

Israel through the Global Crisis: Do Innovations Help?

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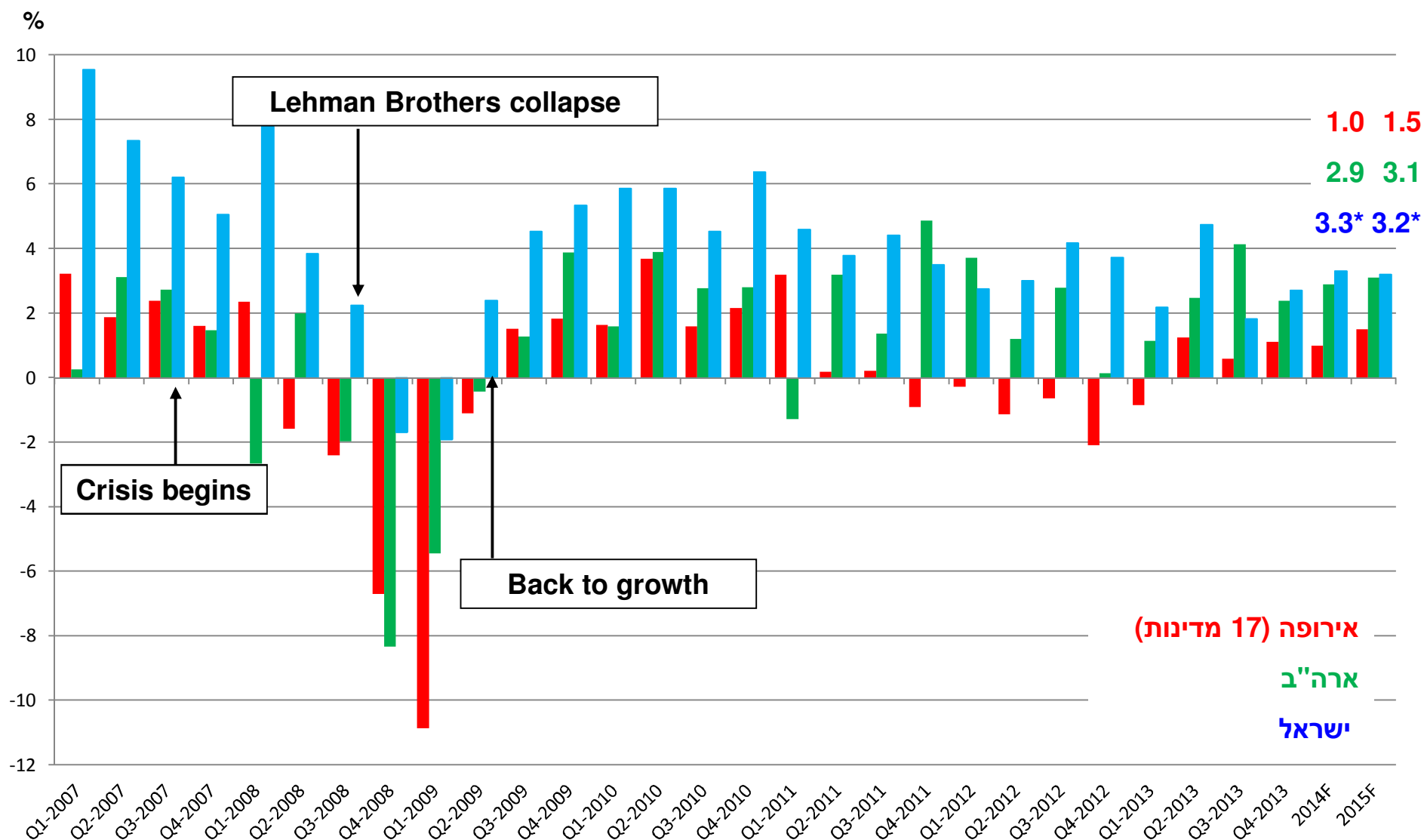
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Outline

- The Macro Picture
- Innovations and Start Ups

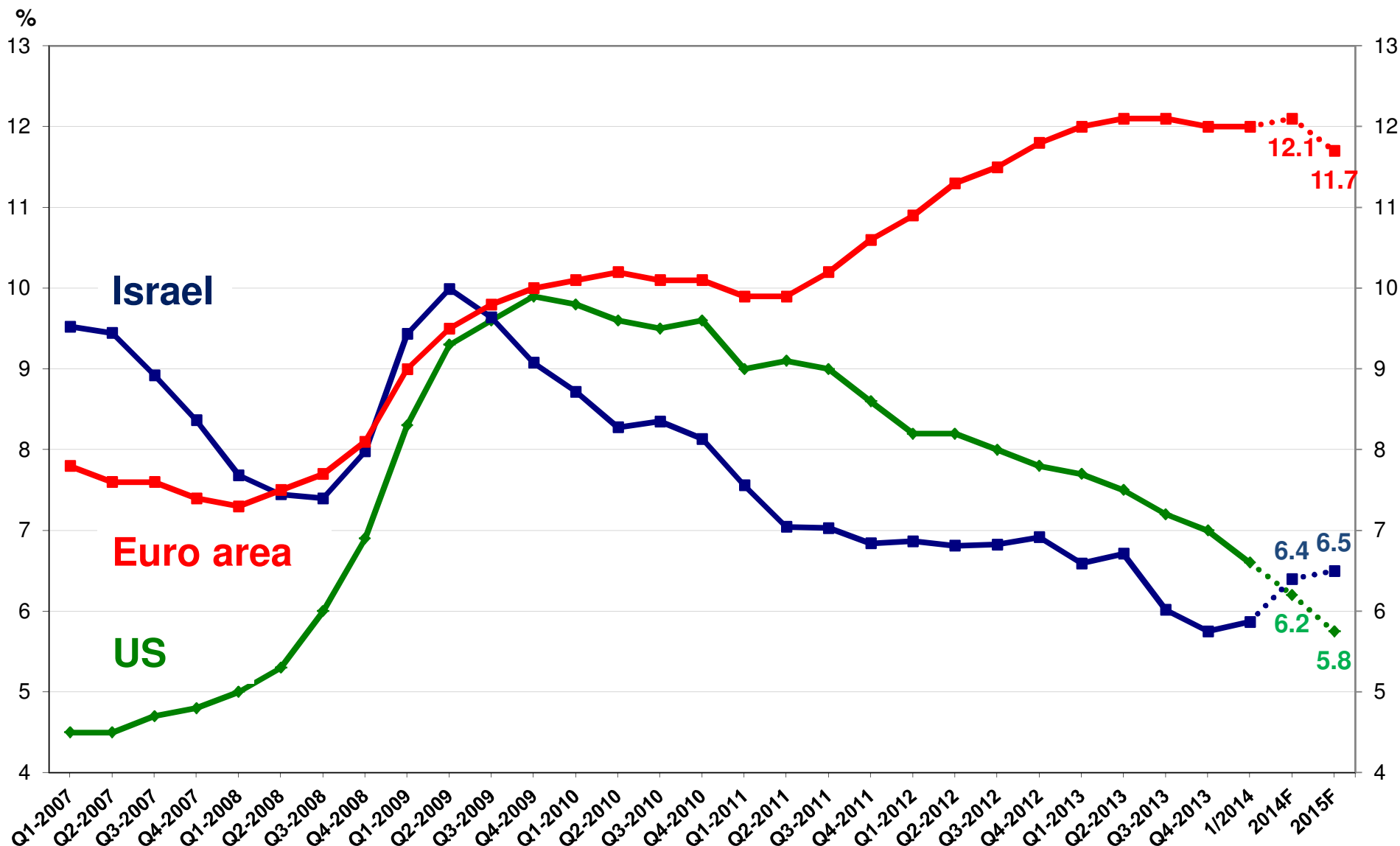
Growth Rates - Israel, US and Europe



Quarterly rates in annual terms. * excluding "TAMAR" gas, growth is 2.9 in 2014 and 3.2 in 2015.

