Innovative Economy and it's Challenges- The Case of Israel

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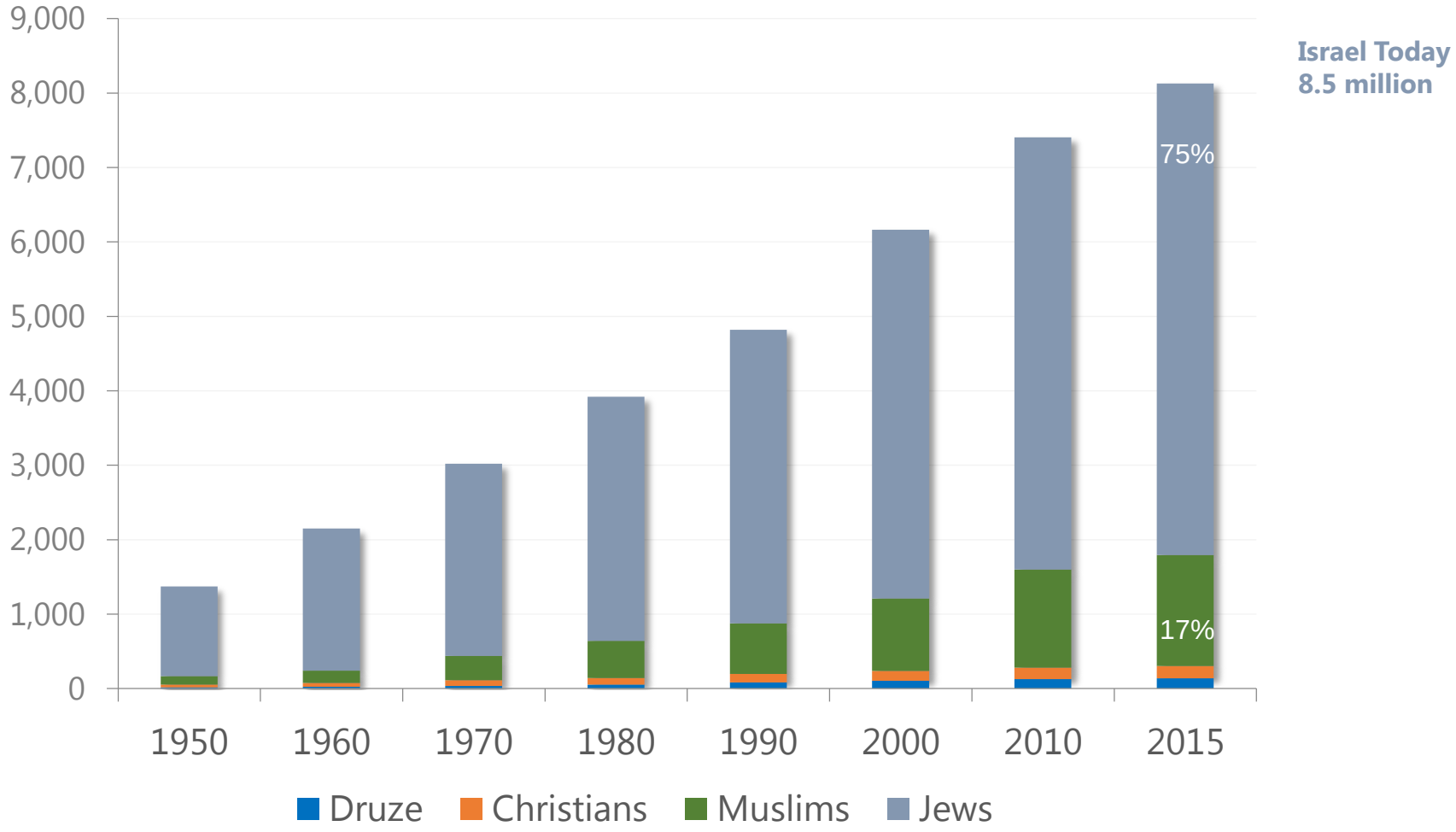
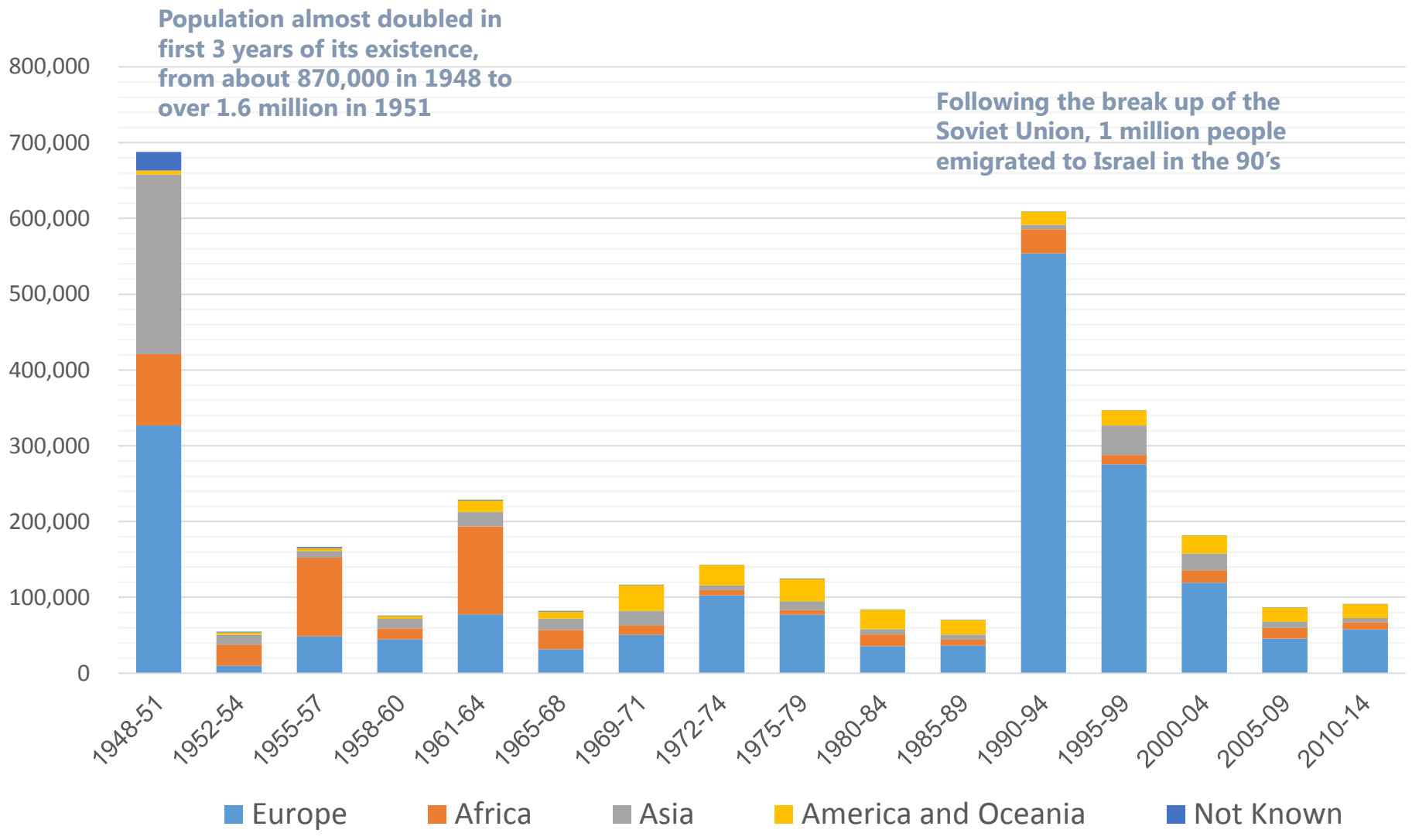
Israel Population by Religious Affiliation



