Directives to Enhance Private Sector Engagement in R&D Activities

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Ufuk Batum

- Private sector experience, 30 years.
- 20 years of senior execution.
- Worked in USA, France, Italy, Romania and Turkey.
- Consultant to Turkcell, Turkish Airlines, AnadoluJet, TEB BNP Paribas, NATO, TIM, TUBITAK, etc.
- Author of 6 books.
- Vice President of ODTU TEKNOKENT.
- An Entrepreneur and a Mentor.
- A full hearted Rainmaker.
Agenda

- Setting the Stage: Importance of the Issue
- Influential Factors on the Development of R&D Based Investments
- SWOT Analysis
- Recommendations & Conclusion
- Q&A
Sustained productivity requires that an economy continually upgrade itself.

WEF places “business sophistication” among critical factors to build national competitiveness.

Role of institutional bodies in fostering innovation and technology commercialization, and thus “upgrading” the economy has become critical.
Setting the Stage: Importance of the Issue

- Properly designed policies create a favorable environment to scale and effectively leverage market-based creativity.

- So the main question to ask is...
  - Are there any obstacles inhibiting business opportunities? What can government policy do in support? What should the main priorities be?
“Post knowledge era” leads to the rise of creative economies.

Oil is an exhaustible resource.

Economic diversification is needed.

There is a high unemployment rate of qualified workforce in the region (~20-25%).
However...

- A “broken cycle” exists among universities, research and society.

- Wide technological distance from the world’s rapidly advanced countries.

- Private sector engagement is highly required to:
  - Create new and well paid jobs,
  - Bring effectiveness in resource utilization,
  - Provide necessary funding for new ideas in R&D based fields,
  - Increase inclusiveness of educated workforce in related fields.
Influential Factors on the Development of R&D Based Investments - *Human Capital*

- The remedy for low levels of intellectual capital in Arab countries is providing an intense collaboration among these sources.

- Introduction of national policies aiming at simultaneous improvement of various components of the ecosystem is highly required.
Influential Factors on the Development of R&D Based Investments – *Education and Research Institutions*

- Of the top 500 universities in the world, only five institutions are based in an Arab country.

- Improving science education in universities, enhancing scientific research capacity, increasing financial support for R&D, and fostering regional and international scientific and educational cooperation should be covered by policies, as well as by culture.
## Innovation Input and Output in the Arab Region (Global Innovation Index, 2013)

<table>
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<tr>
<th>World Ranking</th>
<th>Country</th>
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Influential Factors on the Development of R&D Based Investments - Patenting Activities

- Patenting rates have long been considered a well-grounded proxy for the level of innovation activity in a country.
Influential Factors on the Development of R&D Based Investments – *Business Environment*

- The tendency of private sector to engage in R&D activities and related sectors is highly affected by the dynamics of business environment - *whether or not it is easy to found a business in that context.*
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<tr>
<th>Economy</th>
<th>Rank</th>
<th>Filtered Rank</th>
<th>Starting a Business</th>
<th>Dealing with Construction Permits</th>
<th>Getting Electricity</th>
<th>Registering Property</th>
<th>Getting Credit</th>
<th>Protecting Minority Investors</th>
<th>Paying Taxes</th>
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Influential Factors on the Development of R&D Based Investments – Attracting Foreign Investment in R&D

- Pursuing policies to attract FDI in high value-added activities is important, esp. to be integrated with global value chain.

- These policies include;
  - Privatization, regulatory reforms and competition policies, the provision of physical or legal infrastructure, tax incentives, regulations to enhance cooperation between foreign affiliates and local players, the transfer of skills to domestic firms.
Influential Factors on the Development of R&D Based Investments – *Attracting Foreign Investment in R&D*

- FDI in technology & innovation areas is influential in raising the capability of private firms to absorb and use the technology/knowhow that enter through foreign investment.

- However; in the region, FDI and stocks are concentrated in few countries and sectors - nearly 80% is concentrated in Saudi Arabia, Egypt, Qatar, Lebanon and UAE.

