



**NATIONAL  
SCHOOL  
OF PUBLIC  
HEALTH**  
ATHENS SCHOOL  
OF HYGIENE 1929-1994



# Φαρμακευτική Πολιτική

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# EUROPEAN ECONOMY

Occasional Papers 192 | April 2014

The Second Economic Adjustment Programme for Greece  
Fourth Review – April 2014



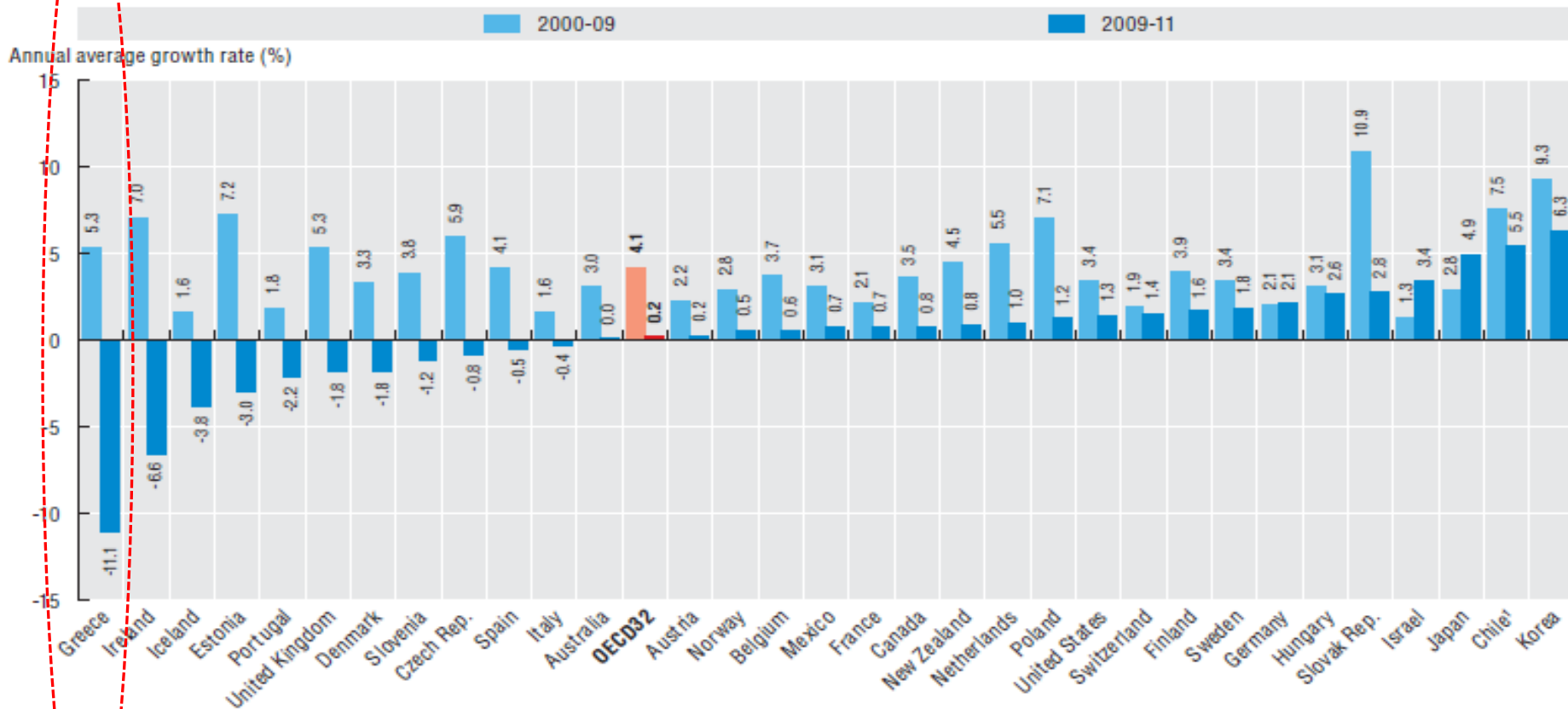
## 3.2.7. Modernising the healthcare system

# Health spending in the EU falls in 2010

## Annual growth rate in health expenditure per capita



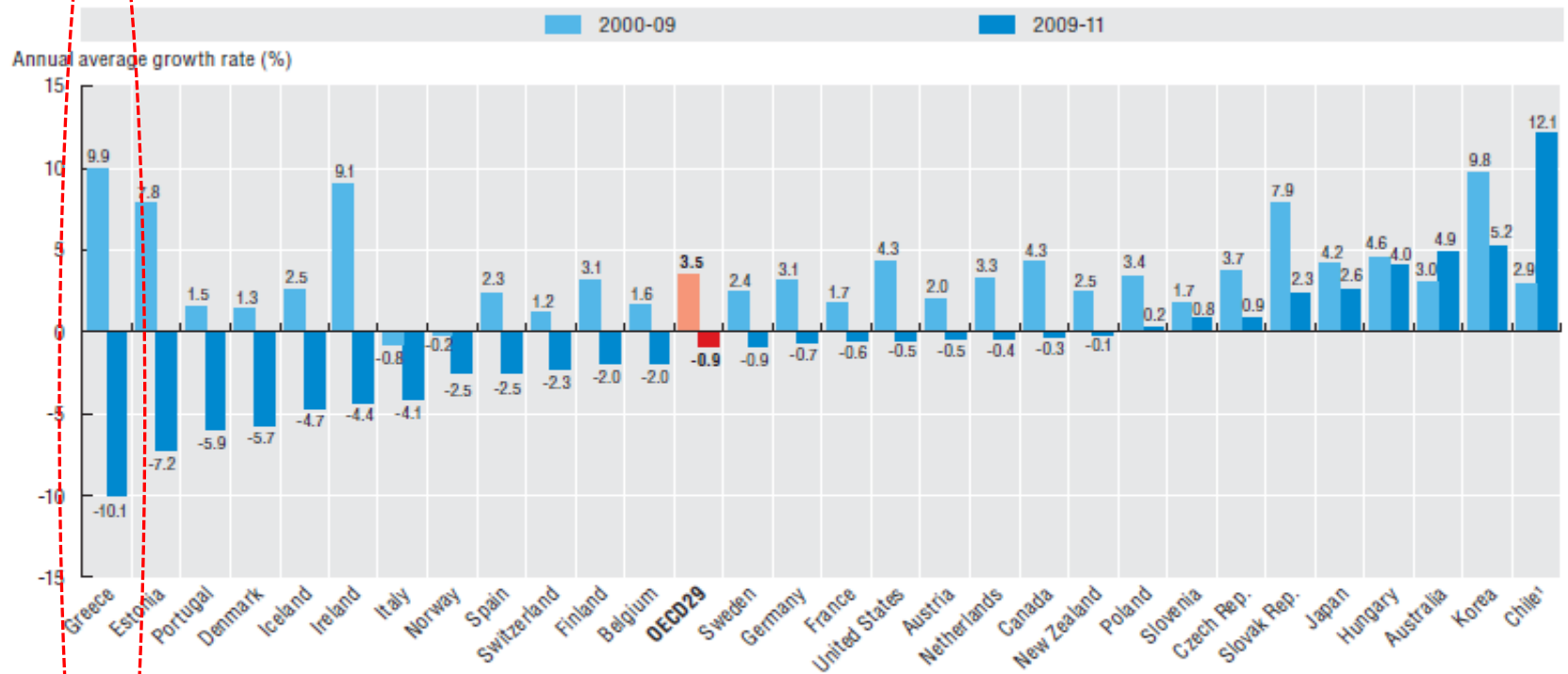
7.1.2. Annual average growth rate in per capita health expenditure, real terms, 2000 to 2011 (or nearest year)