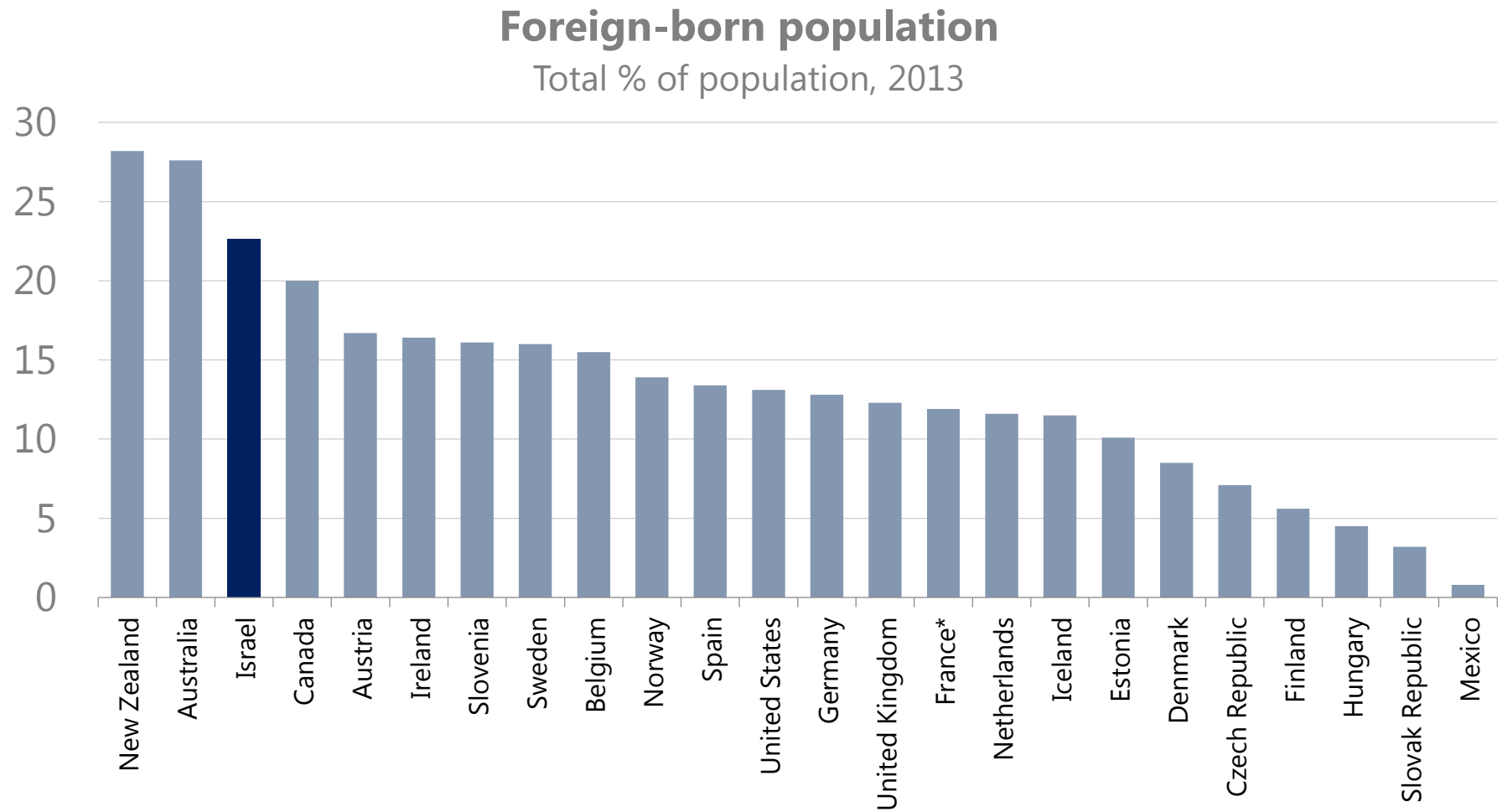
SOURCE: Central Bureau of Statistics

Immigrants by Period of Immigration and Last Continent of Residence



SOURCE: Central Bureau of Statistics

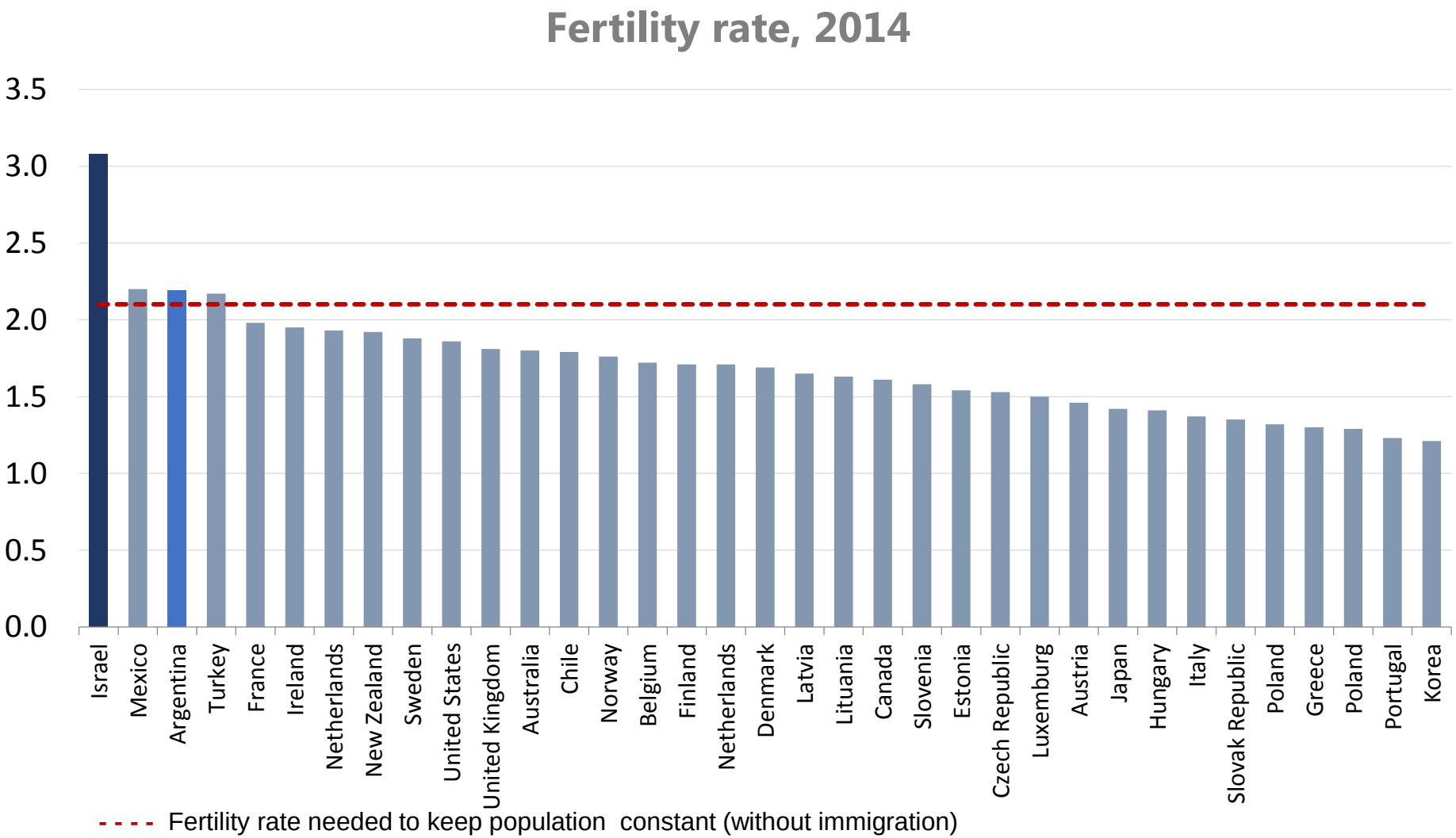
Israel's Population is Diverse, Growing and Young by OECD Standards – Foreign Born Population



* 2012 data

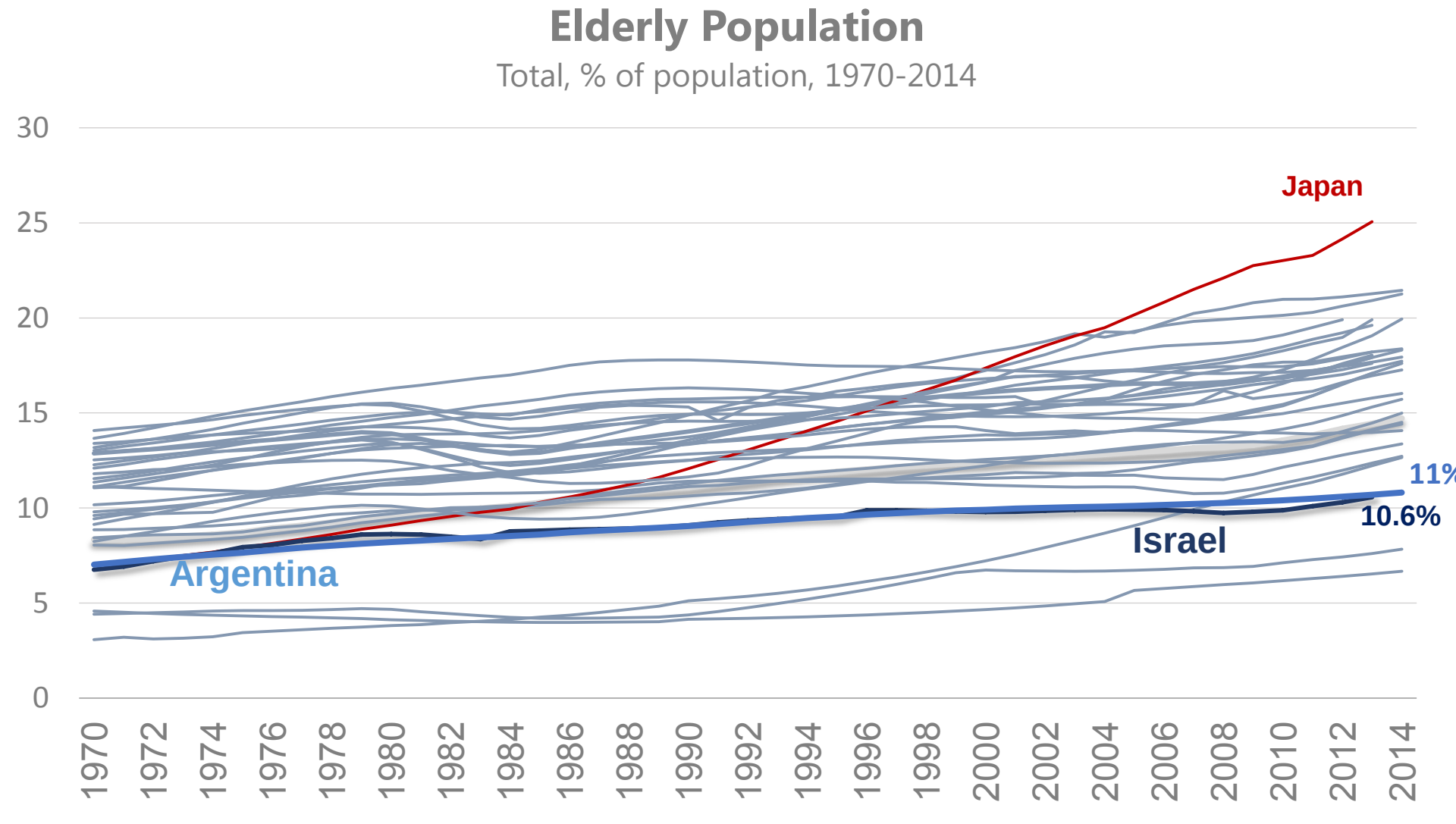
Source: OECD

Israel's Population is Diverse, Growing and Young by OECD Standards – Fertility Rates



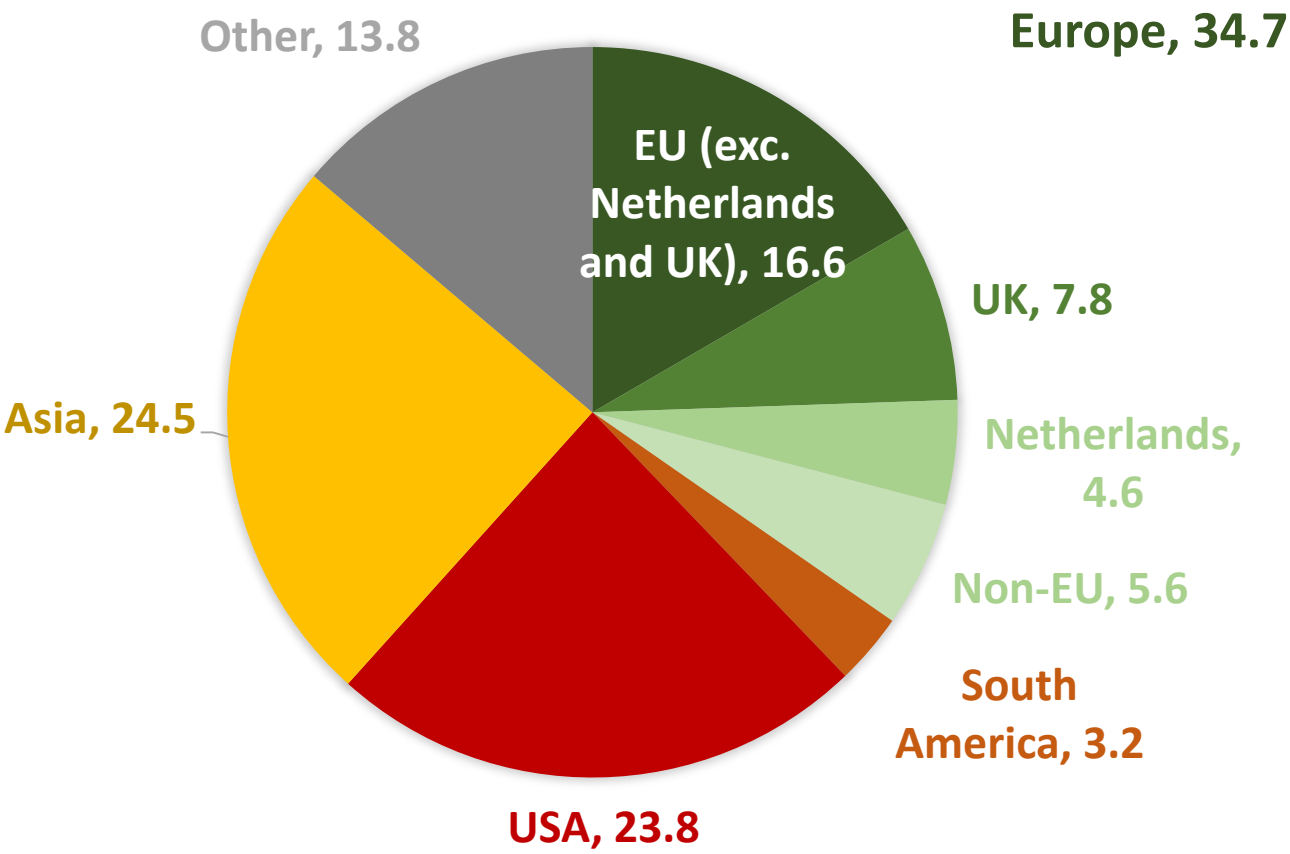
Source: OECD, World Bank

Israel's Population is Diverse, Growing and Young by OECD Standards – Share of Elderly



