tepav

Economic Policy Research Foundation of Turkey

Structural transformation and industrial policy in Turkey: Any lessons for least developed countries?

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Three guiding questions

- Q1: Did "structural change" take place in Turkey? How?
- Q2: Did "structural change" deliver the desired results?
- Q3: What was the role of industrial policy? What should be its role for the future?

Framework

- What has Turkey achieved in terms of structural transformation?
  - ➔ Full side of the glass: How did we become a middle income economy?
  - ➔ Empty side of the glass: What is it that industrial policy need to fix?
- What is the prevalent policy framework?
  - ➔ Can we call it industrial policy?
- Any policy lessons for least developed countries?

Industrial policy (as we shall know it)

- Picking winners or fostering structural transformation?
  - ➔ Diversification/specialization
- Rationale
  - ➔ Self-discovery externalities
  - ➔ Coordination externalities
  - ➔ Missing public inputs
- "Industrial policy as a mindset"
  - ➔ Process more important than policy
  - ➔ Getting the institutions right

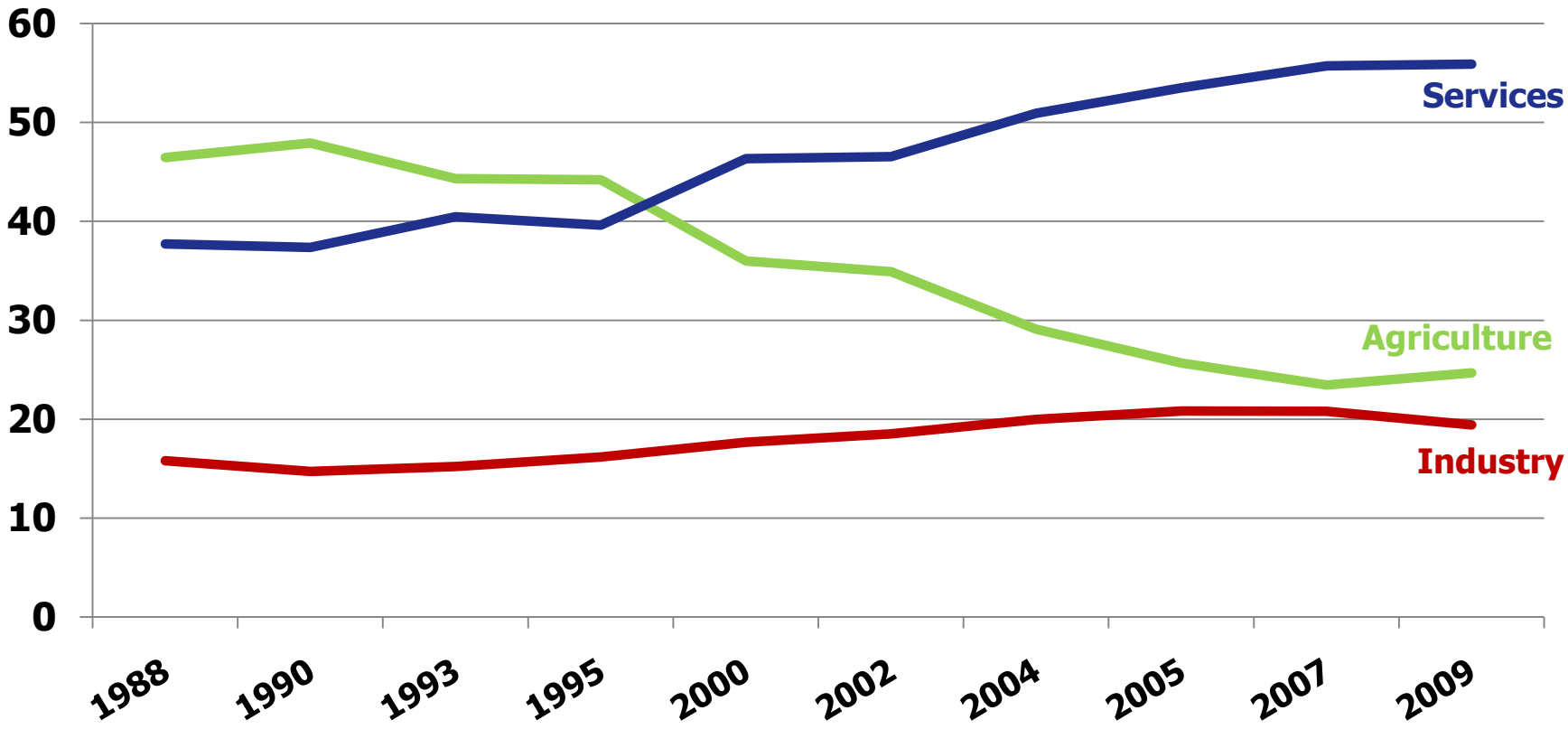
An overview of the recent progress of Turkish economy

	1980	2001	2008
GDP (billion $)	70	509	700
Per capita GDP (USD)	1,500	2,906	9,000
Number of enterprises	90,000	723,503	1,170,248
Exports (USD billion)	3	31	132
Exports per worker (USD)	65	1,456	6,229
Industry share in exports	10%	92%	92%
Number of exporters	1,000	25,000	47,000
Tourism revenue (billion $)	0,3	8	21
Ranking in the world (in terms of GDP)	25th	21st	17th