1. CPI used as deflator.


Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

### 7.4.2. Average annual growth in pharmaceutical expenditure per capita, in real terms, 2000 to 2011 (or nearest year)



1. CPI used as deflator.

Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

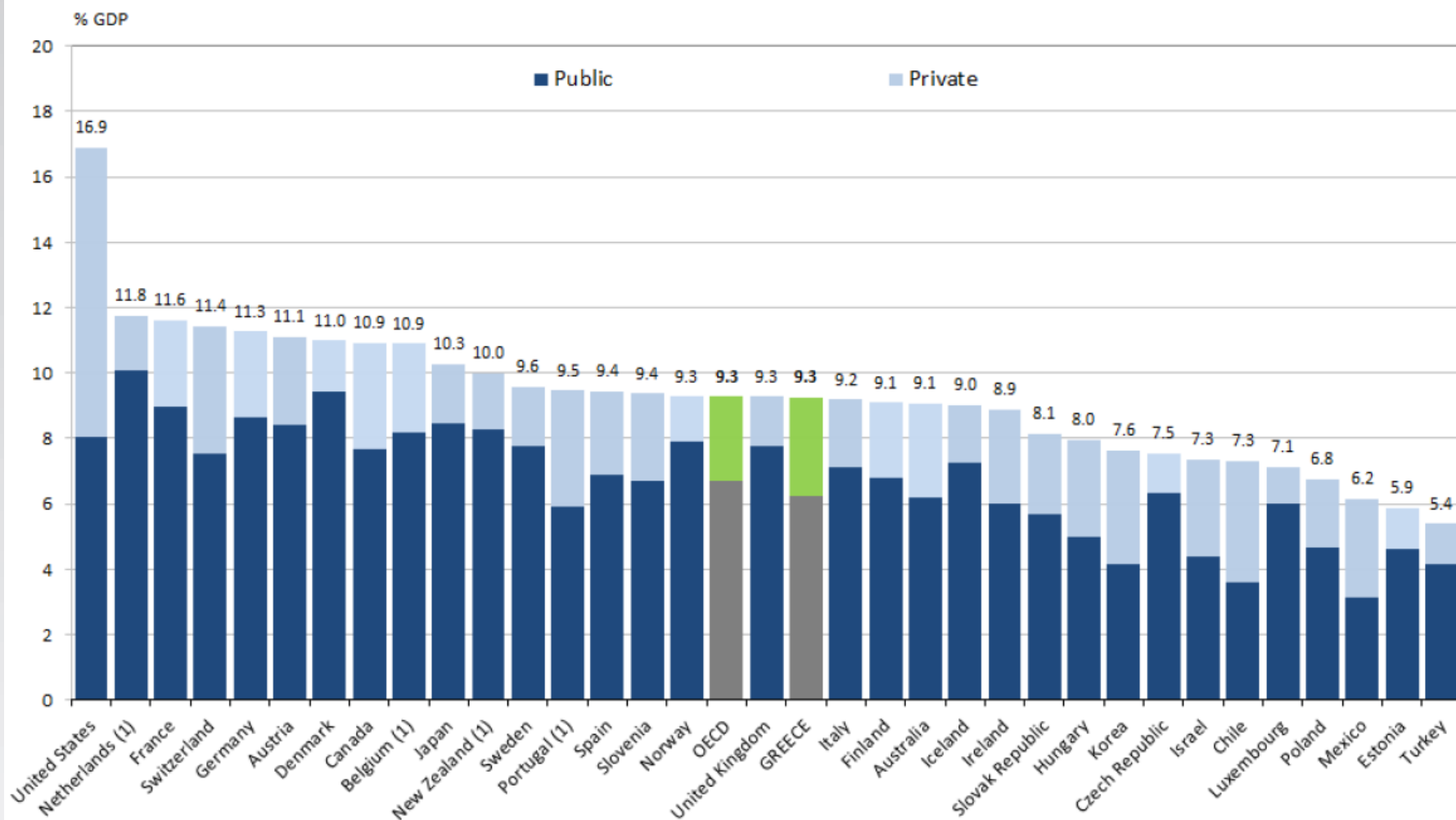
StatLink  <http://dx.doi.org/10.1787/888932918985>

# MOST EFFICIENT HEALTH CARE 2014: COUNTRIES

Singapore is best in Bloomberg's second annual ranking of countries with the most efficient health care while the U.S. remains near the bottom