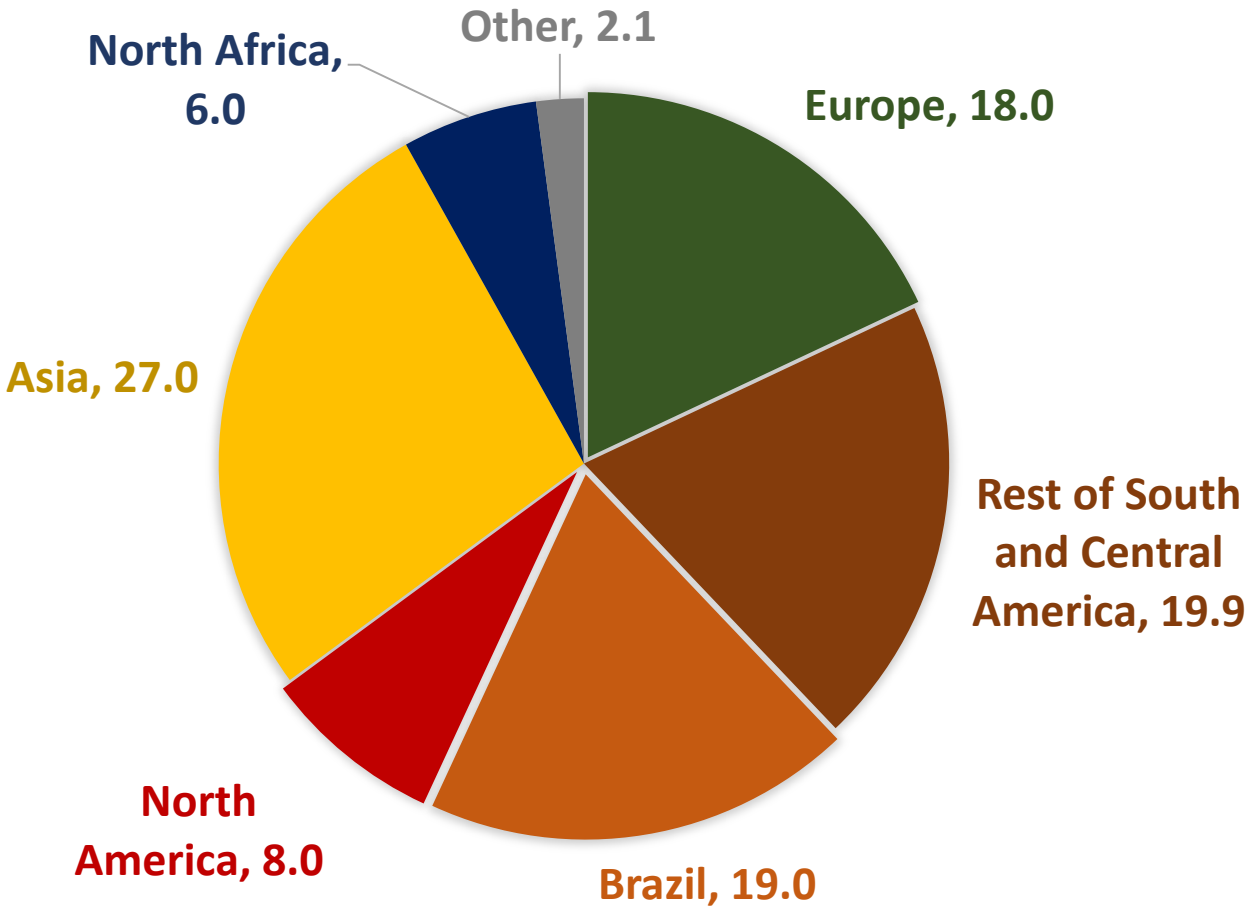
Source: OECD

Geographical Composition of Israel's Exports
Goods excluding diamonds, 2015



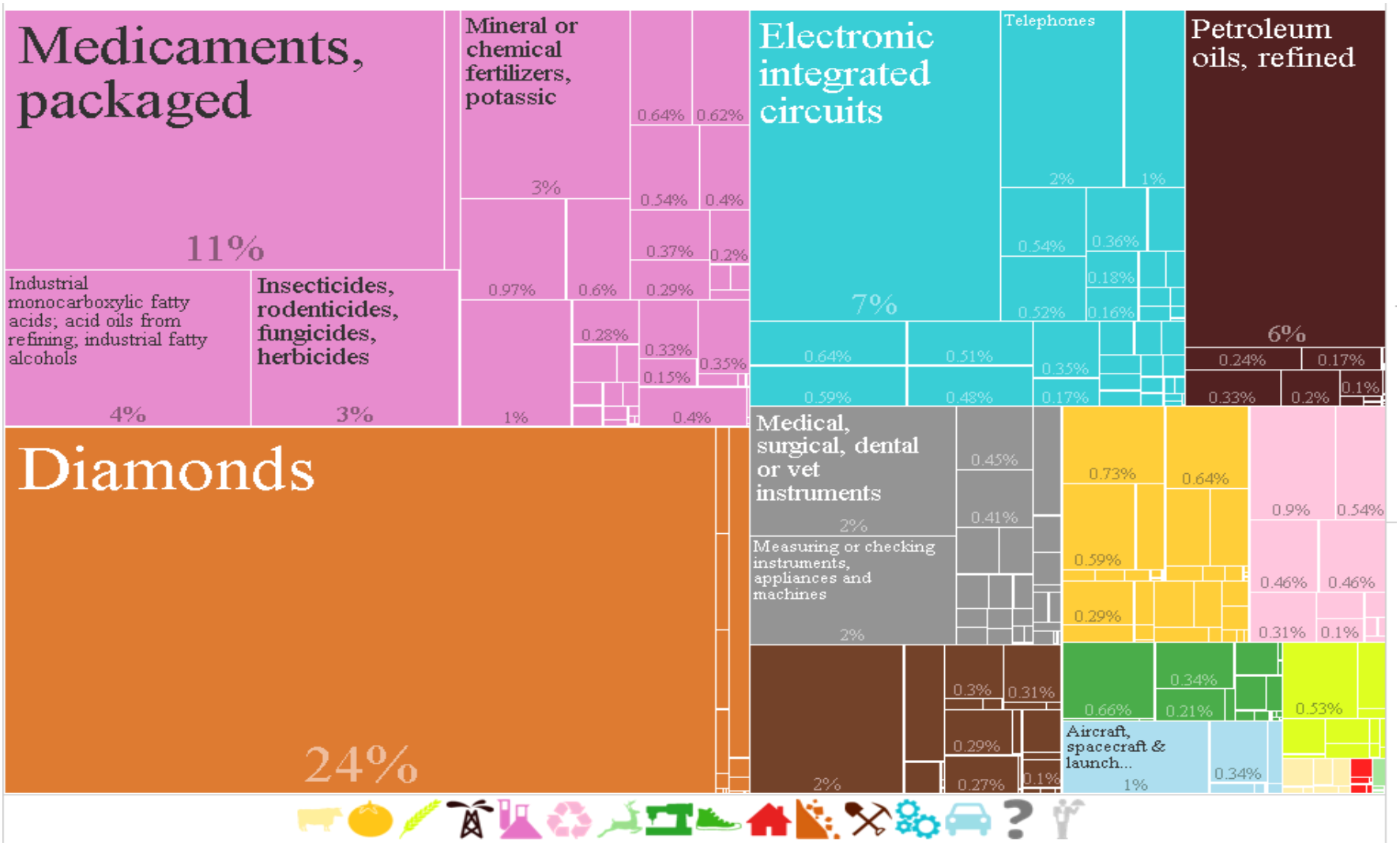
SOURCE: Central Bureau of statistics

Geographical Composition of Argentina's Exports Goods, 2014



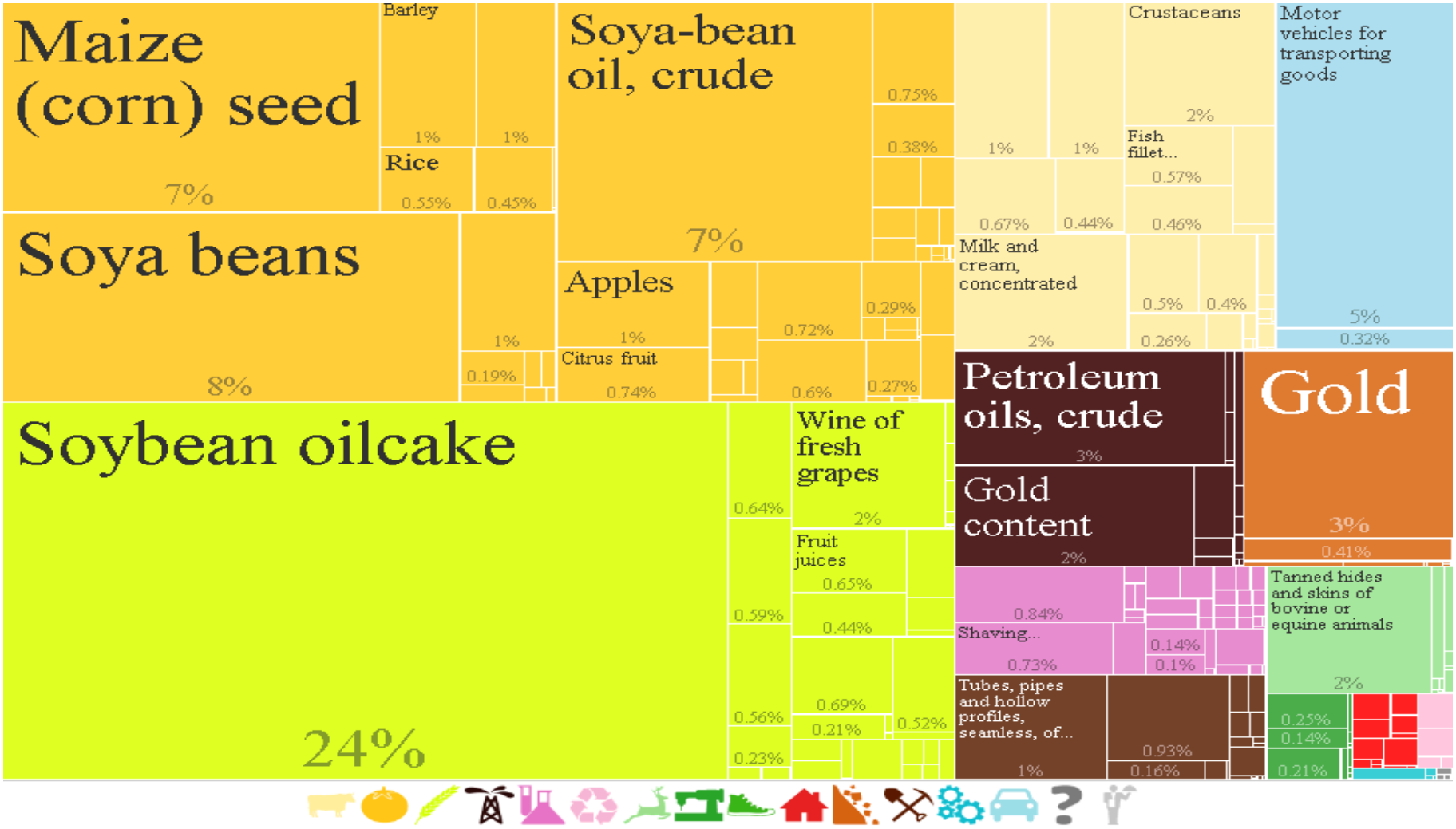
SOURCE: The Atlas of Economic Complexity

Economic Complexity: Israeli Goods Exports, 2014



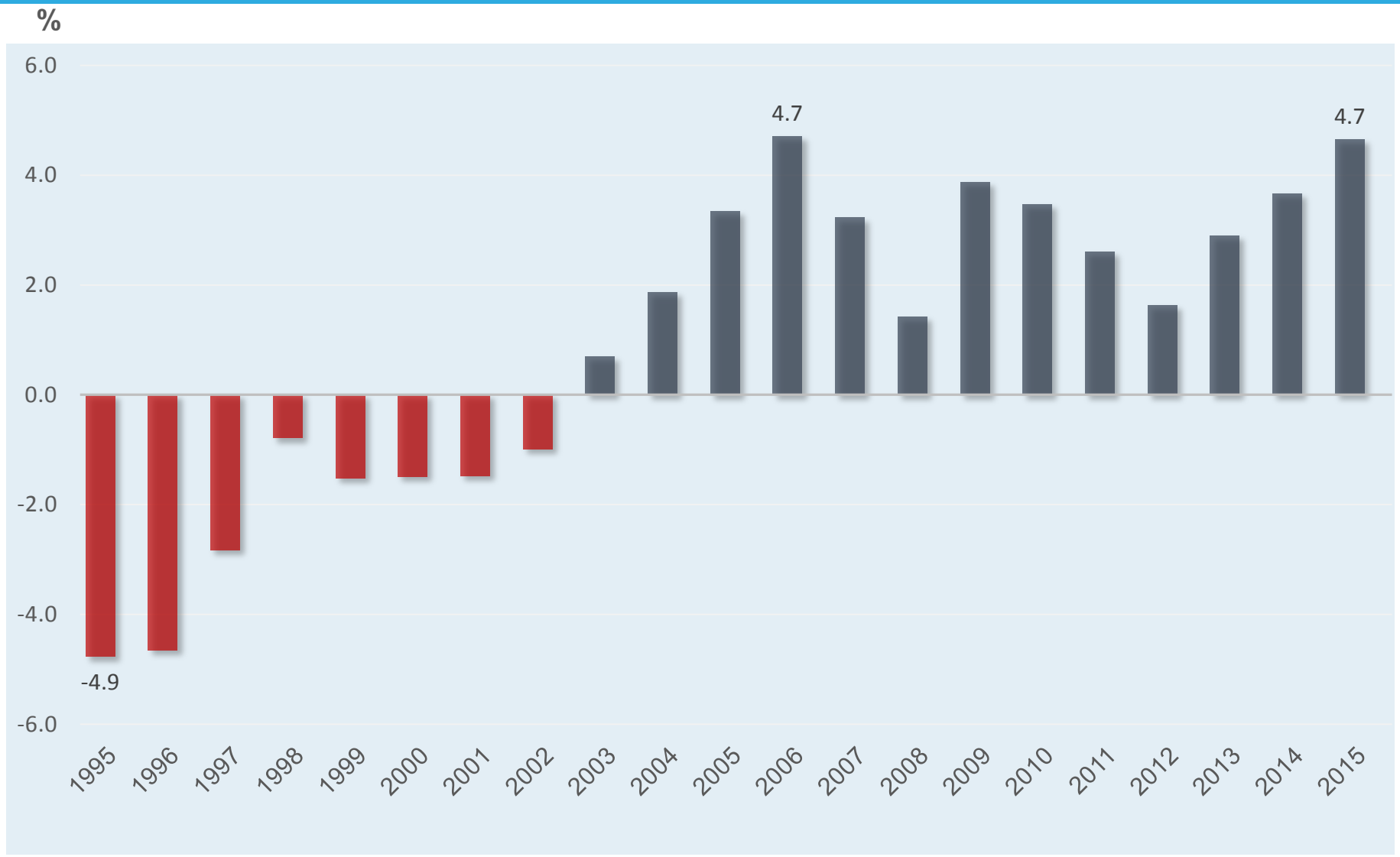
SOURCE: The Atlas of Economic Complexity, Harvard