Source: WDI, EIU, TÜİK, SSK, TİM

Transformation is still ongoing; along with rapid urbanization

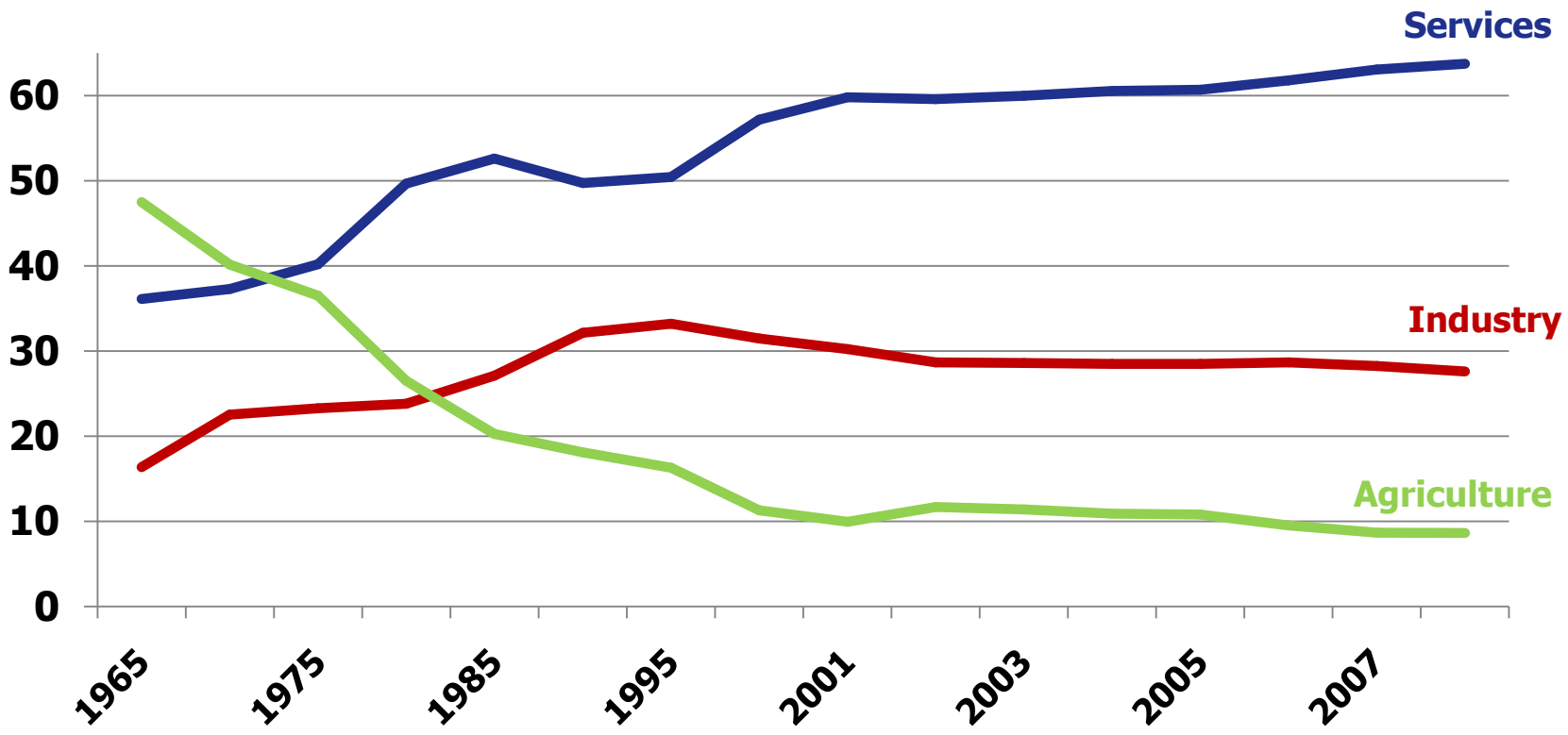
Sectoral distribution of labor (%) 1988 - 2009



Source: TÜİK

No structural change after 2001?

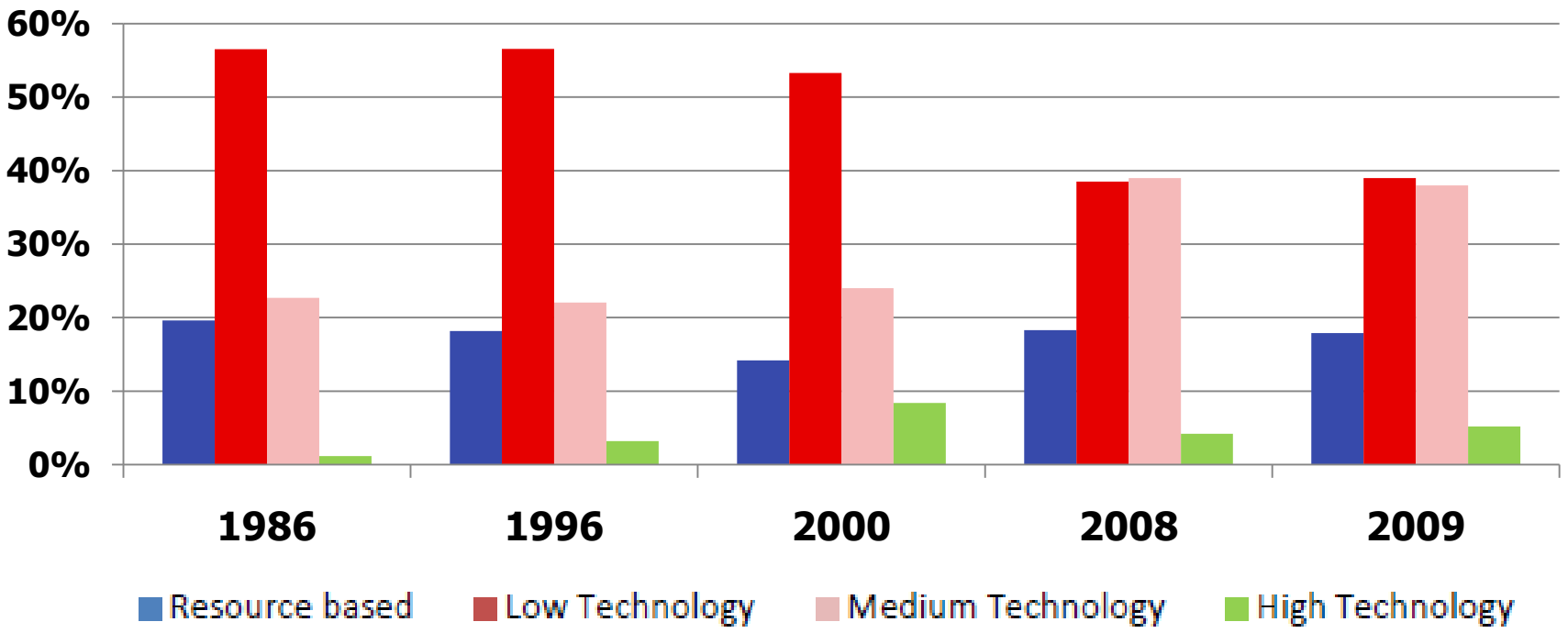
Sectoral composition of GDP (%) 1965 - 2009



Source: WB, World Development Indicators

Technological transformation: declining low-tech, rising mid-tech

Technological composition of Turkey's exports 1990-2009



Source: UN COMTRADE database, TEPAV calculations
(Based on UNIDO classification of products by level of technology)

What does Turkey produce now?

