



“Pharma R&D and Patents support Health Care & Economy”

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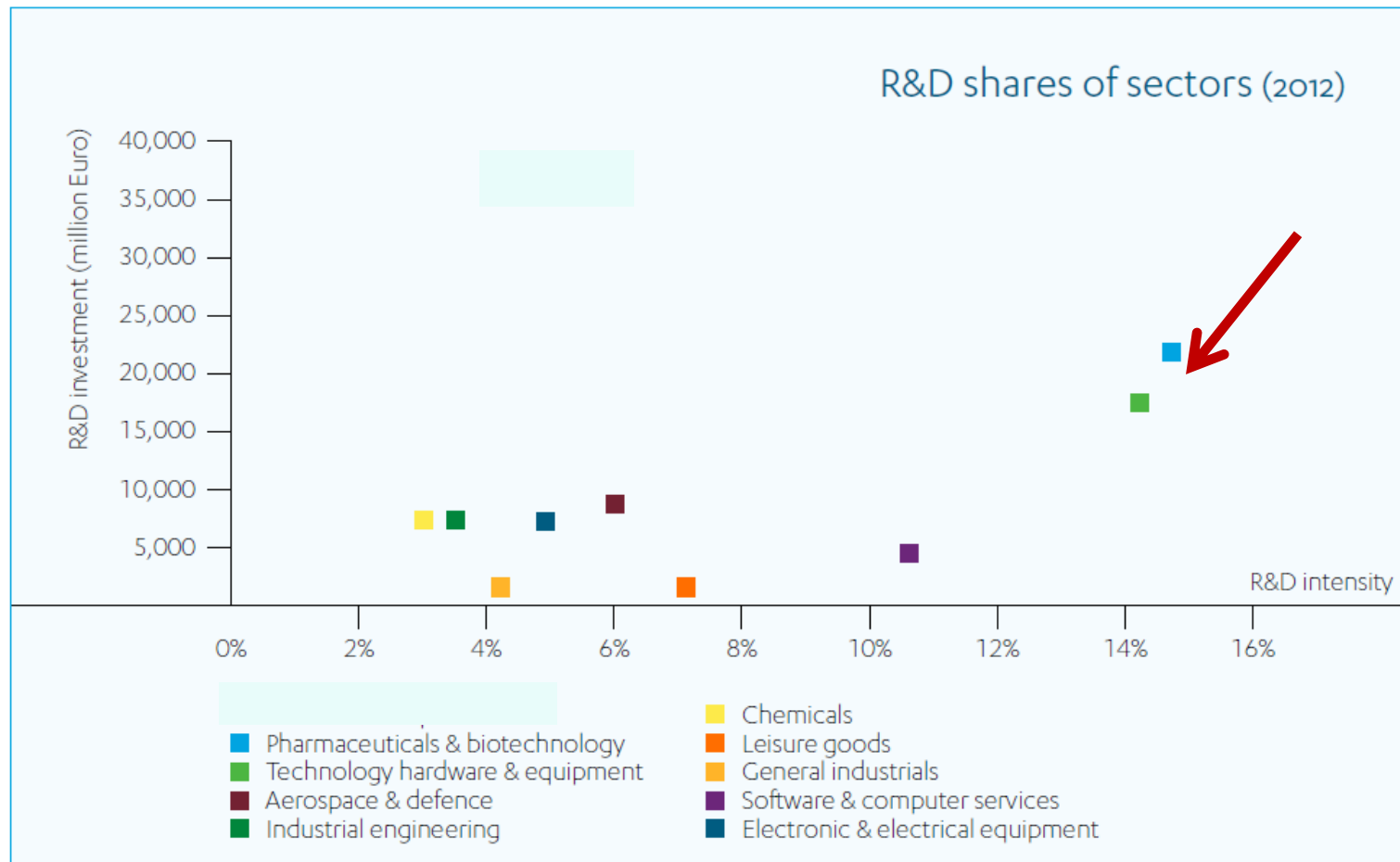
April 28th, 2014

Intellectual Property Patents: The vehicle for innovation

- The pharmaceutical industry has consistently invested in science.
- In 2011 alone, the industry invested €27.5 billion in R&D in Europe.
- The rewards are new and better medicines that benefit patients, health outcomes, scientific progress economy and society as a whole.

