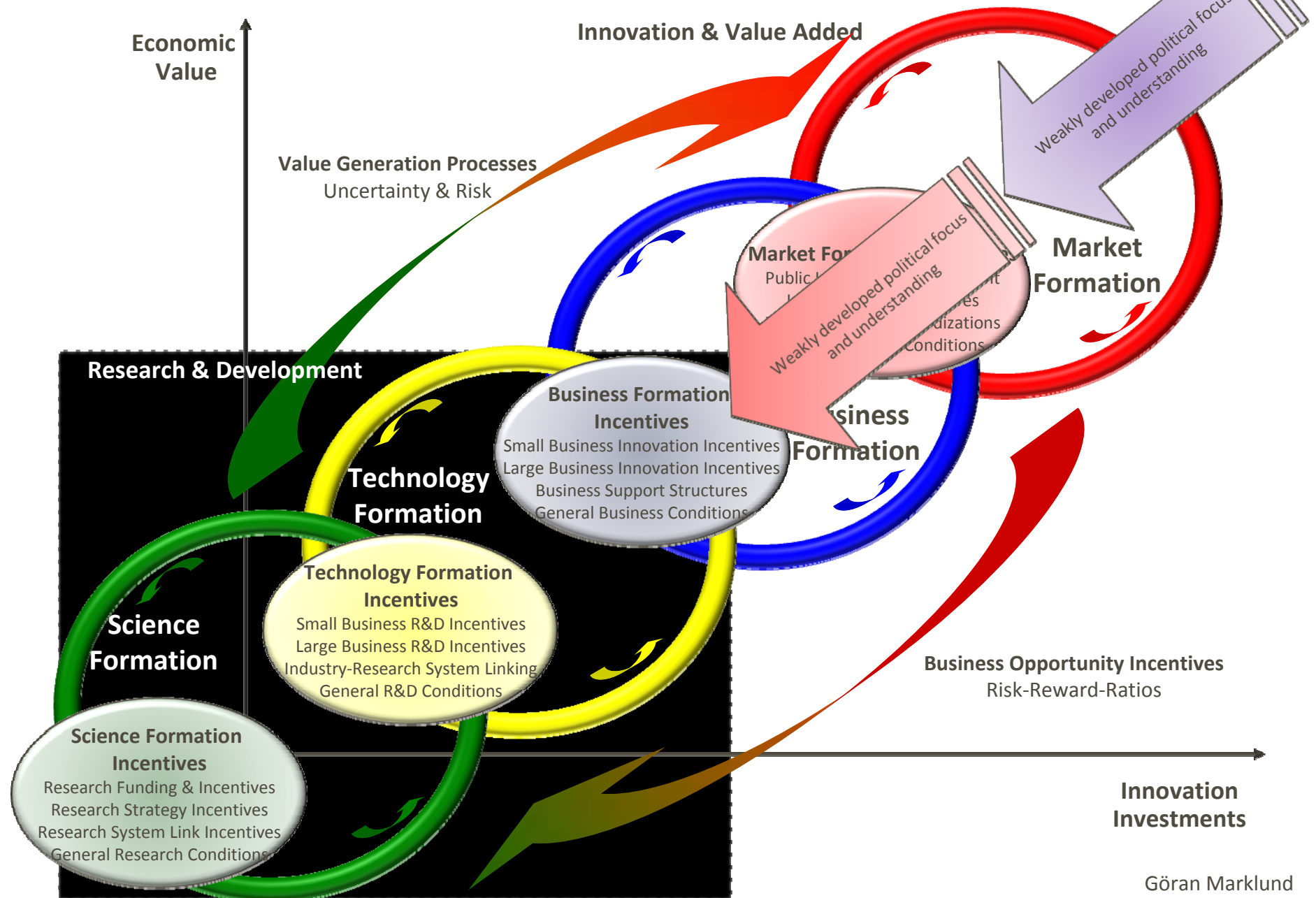
# Multidimensional formation processes in global contexts

Essence of the experimental economy and different dimensions of innovation policy



# Multidimensional formation processes in global contexts

Essence of the experimental economy and different dimensions of innovation policy





Thank You!