| Rank 2014 | Rank 2013 | Country              | Efficiency score | Life expectancy | Health-care cost as percentage of GDP | Health-care cost per capita (US\$) | Change in life expectancy (years) | Change in health-care cost per capita (US\$) | Change in health-care cost per capita (%) | Change in GDP per capita (%) | Inflation (%) |
|-----------|-----------|----------------------|------------------|-----------------|---------------------------------------|------------------------------------|-----------------------------------|----------------------------------------------|-------------------------------------------|------------------------------|---------------|
| 1         | 2         | Singapore            | 78.6             | 82.1            | 4.5                                   | 2,426                              | 0.40                              | 281.73                                       | 13.1                                      | 2.2                          | 4.5           |
| 2         | 1         | Hong Kong SAR        | 77.5             | 83.5            | 5.3                                   | 1,944                              | 0.06                              | 535.68                                       | 38.0                                      | 4.5                          | 4.1           |
| 3         | 6         | Italy                | 76.3             | 82.9            | 9.0                                   | 3,032                              | 0.30                              | -306.64                                      | -9.2                                      | -8.6                         | 3.0           |
| 4         | 3         | Japan                | 68.1             | 83.1            | 10.2                                  | 4,752                              | 0.50                              | 110.93                                       | 2.4                                       | 0.7                          | 0.0           |
| 5         | 8         | South Korea          | 67.4             | 81.4            | 7.0                                   | 1,703                              | 0.40                              | 50.11                                        | 3.0                                       | 1.2                          | 2.2           |
| 6         | 7         | Australia            | 65.9             | 82.1            | 9.1                                   | 6,140                              | 0.20                              | 25.62                                        | 0.4                                       | 8.6                          | 1.8           |
| 7         | 4         | Israel               | 65.4             | 81.7            | 7.0                                   | 2,289                              | 0.00                              | -84.64                                       | -3.6                                      | -2.1                         | 1.7           |
| 8         | 19        | France               | 64.6             | 82.6            | 11.8                                  | 4,690                              | 0.45                              | -278.26                                      | -5.6                                      | -6.6                         | 2.0           |
| 9         | 12        | United Arab Emirates | 64.1             | 77.0            | 3.2                                   | 1,343                              | 0.18                              | -32.24                                       | -2.3                                      | 6.7                          | 0.7           |
| 10        | 14        | United Kingdom       | 63.1             | 81.5            | 9.4                                   | 3,647                              | 0.55                              | -11.47                                       | -0.3                                      | -0.7                         | 2.8           |
| 11        | -         | Norway               | 63.0             | 81.5            | 9.1                                   | 9,055                              | 0.16                              | -852.86                                      | -8.6                                      | 0.5                          | 0.7           |
| 12        | 15        | Mexico               | 59.1             | 77.1            | 6.3                                   | 618                                | 0.22                              | 9.48                                         | 1.6                                       | 0.2                          | 4.1           |
| 13        | 20        | Ecuador              | 58.4             | 76.2            | 6.7                                   | 361                                | 0.28                              | -0.81                                        | -0.2                                      | 7.7                          | 5.1           |
| 14        | 5         | Spain                | 58.1             | 82.4            | 9.9                                   | 2,808                              | -0.10                             | -170.01                                      | -5.7                                      | -9.1                         | 2.4           |
| 15        | 9         | Switzerland          | 57.9             | 82.7            | 11.4                                  | 8,980                              | 0.00                              | -267.86                                      | -2.9                                      | -5.2                         | -0.7          |
| 16        | 29        | Saudi Arabia         | 57.8             | 75.5            | 3.1                                   | 795                                | 0.21                              | 73.88                                        | 10.2                                      | 7.6                          | 2.9           |
| 17        | 13        | Chile                | 55.5             | 79.6            | 7.2                                   | 1,103                              | 0.27                              | 81.75                                        | 8.0                                       | 5.1                          | 3.0           |
| 18        | 24        | Czech Republic       | 54.1             | 78.1            | 7.7                                   | 1,432                              | 0.20                              | -113.70                                      | -7.4                                      | -9.2                         | 3.3           |
| 19        | 23        | Finland              | 53.3             | 80.6            | 9.3                                   | 4,232                              | 0.16                              | -179.44                                      | -4.1                                      | -6.3                         | 2.8           |
| 19        | 10        | Sweden               | 53.3             | 81.7            | 9.7                                   | 5,319                              | -0.10                             | -99.36                                       | -1.8                                      | -3.0                         | 0.9           |
| 21        | 17        | Canada               | 52.9             | 81.2            | 11.0                                  | 5,741                              | 0.17                              | 84.32                                        | 1.5                                       | 1.2                          | 1.5           |
| 22        | 21        | Poland               | 52.4             | 76.8            | 6.7                                   | 854                                | 0.05                              | -61.31                                       | -6.7                                      | -5.0                         | 3.7           |
| 23        | 30        | Germany              | 51.6             | 80.9            | 11.0                                  | 4,683                              | 0.15                              | -312.72                                      | -6.3                                      | -4.0                         | 2.0           |
| 24        | 31        | Greece               | 49.9             | 80.6            | 9.1                                   | 2,044                              | -0.10                             | -259.74                                      | -11.3                                     | -14.1                        | 1.5           |
| 25        | 11        | Libya                | 49.8             | 75.2            | 4.3                                   | 578                                | 0.19                              | 367.40                                       | 174.1                                     | 134.0                        | 6.1           |
| 26        | 37        | China                | 49.5             | 75.2            | 5.3                                   | 322                                | 0.16                              | 47.88                                        | 17.5                                      | 11.8                         | 2.7           |
| 27        | 18        | Malaysia             | 49.2             | 74.8            | 3.9                                   | 410                                | 0.17                              | 25.37                                        | 6.6                                       | 3.7                          | 1.7           |
| 28        | 27        | Portugal             | 47.2             | 80.4            | 9.4                                   | 1,905                              | -0.10                             | -397.31                                      | -17.3                                     | -10.5                        | 2.8           |
| 29        | 22        | Thailand             | 46.9             | 74.2            | 3.9                                   | 215                                | 0.18                              | 1.19                                         | 0.6                                       | 5.5                          | 3.0           |
| 30        | 33        | Romania              | 46.8             | 74.6            | 5.0                                   | 420                                | 0.00                              | -59.92                                       | -12.5                                     | -6.9                         | 3.3           |

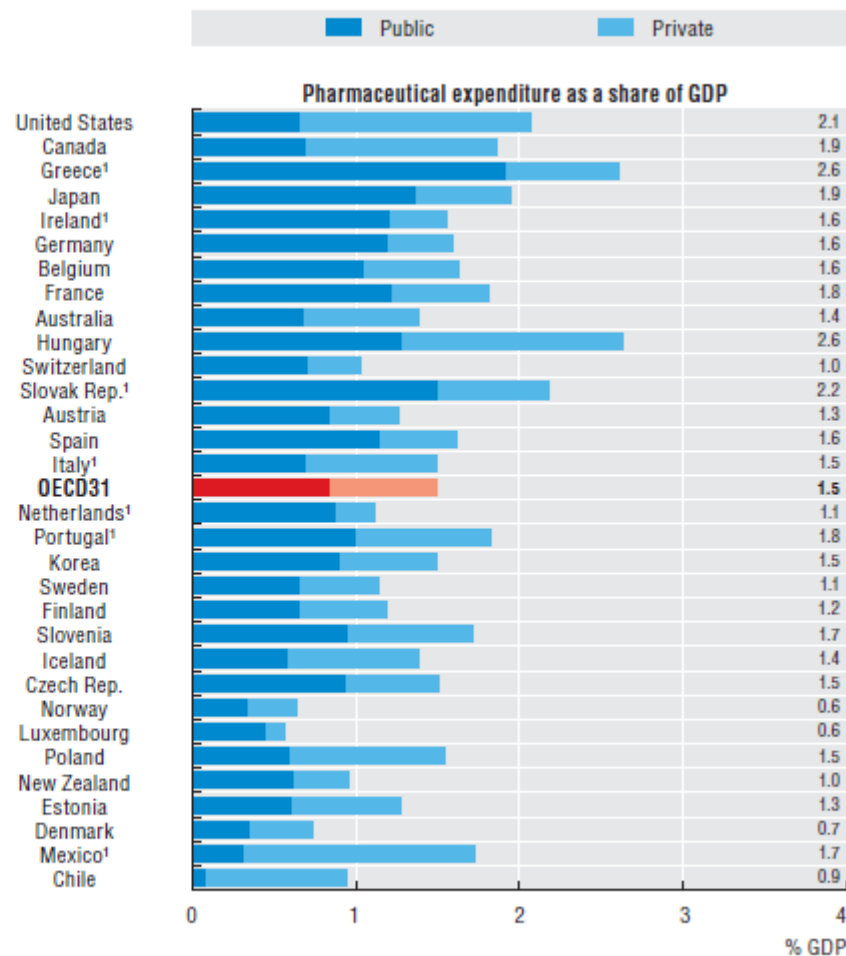
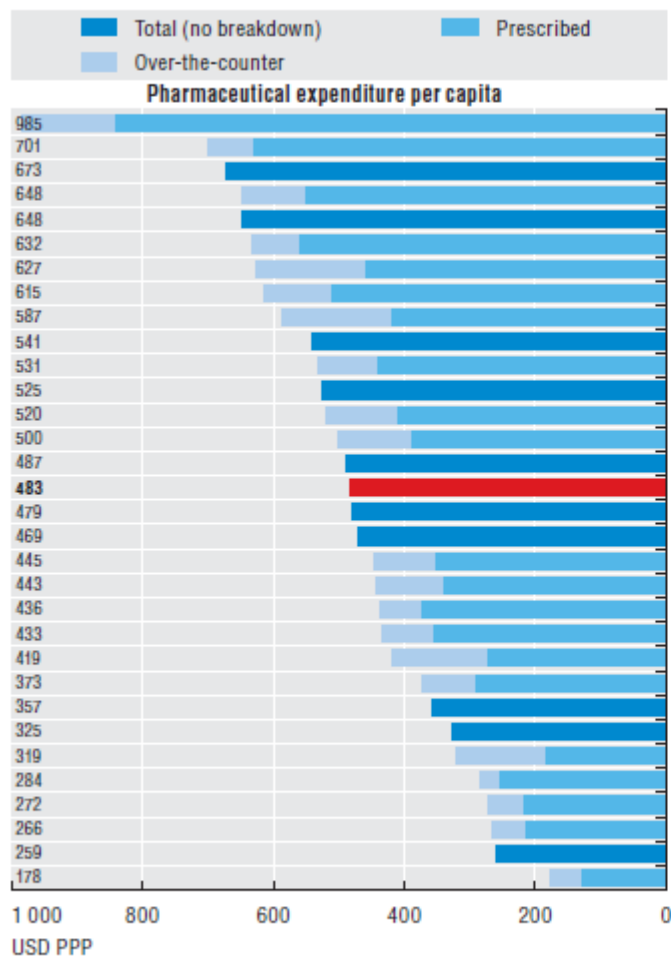
## Health expenditure, public and private, as a share of GDP, OECD countries, 2012 or latest year