- Emerging sectors:
  - ➔ White goods
  - ➔ Automobile and parts
  - ➔ Consumer electronics
  - ➔ Ships
  - ➔ Machinery and equipment
- Traditional sectors:
  - ➔ Textile, apparels, leather
  - ➔ Food and agro-industry
  - ➔ Construction materials
  - ➔ Furniture

Widening gap has implications…

- Emerging sectors:
  - ➔ White goods
  - ➔ Automobile and parts
  - ➔ Consumer electronics
  - ➔ Ships
  - ➔ Machinery and equipment

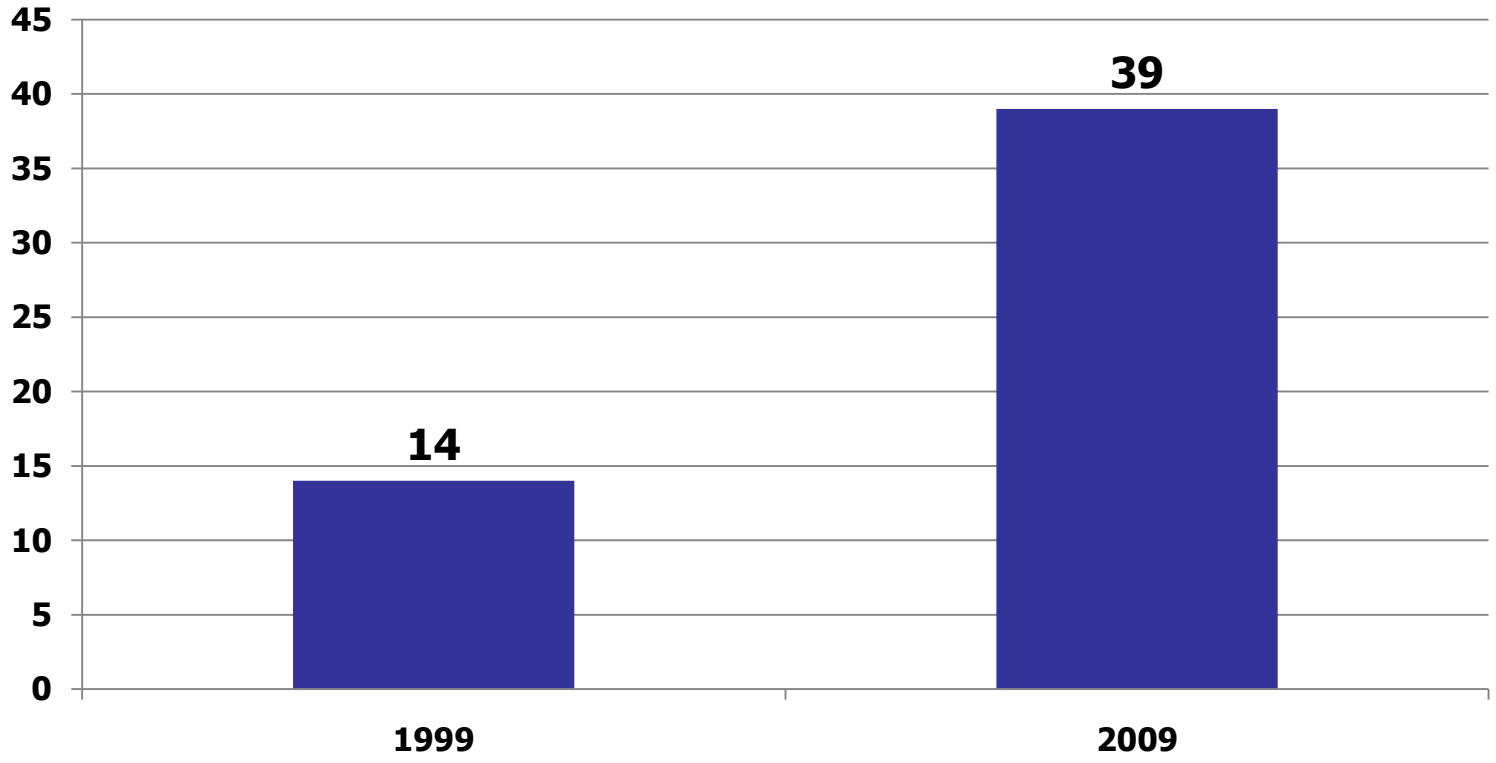
• **Capital intensive**
• **High level of import dependency**

- Traditional sectors:
  - ➔ Textile, apparels, leather
  - ➔ Food and agro-industry
  - ➔ Construction materials
  - ➔ Furniture

• **Labor intensive**
• **Low level of import dependency**

Sectoral diversification: a highly visible trend

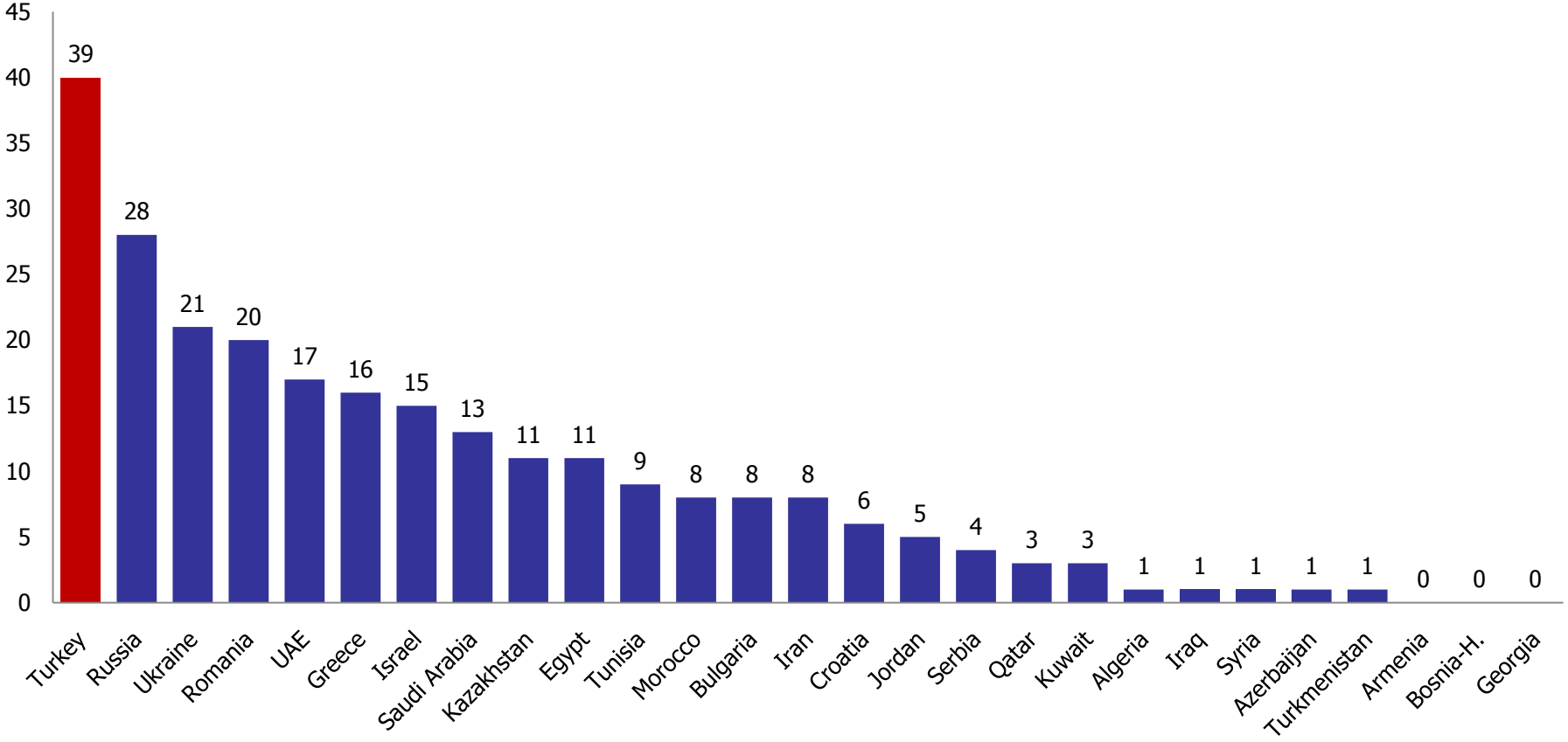
Number of product groups with above $ 500 million exports
HS4 classification, 2 digit, 1999-2009