<http://www.efpia.eu/topics/innovation/intellectual-property>

Pharmaceuticals is the most R&D intensive sector in Europe

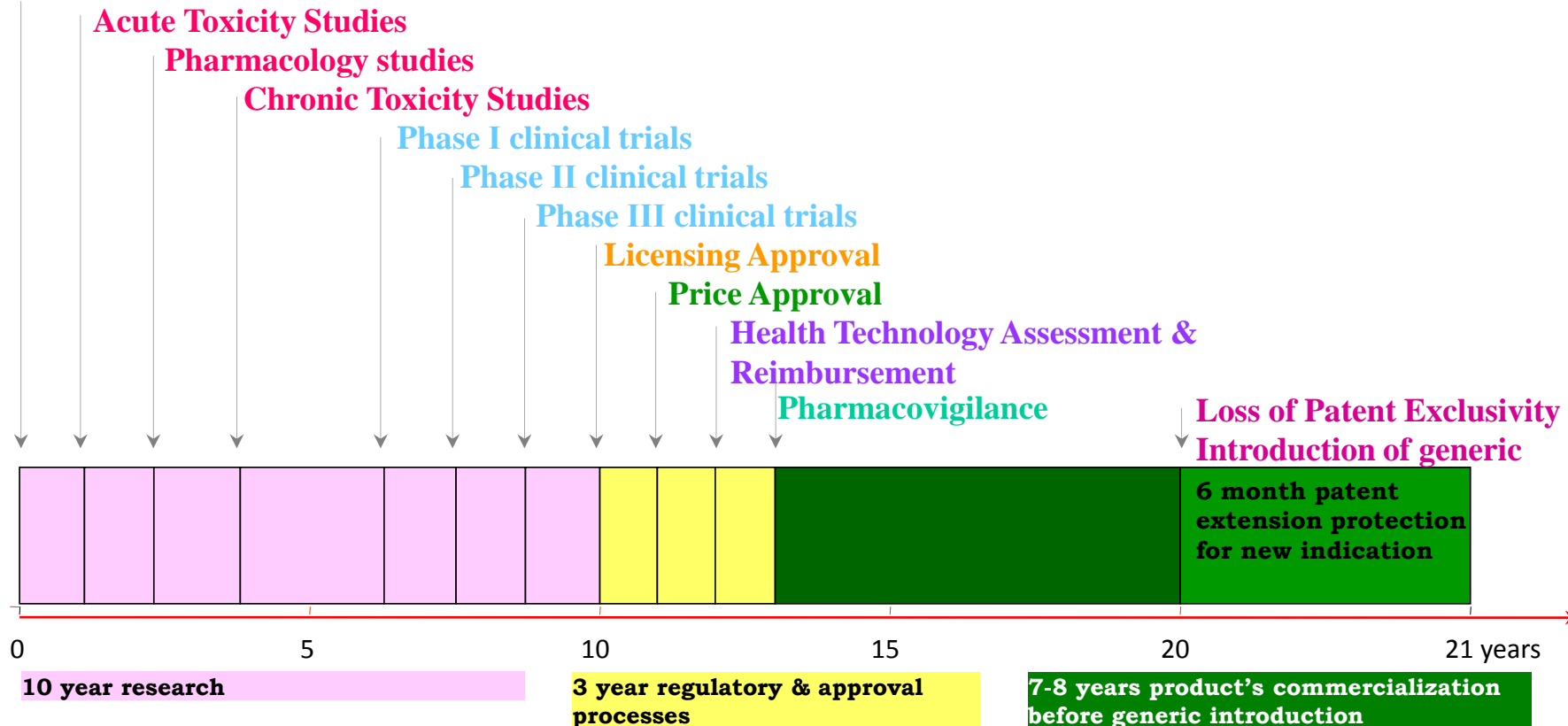


(Source: European Commission – EU R&D Scorecard 2012)

