Advancing the Promise of Turkey in the Global Economy: The Strategic Imperatives

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Three Essential Points:

1. The Current World Disorder: *The Potential Role Turkey Could Play?*


3. Stimulating Innovation & Globalization through *targeted Growth Platforms?*
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The World Disorder

*Changed Equations of Power:*

1. One Super power with no clear value proposition/Eroding Trust & No Counter balance
2. Shift in Economic Center of Gravity: AP versus Atlantic
4. Middle East’s search for a New Identity?
5. Expanding EU = New Possibilities?/New Groupings?
Geo-Political Alliances are In Transition

Paradigm Shift

Past

Future

Bond by Cold War Forces of Alliances

Deconstruction of Past Geopolitical Architecture

U.S. — USSR

EC

Japan

Asia

ROW

NATO

Turkey

OPEC

WTO Issues

Middle East Uncertainties

“New and Independent Identity”

Reconfigure

New Role?

Uncertainties

Reconfigure

Russia

Expanded EC

Japan

China

ROW?

OPEC

Turkey
The Emerging Economic Environment will be influenced by several fundamental forces

**Supply**
- Convergence Effect of Information Technologies
- New Materials and Nanotechnologies
- Genetic Engineering

**Demand**
- Freer Economic Flows (WTO, Market Economies)
- Choice of Solutions
- Ecological and Energy Efficient Products / Services

The Emerging Economic Environment will be influenced by several fundamental forces.
In the process several industries critical to the Nation could undergo major changes.

Turkey need to understand how the Tornado will change character of different industries.
As a result Turkey has to make a switch from Classical to Knowledge Economics.
At the same time Center of Gravity of Global Economy is also shifting

Percent of GDP Distribution

Role of Turkey?
In the last quarter century Turkey has addressed some of the fundamentals

1. Stabilizing democracy
2. Harnessing Inflation
3. Strengthening Turkey’s overall economic infrastructure
4. Partial Modernization of the Corporate Sector
Turkey’s foreign exchange reserves increased three folds in the last ten years

Foreign Exchange Reserves in US$ Mn (1996-2005)¹

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1. International Monetary Fund (http://www.imfstatistics.org)
More than thirty five percent of total population in Turkey is below 18 years.

Percentage of Population below 18 Years vs. GDP per Capita (2005)

Youthfulness = Economic Vibrancy?

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1. Energy Information Administration - EIA (http://www.eia.doe.gov/)
2. UN Nations Population Division (http://www.un.org/english/)
However Turkey’s trade balance has been declining

Trade Balance in US$ Mn (1990-2005)

As a Percentage of GNP: 0.8%

6.25%

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Changing Global Environment and Turkey’s Economic Possibilities imply *New Course ahead*

- Mid Eighties
- 2006
- 2010

**Economic modernization**

**Securing a Prominent Global Role**

1. Improving the nation’s long-term competitiveness (*e.g. Energy Strategy*)
2. Strengthening Turkey’s Geo-Political role
3. Cultivating more confidence in the Corporate Sector
Accordingly, the new strategic game plan must ensure a new set of requirements are met.

**Internal Aspirations**
- Triggering a new era
- Increasing Global exposure
- Balancing socio-economic development process

**Global Environment**
- Power of new economics
- Short-lived technologies
- Rising environmental concerns
- WTO environment

**Strategic Requirements**
1. Create distinctive competitive advantages
2. Select areas with winning possibilities
3. Evaluate possibilities with global perspective
4. Strategic guidance to drive leadership mechanisms
5. Emphasis on soft factors
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Turkey’s Position

- Strategic Location = Gateway role between East & West, North & South, between different streams of Enquiry

- Cultural Integrator

- Developing a socio-economic infrastructure (to play the Value added Clearing house role?)
Turkish economy must now aspire for a decade of growth similar to what Asian Nations have enjoyed

Average Growth Rate (1995-2005) vs. GDP* per Capita (2005)\(^1,2\)

Next Decade Growth > 7.5% ?

Note: *Real GDP with base year 2000

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1. Energy Information Administration - EIA (http://www.eia.doe.gov/)
2. UN Nations Population Division (http://www.un.org/english/)

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China’s manufacturing exports as a percentage of World manufacturing exports has increased by 4.5 times.