Source: UN COMTRADE

Turkey appears to be the most diversifed economy in her region

Number of product groups with above $ 500 million exports (HS4 classification, 2 digit, 2008)



Source: UN COMTRADE

Industrial activity has spread throughout the country

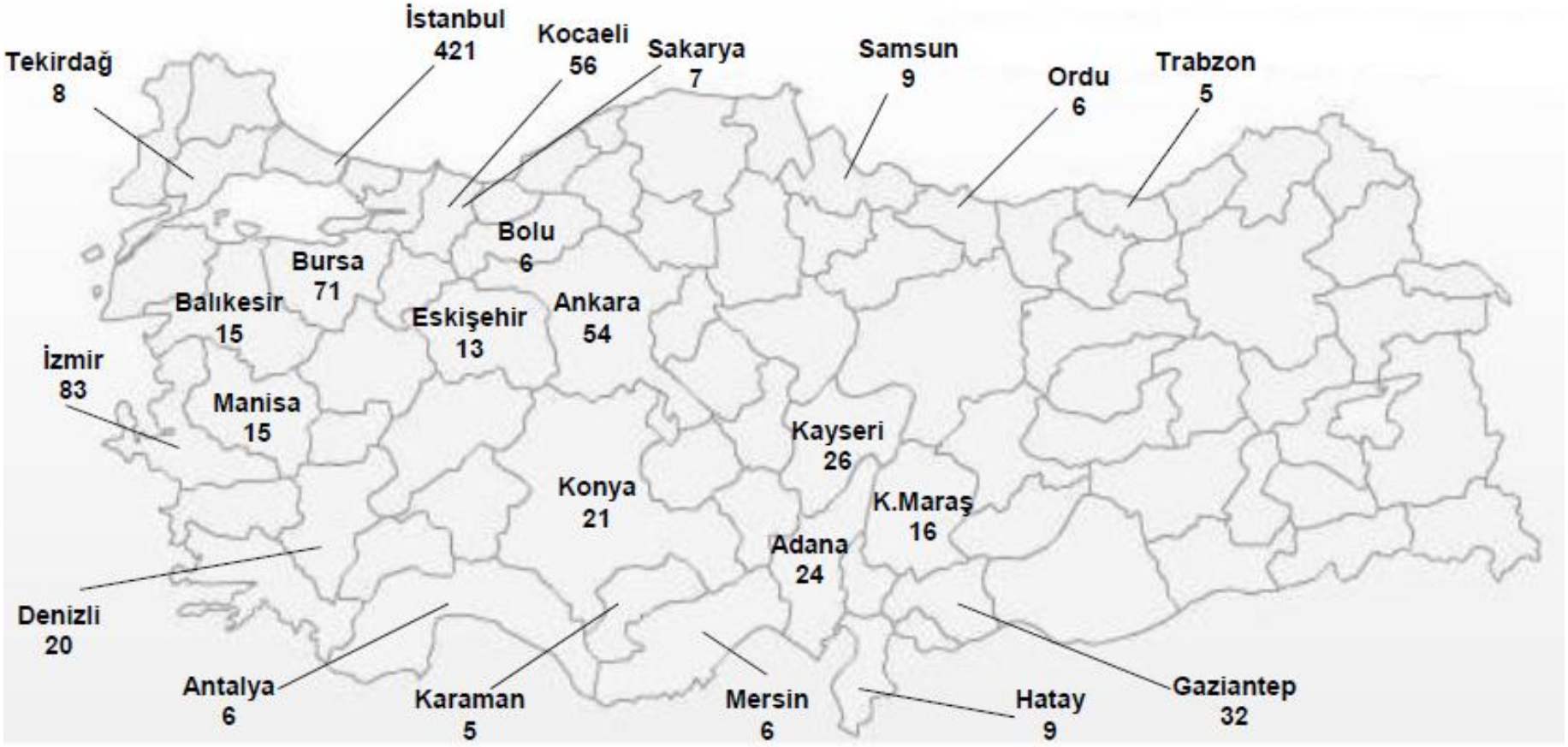
Geographical distribution of the largest 1000 industrial firms in Turkey, 1999 and 2009

	1999	2009
İstanbul	508	421
İzmir	122	83
Adana	20	24
Bursa	41	71
Rest of Turkey	249	382

Source: Istanbul Chamber of Industry

"the emerging Anatolian tigers"

