Beyond the buzz
The future, Israel and you

Arik Makukh
Invest In Israel
The Israel Investment Promotion Center

Israel in brief

Young
Small
Growing
Beautiful
Restless

66 years old
8 Million people
GDP 291.5 B USD (CAGR=12.5%, 2010-13)
GDP PPP 36.2K USD (CAGR=7%, 2010-13)
Beaches, Desert, Cities, People
1% of world news

Scarce in natural resources, except for one…
**Israel Human Capital**

- Highest ratio of engineers per capita
- 10 Nobel prize winners – 6 in the last decade (2 in economics and 4 in chemistry)
- Skilled labour – #1 (IMD 2011)
- Entrepreneurship of managers – #2 (IMD)
- Flexibility of people – #2 (IMD)

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**The country’s vital resources**

**A curious culture**
- 7 world class universities
- #1 for quality of scientific institutions
- #3 for scientific infrastructure
- #4 for technological infrastructure
- Fast adoption of innovation

**An entrepreneurial DNA**
- #1 for country and business expenditure on R&D (as % of GDP)
- Problem solving orientation – 2000 years of adapting to constant change
- Immigrants society – 80 countries of origin
- High tolerance for failure

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**EUROMED INVEST**

- #1 world innovative capacity
  IMD Global competitive year book 2013
- #3 Country Innovation
  WEF Global competitive yearbook 2013-2014
- #1 in startup ventures density (outside USA; 2nd to Silicon valley)
  Tel-Aviv, Israel’s business center, is ranked the second best innovation eco system

Source: WEF year book 2013-2014; IMD 2013
Intensive of R&D

GERD (Gross domestic expenditure on R & D) as % of GDP

Israel's Competitive Edge – IMD World Report 2012

<table>
<thead>
<tr>
<th>Country Rank</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUSINESS EXPENDITURE ON R&amp;D (% GDP)</td>
<td>Israel</td>
<td>Korea</td>
<td>Finland</td>
<td>Japan</td>
</tr>
<tr>
<td>TOTAL EXPENDITURE ON R&amp;D (% GDP)</td>
<td>Israel</td>
<td>Finland</td>
<td>Korea</td>
<td>Switzerland</td>
</tr>
<tr>
<td>INNOVATIVE CAPACITY</td>
<td>Switzerland</td>
<td>Israel</td>
<td>Germany</td>
<td>USA</td>
</tr>
<tr>
<td>ENTREPRENEURSHIP OF MANAGERS</td>
<td>Taiwan</td>
<td>Israel</td>
<td>Hong Kong</td>
<td>Lithuania</td>
</tr>
<tr>
<td>SCIENTIFIC RESEARCH</td>
<td>Switzerland</td>
<td>Israel</td>
<td>USA</td>
<td>Sweden</td>
</tr>
<tr>
<td>KNOWLEDGE TRANSFER BETWEEN INDUSTRY &amp; ACADEMIA</td>
<td>Switzerland</td>
<td>Israel</td>
<td>USA</td>
<td>Singapore</td>
</tr>
</tbody>
</table>

Source: IMD World Competitiveness Yearbook - 2012
"The country’s main strengths remain its world-class capacity for innovation (3rd), which rests on highly innovative businesses that benefit from the presence of the world’s best research institutions geared toward the needs of the business sector. Israel’s excellent innovation capacity, which is supported by the government’s public procurement policies, is reflected in the country’s high number of patents (4th). Its favorable financial environment, particularly evident in the ease of access to venture capital (3rd), has contributed to making Israel an innovation powerhouse."

Source: World Economic Forum

The Global Competitiveness Report 2012-2013
(World Economic Forum)

<table>
<thead>
<tr>
<th>Capacity of Innovation</th>
<th>2012-2013</th>
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<tbody>
<tr>
<td>12th pillar: Innovation</td>
<td>2012-2013</td>
</tr>
<tr>
<td>10.01 Capacity for innovation</td>
<td>5.4</td>
</tr>
<tr>
<td>10.02 Quality of scientific research institutions</td>
<td>6.3</td>
</tr>
<tr>
<td>10.03 Company spending on R&amp;D</td>
<td>5.4</td>
</tr>
<tr>
<td>10.04 University-industry collaboration in R&amp;D</td>
<td>5.4</td>
</tr>
<tr>
<td>10.05 Gov’t procurement of advanced tech products</td>
<td>4.6</td>
</tr>
<tr>
<td>10.06 Availability of scientists and engineers</td>
<td>5.0</td>
</tr>
<tr>
<td>10.07 PCT patents, applications/million pop.&quot;</td>
<td>205.5</td>
</tr>
</tbody>
</table>