- There has been a decrease in FDI inflows to the region since 2009.
SWOT ANALYSIS
Strengths

- Young and demanding population
- Strong monetary assets / Strong financial capital
- Trading skills and talent taking its roots from a long historical past
- An adaptive entrepreneurship culture with the experience of surviving in difficult market conditions
- Increasing levels of investment made in education (especially in applied sciences)
- Dubai, Doha and Abu Dhabi rising as important transportation hubs
- Leader based societies where good role models play an important way out
- Arabic as a common and widely spoken language base for research, technology and business
- English widely used as a second language as means of communication for education, research and business
- A strong intellectual diaspora in other countries
- Connected (floating) societies/countries in the Arabic world
- A substantial market size (the whole region as one large market without any language barrier)
- Stock of problems pushing the crowds for solutions
- Good salary and benefit packages for well educated employees (local or international)
- A promising ecosystem for expatriates
- No visible zenophobia
- A competitive banking industry
Weaknesses

- Weak intellectual capital
- Lack of research culture
- Insufficient transportation infrastructure (good ones are limited to a few countries)
- Low levels of patenting activities
- Low ranks in ease of doing business index
- Lack of group work
- Lack of multi-discipline approach
- Lack of structured policies to foster entrepreneurial activity in high-tech sectors
- Overdependence of the economy on natural resources (particularly oil & gas - “Oil Curse”)
- Lack of intellectual property (IP) rights
- Limitations on the formation of a free market
- Perception of high nepotism and corruption
- Low perception on rule of law and democracy
- Lack of middle class
- Limited social and political environment to host foreign direct investment
- Weak cooperation and collaboration culture (political disputes, etc.)
- State subsidies and unreasonable welfare in oil/gas rich countries
- Strong belief that business would be handled from top to bottom
- Lack of written culture
- Too much bureaucracy
- Perception of oligopolistic market behaviour
- Limited experience or will for long-term planning
- Limited SME talent and establishment
Opportunities

- Geographical location advantage; a bridge between East and West
- The region includes emerging markets and inspires new ones
- Recovery in relations with Western world (esp. After the detrimental effects of post 9/11 period on people and capital flow)
- Increasing tendency towards global integration in education sector
- The strong trend that the major corporations particularly in Western societies are facing low growth rate and profitability
- Movement of capital, talent, growth and knowhow from West to East, from developed to developing countries
- High rate of return opportunities for international corporations
- Oil prices to be improved in mid to long term
- Existence of role model countries (Turkey, Malaysia) in the region where the adaptability of the offered model to MENA countries is rather high
- Opportunities for privatization
- Opportunities for mergers and acquisitions
- New and concrete financial incentives to be planned and implemented in the MENA countries
- Likeliness of well designed public policies to foster education and research in the region
Threats

- Any new political turmoil in the region might turn into long lasting regional and international wars and conflicts
- Decreasing importance of oil/gas sectors
- Further souring of oil prices
- Increasing global competition in R&D activity and high-tech sectors
- Emergence of new and strong R&D “centers” with favorable business conditions (i.e. Turkey, Ireland, Malaysia, Singapore)
- Continuation of brain drain
Recommendations

- An innovation culture should be rooted.
- Research and entrepreneurship supporting policies are crucial to institutionalize this culture.
- Fostering reverse brain drain and attracting FDI are important to structure a rich intellectual infrastructure.
- Establishing “regional innovation - R&D hubs” are important both to foster cluster based innovation and to build focused investment bases for international funds.
- Research is important, but Development is more practical to start with.
- The policies should promote transparency.
Conclusions

- Decision makers and opinion leaders should act together to prepare the scene in terms of political, social and economic pillars.

- Improvements in terms of accountability, infrastructure, ease of doing business, protection of IP rights will make local & international companies more prone to R&D engagement and investment in the region.

- Change does not happen over night. It cannot be imported or bought from a shop.

- Lessons to be learned, but these need to be customized and localized.
Conclusions

- Investments in the higher education system should be supported by liberal policies and incentives.

- Countries in the region should design constructive, easy-to-do and easy to-execute laws, legal frameworks, programs and funding to foster the formation of research and creative ecosystems.
  - “Technology Development Zones” Law
  - “R&D Activity Support” Law
Thank you

@UfukBatum
ufuk.baturn@odtuteknokent.com.tr
ufuk.baturn@gmail.com