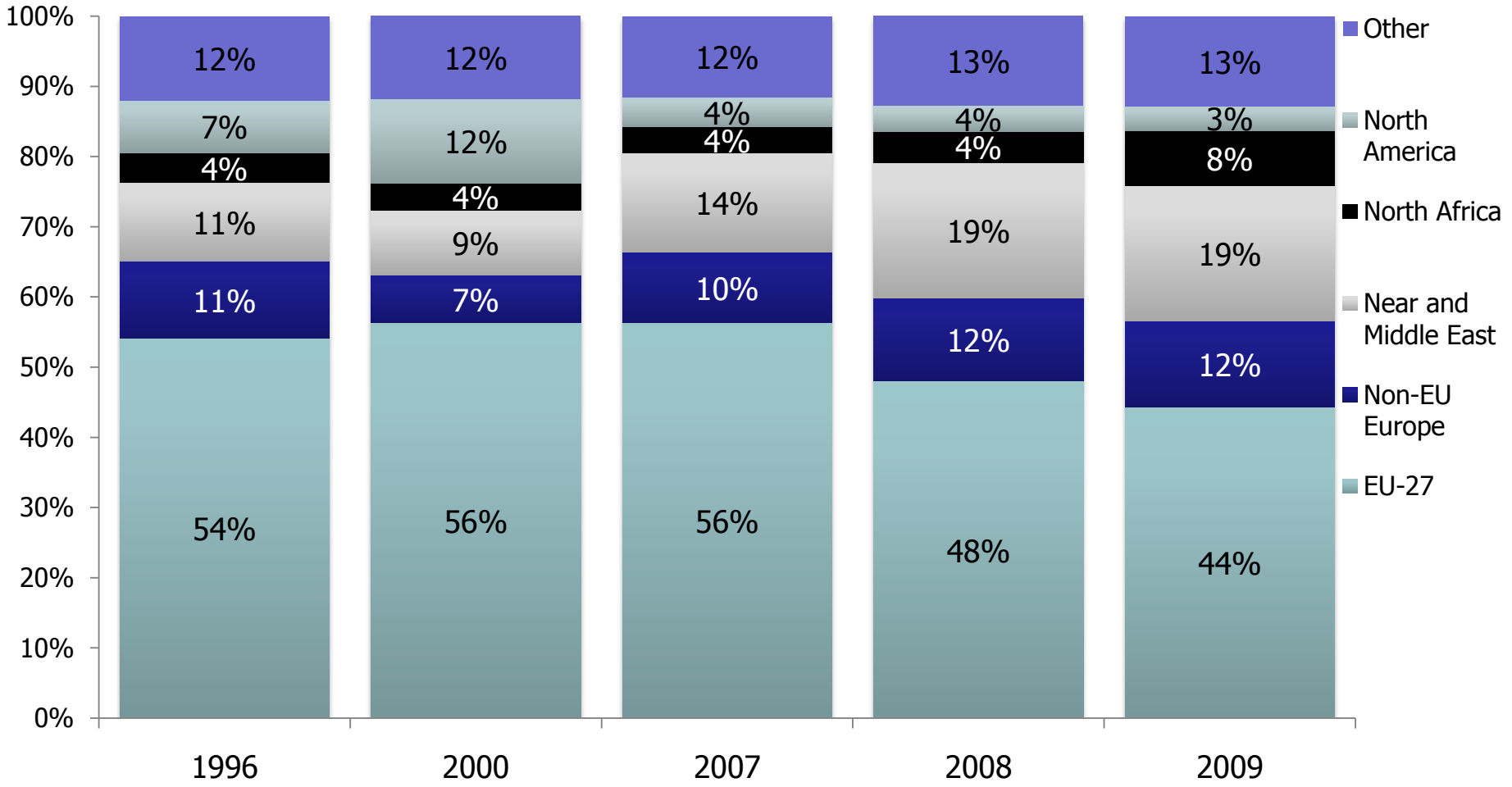
Cities with 5 or more firms among the largest 1000 industrial firms in Turkey, 2009



Source: Istanbul Chamber of Industry

Geographic composition of Turkey's exports: EU-Turkey Customs Union brings Turkey closer to her region

Geographical composition of Turkey's exports (1996-2009)



To sum up the transformation story

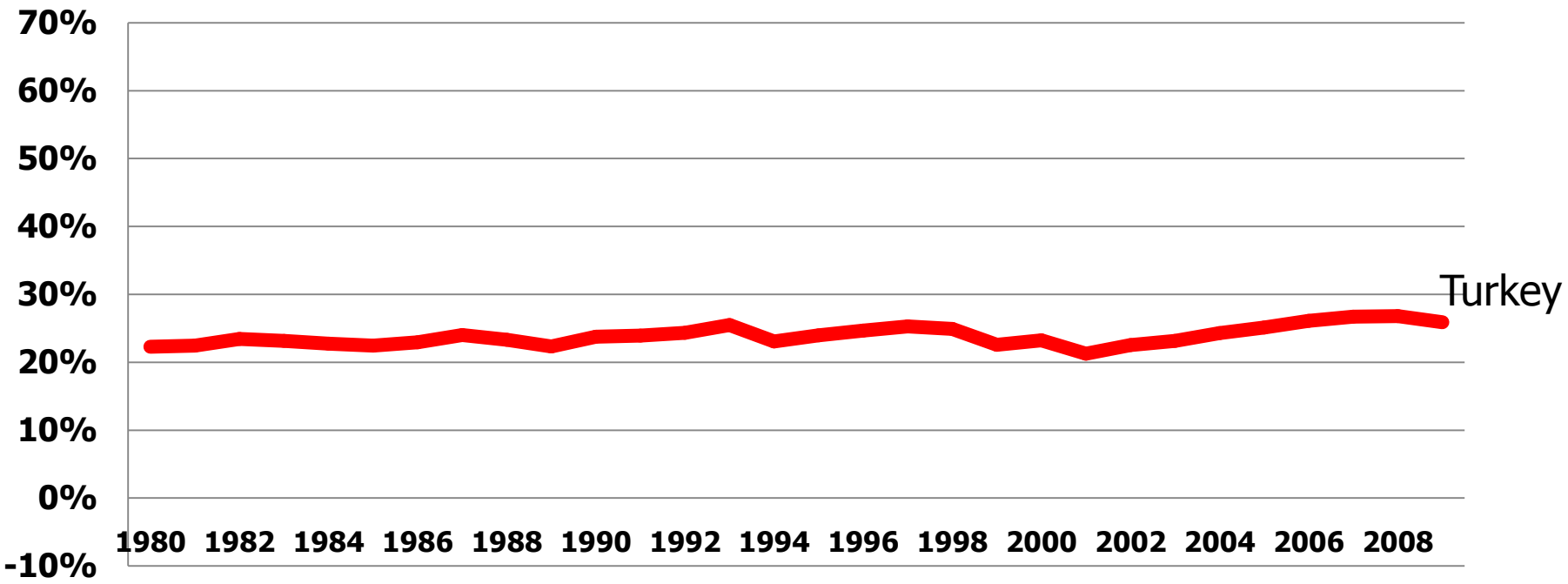
- Transformation is happening and changing the Turkish society more than ever before
- Not a coherent industrial policy but rather the outcome of the interplay of several factors
  - ➔ Internal structural factors:
    - Geographical location
    - EU Customs Union and accession process
    - Demographic structure / entrepreneurship potential
  - ➔ External factors:
    - Global economic and technological trends
    - Vertical specialization strategies of MNCs
    - Rising foreign direct investment flows