Venture Capital
8.03 Venture capital availability | 4.5       |

Investor Protection
1.22 Strength of investor protection: 0-10 (best) | 8.3       |

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<table>
<thead>
<tr>
<th>Economic Figures</th>
<th>2012</th>
<th>2013</th>
<th>2013 Q1</th>
<th>2013 Q2</th>
<th>2013 Q3</th>
<th>2013 Q4</th>
<th>2014 Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>257,5</td>
<td>271,5</td>
<td>68.2</td>
<td>73.6</td>
<td>74.5</td>
<td>75.3</td>
<td>75.8</td>
</tr>
<tr>
<td>Real GDP growth rate</td>
<td>3.6%</td>
<td>3.3%</td>
<td>2.1%</td>
<td>4.4%</td>
<td>2.6%</td>
<td>3.3%</td>
<td>2.9%</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>$32,165</td>
<td>$34,187</td>
<td>$9,521</td>
<td>$9,980</td>
<td>$9,372</td>
<td>$9,308</td>
<td>$9,193</td>
</tr>
<tr>
<td>GDP per capita growth rate</td>
<td>1.5%</td>
<td>1.3%</td>
<td>0.0%</td>
<td>0.7%</td>
<td>0.0%</td>
<td>0.3%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Exports (goods &amp; services), % of GDP</td>
<td>91.1</td>
<td>95.1</td>
<td>23.3</td>
<td>24.7</td>
<td>21.6</td>
<td>20.2</td>
<td>25.1</td>
</tr>
<tr>
<td>Imports (goods &amp; services), % of GDP</td>
<td>92.6</td>
<td>91.4</td>
<td>22.0</td>
<td>22.6</td>
<td>23.6</td>
<td>23.2</td>
<td>23.2</td>
</tr>
<tr>
<td>Inflation rate</td>
<td>0.9%</td>
<td>0.2%</td>
<td>0.6%</td>
<td>0.7%</td>
<td>0.6%</td>
<td>0.8%</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

*Using a periodic average exchange rate
New innovative startups a year
(new breakthrough every 8 hours)
EUROMED INVEST

Isreali success stories

Netafim - Drip (low volume) irrigation
Intel’s Centrino and Pentium 4 microprocessors
Given Imaging - Ingestible video camera
M System’s Disk On Key and Disk On Chip flash memory
AOL - Instant Messenger ICQ
Waze - Community based GPS traffic and navigation app
Wix - Flash website platform
PrimeSense - 3D sensing technology for Kinect
Argo - Technology with motorized legs that power knee and hip movement
Powermat – Wireless energy transfer
Aqwise - Wastewater treatment solutions
TaKaDu - Monitoring water networks
Ormat - Geothermal energy and residual heat
HelloFocus – Solar thermal solutions

A major development hub
300 of the world’s leading corporations have opened development centers in Israel, employing some 50,000 people.

Israel and the EU Joint Programs

EU Programs’ Characteristics

- EU Framework programs for R&D
  - 1996-2013: 4100 approved grants for Israeli R&D groups, totaling 1.25 billion Euros
- Horizon 2020 – Israel will contribute 1 billion Euros
- Eureka
  - Israel is the only non-European full member
  - Israeli companies participate in 10% of projects
  - Chairman of the program in 2010-2011
Public funding of R&D in Israel

- Basic Research
- Applied Academic Research
- International Programs
- Support Policy Research
- Nofar
- Tnufa
- Incubators
- Magnet
- Competitive R&D
- Bilateral, EUREKA

Risk

Market Proximity

PBC ("Vatat") & ISF
- OCS, Ministry of Economy
- Ministry of Science, Technology and Space
- Other Ministries

Israel-Italy
The Bilateral Programs
Bilateral Program Characteristics

- Industrial R&D in all sectors
- Annual Calls for Proposals (usually in Feb)
- Joint Participation and contribution of both sides to the project
- Project Financing of up to 50% of Costs

Israeli side of project

- A two-phase process
- Financed by the OCS R&D fund
- Subject to the rules and regulations of the OCS
A one-phase process
- Financed by the Italian Ministry of Foreign Affairs

Funding Agencies - Israel

Office of the Chief Scientist (OCS) in the Ministry of Economy (with ISERD as front-end)

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ISERD, 29 HaMered Str., Tel Aviv 61500
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ran@iserd.org.il
Funding Agencies - Italy