Source: OECD data, forecasts by BOI (December 2013), Federal Reserve (March 2014) and ECB (2014Q1).

Unemployment signals that the real crisis remains in US and EU - less so in Israel



Source: OECD, BOI and CBS data, forecasts by BOI (December 2013), Federal Reserve (March 2014) and ECB (2014Q1).

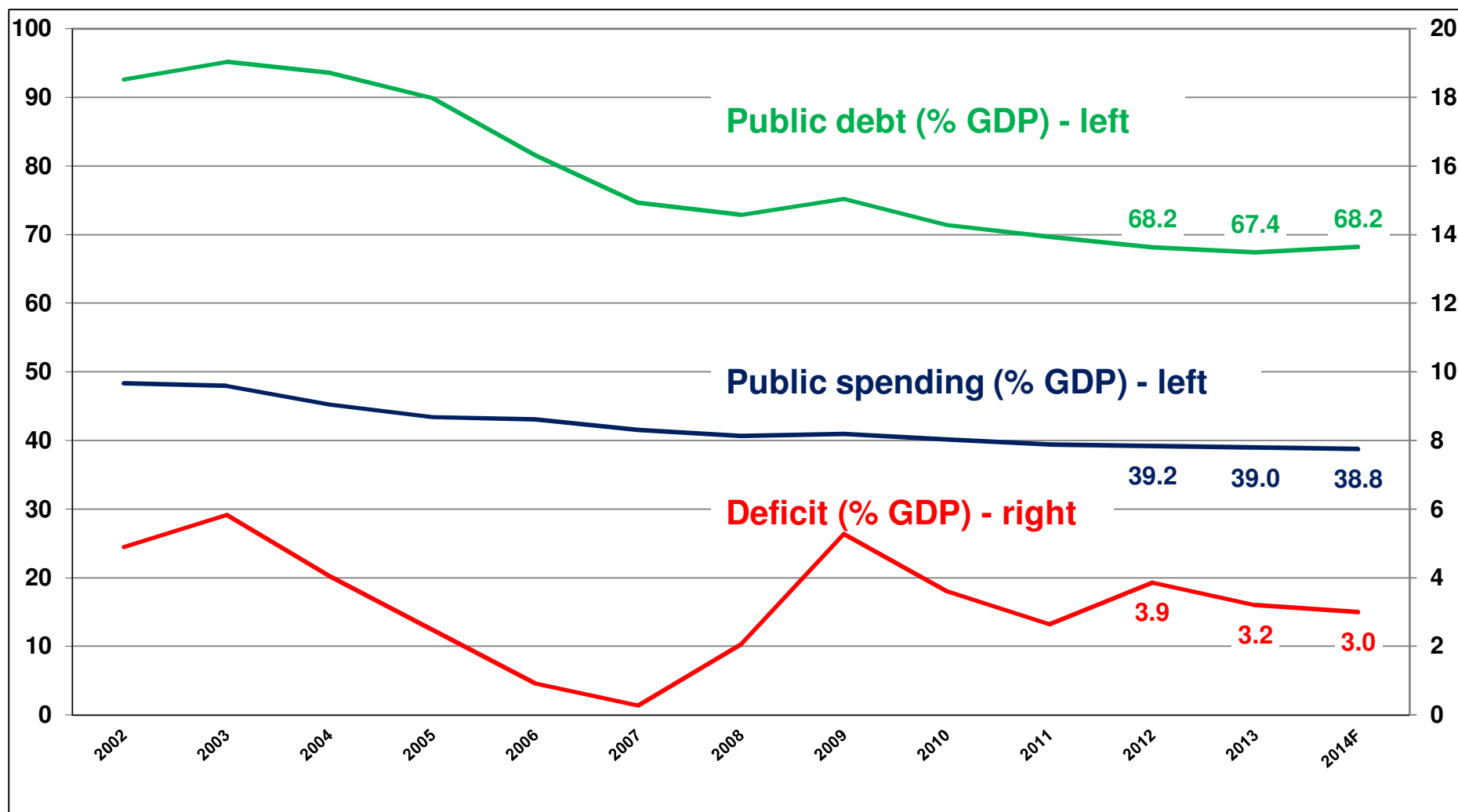
Israel's Economic Strength: Resilience to Shocks

- Financial markets: Stable
- Fiscal policy: Credible reduction in Debt/GDP
- Balance of payments surplus
- Monetary policy: Price stability and growth

Financial markets are stable and functioning very well, but...

- Private and public debt are below average OECD
- Banking capital level at world average (14.9%; core tier 1 9.1%)
- Banks are stable, deleverage in business and increase mortgage to households (housing prices rise)
- Savings rate relatively high (18.3%)
- No exposure to advanced financial instruments (MBS, CDO, CDS); small inter-banking market
- Capital requirements from banks, non-bank credit restrictions and lack of securitization - create limits on business credit growth

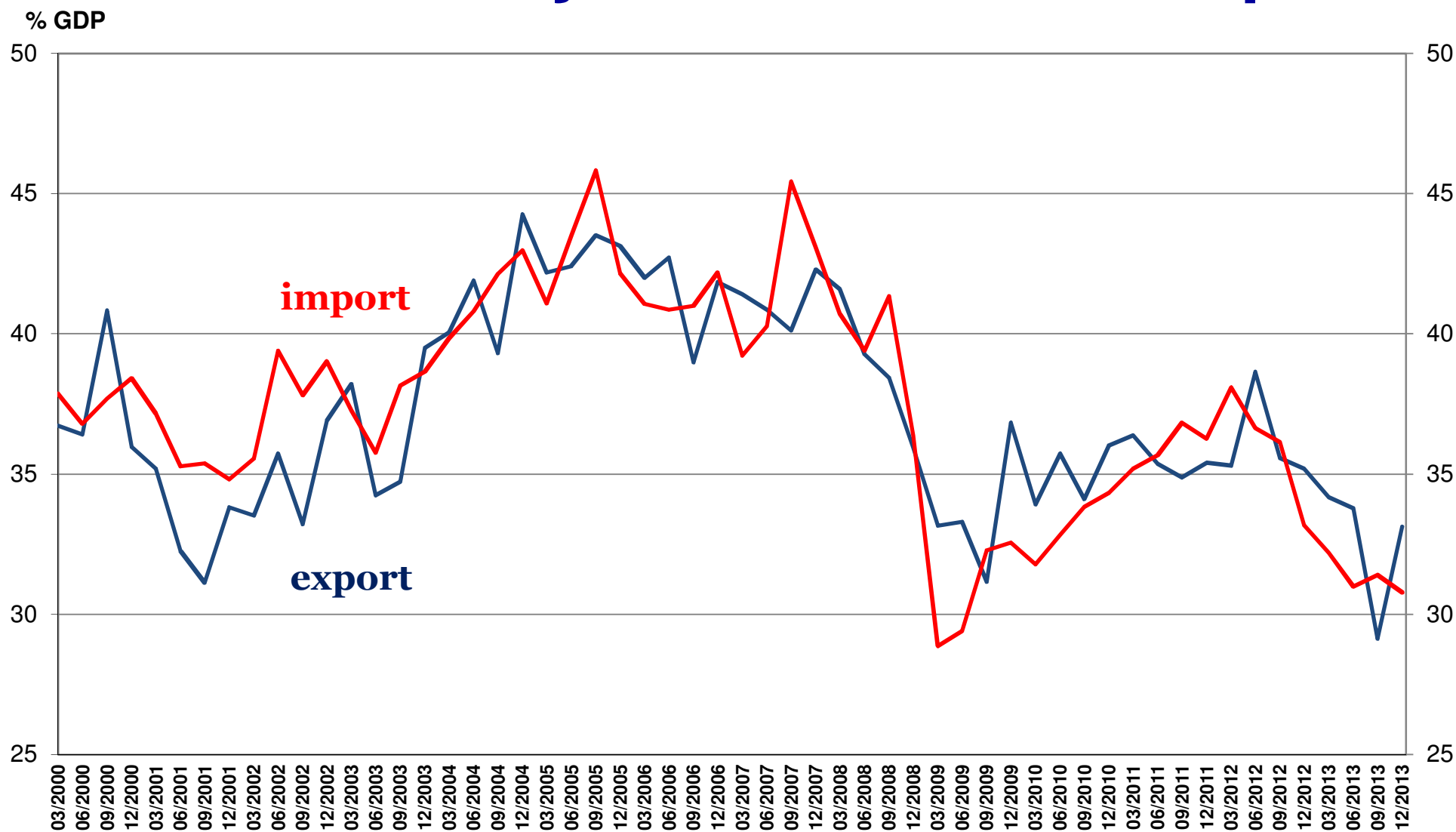
Fiscal Policy: Conservative and *Credible*



Data and forecasts are according to the new GDP definitions. Deficit for 2014 is the target.