The Medicine Development Process

From 20 years patent protection only 7- 8 year commercialization

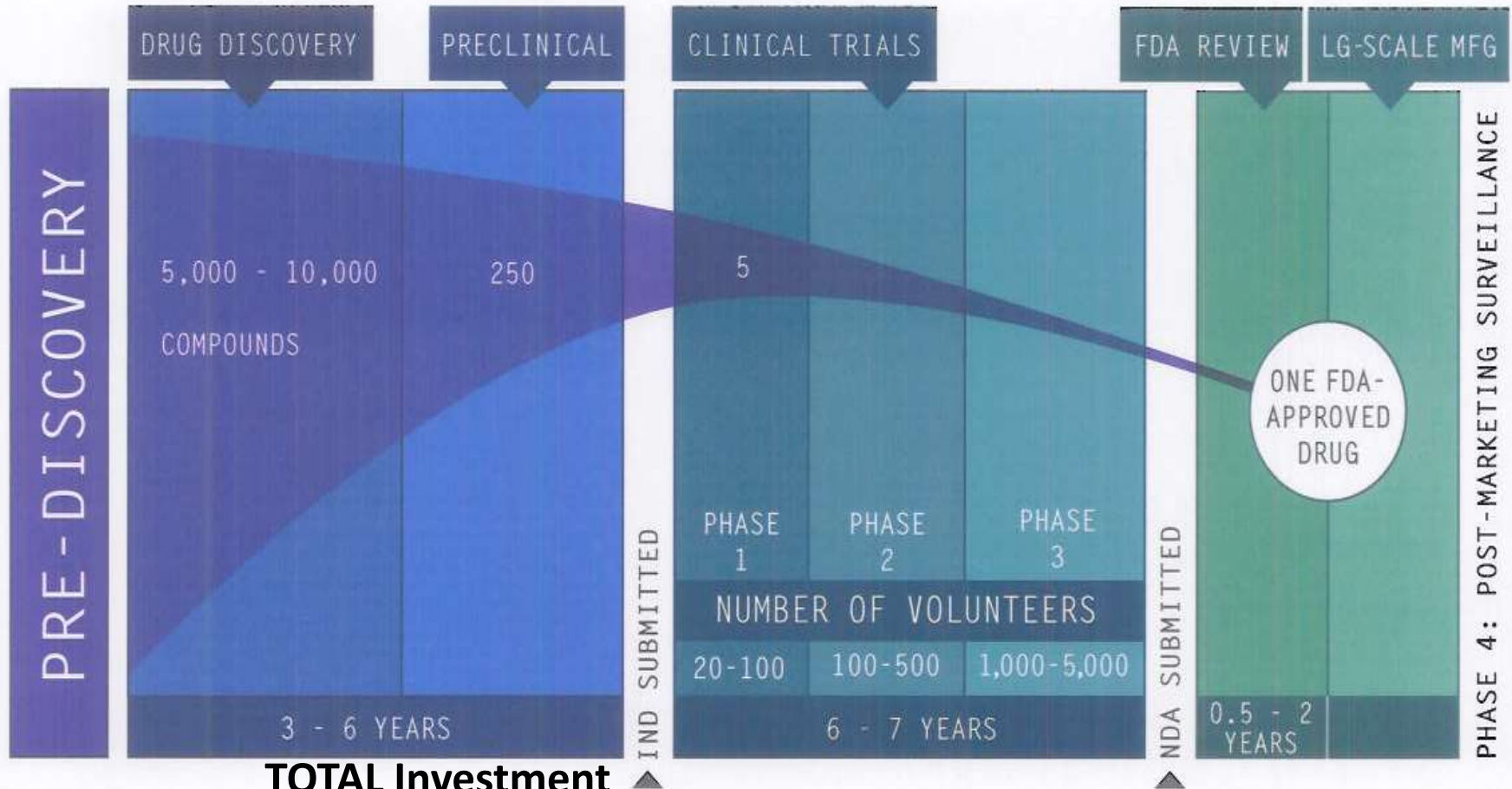
Patent Protection Application



For every 25,000 compounds that begin in a laboratory 25 make it to the point of Clinical Testing, (tested in humans). 5 make it to the market. 1 will recoup what was invested.