1. Total expenditure excluding capital expenditure.


Source: OECD Health Statistics 2014.

### 7.4.1. Expenditure on pharmaceuticals per capita and as a share of GDP, 2011 (or nearest year)



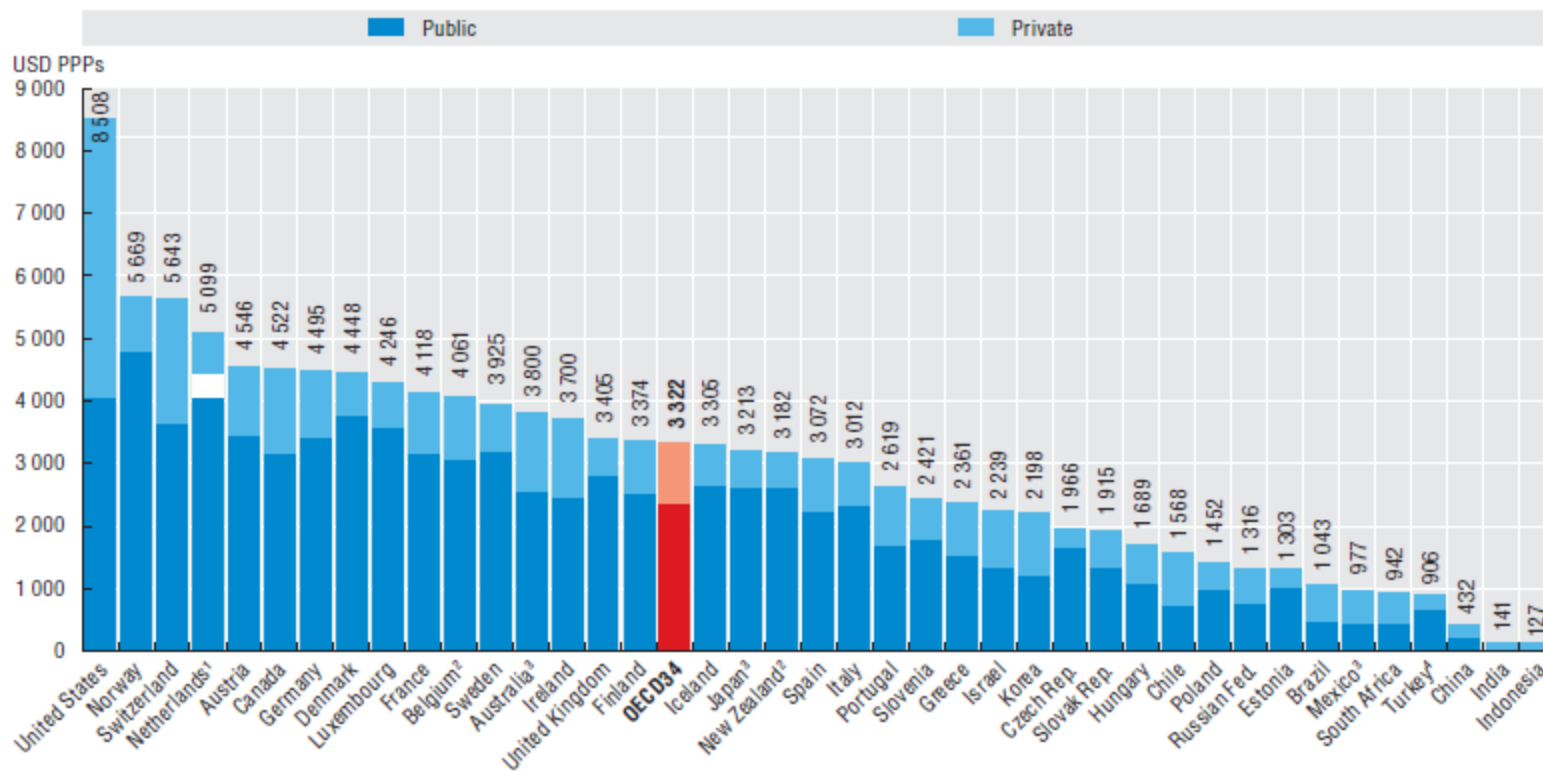
1. Includes medical non-durables.

Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

StatLink  <http://dx.doi.org/10.1787/888932918966>




### 7.1.1. Health expenditure per capita, 2011 (or nearest year)



1. In the Netherlands, it is not possible to clearly distinguish the public and private share related to investments.
2. Current health expenditure.
3. Data refers to 2010.
4. Data refers to 2008.

