

Building innovation capabilities in emerging economies: firms, states and institutions

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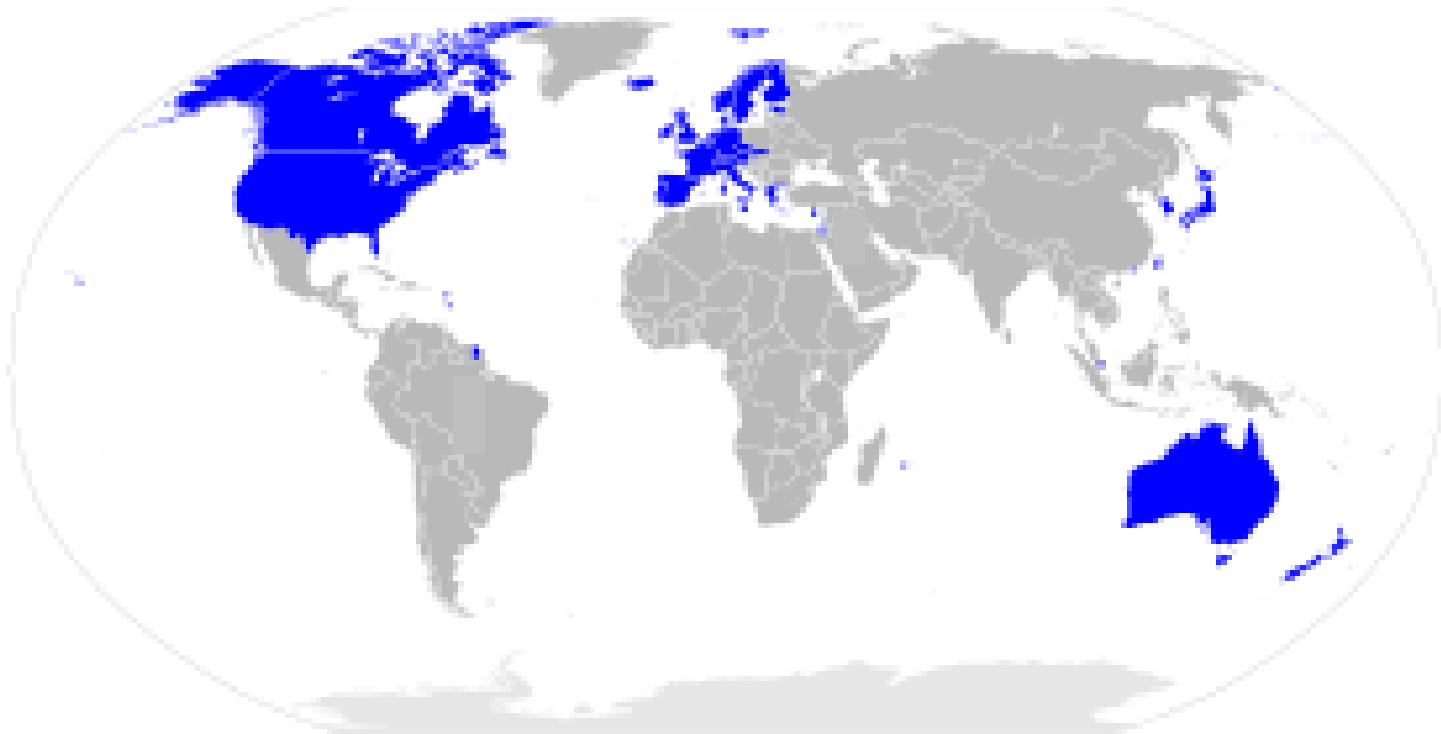
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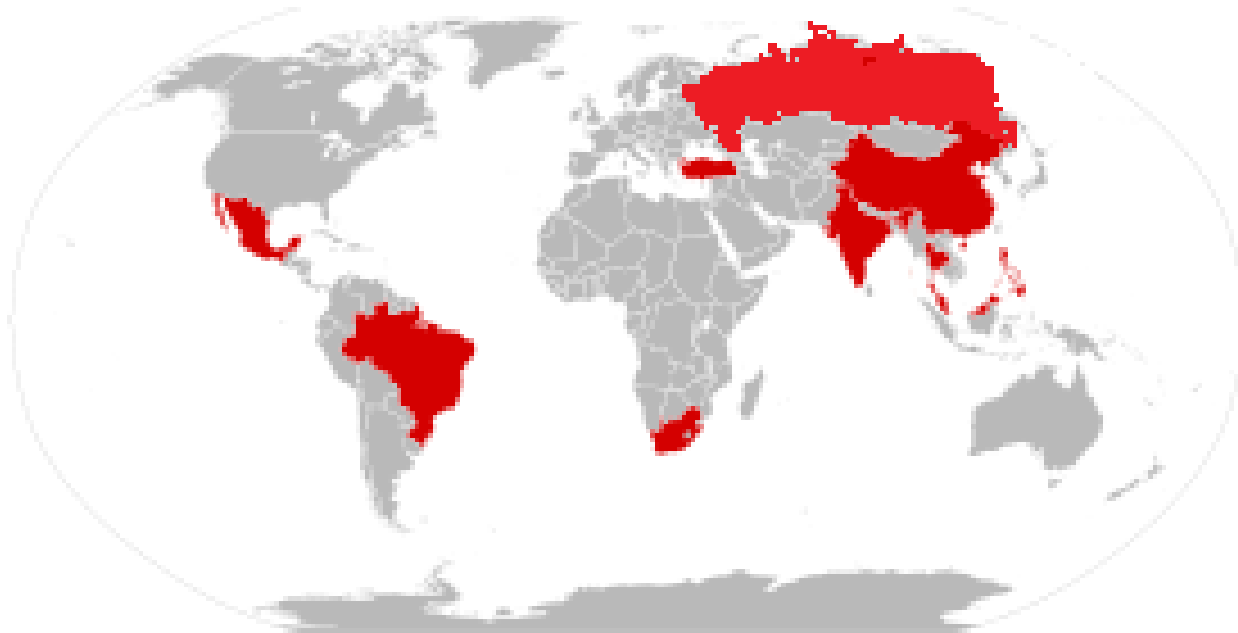
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Historical locations of innovation