Pharmaceutical Research & Development

From 10.000 compounds only 1 is finally marketed



TOTAL Investment
\$1 bn to \$1,2 bn

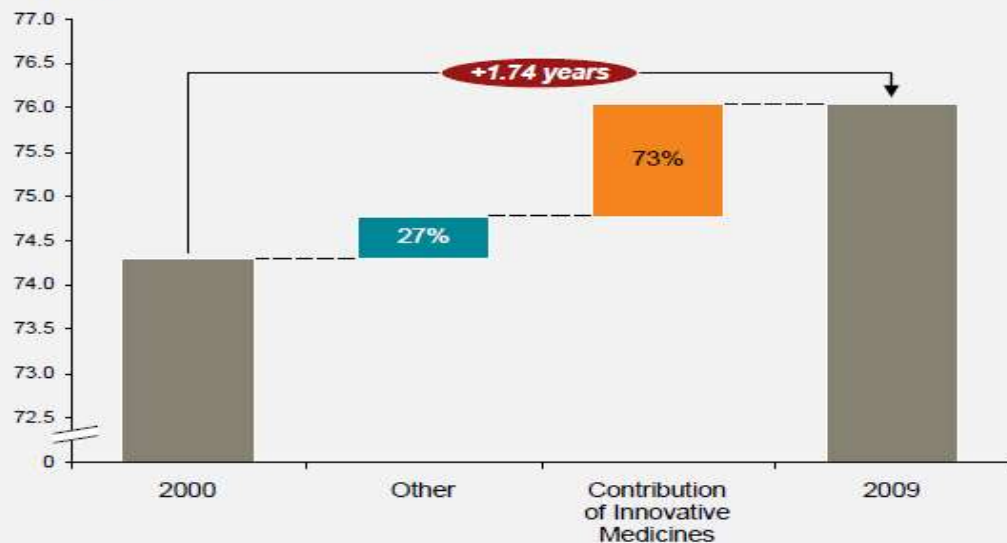
R&D: Increase in Life Expectancy

Health & Wealth

Life expectancy continues to improve today – and medicines usage has made major contribution to recent advances, 73%

Contribution of innovative medicines to increase in life expectancy

Life Expectancy (years)



- ❖ From 2000 – 2009, an improvement in population life expectancy of 1.74 years was seen across 30 OECD countries.
- ❖ Innovative medicines are estimated to have contributed to 73% of this improvement.

Positive impact of pharmaceutical innovation

- Significant increase in life expectancy
- Improved level of health and longevity (e.g. HIV/AIDS, many cancers, cardiovascular diseases)
- Significant progress in quality of life (e.g. asthma, diabetes)
- Much less overall Health Care costs (Hospitalization etc.)
- Improved treatment lead to more productive population in the country

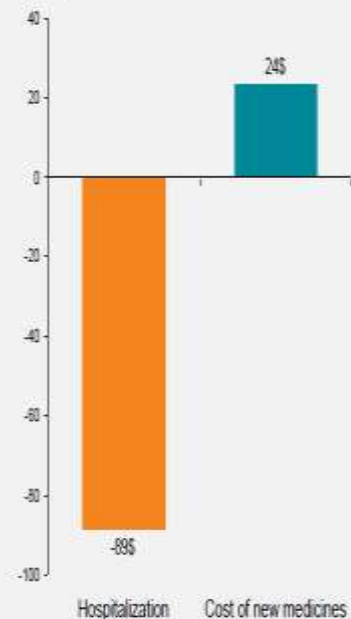
Medicines reduce other health costs

Relative to costs of hospitalisation, cost of innovative new medicines are a good investment