Empty side of the glass? Major policy challenges waiting to be tackled…

- Achieving convergence
  - ➔ Increasing the economic growth capacity from 4 to 7 percent
  - ➔ *A coherent growth story?*
- Tackling SME growth problem
  - ➔ Productivity and innovation issues
  - ➔ *An ambitious eco-system renovation strategy?*
- Fighting skills mismatch and unemployment
  - ➔ Urban-rural transformation
  - ➔ *An education reform strategy in line with growth and competitiveness strategy?*

A very stable convergence performance! Structural change with no (relative) results?

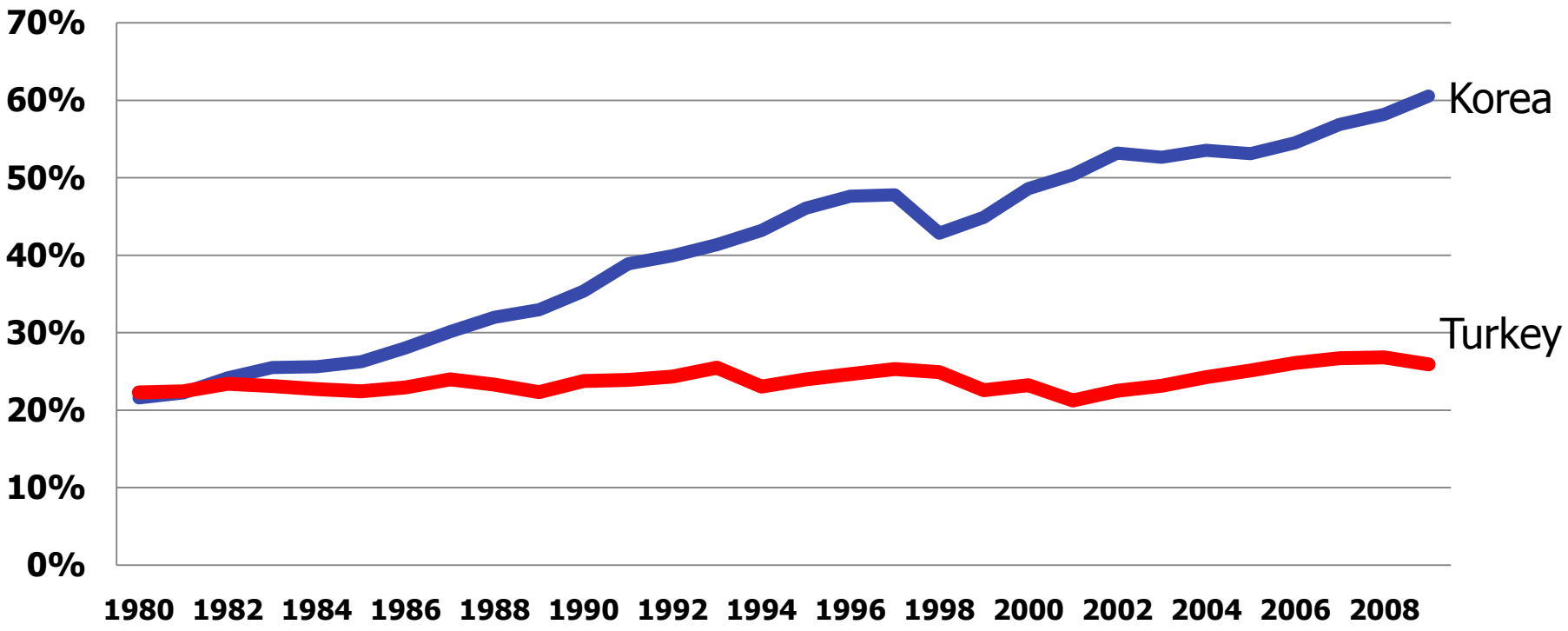
GDP per capita in Turkey as percentage of GDP per capita in U.S., (PPP, 1975-2008)



Kaynak: EIU and TEPAV calculations

Though non-convergence is not destiny. A coherent growth story is what Turkey needs…

