The Israeli Paradox: Accelerating Growth/Overcoming Inequality

Speakers

Abby Cohen, Senior Investment Strategist and President, Global Markets Institute, Goldman Sachs
Eugene Kandel, Head of the National Economic Council, Israeli Prime Minister's Office
Aaron Mankovski, Chairman, Israel Advanced Technology Industries (IATI); Managing General Partner, Pitango Venture Capital
Yair Seroussi, Chairman, Bank Hapoalim

Moderator

Glenn Yago, Senior Director, Israel Center; Senior Research Fellow; and Founder, Financial Innovations Labs, Milken Institute
Headstands in Israel: envisioning the future
Second Lebanon war 2006
Milken Institute Summer Field School
Searching for solutions: life sciences fund, export credit, affordable housing and solid waste project finance
From scarcity to innovation

The Paradox of Israeli Competitive Advantage

or From Vegetarian Schnitzel to the Space Industry
GDP growth rates in Israel and in the advanced economies (2000-2011)

- The Quarterly data show the seasonally adjusted rate of change from the previous quarter at an annualized rate.
- The growth rate for the advanced OECD economies (excluding Luxembourg and Iceland) is a simple average of their individual growth rates.

Source: OECD Data and the Bank of Israel.
Israel’s annual GDP growth rates

2000 – 2012F

Source: Bank of Israel forecasts for 2012.
Current account of balance of payments

Percent of GDP, 1995-2011

Source: Balance of Payments, Central Bureau of Statistics.
Budget deficit*

Percent of GDP, 2000-2012**

*Percent of GDP; excluding credit extended. The data refers to the deficit excluding the Bank of Israel’s profits.

**2011 and 2012 Budget deficit is based on the current budget and BOI forecast.
Manufacturing exports by technology intensity

**1995**
- High: 36%
- Medium-high: 28%
- Medium-low: 21%
- Low: 15%

**2011**
- High: 47.6%
- Medium-high: 30.9%
- Medium-low: 16.6%
- Low: 5.0%

**High-technology Industries**: office & computing equipment, electronic components, aircraft, electronic communication equipment, equipment for control & supervision, pharmaceutical products.

**Medium-high-technology Industries**: chemicals & refining petroleum, machinery & equipment, electronic equipments & electrical motors, transport equipment.

**Medium-low-technology Industries**: mining & quarrying, rubber & plastic products, non-metallic mineral products, basic metals, metal products, ships & boats, jewelry & silversmiths’, articles n.e.c.

**Low-technology Industries**: food products, beverages & tobacco, textiles, wearing apparel & leather, paper, printing & wood products.

Source: Central Bureau of Statistics.
National expenditure on R&D as a percent of GDP

2008*

Slovakia 0.5
Greece 0.6
Poland 0.6
Turkey 0.7
Italy 1.2
Spain 1.3
Ireland 1.4
Germany 1.4
Portugal 1.5
France 1.5
Luxembourg 1.6
Canada 1.7
Netherlands 1.8
Belgium 1.9
Australia 1.9
Japan 2.0
OECD total 2.1
U.S. 2.3
Korea 2.5
Germany 2.7
Austria 2.8
Denmark 3.2
Japan 3.4
Sweden 3.5
Israel 3.8

Source: OECD Stat.

• Data for 2008 or last available year.
Ease of doing business in Israel: "Doing Business 2012"
*Ranks out of 183 countries*

For example, in the area of *Registering property*, Israel ranks 137th out of 183 countries. This is a significant improvement from previous years.

Other areas where Israel fares better include:
- *Trading across borders*: 30th
- *Getting credit*: 8th
- *Protecting investors*: 5th

Areas where Israel still has room for improvement include:
- *Enforcing contracts*: 147th
- *Getting electricity*: 93rd
- *Paying taxes*: 94th

Rate of relative poverty by group

By family size

- 1997
- 2003
- 2010

By education level of head of household (years of schooling)

- 0-8
- 9-10
- 11-12
- 13-15
- 16+

By number of wage earners

- 0
- 1
- 2+

By population group

- Ultra-orthodox
- Arabs*
- General population

• Not including the Arab population of East Jerusalem.

Source: Based on data from Central Bureau of Statistics and Income Surveys.
Israeli achievements in reading, mathematics and the sciences on the PISA 2009

<table>
<thead>
<tr>
<th>Subject</th>
<th>Average Score</th>
<th>Rank</th>
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<tbody>
<tr>
<td>Reading</td>
<td>474</td>
<td>36</td>
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<td>Mathematics</td>
<td>447</td>
<td>41</td>
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<tr>
<td>Science</td>
<td>455</td>
<td>41</td>
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</table>

Rank out of 64 countries
Poverty rates in the population and among households headed by a worker, 1995-2009

By sector, household head aged 25-64

Data: Central Bureau of Statistics.
Poverty rates among workers

By gender 1988-2008

Data: Central Bureau of Statistics.
Poverty rates among workers
By sector 1988-2008

Data: Central Bureau of Statistics.
Demographics: share of population growth

% of total population, 1980-2009

* Until 1995, the Population Census grouped “Others” together with the Arab population.
Source: General population: CBS Population Census; Ultra-Orthodox data: Bank of Israel calculations based on CBS survey data.
Growth versus inequality

1998-2009

* real growth in GDP per capita.