Ministry of Foreign Affairs

Dott.ssa Federica Campioni
Ministero degli Affari Esteri
DGAP - Direzione Generale per gli Affari Politici e la Sicurezza
VIII Ufficio
Piazzale della Farnesina, 1 - 00135 Roma
Tel. +39 06 36918901
federica.campioni@esteri.it

Results of the 2013 Call

- 53 applications; 33 -> phase 2 (in IL); 14 selected for financing
- Total amount of funding for all projects in Euro: IL 1.31M, IT 1.49M

<table>
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<tr>
<th>Selected Project</th>
<th>Area</th>
<th>Israeli party</th>
<th>Italian party</th>
</tr>
</thead>
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<tr>
<td>AIRWAY</td>
<td>Environment</td>
<td>Airbase Systems</td>
<td>3D Informatica</td>
</tr>
<tr>
<td>FRESH</td>
<td>Food</td>
<td>Strauss</td>
<td>Officine di Cartigiano</td>
</tr>
<tr>
<td>HOPIP</td>
<td>Space/ICT</td>
<td>LMY</td>
<td>AGT</td>
</tr>
<tr>
<td>IrrIGAte</td>
<td>Food</td>
<td>Netafim, BGU</td>
<td>IGA, Università di Udine</td>
</tr>
<tr>
<td>MAG-Avionics</td>
<td>Avionics</td>
<td>Matechet Carmel</td>
<td>SAB Aerospace</td>
</tr>
<tr>
<td>MEME</td>
<td>Energy</td>
<td>Acktar, Technion</td>
<td>Tecnimont, INTM</td>
</tr>
<tr>
<td>MOVER</td>
<td>Communications</td>
<td>Silicom</td>
<td>Politecnico di Torino, Tiesse S.p.A.</td>
</tr>
<tr>
<td>RAMSAAT II</td>
<td>ICT (QA)</td>
<td>ALD</td>
<td>NIER</td>
</tr>
<tr>
<td>RAYS</td>
<td>Environment</td>
<td>BNZ, Technion</td>
<td>Marcantonini, Università di Perugia</td>
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<tr>
<td>RHAISP</td>
<td>Space</td>
<td>Tower Semiconductor</td>
<td>TSD, RedCat, RGM,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>U. Calabria, U.Palermo</td>
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<tr>
<td>SEADEST</td>
<td>Marine Tech.</td>
<td>IARD</td>
<td>FLYBY</td>
</tr>
<tr>
<td>SHIC</td>
<td>Energy</td>
<td>Sol-Chip</td>
<td>Canova tech</td>
</tr>
<tr>
<td>WISEDET</td>
<td>ICT/Environment</td>
<td>Cartasense</td>
<td>SysDesign, CNR-IMM</td>
</tr>
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</table>
**SUCCESS STORY**

IAI, Super Heron Heavy Fuel Engine – powered by Diesel Jet Italy

- Significant fuel consumption reduction, around 30%
- Engine automotive derived
- Use of the same fuels that propel jet aviation engines, as kerosene Jet A-1 or JP
- Easier availability, higher safety and lower costs
- Good suitability for turbocharging: high specific power and capability to keep the performance constant with the altitude
- Robustness, reliability and longer maintenance intervals
SUCCESS STORY
Elbit Systems (Elop) – ELT Roma

MUSIC® / C-MUISC™

DIRCM Directed IR Countermeasures solutions for aircraft protection

June 2007
Elbit Systems Ltd. announced that its subsidiary Elbit Systems Electro-Optics Elop Ltd. and Elettronica S.p.A. agreed to cooperate to the joint development of advanced DIRCM systems intended to protect helicopters and wide-bodied aircraft from low altitude attack by shoulder-mounted heat seeking missiles.

June 2011
Elbit Systems announced the signature of supply order for the system’s first international customer – the Italian Air Force. The company has been awarded a contract valued in excess of $15 million by Elettronica S.p.A to supply MUSIC based elements for Elettronica’s ELT/572 DIRCM system destined for various platforms of the Italian Air Force. The contract will be performed over the next three years.

June 2013
System installed on the 1° EL AL 737
We are here to help you

• **Identify** quality business opportunities in Israel
• **Connect** with relevant companies and the local business community
• **Advise you** on how to maximize substantial governmental support
• **Expedite** the process of setting up your business in Israel

The Israel Investment Promotion Center advances high-quality direct international investment in Israel with focus on the following sectors: ICT, New Media, Life Sciences, Renewable energy and Financial Services

The Israeli Economic & Trade mission to Italy

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Thank you

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