Manufacturing Exports of Select Developing Countries as a Percentage of World Manufacturing Exports (1990-2004)

- China (8.25%)
- Mexico (2.31%)
- Malaysia (2.31%)
- India (0.88%)
- Turkey (0.81%)
- Brazil (0.77%)
- Egypt (0.03%)

World Manufacturing Export (US$ Bn)
- 1990: 2,391
- 1995: 3,719
- 2000: 4,688
- 2004: 6,750

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Turkey exports per capita could significantly increase

Exports per Capita of different Countries in US$ per Capita (2005)\(^1,2\)

<table>
<thead>
<tr>
<th>Country</th>
<th>Exports per Capita (US$/Person)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>89</td>
</tr>
<tr>
<td>China</td>
<td>579</td>
</tr>
<tr>
<td>Turkey</td>
<td>983</td>
</tr>
<tr>
<td>Thailand</td>
<td>1,721</td>
</tr>
<tr>
<td>US</td>
<td>3,042</td>
</tr>
<tr>
<td>Japan</td>
<td>4,664</td>
</tr>
<tr>
<td>Korea</td>
<td>5,947</td>
</tr>
<tr>
<td>UK</td>
<td>6,236</td>
</tr>
<tr>
<td>Germany</td>
<td>11,841</td>
</tr>
</tbody>
</table>

If per capita exports same as Thai
$70 B
If per capita exports same as the US
$125 B

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1. International Financial Statistics Online

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Turkey’s trade deficit per capita could be a drag for its Economic Development

Average Growth Rate (1995-2005) vs. Trade Balance per Capita (2005)

1. Energy Information Administration - EIA (http://www.eia.doe.gov/)
2. UN Nations Population Division (http://www.un.org/english/)
3. World trade Organization (http://stat.wto.org/)
Moving forward Turkey must evolve Global Strategy similar to South Korea in late 70s & Japan in early 70s

GDP per Capita in US$/Capita: South Korea, Japan and Turkey (1971-2005)

South Korea
Japan
Turkey

Global Presence/Rise of Turkish Multinationals?
Manufacturing competitiveness?
Innovation?

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1. International Monetary Fund (http://www.imfstatistics.org)
3. World bank data ???
Strategic Framework for defining the economic value propositions

The basic framework: Strategic Triangle for Regional Strategies

Country/State Or City

Customers

Competitors

Sectors of the Economy

Priorities?

Value?

Relative Cost?

Conducive Conditions?

Companies

Value?
A Strategic framework that group industries into different roles requiring different policy and infrastructure supports

Socio-Economic Impact

- Employment and capital generation ability
- Impact on Social development
- Impact on Industrial/Economic Environment
- Impact on the State’s Global Power

Competitive Advantage

- Global Links
- Stage of development and uniqueness
- Domestic Environment
- Competitiveness of input factors

Development Sector
- Build Competitiveness through special incentives

Locomotive Sector
- Develop Aggressively through infrastructure supports and policy incentives

“Free market” Sector
- Leave to Market Forces

Promotional Sector
- Promote / Create Scale through innovative marketing

Please refer to Appendix 2 for specifics of the methodology.
Several Industries in Turkey could emerge as the locomotive of economic growth

- Agricultural machinery
- Software
- Personal care

- Tourism
- Shipbuilding
- Pharma/
- Handicrafts / decorative items
- Specialty Chemicals
- Clothing and footwear
- Auto4-Wheelers
- Food and beverages
- Steel
- Glass

- Sugar based
- Cotton
- Metal ores

High-tech industries, in vogue in OECD

Central State: Agro based industrialization

Coast Line area

Tentative Hypotheses

High

Low

Degree of Economic Impact

Low

High

Competitiveness

* As finished product
** Until volume picks up

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Priority industries must drive infrastructure/utilities strategy and promoted through market mechanisms

**Industry in Turkey**
- Sugar
- Wheat/Corn
- Fruits & Vegetables
- Cotton
- Silk
- Flowers
- Oil & Gas
- Minerals
- Dolomite
- Strategic minerals
- Chemicals
- Engineering goods
- Ship building
- Transportation equipment
- Automotive components
- Electronics (Rural)
- Software (niche)
- Pharma & Specialties
- R&D, D&E, Services
- Maintenance
- Flavors & fragrances

**Rural & Smaller towns**
- Performing Arts
- Art & Crafts
- Sports
- Education
- Multimedia
- Financial Center & Professional Services

**Istanbul**
- Performing Arts
- Art & Crafts
- Sports
- Education
- Multimedia
- Financial Center & Professional Services

**Upstream**
- Central
  - Sugar
  - Wheat/Corn
  - Fruits & Vegetables
  - Cotton
  - Silk
  - Flowers
- Oil & Gas
- Minerals
- Dolomite
- Strategic minerals

**Downstream**
- Istanbul
- Performing Arts
- Art & Crafts
- Sports
- Education
- Multimedia
- Financial Center & Professional Services

Significant profit making opportunities

**World scale projects through innovative market mechanisms**
- Energy & Power Strategy
- Airports and Airstrips
- Roadways & Railways modernization
- Dockyards to match Shanghai, Yokohama and Korean Ports
- Waterways development
- Water management
- Sanitation & Recycling Strategy

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Holistic Approach?