Example: Cardiovascular

Cost of newer cardiovascular medicines compared to savings in hospitalizations in 20 OECD countries 1995 - 2003

\$ per capita



*** Study objective:**

Assess the effects of introductions of innovative cardiovascular medicines on total healthcare spending

*** Methodology:**

* Data used for 1100 cardiovascular medicines in 20 OECD countries during the period 1995 – 2003 and based on drug vintage (i.e. the first year the medicines was available in any market)

* Controlling for demographic variables, quality of cardiovascular medicines consumption, consumptions of other medical innovations (e.g. CT scanners and MRI units), cardiovascular risk factors and prevalence

*** Conclusion:**

Per capita expenditure on hospitalization would have been \$89 higher in 2003 had new cardiovascular medicines not been introduced in the period 1995 – 2003. This increase was almost four times as high as the per capita increase on expenditure on cardiovascular medicines (\$24)

Σε σύνολο, \$18 επένδυση σε καινοτόμο φάρμακο επιστρέφει \$129 σε εξοικονόμηση - εξοικονομούνται \$7 για κάθε \$1 που επενδύεται



← Αύξηση κόστους φαρμάκου



Εξοικονόμηση από επισκέψεις σε ιατρούς εκτός νοσοκομείων



Μείωση ιδιωτικών δαπανών



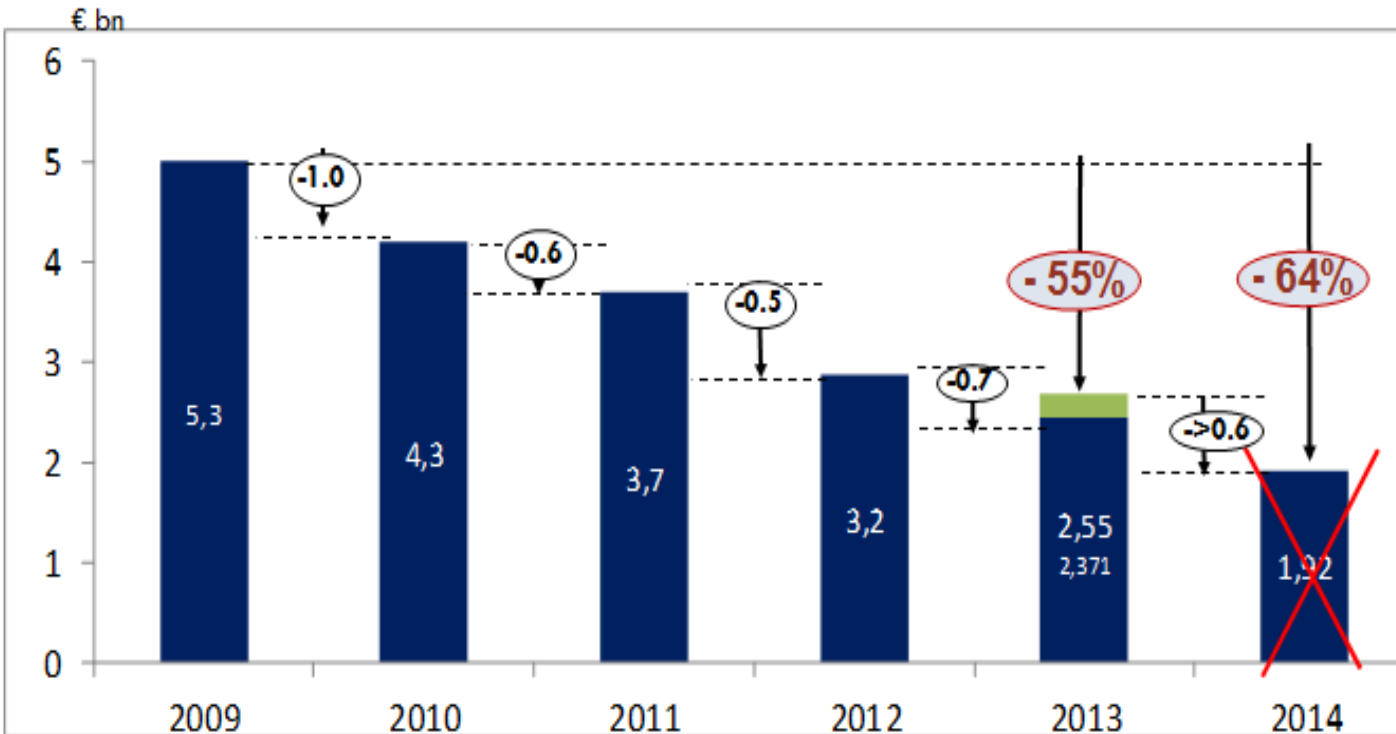
Εξοικονόμηση από εξωτερικά ιατρεία



Εξοικονόμηση από τα Επείγοντα



2009-2014: -64% drug spend: No new innovative drugs entered in Greece



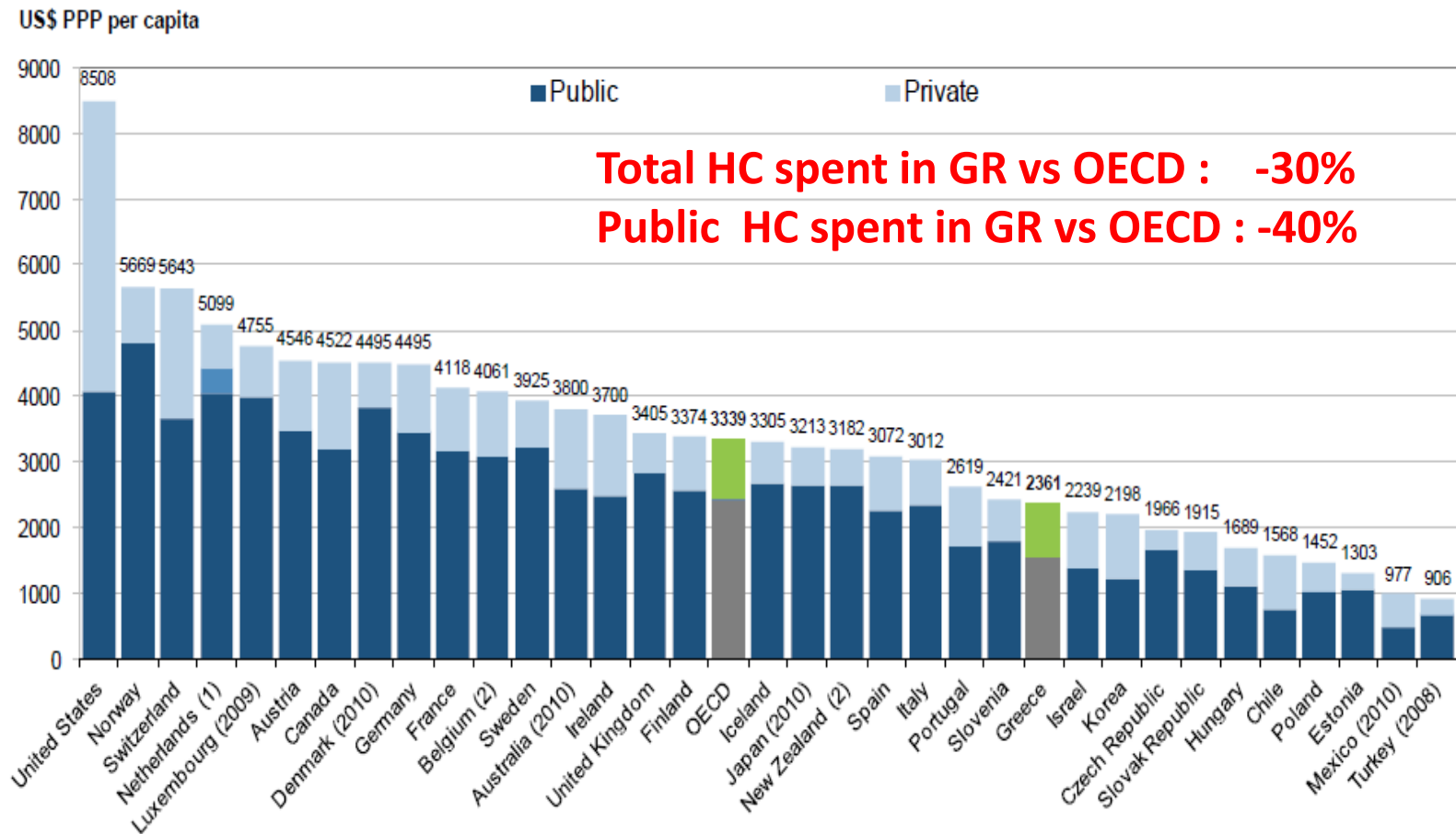
Equivalents of ~€350 mio coming from other HC centers to cover extra funding for drugs