Source: BOI and CBS.

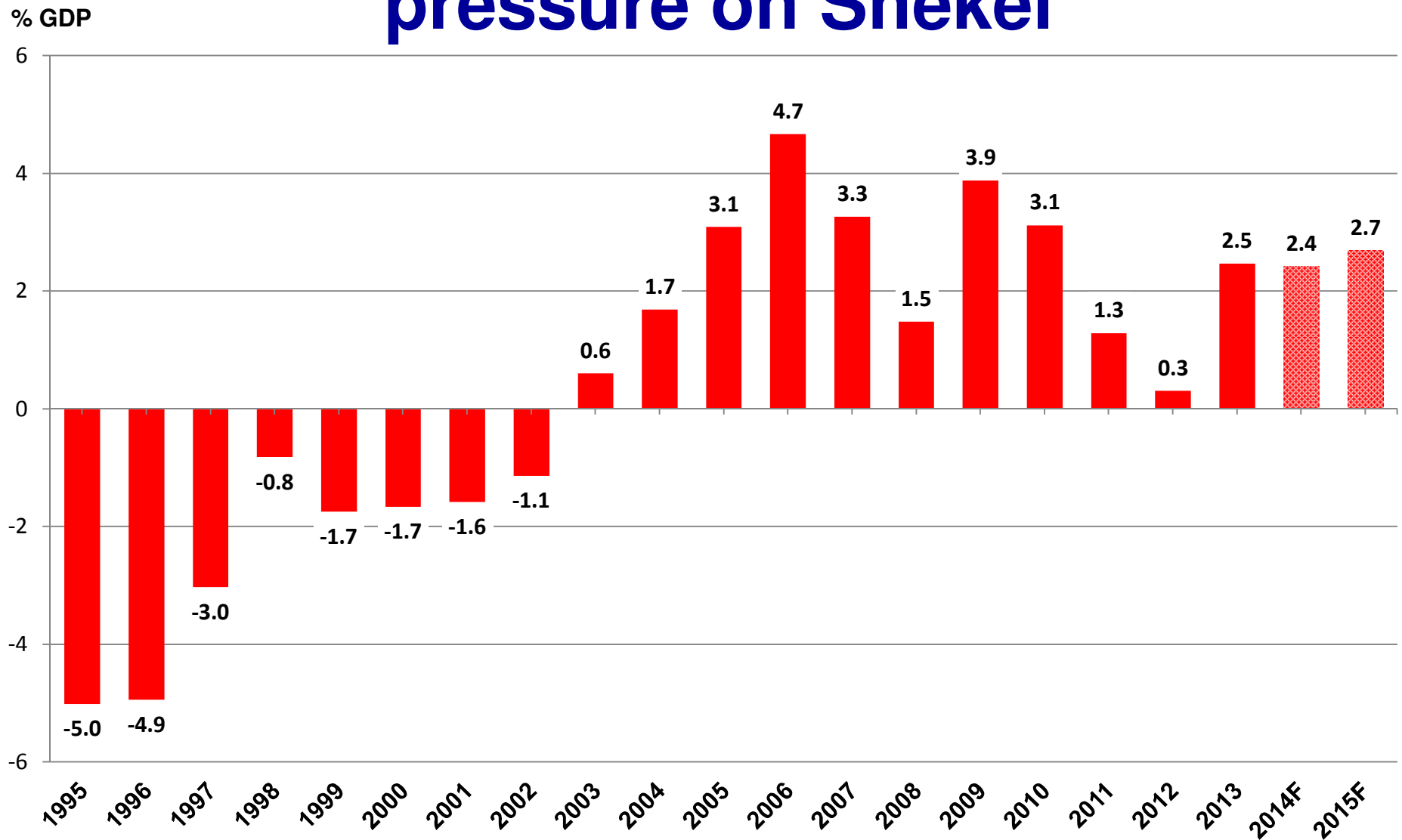
Balance of Payments: Back to surplus



Total goods and services, calculated from current prices series.

Source: CBS.

Current Account: Growing surplus, pressure on Shekel

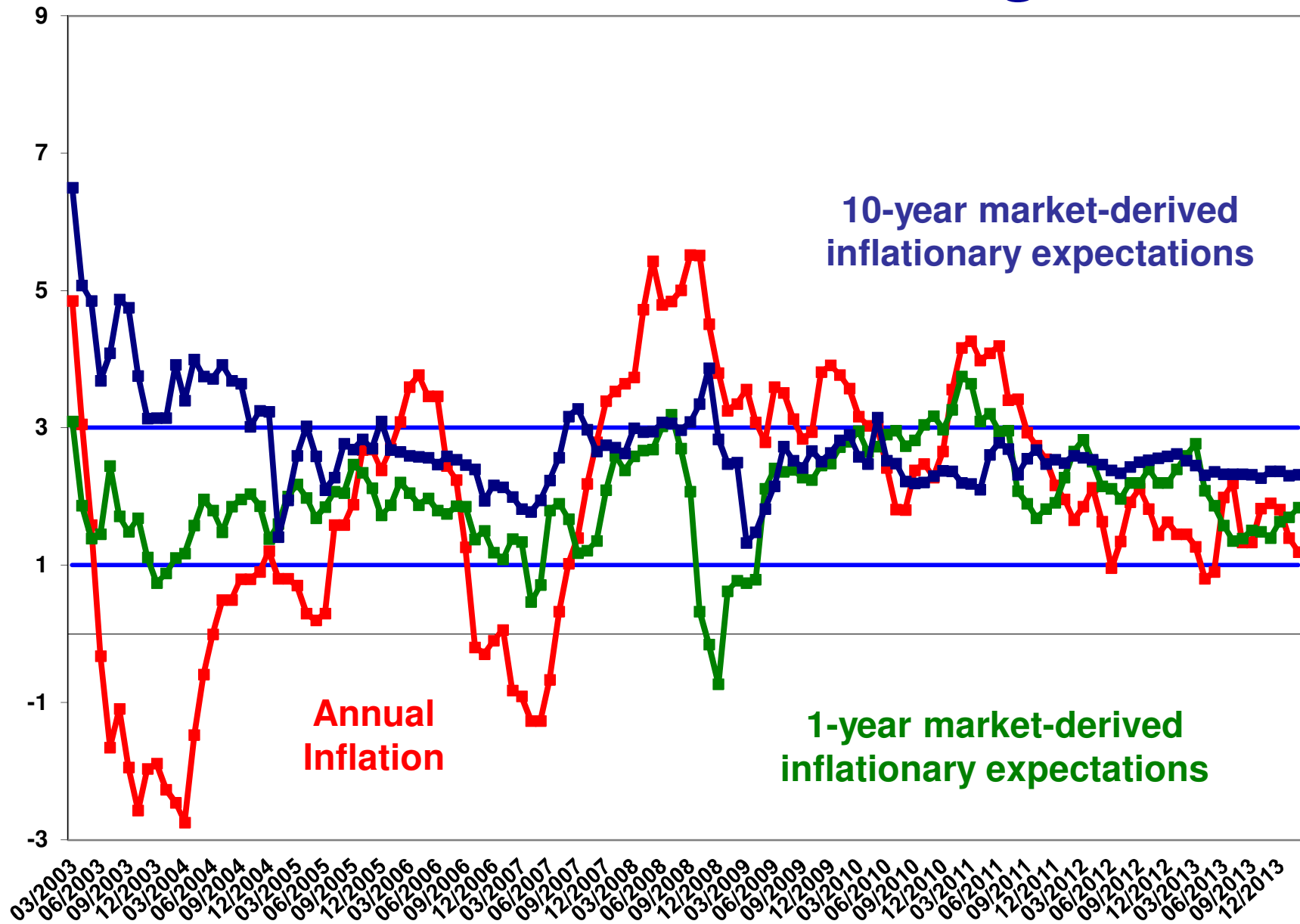


Source: CBS, estimated forecast calculated from BOI (December 2013).