PROBLEMS ≈ OPPORTUNITIES

Holistic Approach

Energy

Renewable and Clean Energy Source

Ecology

Energy, Food and Health for All

Equity

Sustainable Economic Developed

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Turkey’s Energy Strategy will be central toward creation of a Vibrant Economy

Energy Consumption per Capita vs. GDP per Capita (2004)

80% of Global Population

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1. Energy Information Administration - EIA (http://www.eia.doe.gov/)
Large Scale Engineering Systems approach must drive Turkey’s Vision of NextGen Distributed Power Infrastructure

The Virtual Power Plant
- **Aggregates the output of thousands of micropower technologies**
- **Peak shaving becomes power trading on the wholesale market**
- **Coordination and control through a new communications infrastructure**
Not Either/Or Unification

A

Electrolizer

H₂

O₂

B

Sun's Rays

Photovoltaic Cells

H₂

O₂

C

H₂ Cylinder

O₂ Cylinder

D

Reformer

H₂

CH₄

E

Methanol

Biomass

Ethanol

F

Metal Hydride

Nuclear

H₂ Tanker / Pipeline

Specialized Applications

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Engineering Systems Advanced Solid Modeling Capability

Engineering Tools Include Autocad, Solidworks, Thermal Analysis System, Fortran, C++
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Turkey’s New Role?

Central role in World Affairs with prominent Economic structure

NATO member with Middle Income Economic Stature
Accordingly the New Paradigm must Embrace both *Outside-in Thinking & Inside out Initiatives*?
Graduation of manufacturing will require development of “Hubs of Excellence” of Knowledge & Services

 Strategic Journeys each region will need to undertake?

- Istanbul
- Turkish Heart Land
- Central State: Agro based industrialization

“Upgrade” manufacturing industries both downstream agro and engineering

Knowledge intensity

Service intensity

High

Low

High

Low
Turkey has to fundamentally has to significantly improve its Innovation Capacity

Total No. of Patents Issued by USPTO to Turkey (1996-2005)¹

- Total number of patents issued by USPTO from 1996 to 2005 are 1,648,964
- Turkey has a share of 0.007% of all the patents issued by USPTO from 1996 to 2005

1. "Patents counts by country/state and year, January 1, 1977 – December 31, 2005" by USPTO.

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Turkey’s future competitiveness in knowledge intensive services is essential

Future Istanbul

Illustrative

Low knowledge intensive manufacturing

High knowledge intensive manufacturing for example in Key Centers

Low knowledge intensive service

Istanbul as Global Platform Financial, Logistic, Entrainment Services

Low, Med, High

Global market attractiveness

State’s competitiveness

Knowledge Intensive Agro in Central & Turkey

Low, Med, High

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Different regions of Turkey must be strategically developed as Growth Platforms

- High knowledge intensive service
- High knowledge intensive manufacturing
- Local skill intensive products & service
- Agro based knowledge intensive manufacturing
Turkey's Agenda

**Bold Moves - Balancing Strategic with Opportunistic Plays**

- Global Franchise
- Incubation of New Industries
- Investment in Next Generation Knowledge Chain

**Short-term Project focused moves**
- Incubation of New Industries
- Quality Jobs

**Long-term Competitiveness**
- “Draw for the Brightest and the Best”
- “Shared Public Private Responsibility”
- Public Investments
- Tax Credits for Investments
- Agro based industrialization
- Energy Efficiency
- Environment Friendly High response Industries
- Education and Health Efficient Infrastructure

**Examples of Mega Moves:**
- Leadership Institute
- Convergence Solutions
- New incentive programs for SMEs
- Export Thrusts

**A Strategic Balancing Act for “A Major Surge Ahead”**

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A Blueprint for Knowledge Based Economic Development

- Positive attitudes toward work
- Credibility and faith
- Economic Targets
  - GNP / capita $\geq$ $10,000$
  - Exports / capita $\geq$ $2,000$

Dynamic Economy based on High “Social Intelligence”

Program Classification

<table>
<thead>
<tr>
<th>Bold Moves / CRASH Programs</th>
<th>Midterm Initiatives</th>
<th>Long-term “Evolution” Programs</th>
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Examples of a Few Initiatives:

1. *Develop a Vision Paper from outside in view with the support of TüSİAD*

2. Organize a Policy forum in Turkey

3. **Stimulate bottom up Entrepreneurship and to encourage volunteering**

4. Spark Innovation and increase Exports: *Innovation Turkey*

5. Promote a top notch Management / Leadership School *where US Schools end*