Economic Complexity: Argentinian Goods Exports, 2014



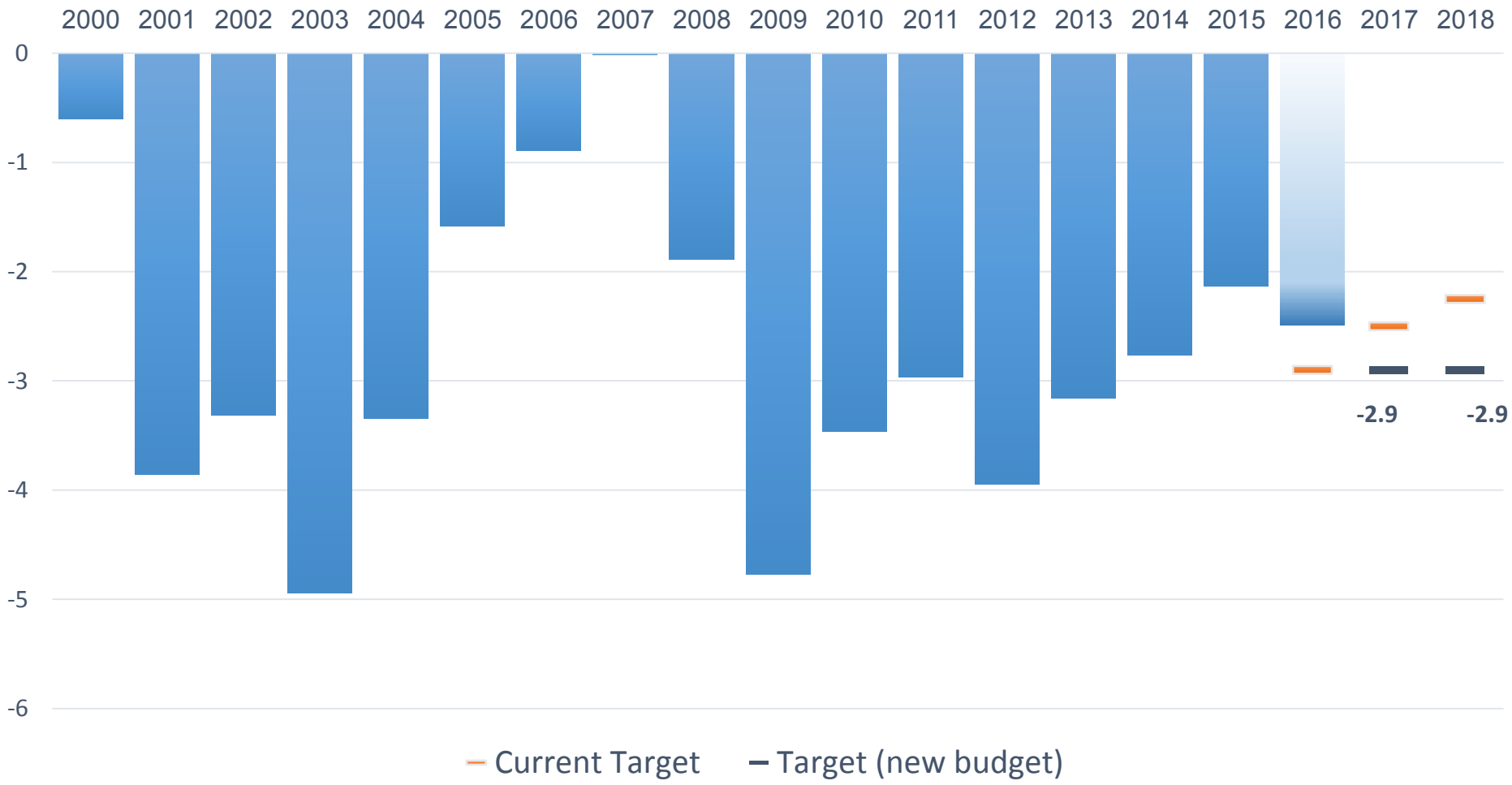
SOURCE: The Atlas of Economic Complexity, Harvard

Israel Current Account % GDP 1995-2015



SOURCE: Bank of Israel

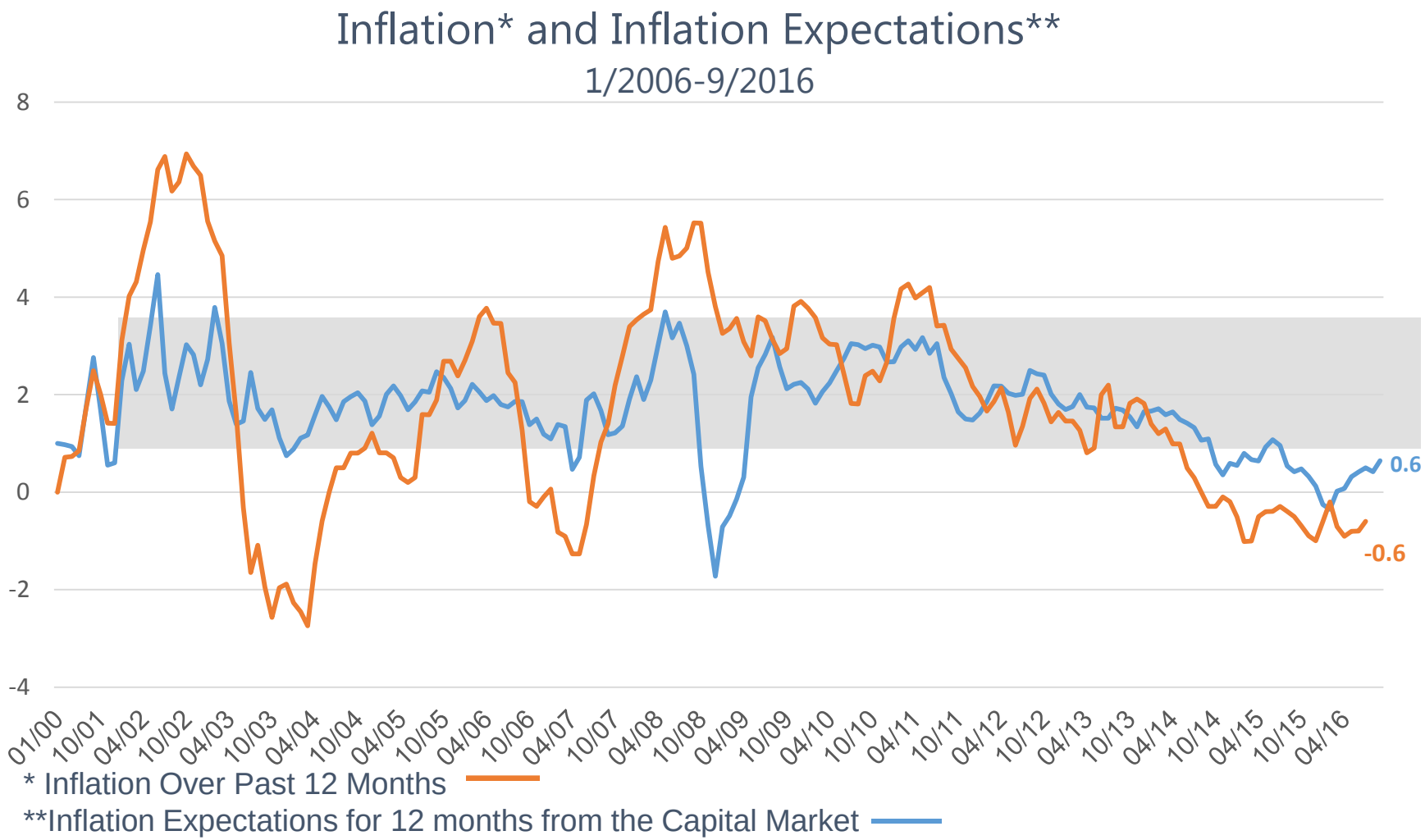
Government Deficit
% of GDP, 2006-2018



*Estimate for 2016

Source: BOI

Drop in ST Inflation Expectations



Source: BoI

Strong Macro Economics

- Affected by World Economy but beating at its own beat
- Exports accounts for 32% of GDP
- Current Account has been in surplus since 2000
- Israel is a Net Lender to the rest of the world
- Public Debt has been falling – but now stable

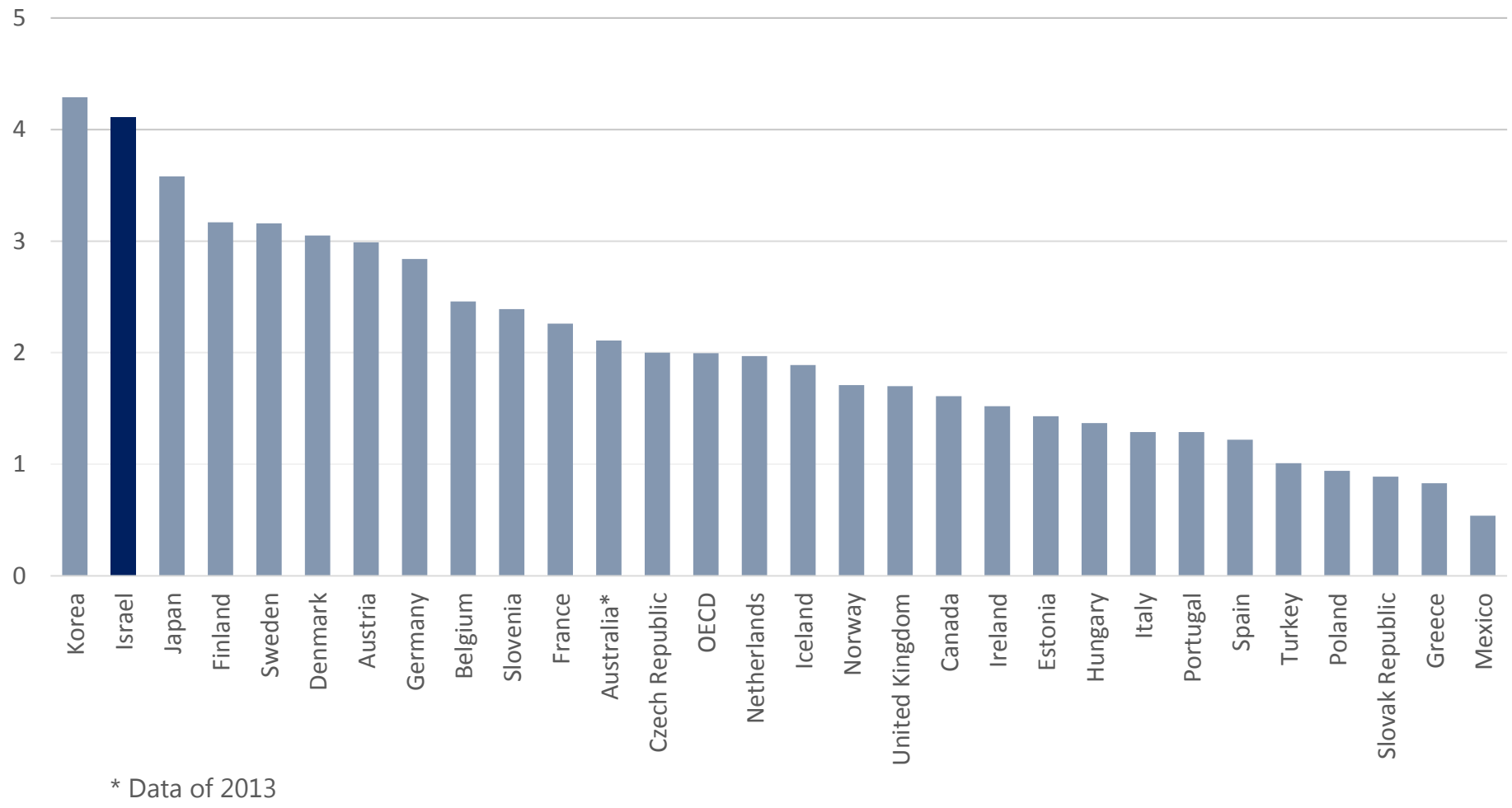
Knowledge Based Economy

- A snapshot of Innovation in Israel
- The Ingredients of Israel's "Silicon Miracle"
- Ecosystems for Innovation: tentative lessons

The Israeli Ecosystem of Innovation

- Importance of excellence in Higher Education
- Risk Culture:
  - "Social cost" of failure is low
  - "Flat society", little importance of hierarchy
- Risk Culture: "risky money"
  - Venture capital funds
  - Angels provide more than just funds
- Government support for commercial R&D
  - Neutrality with respect to the field of innovation
  - Dynamic