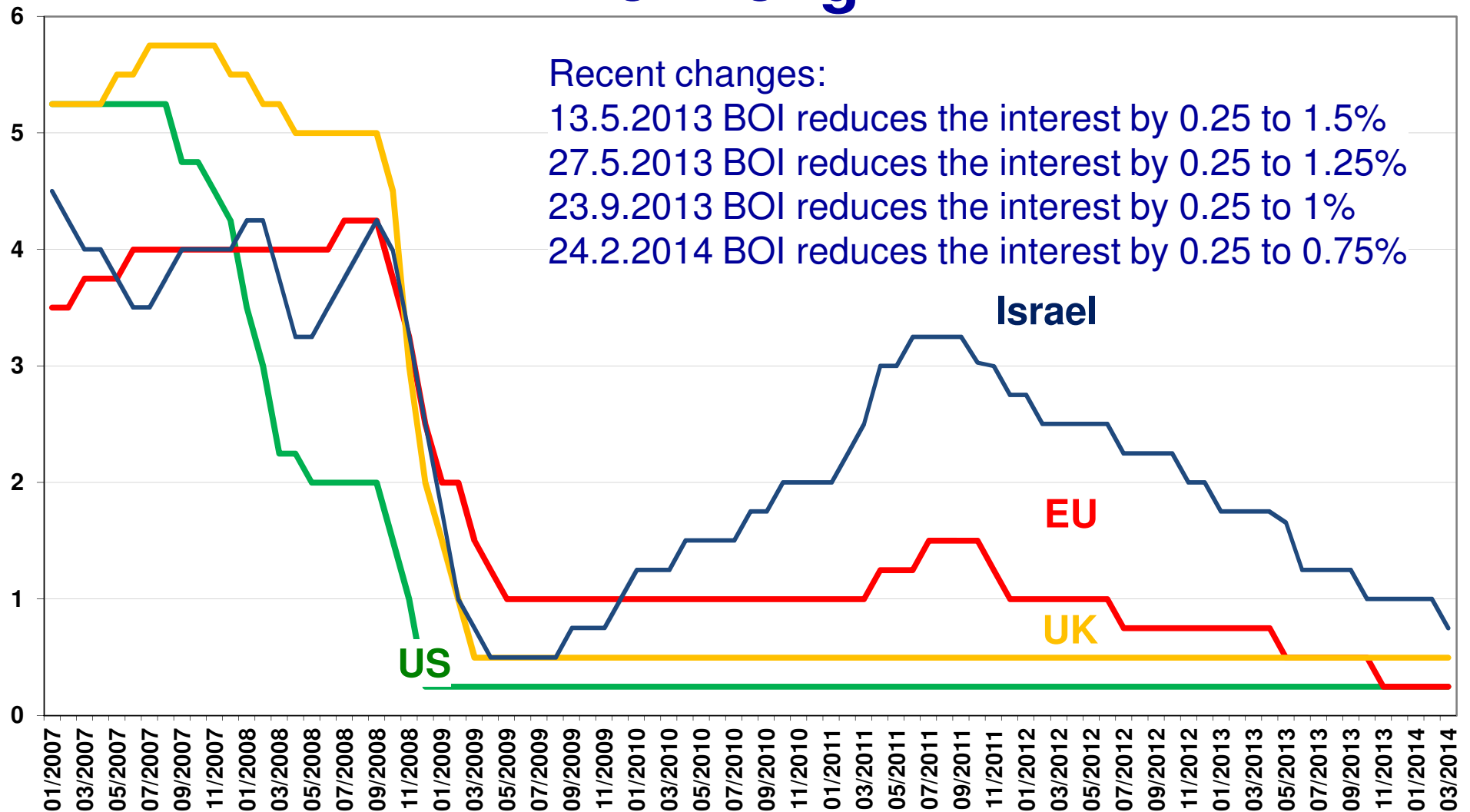
Monetary Policy Goals

- **Main goal:** Price stability, inflation target 1-3%
- **Secondary goal:** Support employment and growth (subject to price stability)
- Tools: Interest rate and FX market interventions
- **Additional goal:** Support financial stability
- Tools: Financial markets interventions and “macro-prudential” actions (e.g. restrictions on exposure to real estate and restrictions on FX derivatives exposure)