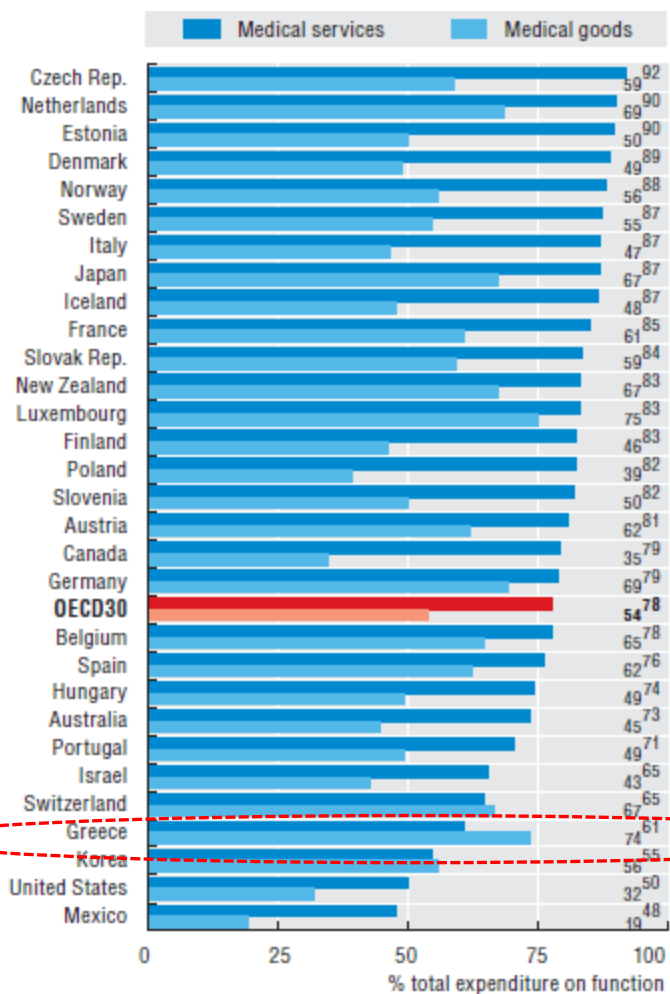
Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>; WHO Global Health Expenditure Database.

StatLink  <http://dx.doi.org/10.1787/888932918833>






### 7.6.2. Public share of expenditure on medical services and goods, 2011 (or nearest year)



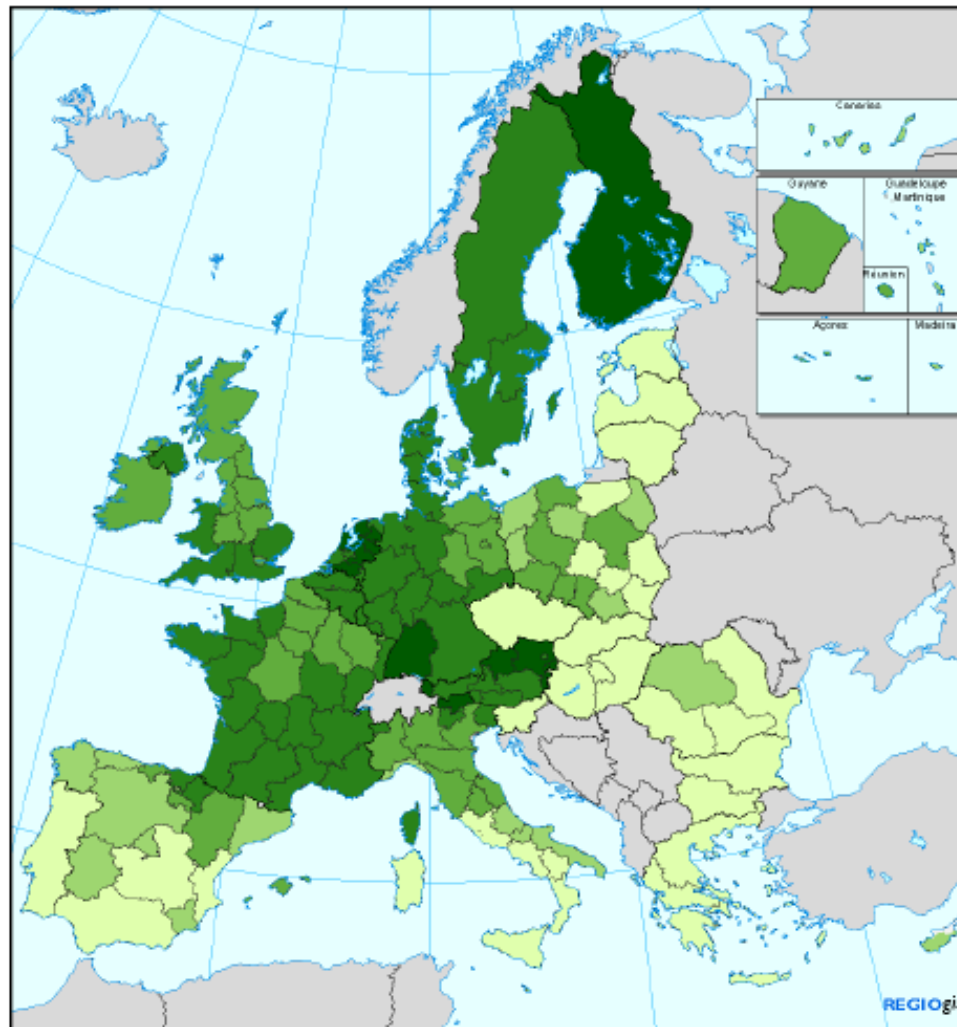
Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.

StatLink  <http://dx.doi.org/10.1787/888932919080>



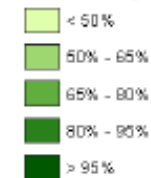


# Quality of life – European regions overview (answer 'good')



## Q1.1 Quality of the life in the region

% answering 'good'