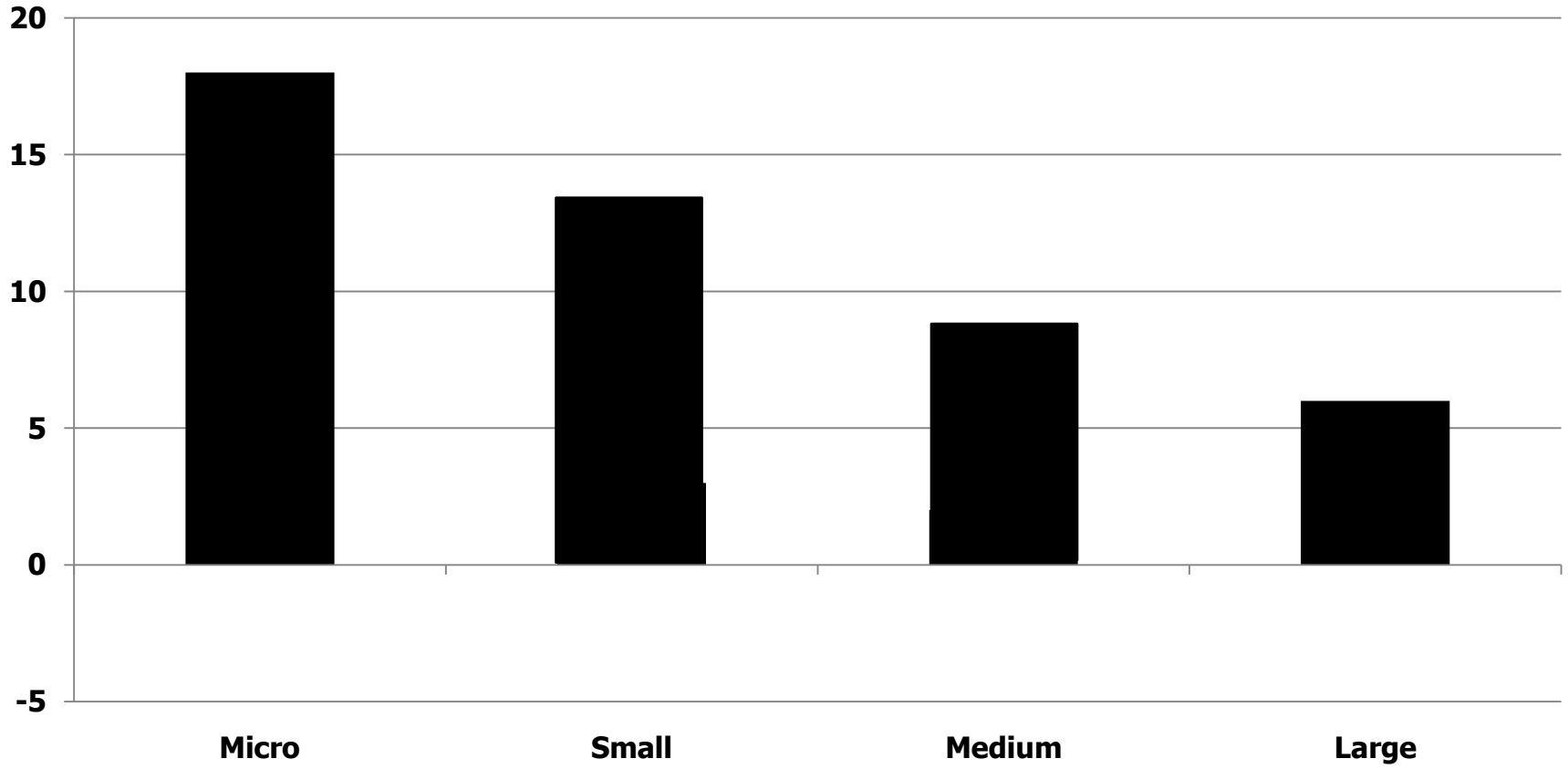
GDP per capita in S.Korea and Turkey as a percentage of GDP per capita in U.S., (SAGP, 1975-2008)



Kaynak: EIU and TEPAV calculations

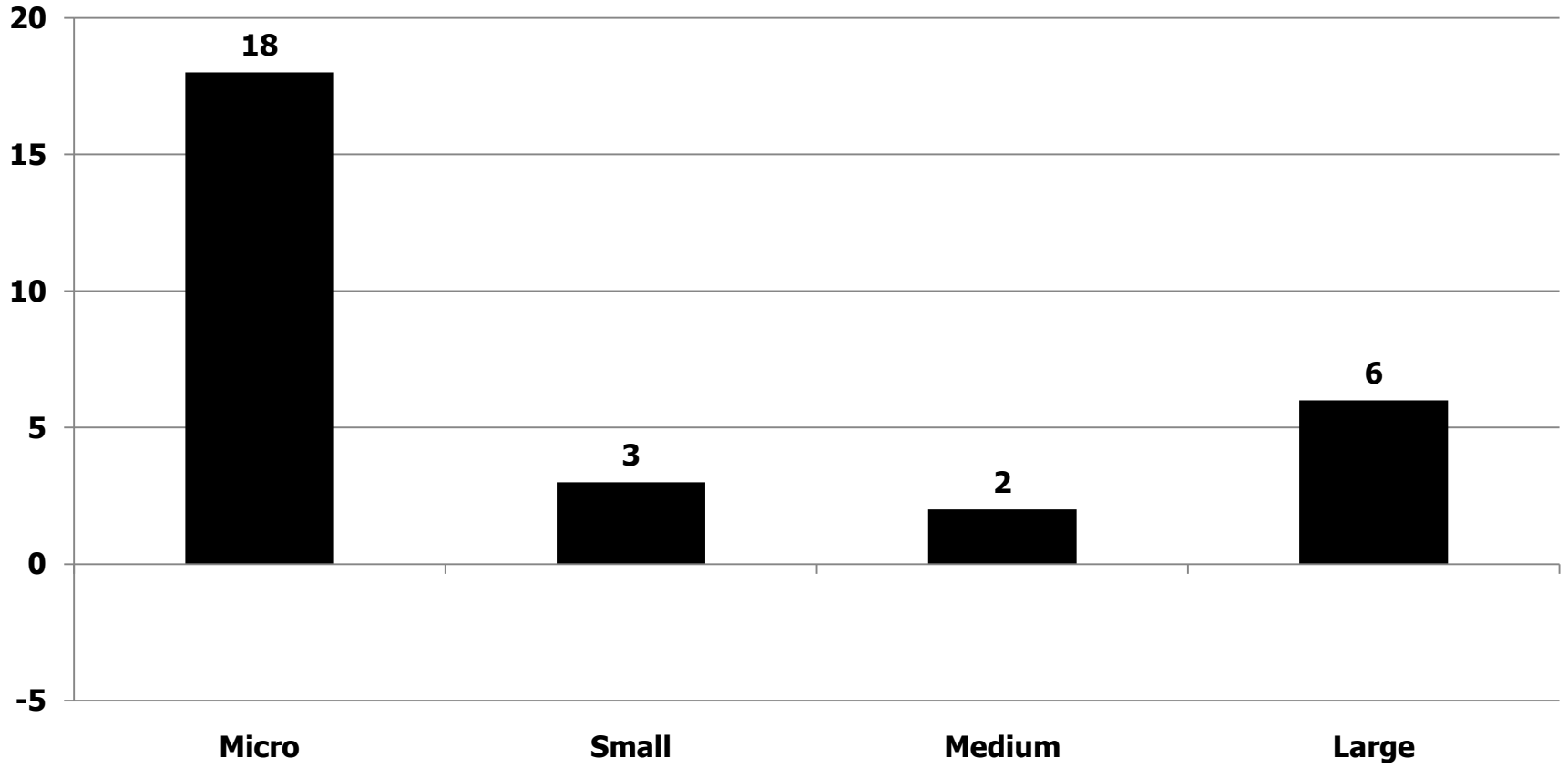
Growth of firms in a healthy, private sector driven economy…

Employment Growth across firm size



Growth problem in Turkish SMEs

Firm-level employment growth across different sizes, percentage increase (2004-2007)