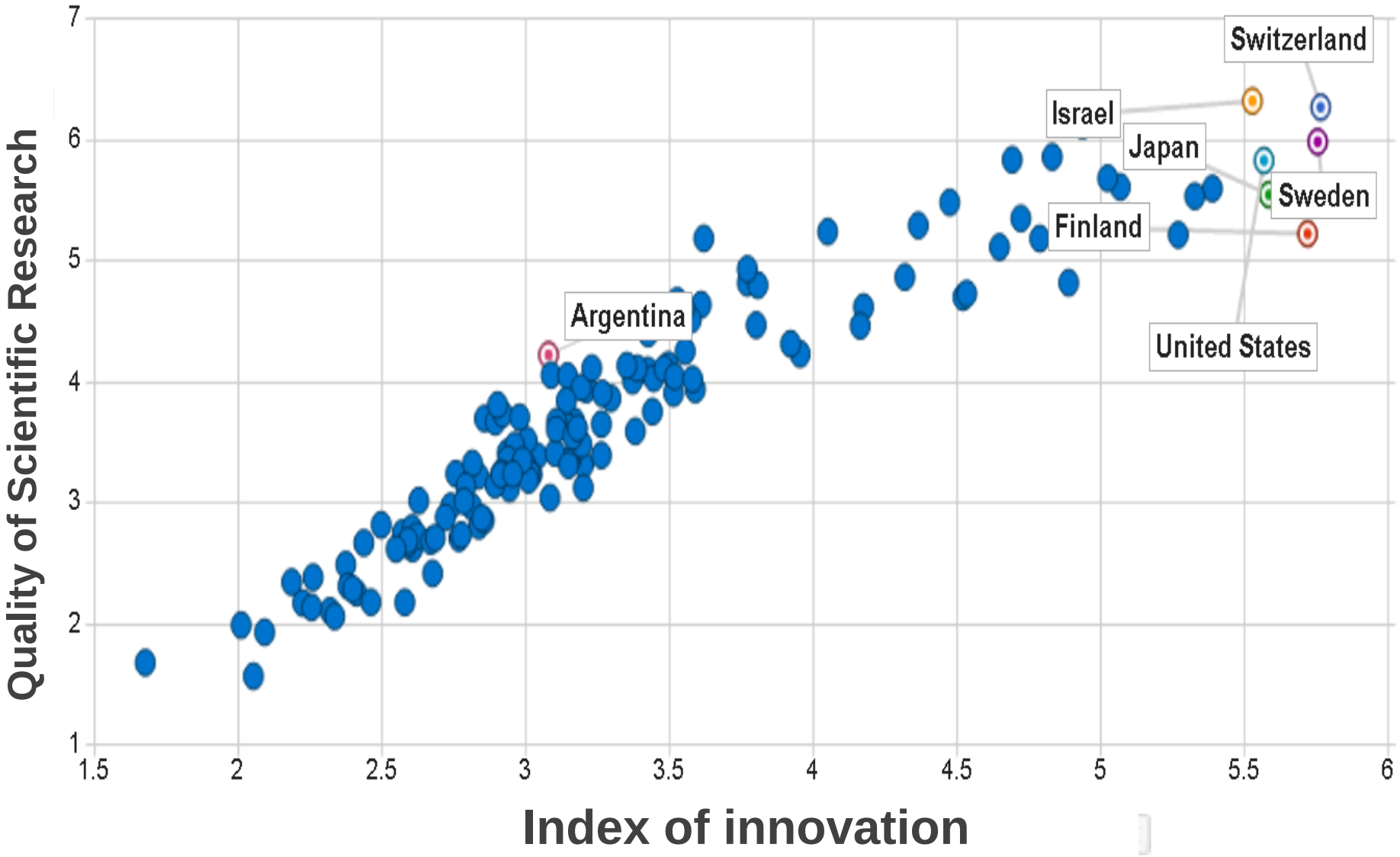
R&D Expenditures as % of GDP, 2014



* Data of 2013

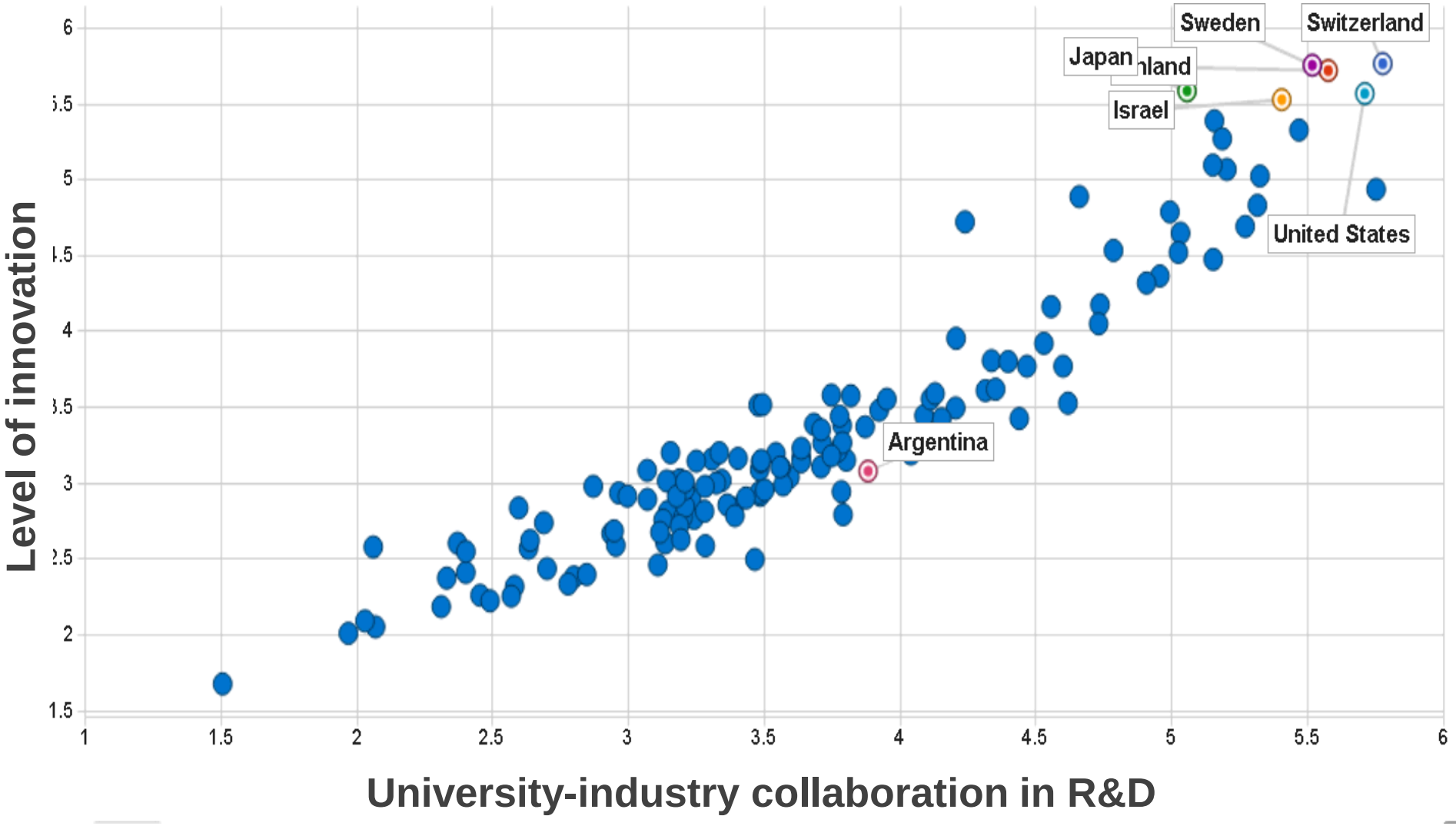
SOURCE: OECD

Indicators of Scientific research and innovation



SOURCE: World economic forum - 2011

University-Industry collaboration in R&D



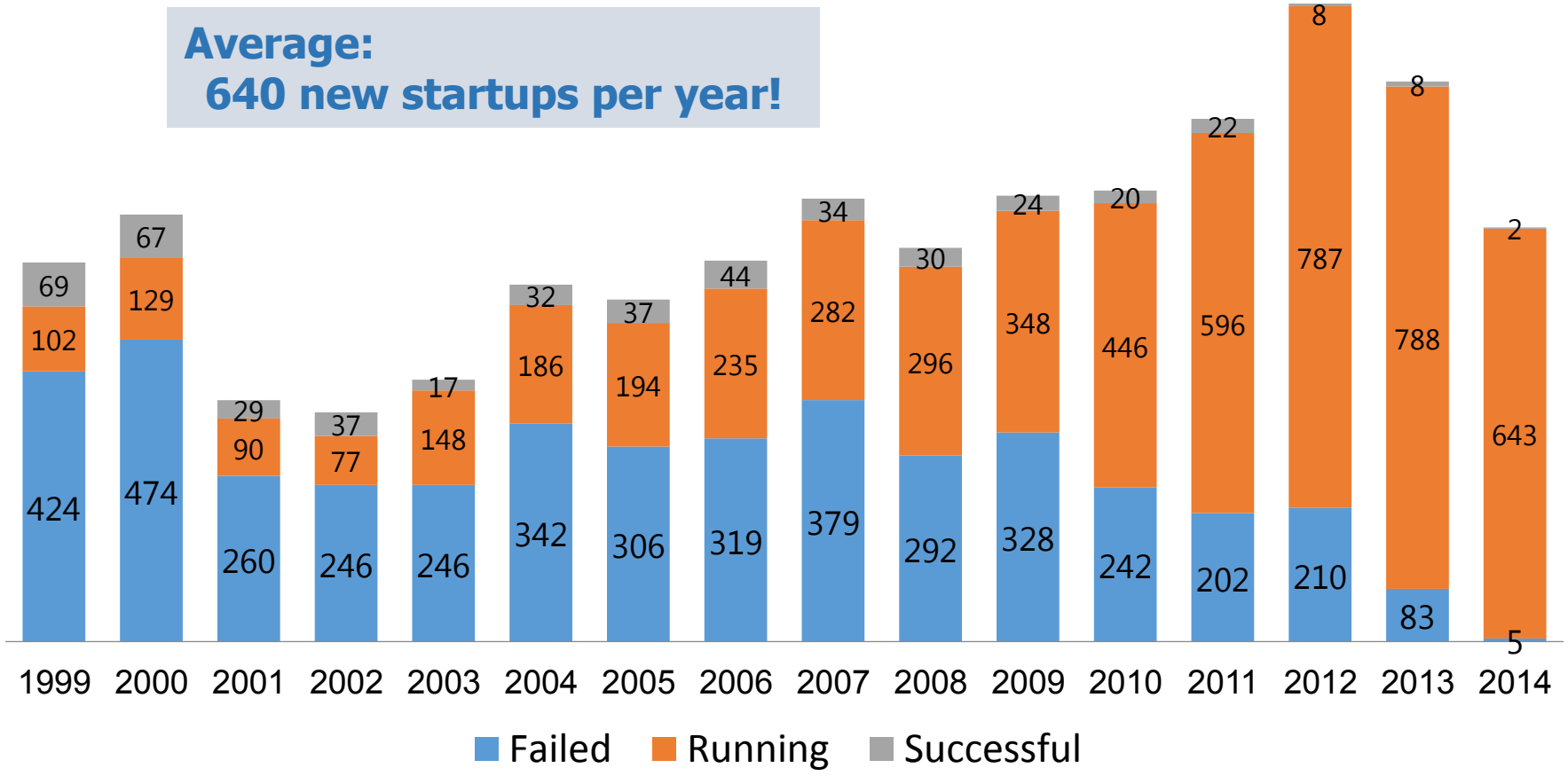
Source : World economic forum - 2011

Flurry of High Tech Entrepreneurship: Taste for Risk

Number of New Start-Ups by Year 1999-2014

Israeli Startup Companies: Number of Companies by Year Established, by Success Index 1999-2014

Average:
640 new startups per year!