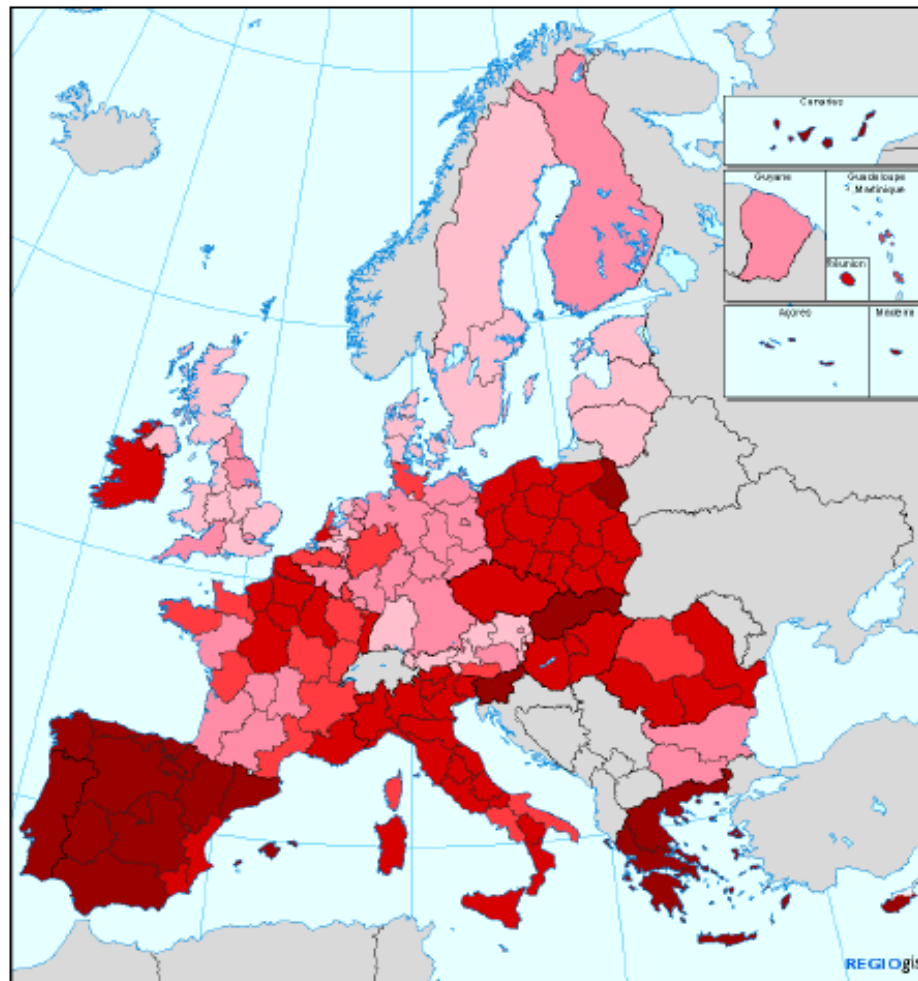


0 500 km

© EuroGeographics Association for the administrative boundaries

Source: Flash Eurobarometer 356

# Quality of life - European regions expectations for the next 12 months (answer 'worse')



Q2.1 Expectations for the quality of the life in the region

% answering 'worse'

- < 25%
- 25% - 30%
- 30% - 35%
- 35% - 50%
- > 50%

0 500 km

© EuroGeographics Association for the administrative boundaries

Source: Flash Eurobarometer 356

**Table 2. Self-reported unmet needs for medical examination  
(too expensive or too far or extended waiting lists (2008-2012))**

|                           | 2008 | 2009 | 2010 | 2011 | 2012 |
|---------------------------|------|------|------|------|------|
| <b>Total population</b>   | 5.4  | 5.5  | 5.5  | 7.5  | 8.0  |
| <b>By income quintile</b> |      |      |      |      |      |
| 1st quintile              | 8.7  | 11.2 | 9.2  | 11.6 | 11.6 |
| 2nd quintile              | 7.1  | 7.4  | 6.7  | 9.8  | 9.6  |
| 3rd quintile              | 6.1  | 4.6  | 5.9  | 7.6  | 9.2  |
| 4th quintile              | 3.4  | 2.7  | 3.2  | 4.8  | 4.7  |
| 5th quintile              | 1.8  | 1.7  | 2.2  | 3.6  | 4.8  |
| <b>By labour status</b>   |      |      |      |      |      |
| Employed                  | 3.3  | 2.8  | 3.1  | 4.7  | 5.6  |
| Unemployed                | 8.6  | 7.5  | 9.4  | 11.3 | 10.8 |
| Retired                   | 7.6  | 7.8  | 7.3  | 10.2 | 9.4  |
| Other inactive            | 5.9  | 7.3  | 6.3  | 6.9  | 8.1  |

Source: EUROSTAT, [http://epp.eurostat.ec.europa.eu/portal/page/portal/health/health\\_care/data/database](http://epp.eurostat.ec.europa.eu/portal/page/portal/health/health_care/data/database),  
(accessed 20/1/2014)

# Στόχοι Φαρμακευτικής Πολιτικής

- Κάλυψη (πληθυσμός, εύρος, επίπεδο)
- Άμεση και ισότιμη πρόσβαση
- Αποτελεσματικότητα
- Αποδοτικότητα
- Ανάπτυξη

# Φαρμακευτική Πολιτική

## Πολιτικές Τιμολόγησης και Έλεγχος Κόστους

Τιμές

Περιθώρια

Κόστος

Συνταγογράφηση  
(ποσότητα –  
Μείγμα)  
Εκτέλεση

$$\begin{aligned}
 V = & \sum_{\text{δοσολόγηση}} \varepsilon_r (r - r_0)^2 + \sum_{\text{αποτελεσματικότητα}} \varepsilon_\theta (\theta - \theta_0)^2 + \sum_{\text{απορροφητικότητα / μείωση}} \varepsilon_z (z - z_0)^2 \\
 & + \sum_{\text{διακείμενη}} \varepsilon_{BB} F_D(\phi) + \sum_{\text{αποκλειστική}} \varepsilon_{SC} F_D(\phi) \\
 & + \sum_{\text{κόστος}} \varepsilon_C \left[ \left( \frac{\sigma_H}{r} \right)^{12} - 2 \left( \frac{\sigma_V}{r} \right)^6 \right] + \sum_{\text{non-contacts}} \varepsilon_{NC} \left( \frac{\sigma_V}{r} \right)^{12}
 \end{aligned}$$

where,  
 $F_D(\phi) = [1 - \cos(\phi - \phi_0)] + \frac{1}{2} [1 - \cos(3(\phi - \phi_0))]$