Data: Central Bureau of Statistics.
90-10 wage differentials in Israel and the OECD

Ratios of wages in the 90th percentile to wages in the 10th percentile for full-time salaried employees, 1998

Data: Central Bureau of Statistics and OECD.
Tel Aviv Stock Exchange market capitalization

Source: TASE, Milken Institute Israel Center
Yair Seroussi
Chairman, Bank Hapoalim
Economic growth has decelerated in H2, being affected by adverse global developments, falling prices in the capital markets and public protest.

Under the assumption that world’s economy is not going to a double-dip, but to a period of low growth (3.3% for the world) and maybe recession in Europe, we believe that the favorable opening conditions, and the fact that no austerity plan is needed, will help to maintain reasonable growth rate of 3.0%.

Since growth is below the preliminary plan, we believe budget deficit will exceed the target by 2% and reach 4% of GDP.
The building blocks of Israel’s economy

Demography: young, fast growing society

Industry: advanced, Hi-tech, flexible, global, innovative, entrepreneurial

Domestic engine: Israeli-Arab population

Domestic engine: Ultra-Orthodox society

Government: fiscal responsibility

Domestic engine: vibrant SME segment
Sound economic position invites questions of growth’s full potential

Swift recovery after crisis

Driving down debt

Sources: CBS, Bank Hapoalim forecast

Source: MOF
By reaching average employment levels, Israeli Arabs and Ultra Orthodox stand to contribute another percentage point to GDP.
Bank Hapoalim is fostering the economy empowering domestic emerging segments
<table>
<thead>
<tr>
<th>Arab Population</th>
<th>Ultra-Orthodox population</th>
<th>SMEs</th>
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<tbody>
<tr>
<td>• Banking &amp; Credit – financing growth</td>
<td>• Tailored banking needs</td>
<td>• Bridging the financing gap</td>
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<td>• Financial Education – empowering households and small businesses</td>
<td>• Tailored products</td>
<td>• Providing professional banking advise</td>
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<td>• Community involvement – giving back, emphasis on education</td>
<td>• Sensibilities and language</td>
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<tr>
<td>• Employment -</td>
<td>• Community involvement</td>
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Recent trends effecting the sector

Seeking education in growing numbers

By 2020 the sector is likely to reach 17% of population

Exposed to new media platforms, internet, cellular

Faster integration moving to new cities

Ultra-Orthodox make 11% of Israeli population – a potential growth engine for the economy

1990 2009 2020

7% 1.. 1..
Tailored banking to Ultra Orthodox

Deposits with no interest
(Religiously sanctioned)

Talking your language

Multi-channel loans

Kosher, tailored internet

Loans for the Jewish holidays
TA 100 stock index is trailing the benchmark
Stock market trending down with decreasing volumes
Banks versus non banks: development of credit

Institutional lending through capital markets has been fast growing
Soft bond market

BOND ISSUANCE 2011 - 2006

BOND ISSUANCE QUARTERLY
Israel’s exports are well diversified

*Industrial exports – excluding diamonds*

Exports to Asia are growing fast

<table>
<thead>
<tr>
<th>Month</th>
<th>USA</th>
<th>ASIA</th>
<th>EU</th>
<th>Others</th>
<th>Asia excl.</th>
<th>China</th>
<th>Asia</th>
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<td>01/07</td>
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Global distribution

November 11-January 12, excluding diamonds

- USA: 20%
- EU: 35%
- Others: 24%
- Asia excl.: 21%
- China: 8%
- Asia (excluding China): 13%

Exports to Asia are growing fast (millions $)
TEL-AVIV stock market showed resilience recovering swiftly after the crisis
Abby Cohen
Senior Investment Strategist and President, Global Markets Institute, Goldman Sachs
Sovereign credit ratings

Israel’s sovereign credit rating (S&P) is improving

Source: Bloomberg, April 2012.

Credit rating

AAA
AA+
AA
A+
A
A-
BBB+
BBB
BBB-

November 2007
Israel upgraded to A

August 2011
U.S. downgraded to AA+

January 2012
France downgraded to AA+

September 2011
Israel upgraded to A+

Source: Bloomberg, April 2012.
10-year sovereign CDS—who’s risky now?

Israel vs. France: Why not AA now; Why not AAA later?

Source: Bloomberg, April 2012.
Accelerating Israel’s growth model: from start-up nation to global nation

<table>
<thead>
<tr>
<th>Year</th>
<th>Goal</th>
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<tbody>
<tr>
<td>2012</td>
<td>Bilateral Creditor Nation: Development Finance</td>
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<td>2012</td>
<td>Sustainable Budget</td>
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<td>2012</td>
<td>Knowledge Based Export Surplus: China, India, Frontier Market Building in Africa</td>
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<td>2015</td>
<td>Sovereign Capital Fund (SCF) Established-Gas Royalties Commence</td>
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<td>2016</td>
<td>Debt/GDP 60% in 4 Years; Export Credit Facilities for Food, Fuel Substitutes, Water, and Global Health</td>
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<td>2022</td>
<td>SCF at 5% GDP in 10 Years</td>
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<td>Energy Technology/Financial Hub Established</td>
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Source: Milken Institute Israel Center, Hulihan Lokey, Globes Israel Business Conference, December 2011