Current locations of innovation!
Many countries join the innovation competition



Innovative firms from emerging economies now challenge the industry leaders!



How do scholars explain firm innovation capability building in emerging economies?

What has happened in East Asian countries? R&D trajectory of emerging countries (Hobday, 1995)



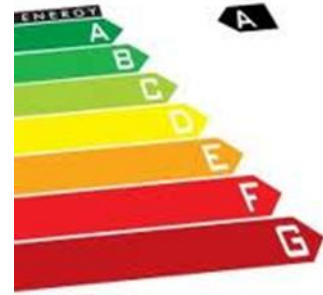
This is a very simplified version!

- Firms can use **different** strategies to build their R&D capabilities.
- Firm has to have extra-ordinary managerial and organization capability to manage its context and institutional environment to build innovation capability in emerging economies.

The case: Developing its own R&D



Arcelik in the white goods industry



- 20,000+ employees,
- 14 production units in four countries in addition to Turkey: China, Romania, Russia, and South Africa.
- Number of R&D employees (app.): 900



BEKO

Blomberg
seit 1883

elektrabreg

FLAVEL

LEISURE



Motivation for R&D (innovation) Capability building

When Turkey decided to open up the economy for global competition, we started to worry for our business. We would be loose our only market that we had.

“So we invited McKinsey and Bain Co. Consultants to analyze what would happen when Turkey entered the Customs Union with EU. And both of them argued that the customs union would bring a new level of competition.

- The value of the company would drop dramatically, so they suggested us **to sell the company**.*
- Another option was to **enter a joint venture** (JV) with one MNE, and we negotiated for years with all the leading international firms.*
- But after lengthy discussion we decided **to invest in our own R&D and innovation**, although at that time we didn't know anything what this really meant...” (Huseyin Subasi, previous CEO).*

Earlier struggle with HR

- *“When we started, all previous R&D efforts had failed in Turkey. There was not one successful example. So we decided to look outside But when we looked outside, we did not see how they started. Refik Bey always said that ‘they /international firms/ are only showing the film, but they do not show how they make the film or take the picture.’ They were sharing what they were doing at the moment, but they did not know how they developed their R&D department earlier and how they started.” (Arçelik R&D Manager 2).*

Earlier struggle with HR

- *“I worked as R&D engineer & system manager at a US company. The attractive point was that they offered starting R&D from zero in Turkey. It was exciting to step down from an advanced level of R&D experiences that has all the infrastructure & systems to a level that has nothing.”(Arçelik R&D Manager 3)*

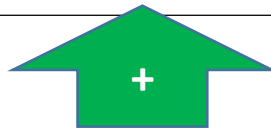
Earlier struggle with HR

- *“In 1989, when we wanted to employ R&D engineers we did not find any. The engineers /in Turkey/ wanted to be sales engineers or researchers at universities...”(Arçelik R&D Manager 3)*

A model of firm innovation capability building in emerging economies

Obstacles & resistance factors:

External (national /culture towards R&D/partner)
Unsustainable state R&D policies
Internal (production mentality, other departments such as production)



Motivation for
building
innovation
capabilities



Learning & capability building trajectory



Outcomes

International sales ratio
R&D employees
Patent data

Supporting factors:

External (state, universities, International collaborations, business group)
Internal (Top management)

Conclusion

- Firms cannot build capabilities in isolation, **context**, **institutional arrangements** and **capability building management** are matters!