Δημογραφικά  
Οικονομία  
Κοινωνικά

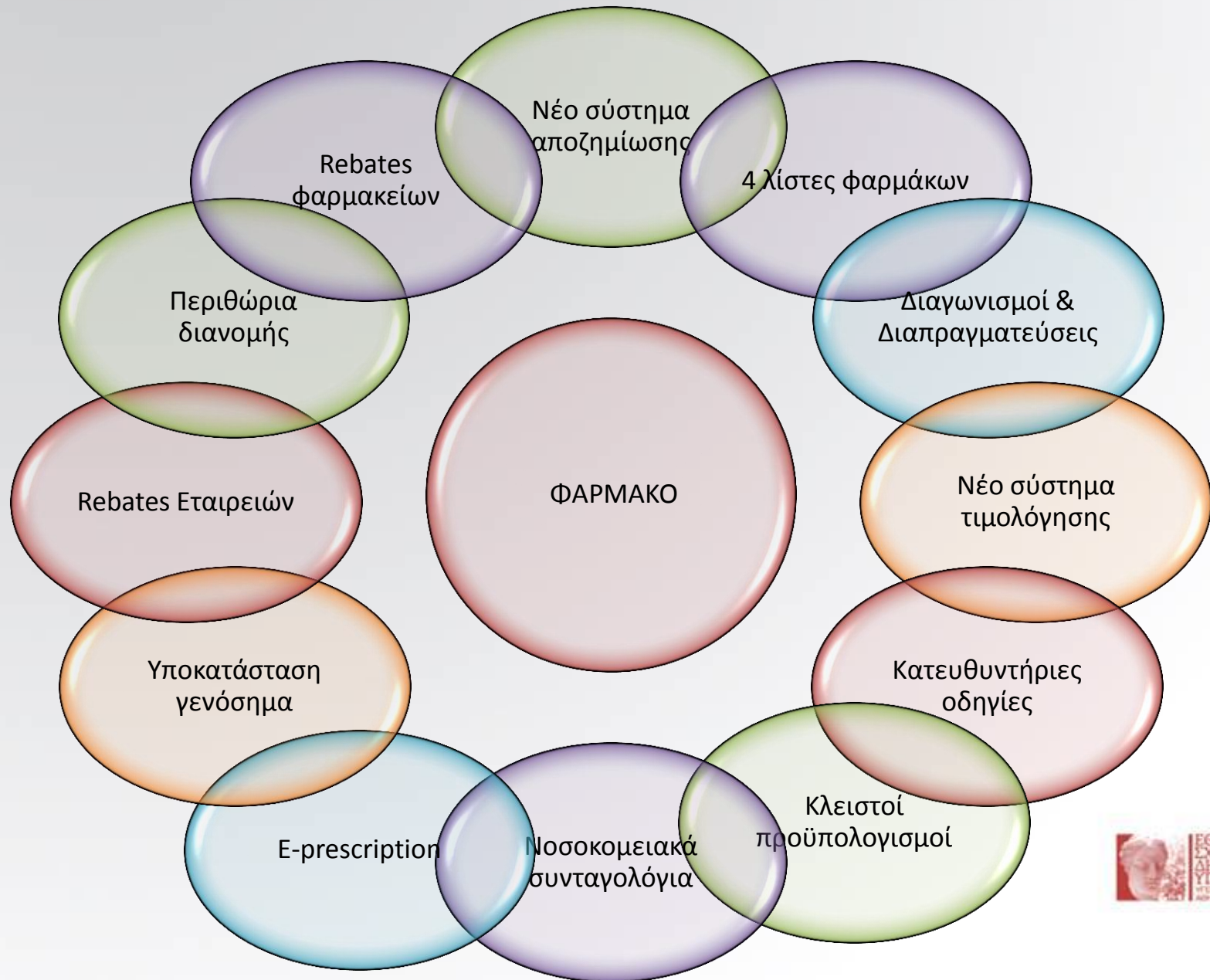
Πολιτικές  
Προαγωγής  
Υγείας

Κάλυψη: breadth, scope, depth

## Πολιτικές Αποζημίωσης

Πολιτικές  
Ελέγχου  
Ζήτησης

# Δράσεις που στοχεύουν το φάρμακο

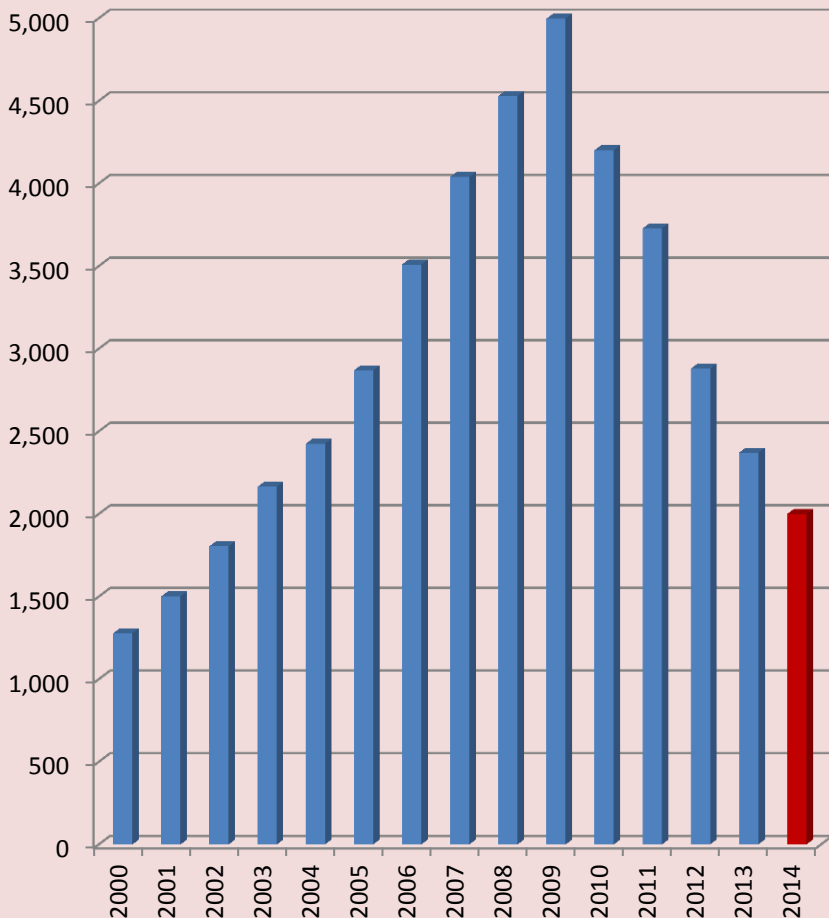




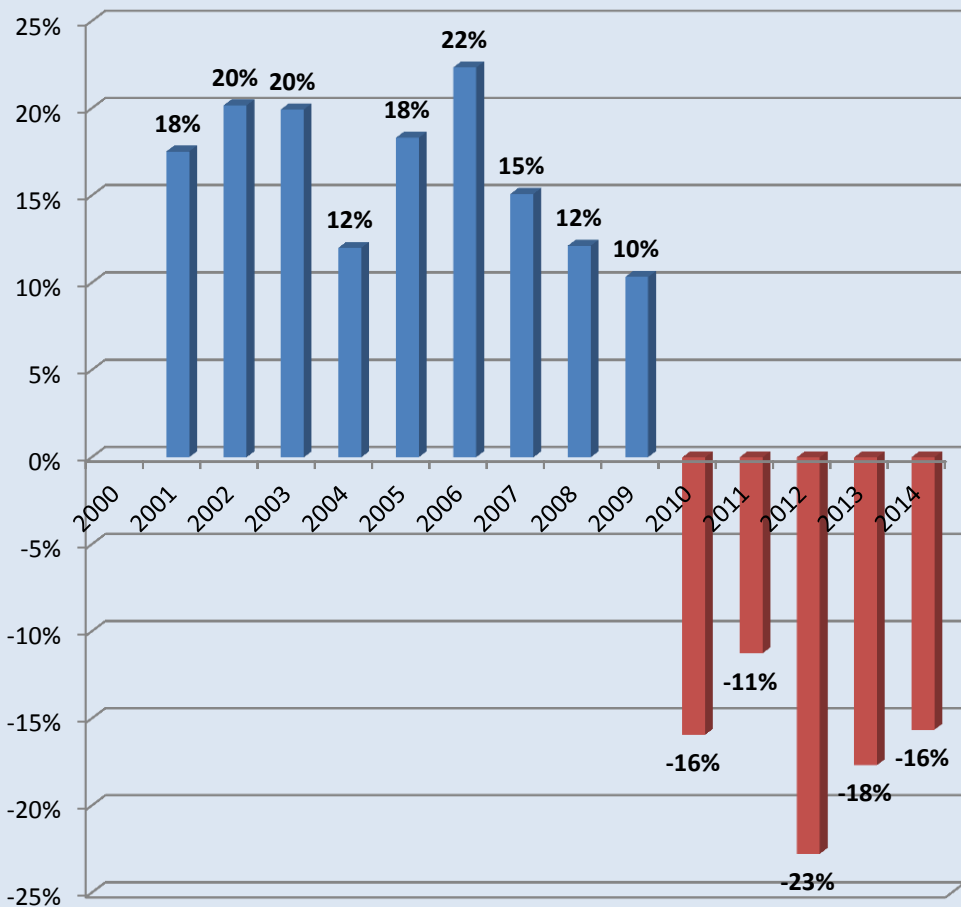
# Greece pharma expenditure trends

## Programme designed by IMF-EC-ECB

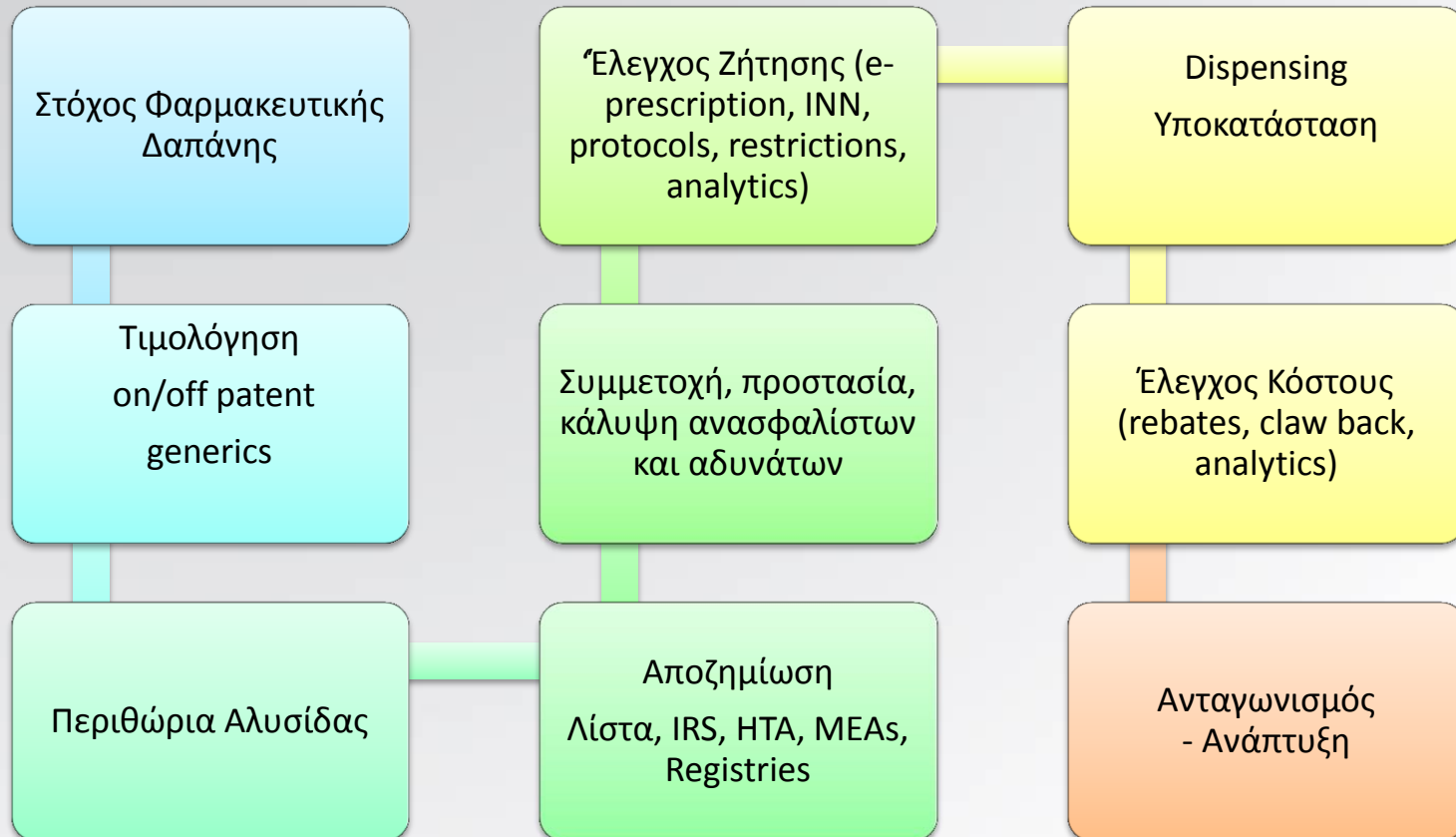