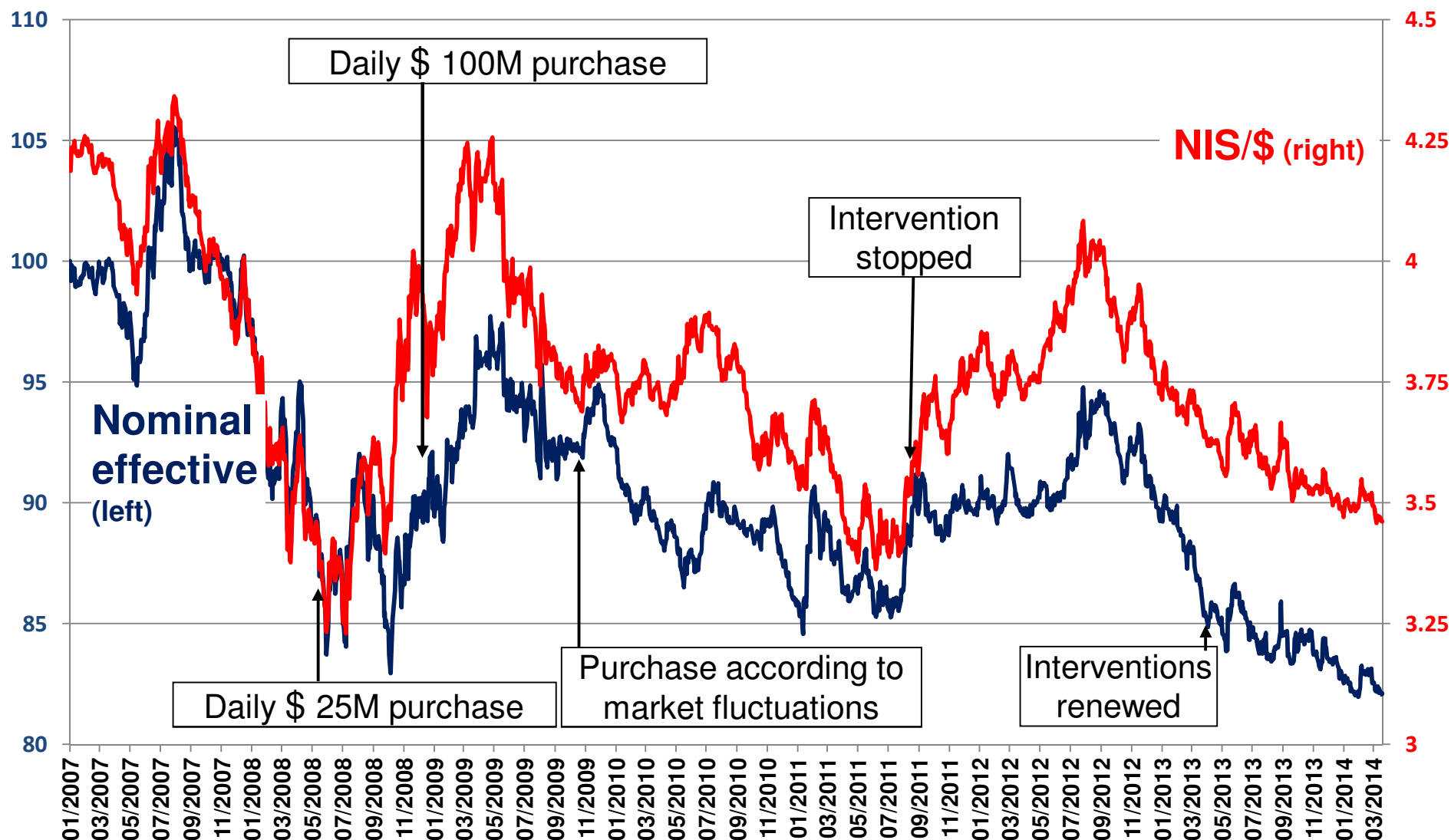
Inflation below mid-target



Interest rate policy: Expansionary in the west - how long? Slightly expansionary in Israel - how long?



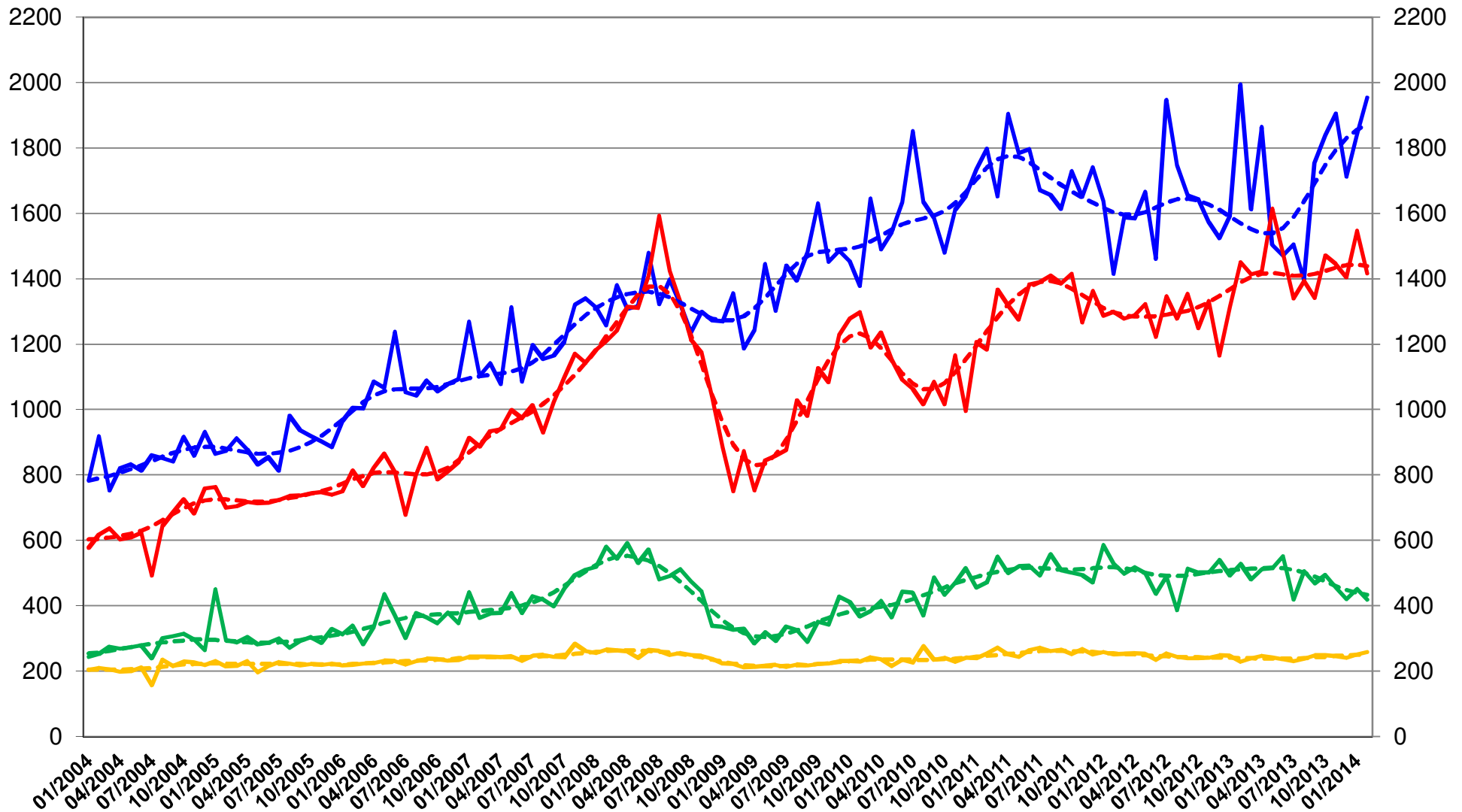
Shekel too strong? Intervention during unusual trends affecting market; Accumulating balances; In the long-term - avoiding intervention



Innovations and Start Ups

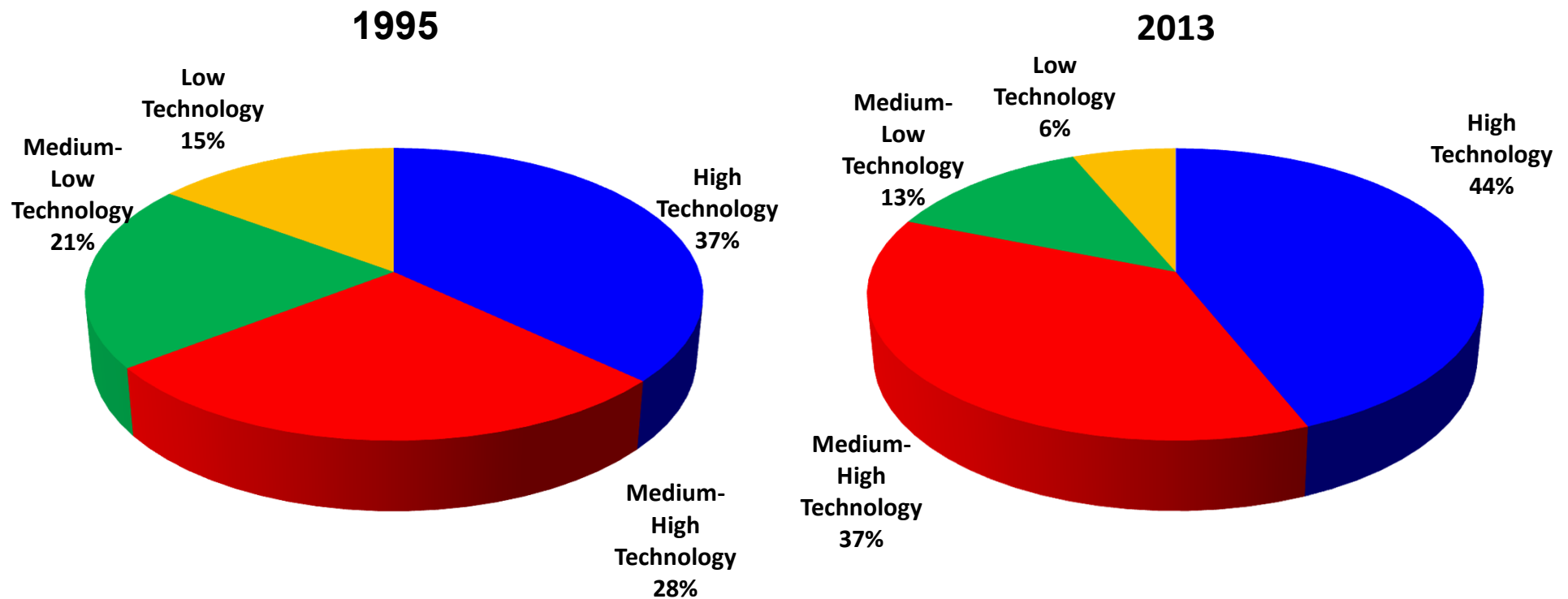
Exports by Technology Intensity: “The growth engine is stuck?”