Source: IVC

Big Prizes, Small Probabilities of Success

Of **10,185 startups** established during **1999 – 2014** ***(640 new start-ups per year!):***

Outcome as of 2015	Number of companies	percent
Successful	480	5%
Failed	4,358	43%
Running (the jury still out…)	5,347	52%
Total	10,185	100%

Successful companies as of 2015 **defined as**:

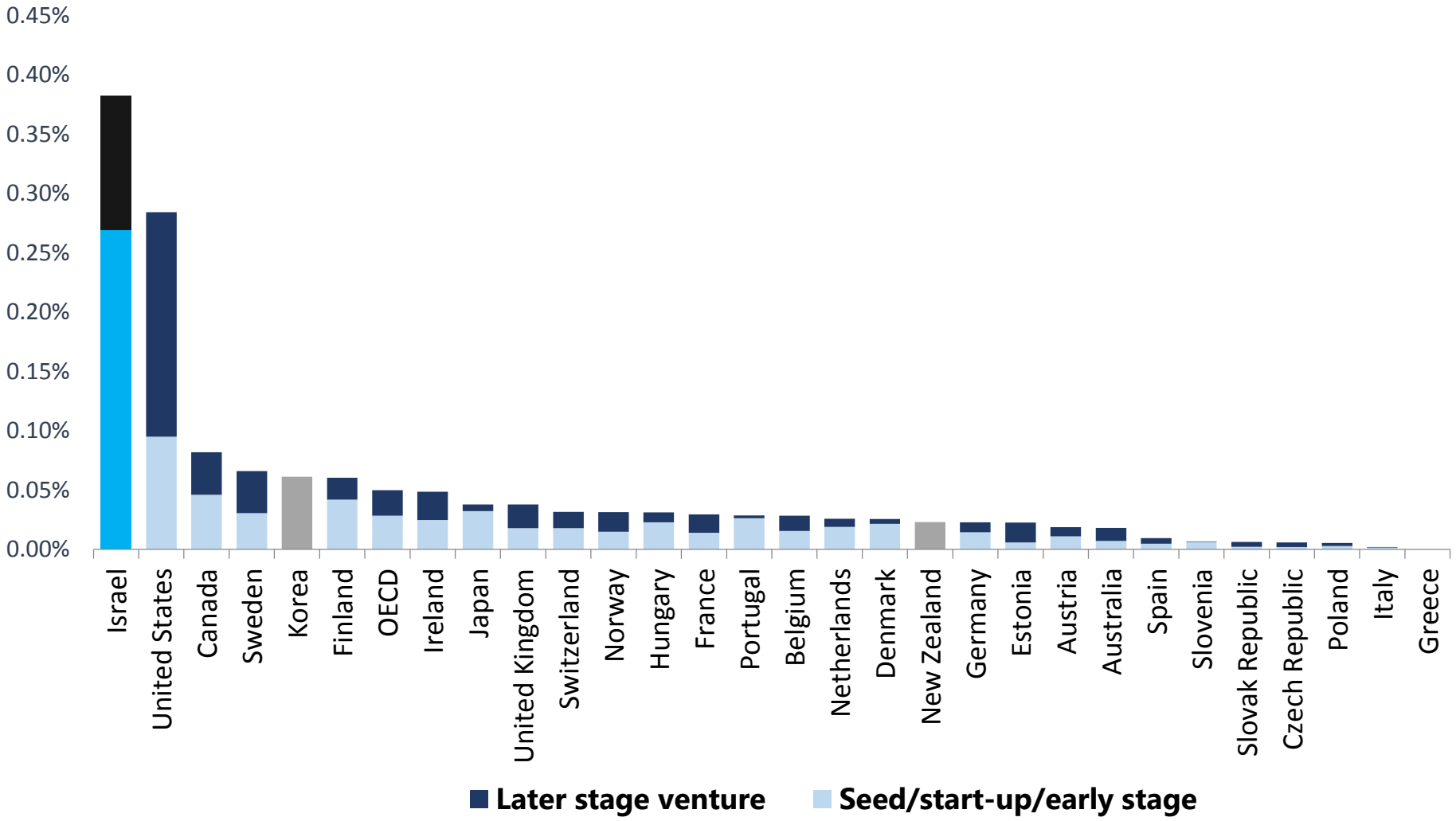
- Reached **100 employees** or more
- Reached annual revenues of **$100 million** or more
- Sold for **positive return** for investors (**71%** of successes)

Source: Israeli Startup Success Report 1999-2014 of IVC and REVERSEXIT

Cultural Aspects

- Social "stain" of failure is low
  - Encourages to try new things
- Little hierarchy – very "flat" society
  - Facilitates exchange of ideas
  - Reduces barriers to entry
- Compulsory military service (silver lining)
  - Important "equalizer" in such a diverse society
  - Learn responsibility at a very early age
  - Learn how large organizations operate

Venture Capital Investment as % of GDP, 2014



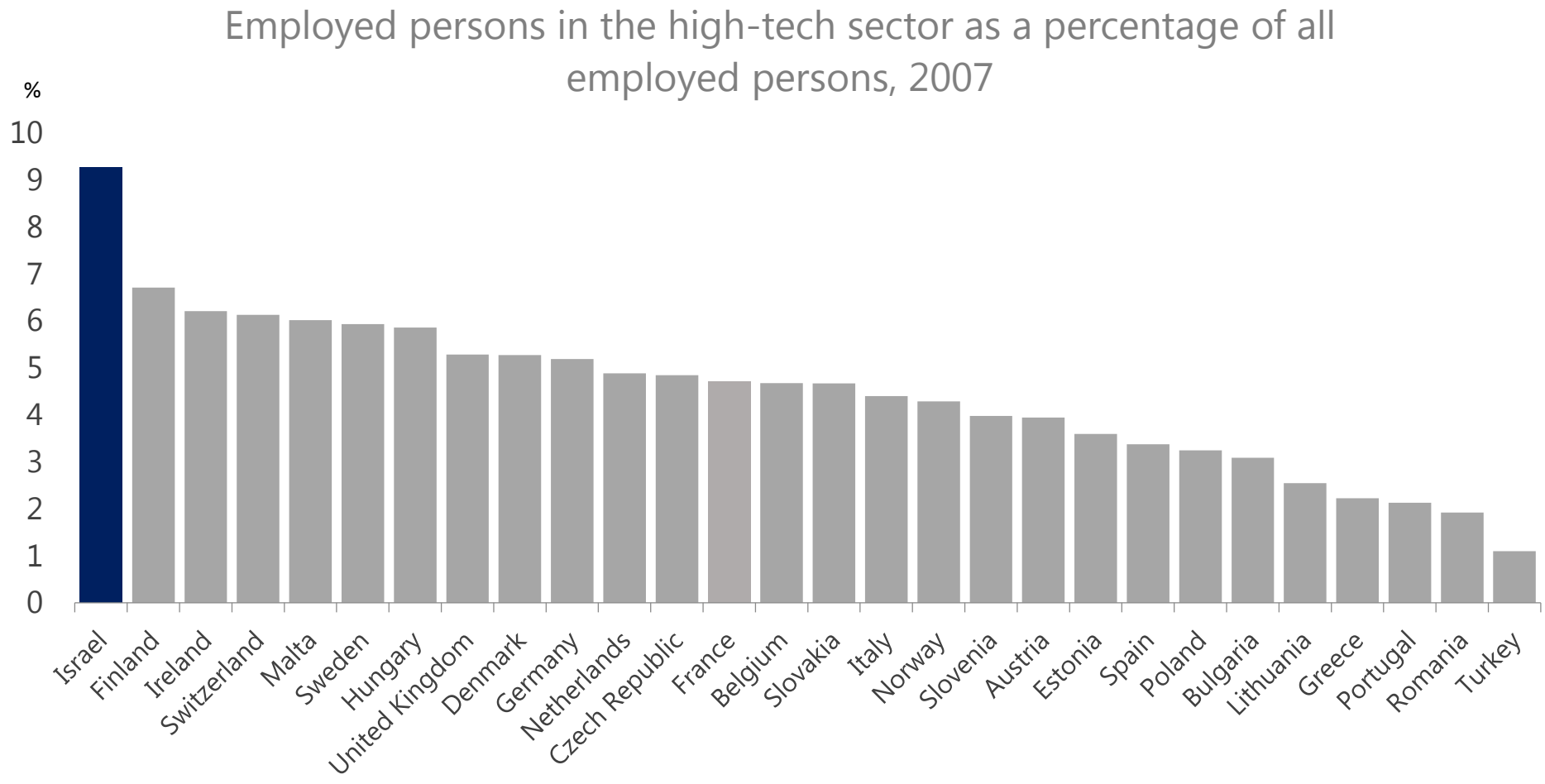
SOURCE: OECD

Listing of High Tech companies in NASDAQ 2014

Region/Country of Origin	No. of companies
USA	2,436
Asia	122
Europe	84
Israel	67
Canada	45
Central America	24
South America	9
Australia & South Pacific	5

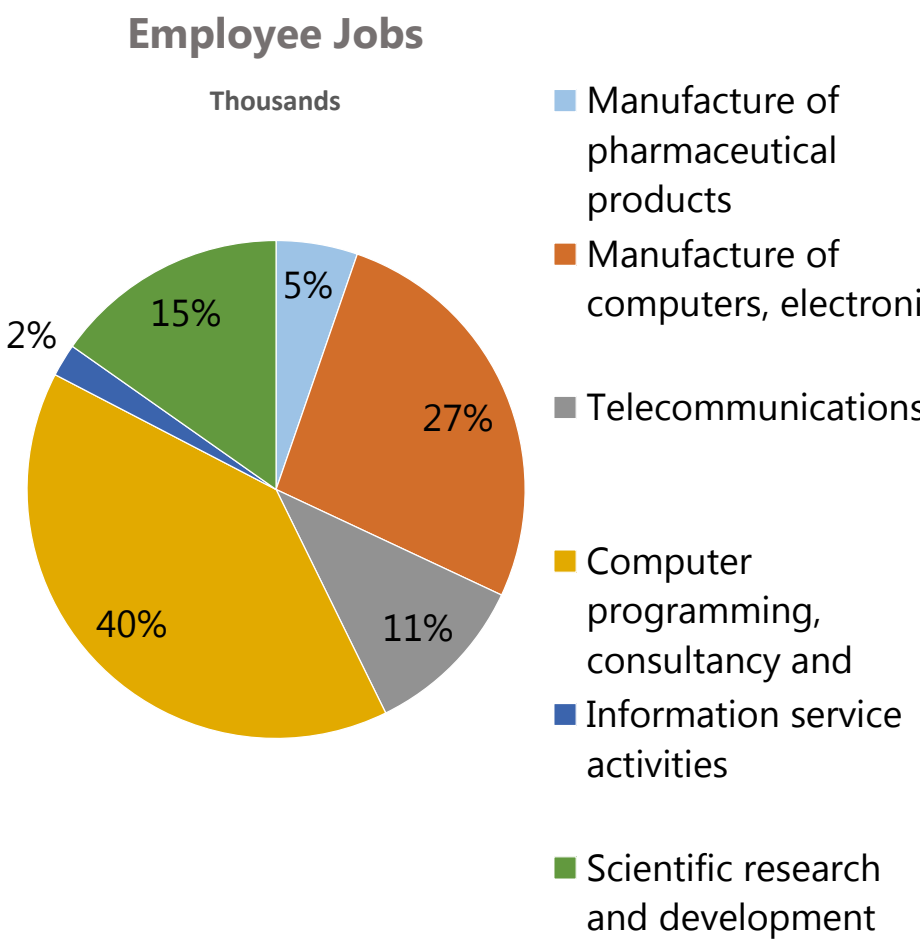
Source: NASDAQ

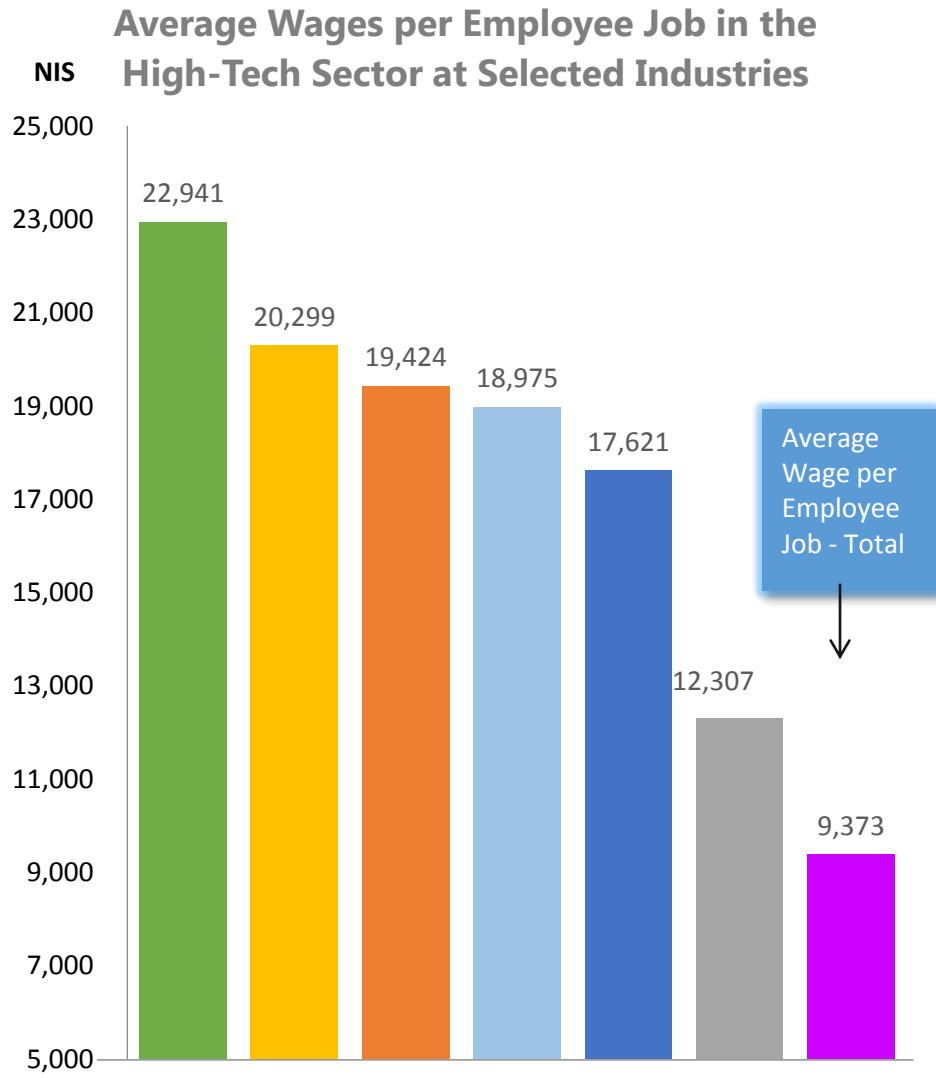
Employed Persons in the High-Tech Sector - an International Comparison