- **Diagnostics ~€70mio:** scaled rebate for ALL, insurance prices
- **Private clinics & rehabilitation centers ~ €180mio:** DRGs' validation and audit of extra charge, scaled rebate, reduction of the reimbursement level of rehabilitation centers for both daily and extended hospitalization (from €150 & €70 respectively to €120 & €50)
- **Ceilings in prices and amounts of consumables ~ €30 mio:** Immediate inaction based on Price Observatory
- Patients copay 1€/prescriptions ~€70m

% GDP	2.2%	1.9%	1.8%	1.5%	1.3%	1%
GDP (bn)	€236	€224	€209	€195	€186	€187

Source: European Commission report 2013

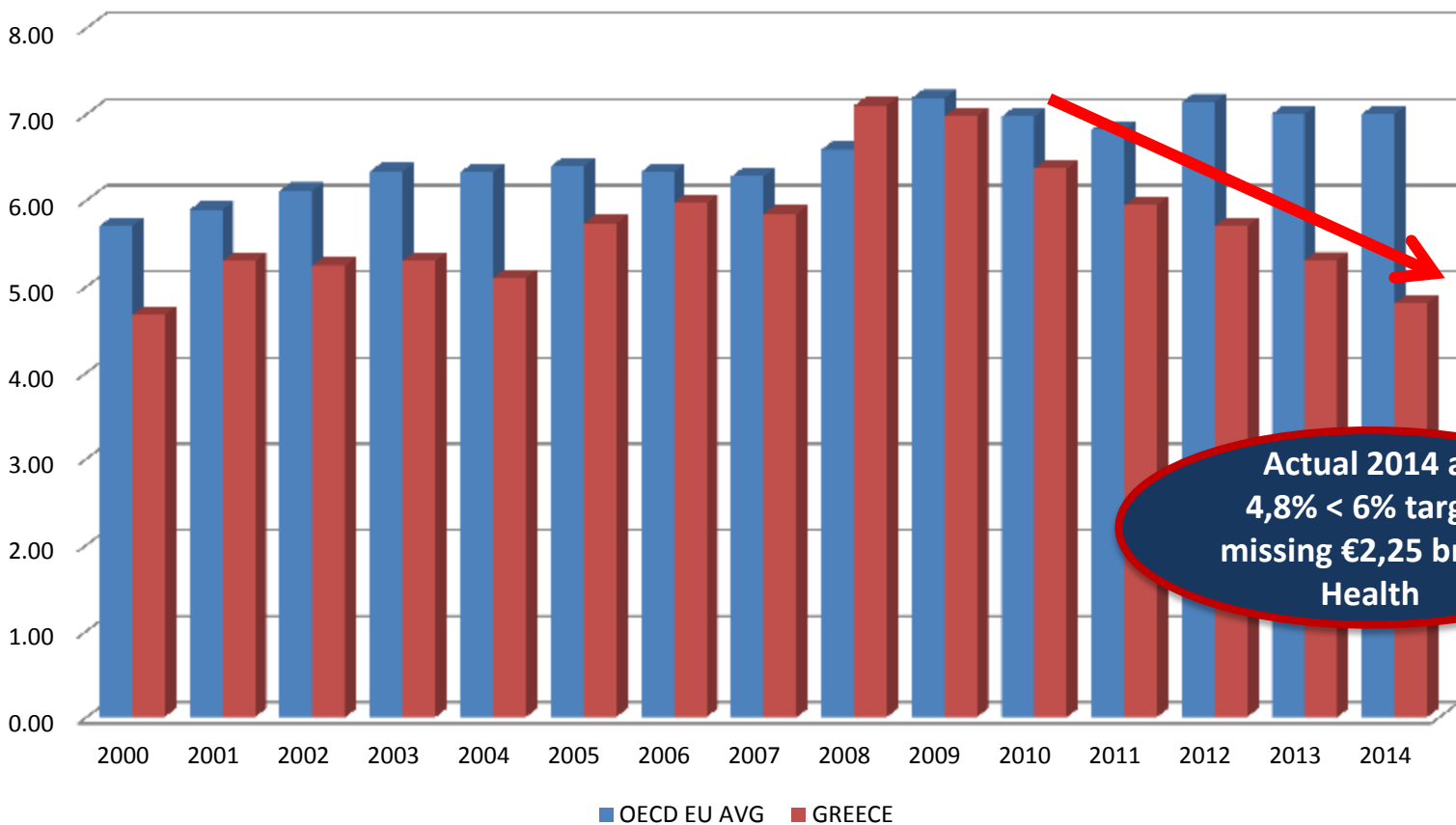
Health expenditure per capita in GR is much lower than OECD avg



Source: OECD health data 2013

OECD avg of Public HC at > 7,5% of GDP while. In GR it contacts dramatically <4,8% of GDP while MoU target is 6%

Public HC expenditure as % of GDP



Source: OECD Health data 2013

OECD EU AVG for 2013 & 2014 are projections

Greece for 2012,2013 & 2014 based on actual social budget

Need for more structural reforms on HC system ensuring patients' access to innovative medicines

a. New medicines Pricing & Reimbursement :

- ✓ Inclusion in RL of ~280 new SKUs (140 new INN), priced in Feb 2014 after **3,5y delays!**
- ✓ Correct prices for all medicines according to Law
- ✓ Decrease **off patent & Gx prices**, and increase their volumes leading to savings for the system and creating room for innovation

b. Feasible Pharma targets for 2014, ensuring patients' access to drugs

- ✓ EOPYY/SSF \geq € 2.2 bil. (currently at 1.919 bil.)
- ✓ Hospitals \geq € 650 mil. (currently at 535 mil.)

c. Outstanding debts:

- ✓ Outstanding public debt towards pharma companies is at very high levels \sim €1,3 bn.
- ✓ Ensure equal payment treatment among HC providers

d. Other Hcare cost centers

- ✓ Drugs account for \sim 17% of total HC
- ✓ Many other cost centers in Hospitals and EOPYY are in comfortable

Looking forward: Modernizing our HC system

- **The financial viability of NHS/EOPYY remains very critical**
- **The authorities must take immediate action to address the lack of control over consumption and purchasing.**
 - Some expenditure categories such as spending with private hospitals or on paraclinic/ diagnostic tests appear to be out of control.
- **The NHS – State Hospitals need immediate actions to restore productivity and patients better services.**
- **The State should focus on the increasing number of citizens that do not have access to healthcare services and drugs.**

Thank you for your attention!