\$ monthly
millions



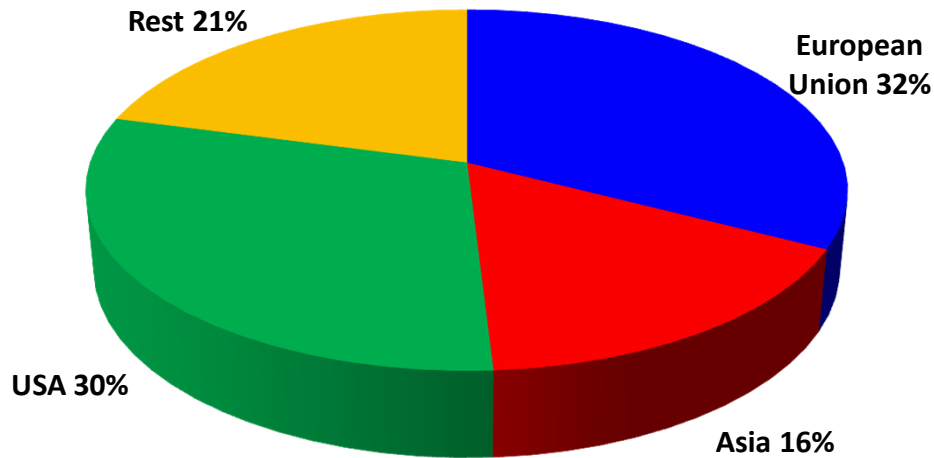
Source: CBS.

Export by Technology Intensity: Transition to High-Tech exports



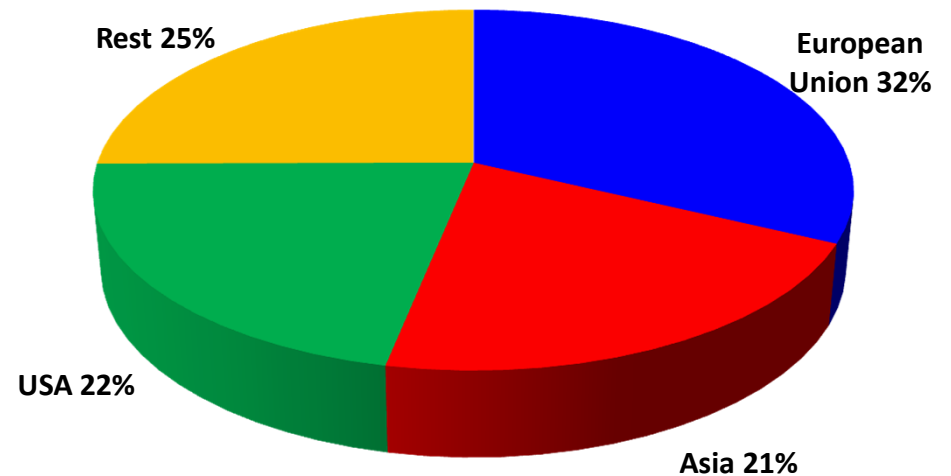
Export by Country (excluding diamonds): Transition to Asia