### Public expenditure on pharmaceuticals (million €)



### Annual Change in Public Expenditure of Pharmaceuticals



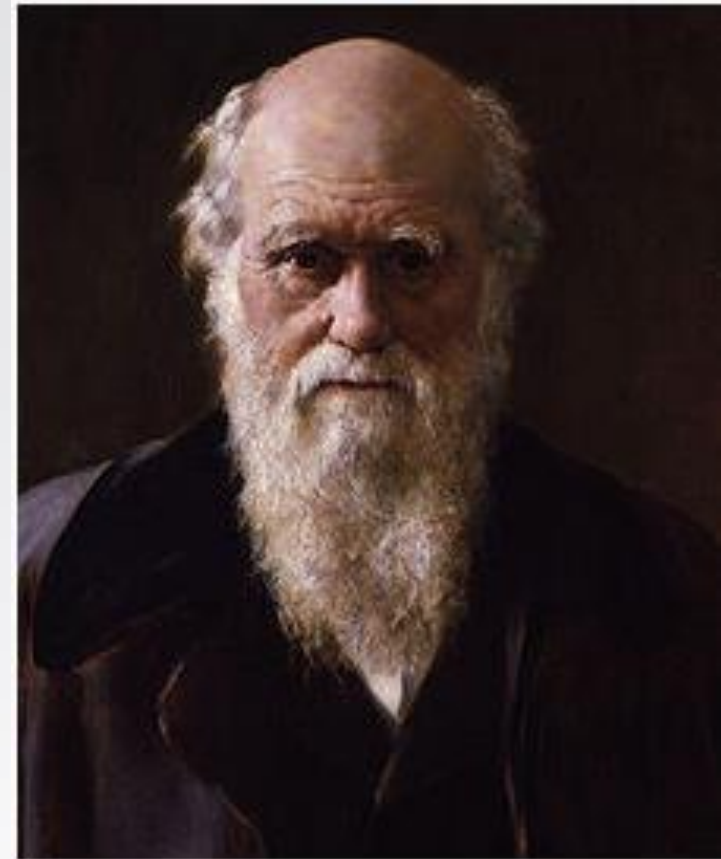
# Φαρμακευτική Πολιτική Αξιολόγηση - Προοπτικές



# How are we going to face the challenges ?

**"Survival of the fittest"**

"better adapted for immediate, local environment"

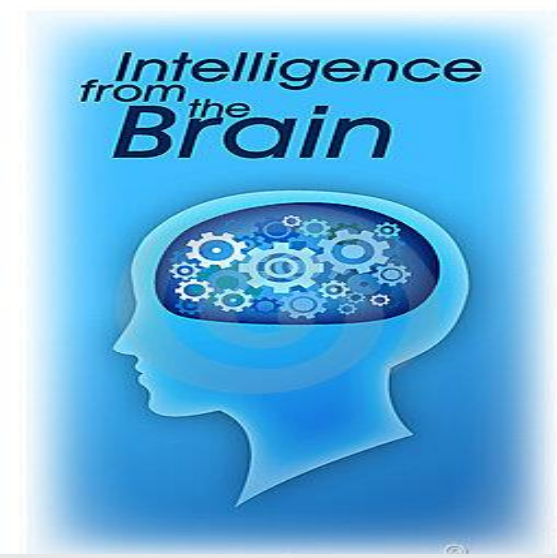




INNOVATION



B+  
BE POSITIVE



~~Reactive~~  
Proactive

BE COOL