Source: CBS

Employee Jobs and Average Wages per Employee Job in the High-Tech Sector, 2014

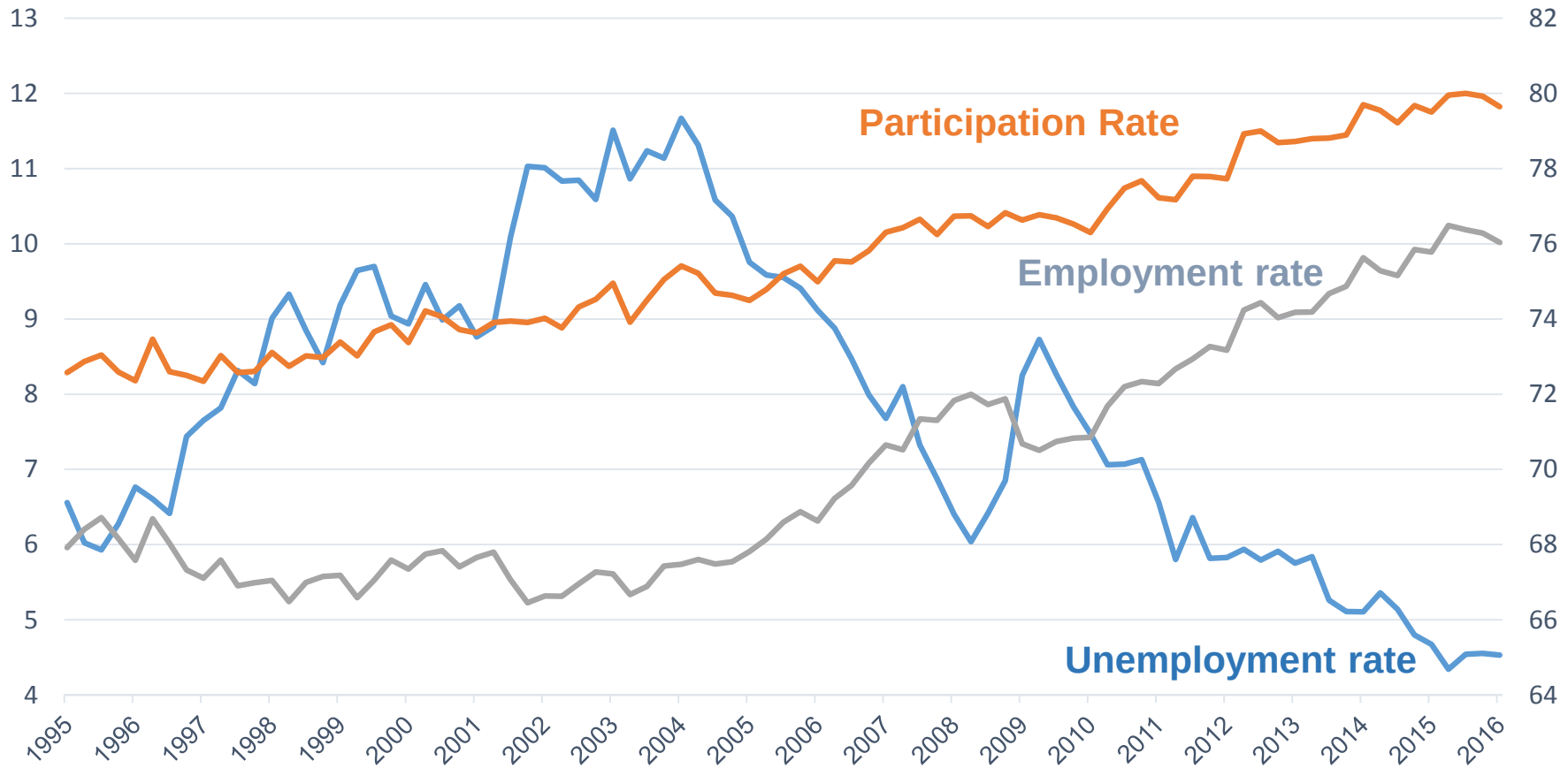




Source: CBS

Labor Market-Main Indicators

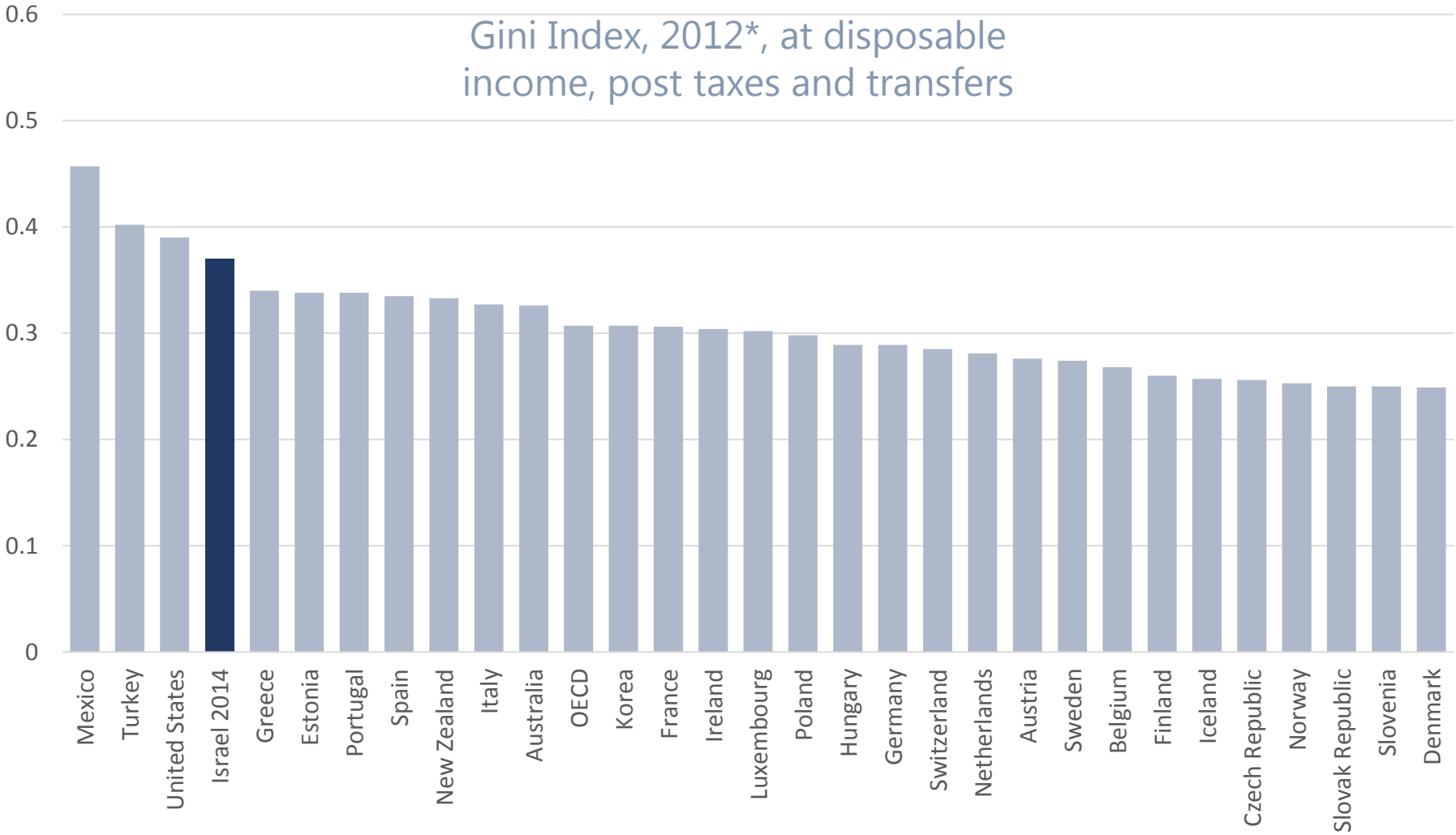
(1995-2016 Quarterly figures, 25-64 years old)



* The new survey is chained according to the old survey, seasonally adjusted and is based on the coefficients of the new survey.

SOURCE: Based on Central Bureau of Statistics Labor Force Survey.

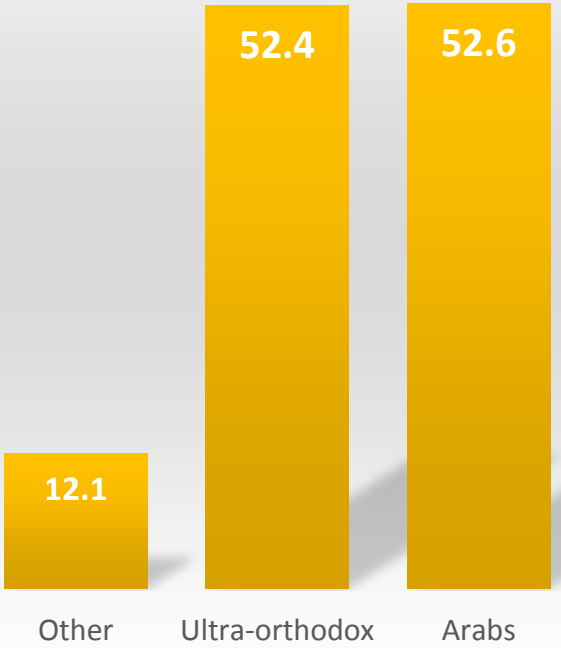
Income Inequality is High



Source: OECD, World bank

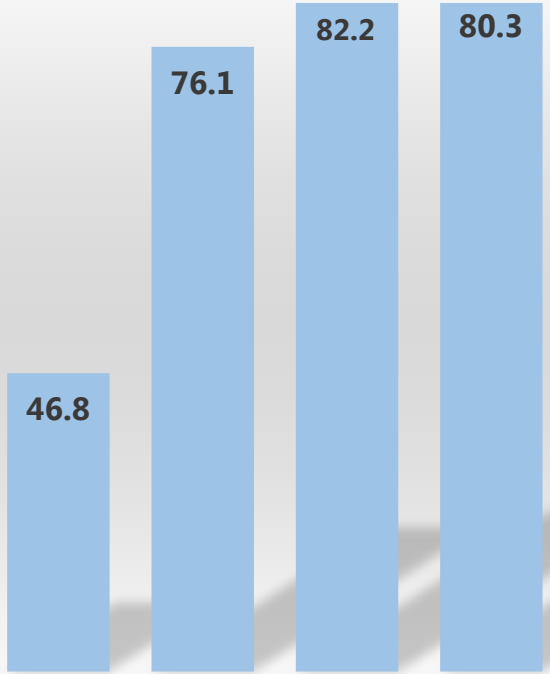
Large Pockets of Poverty
Linked to low employment rate

Incidence of Poverty by group
(% of relative poverty*)