2000



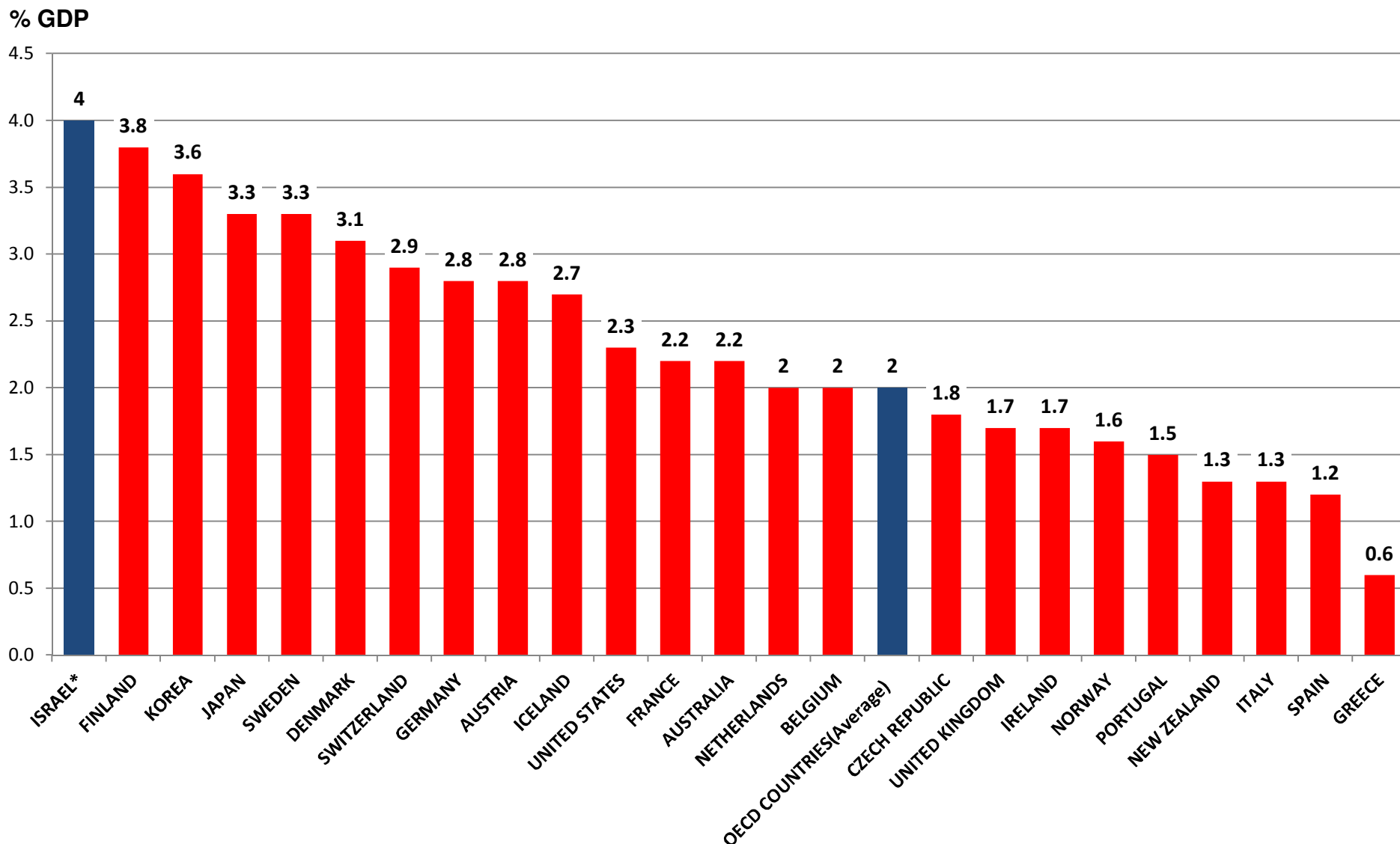
China: 1%
Inc. Hong Kong: 2%

2013



China: 5%
Inc. Hong Kong: 7%

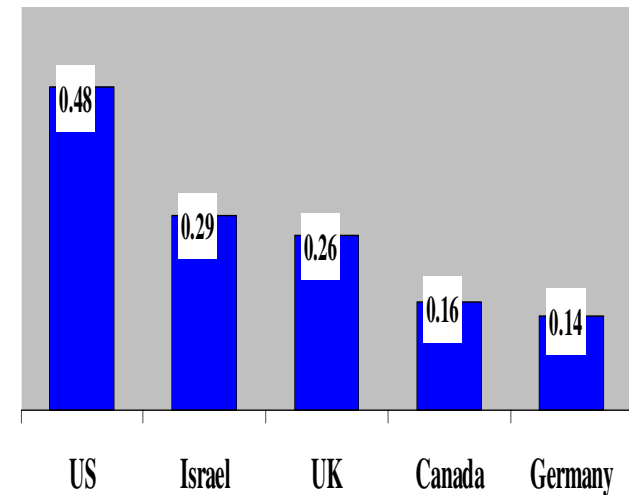
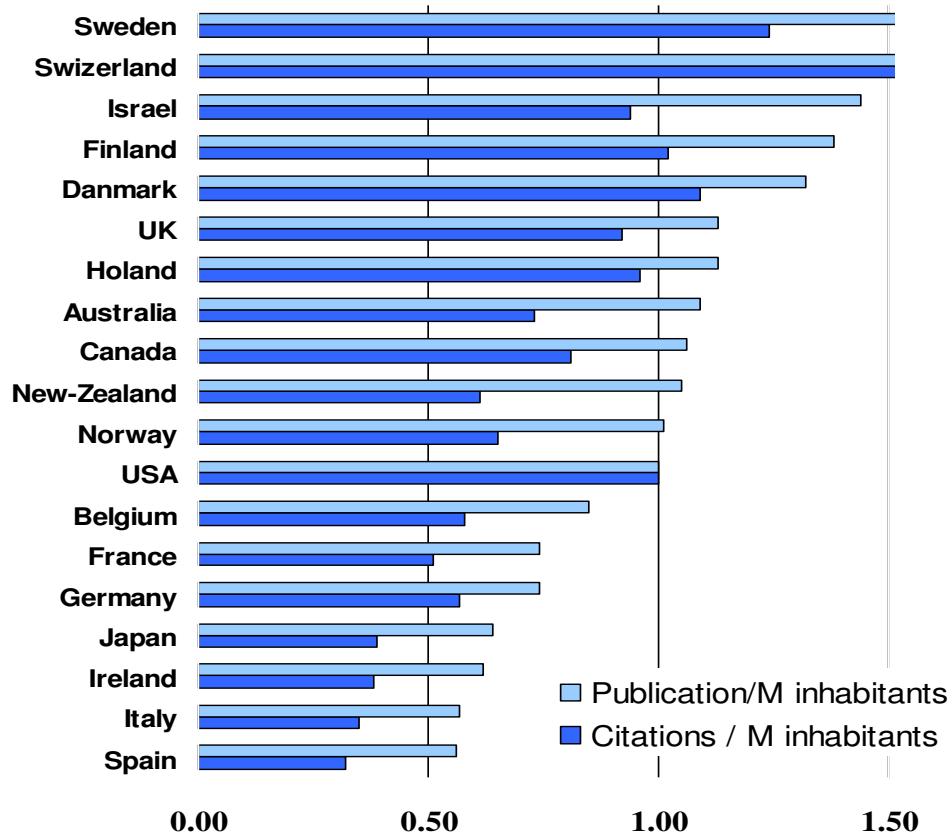
National Expenditure on Civilian R&D (2011)



* Data for Israel is provisional.

Source: CBS.

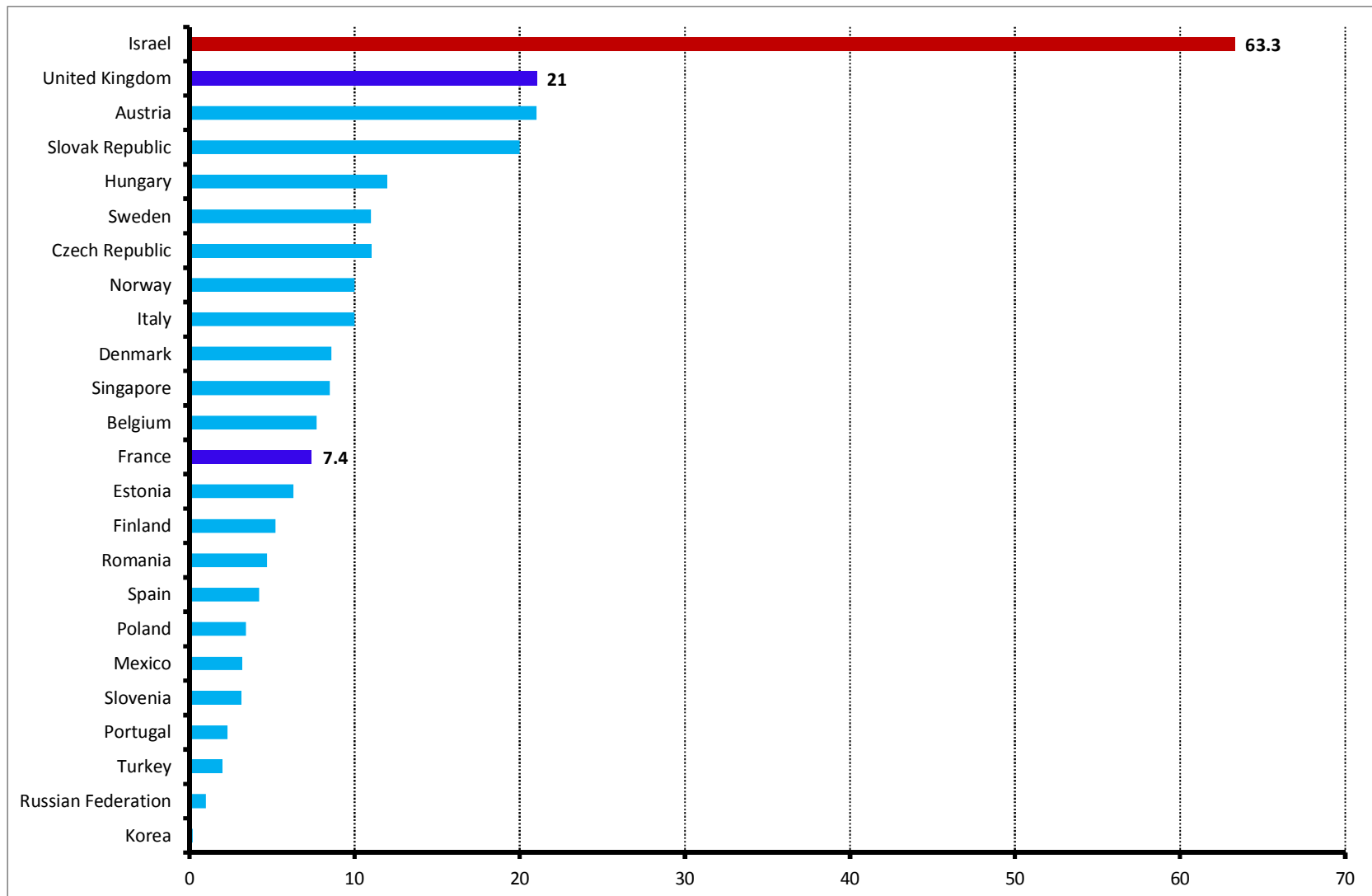
Academic Environment: Scientific Publications & Citations



**Publications in leading LS
Journals* per capita**

*** Nature, Science, The Cell**

Expenditure on R&D of Foreign Affiliates out of Total Expenditure on R&D (2009)