Kaynak: World Bank Enterprise Sueveys

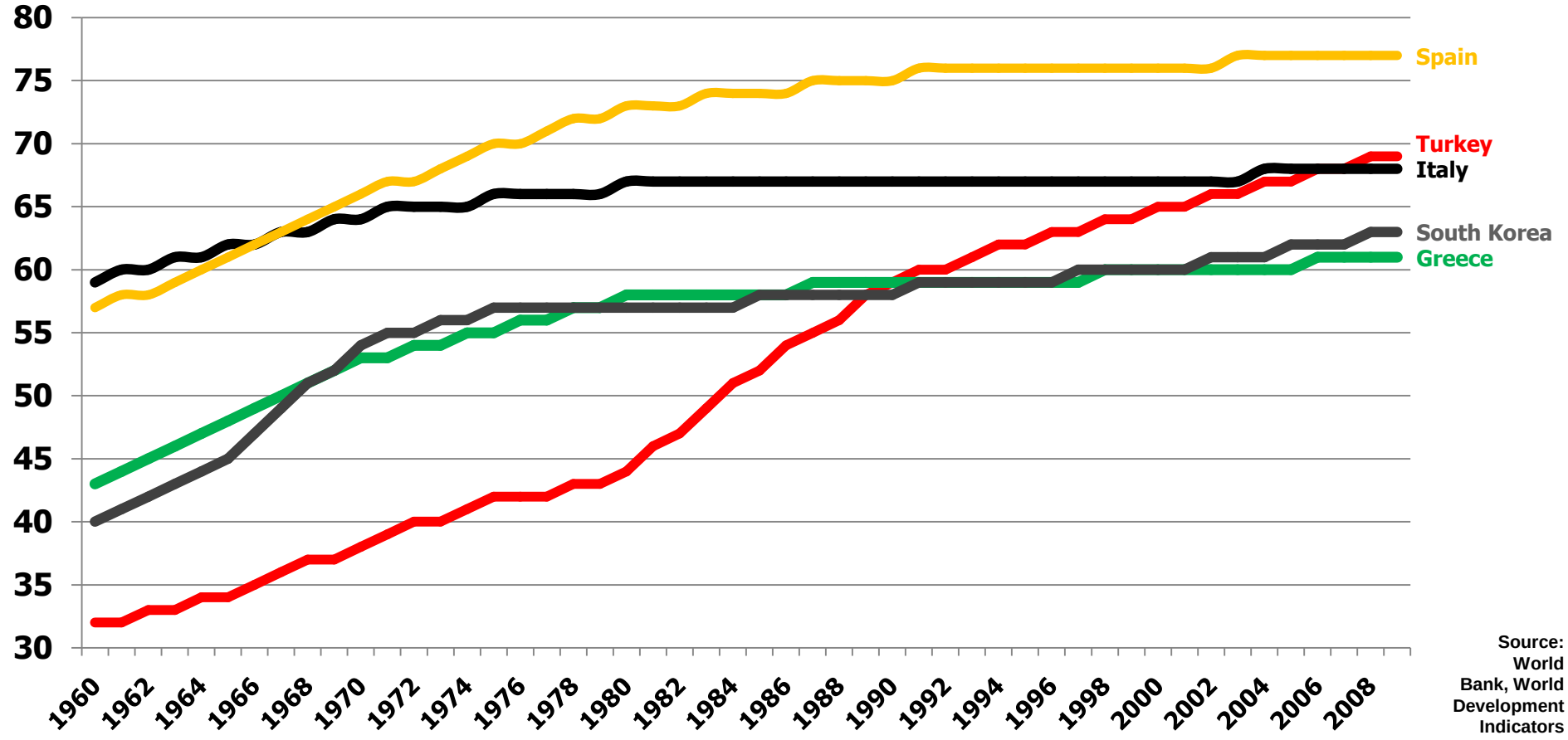
Dual structure of the economy is a big problem

- Registered (modern) firms
  - ➔ Productivity levels: 62% of firms in USA
  - ➔ Economies of scale; new technologies, quality products
  - ➔ Spread over Anatolia; export oriented
- Unregistered (traditional) firms
  - ➔ Productivity levels: 25% of firms in USA
  - ➔ Old technologies, low quality; domestic oriented
  - ➔ Being unregistered provides a cost advantage of around 20%

Source: McKinsey Global Institute

Rapid urbanization puts pressure on labor market and skill needs

Urban population as a percentage of the total population in Turkey, Spain, Italy, Greece and South Korea, (%), 1960-2009



Source: World Bank, World Development Indicators

What is the exsisting policy framework?

- Incentive framework in line with EU
  - ➔ Regional development focus
  - ➔ Incentive or compensation?
- Science and technology policy
  - ➔ Scientific Research Council's expansionary budget as the main instrument
  - ➔ Focus and prioritization problems…
- Investment climate reform
  - ➔ Role of organized industrial zones as one stop shops
- Foreign economic relations strategy
  - ➔ Regional economic integration focus
  - ➔ Capacity problems…

Can we call these a coherent industrial policy framework?

Role of special economic zones

- Main motive:
  - ➔ Improving the investment climate everywhere is not possible but we can designate certain areas as more equal and special
- Different types of special economic zones
  - ➔ **Free Trade Zones**
    - 20 FTZs: 3.620 firms, 50.000 employment
  - ➔ **Technology Development Zones**
    - 37 TDZs: 1.178 firms, 11.195 employment
  - ➔ **Organized Industrial Zones**
    - 120 OIZs: 37.000 firms, 820.000 employment

What sort of industrial policy? – What Turkey needs now…

- Larger context: A coherent growth story that would tackle the binding constraints with ambitious reforms (eco-system renovation for innovation)
  - ➔ Access to finance (PE and VC focus)
  - ➔ Education
  - ➔ … (second generation reforms to upgrade institutions)
- A supporting industrial policy framework as part of the overall growth strategy
- Process more important than policy: focus on governance of industrial policy

Conclusions and takeaways…

- We are yet to see the adoption of the new industrial policy "mindset"
- Risk is obvious: middle income trap. Stuck in between two worlds…
  - ➔ Hard time converging to US and EU income levels
  - ➔ Hard time competing with low-cost East Asian producers
- A jump is needed, and industrial policy is the answer

Possible policy lessons for LDCs?

- Political will to support structural transformation
  - ➔ Political unstability vs developmental state
- Leaving it to markets and/or external actors?
  - ➔ Industrial policy as major component of a coherent growth strategy
  - ➔ Vision for future – what type of an economic structure do we dream of? How will we get there?
- Creating pockets of excellence
  - ➔ Geography – special economic zone, infrastructure
  - ➔ Bureucracy – special tax admin, policy planning
  - ➔ Judiciary – special treatment for strategic investments