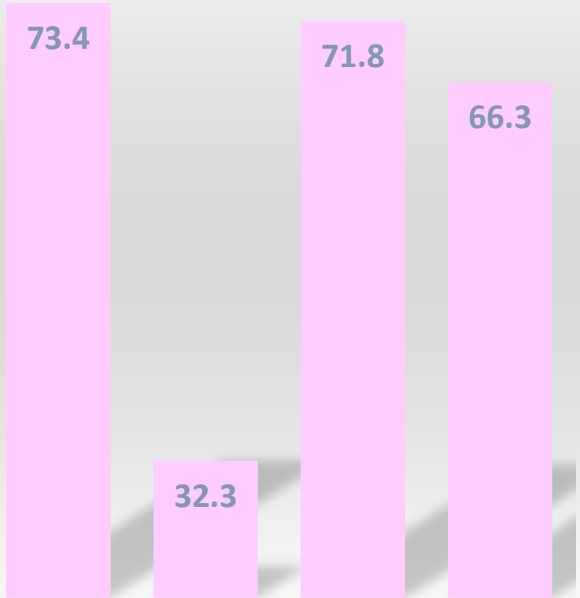
*Defined as 50% of the median household income

Men Labor rate Participation by group



*OECD data for 2014

Women Labor rate Participation by group



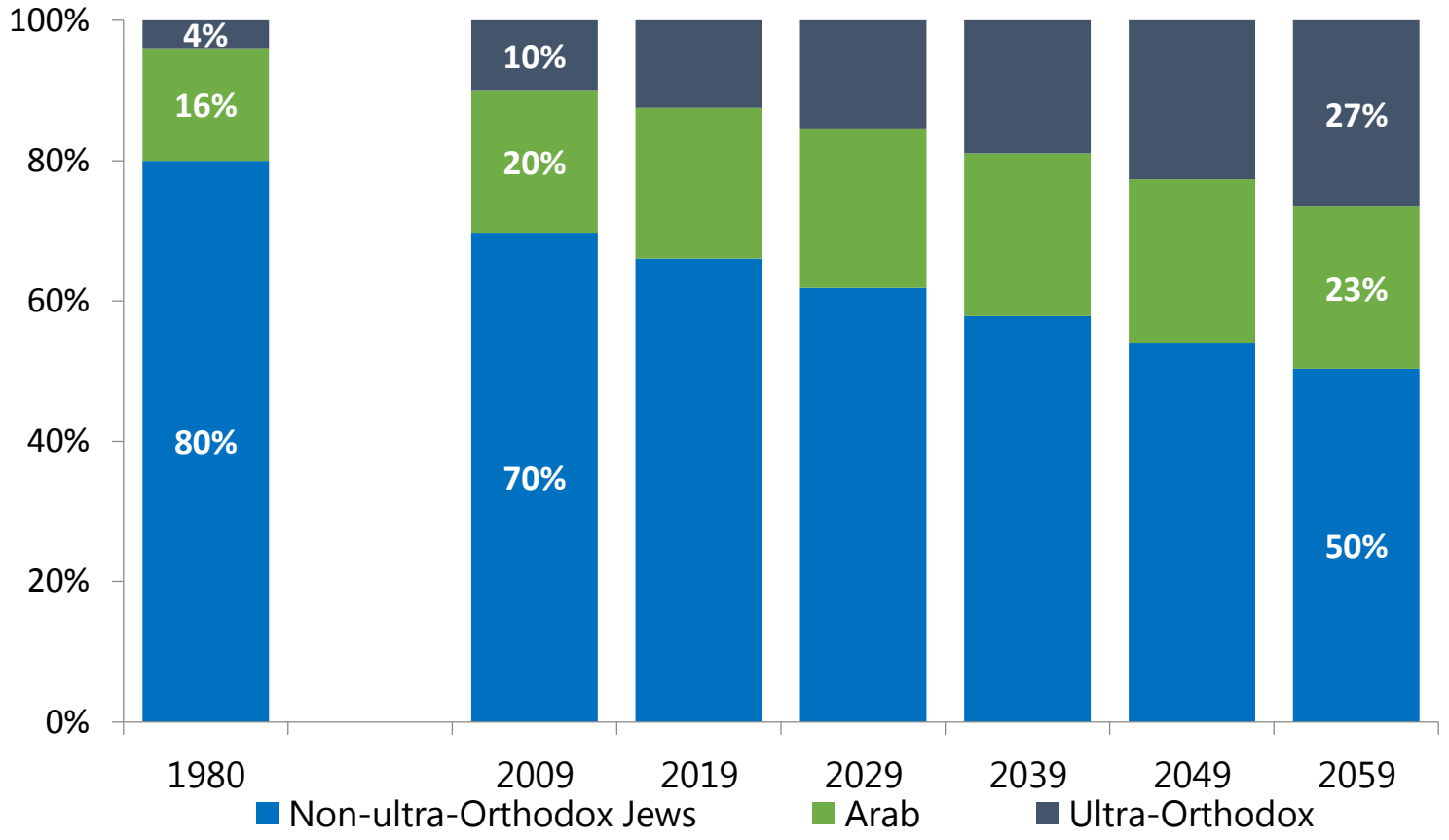
*OECD data for 2014

Source: Central Bureau of statistics and the Bank of Israel

High Fertility Combined with High Labor Participation Rate Requires Appropriate Support and Incentives

Expected demographic trends

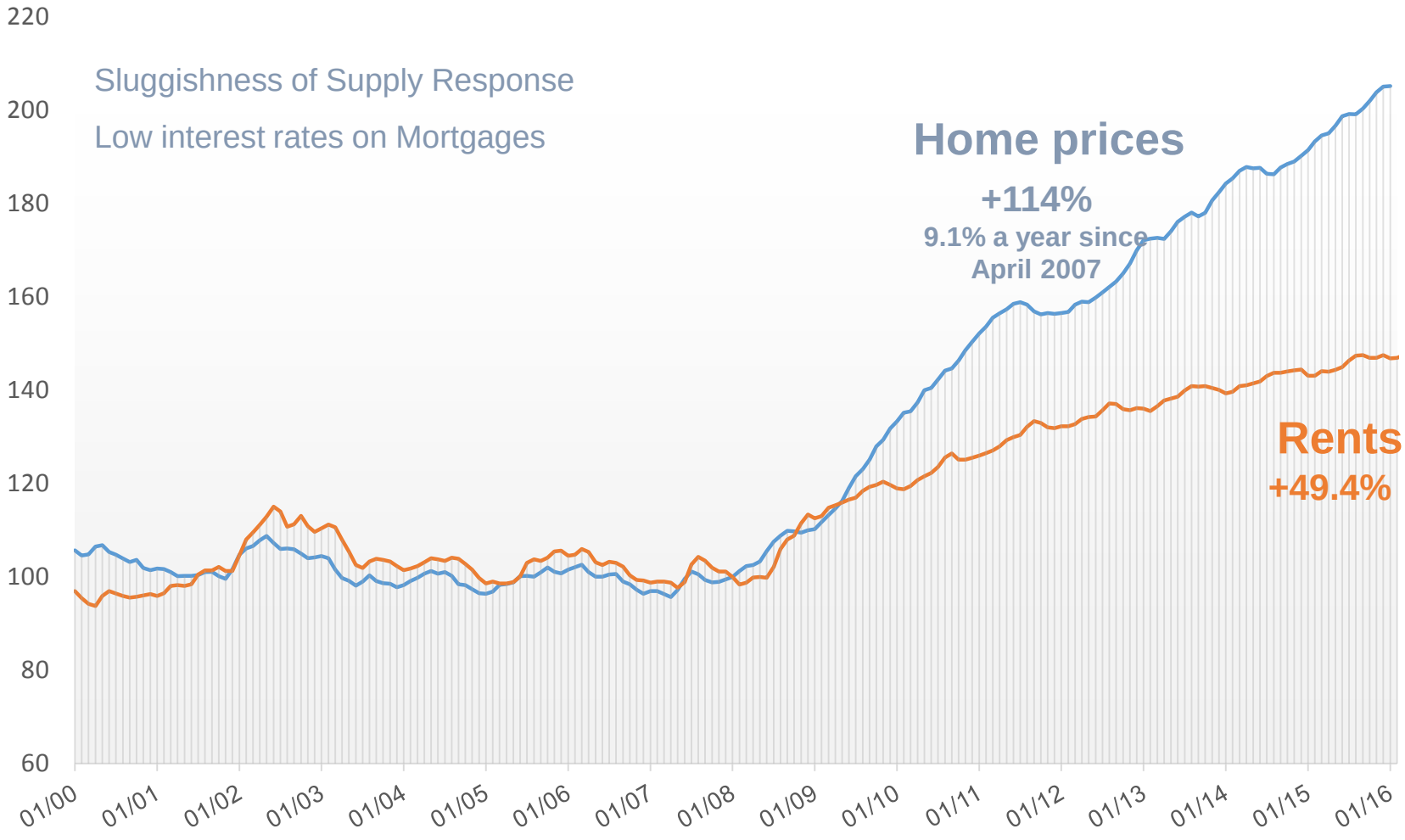
Relative share of population groups



SOURCE: Central Bureau of Statistics.

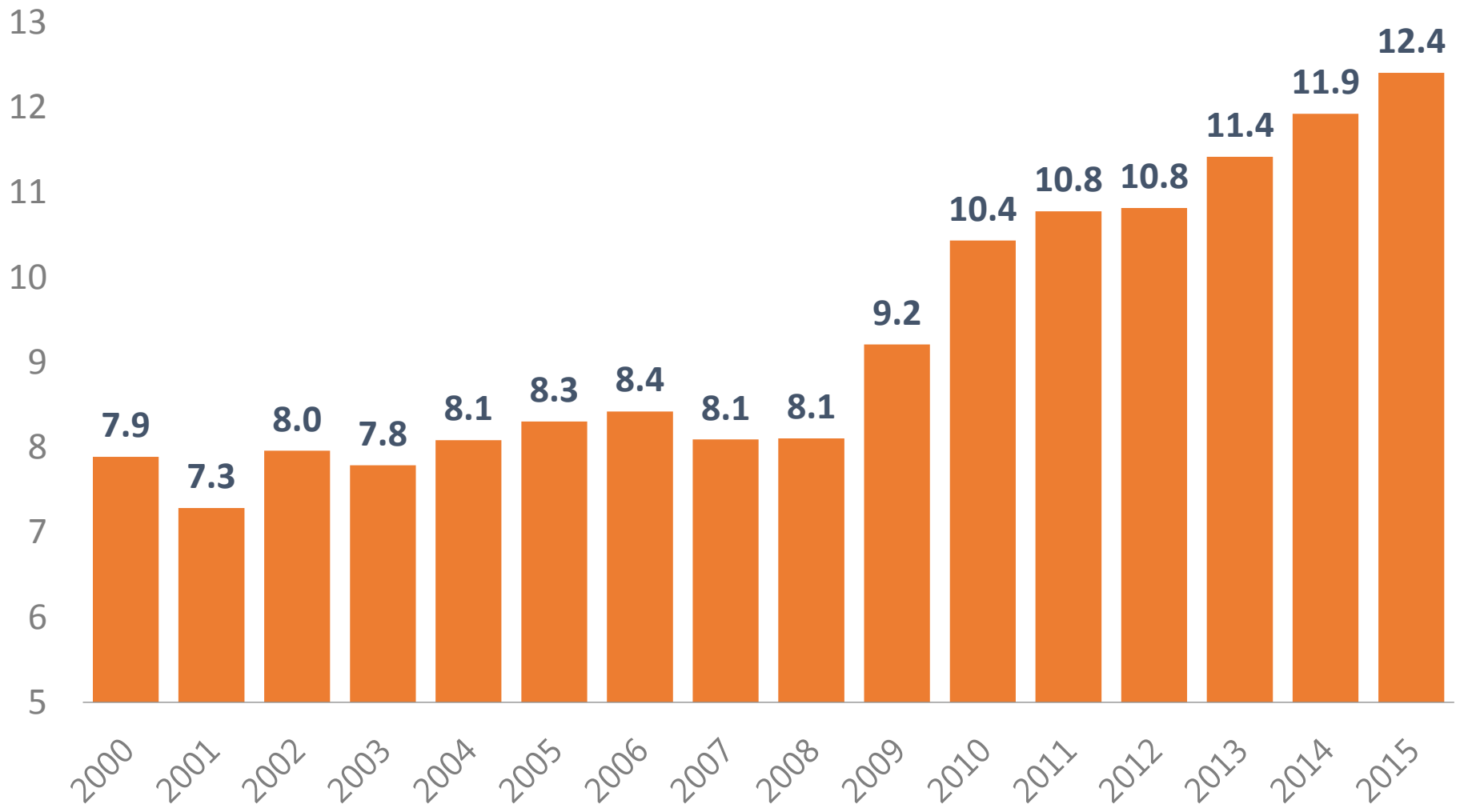
Housing Prices

nominal prices index



Source: OECD

Number of Years of work needed to buy an apartment For someone earning the average wage and buying the "average" apartment



SOURCE: CBS

Summary

Comfortable macro economic environment, but much weaker micro economic situation with high inequality and cost of living

- Moderate Economic Growth
- Low inflation
- No excess debt in either the private nor public sector
- Outstanding High Tech sector

.....and yet

- High Inequality
- High cost of Housing

Muchas Gracias