Global Presence: Companies with R&D Activities and Investments in Israel

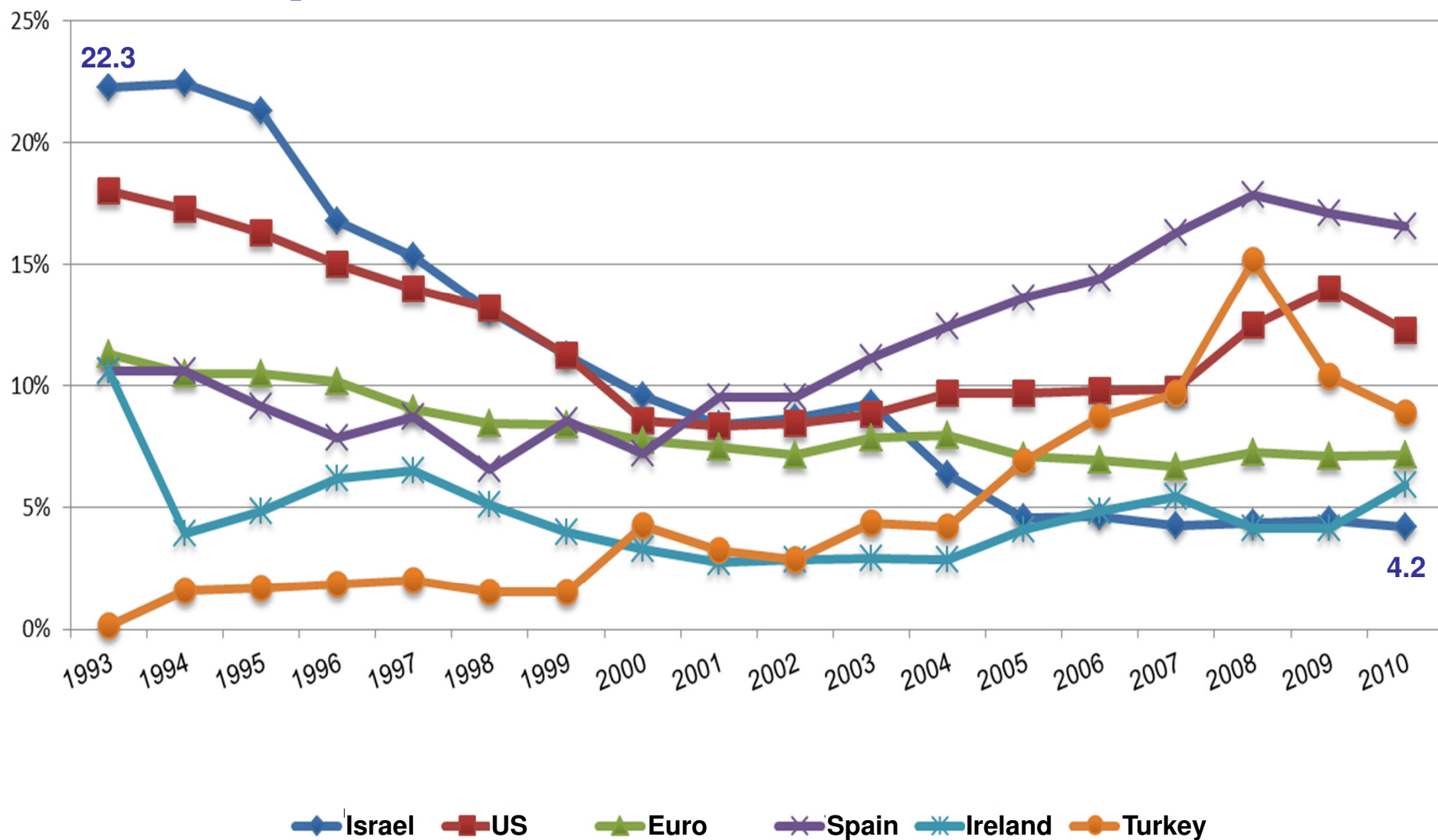


Patents

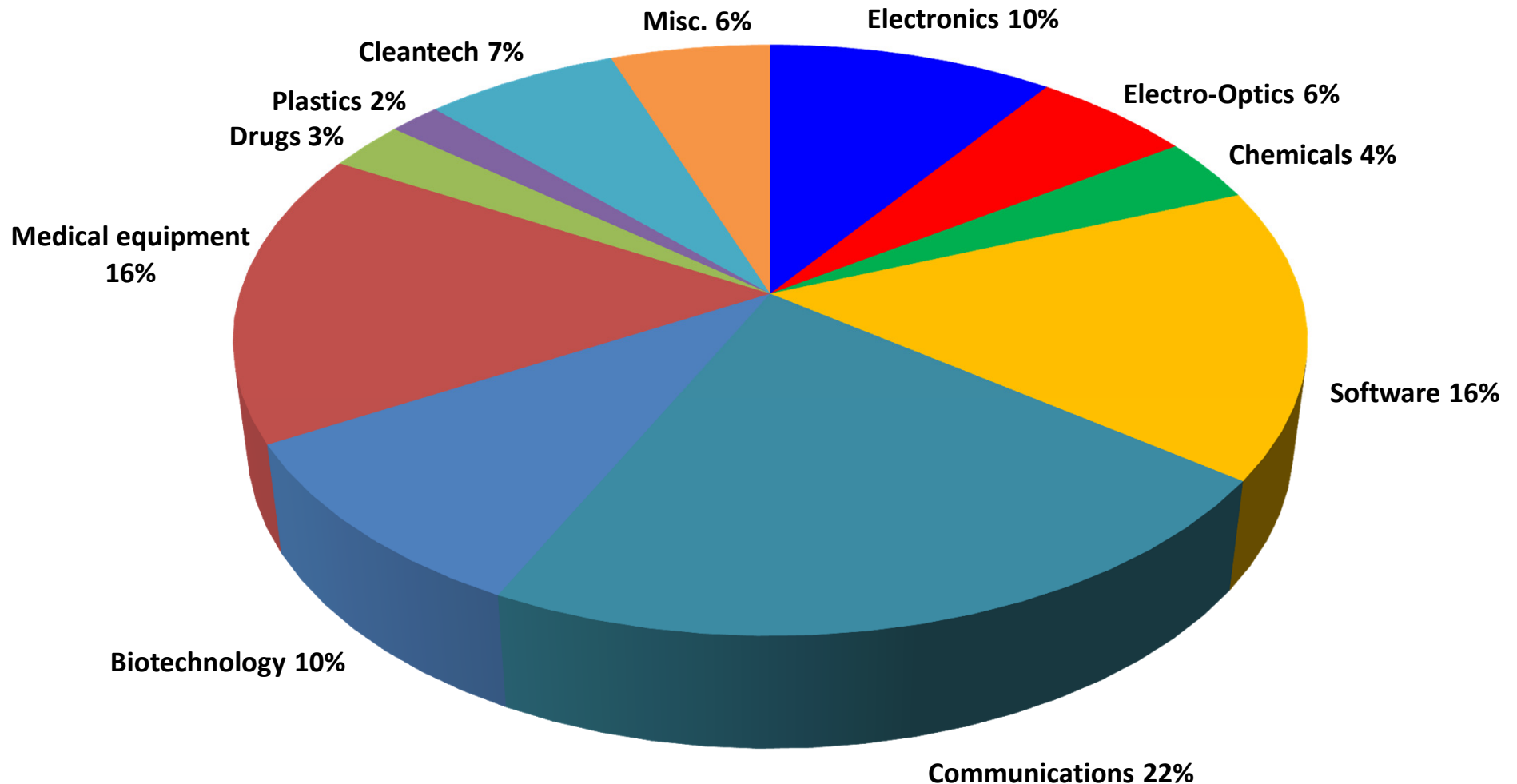


- Israel ranked #5 in number of patents per capita
- Israel ranked #1 in number of medical devices patents and #2 in number of Biopharma patents approved in the US

Government Funding out of Total Expenditure on Business R&D



Office of the Chief Scientist Grants by Technological Sector (2013)



Summary

- The Israeli economy has been stable and growing well due to:
 - Stable macro fundamentals
 - Improving world trade and trade incentives
 - Innovative and growing high tech sector
- The recent developments show slower growth in Hi Tech and the economy
- How could policy enhance growth? Provide incentives for innovations

Thank You!