

Analyzing substitution effects in financing of the pharmaceutical sector in Greece

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INTRODUCTION

- Following the onset of the economic crisis in Greece, three Economic Adjustment agreements, (known as “memorandums”) were signed between the Greek Government, the European Commission, the European Central Bank and the IMF (International Monetary Fund) (2010, 2012, 2015), aiming to achieve fiscal consolidation, through reforms of the healthcare and pharmaceutical sectors in Greece.
- The fiscal adjustment of the public pharmaceutical care was focused on cost-containment measures, including harsh horizontal price cuts, increased co-payments, extensive mandatory rebates and setting predefined annual closed public budget ceilings, whereby any excesses would be returned to the government by the industry in the form of clawback and rebates.
- Such austerity measures might be inefficient, as they can induce moral hazard risks and lower patient outcomes.

OBJECTIVE

- To investigate the effects of these austerity policies on the long-term sustainability of the pharmaceutical industry in Greece.
- To analyze the magnitude of substitution in the funding of outpatient pharmaceutical expenditure among the government’s, the patients’ and the industry’s contribution.

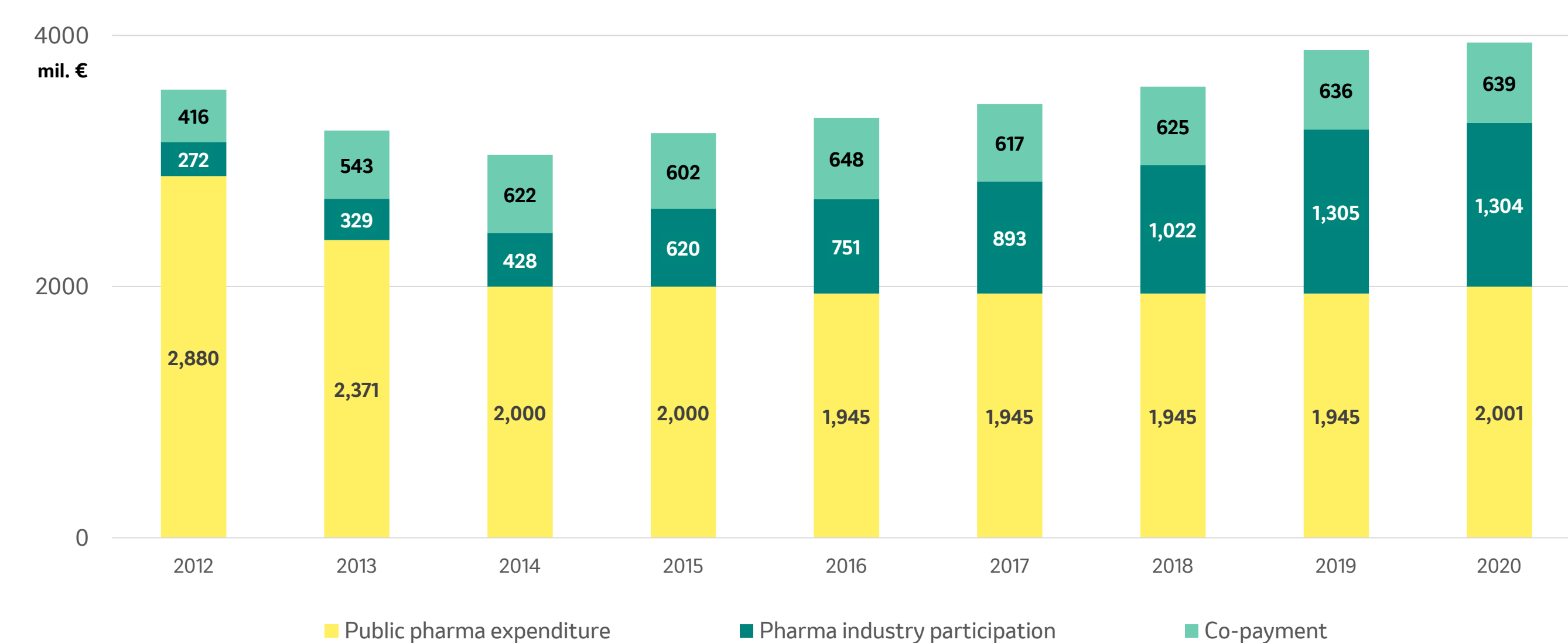
METHODOLOGY

- Time series econometric modeling was used to assess current effects of austerities on efficiency and long-term sustainability of the pharmaceutical sector in Greece. Forecasting analysis was conducted using several econometric models.

RESULTS

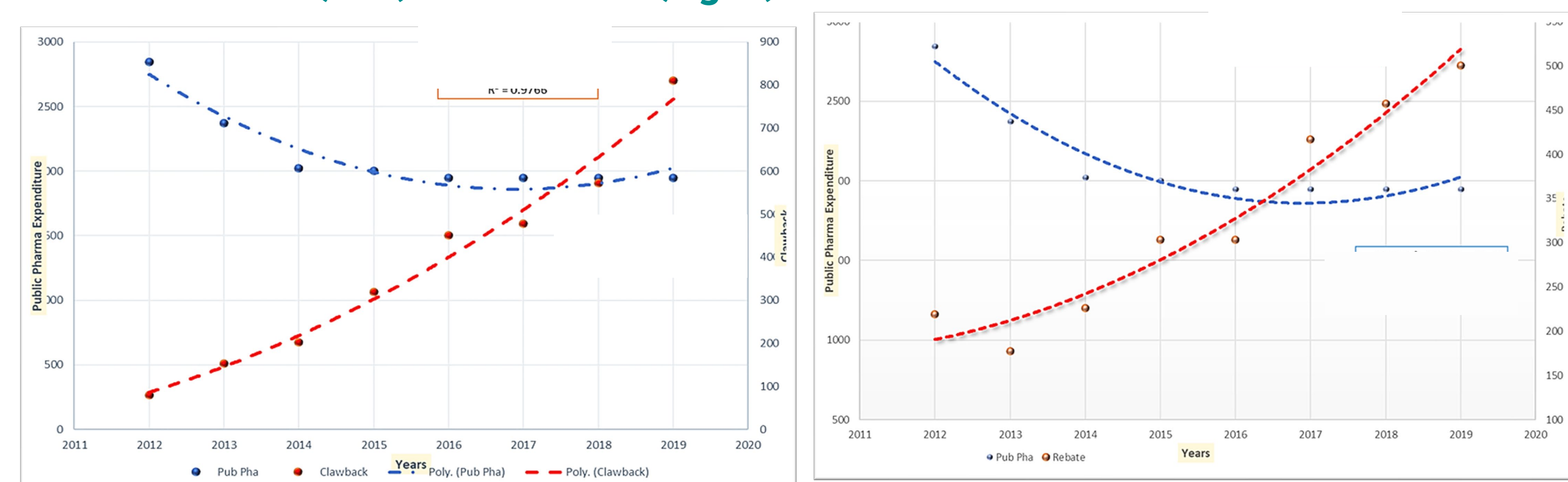
- Between 2010 and 2018 the public funding of the outpatient pharmaceutical expenditure decreased by 76%, while the pharmaceutical industry contribution increased by 419%. (Fig. 1)

Figure 1. Evolution of the outpatient pharmaceutical expenditure (2012-2020)¹



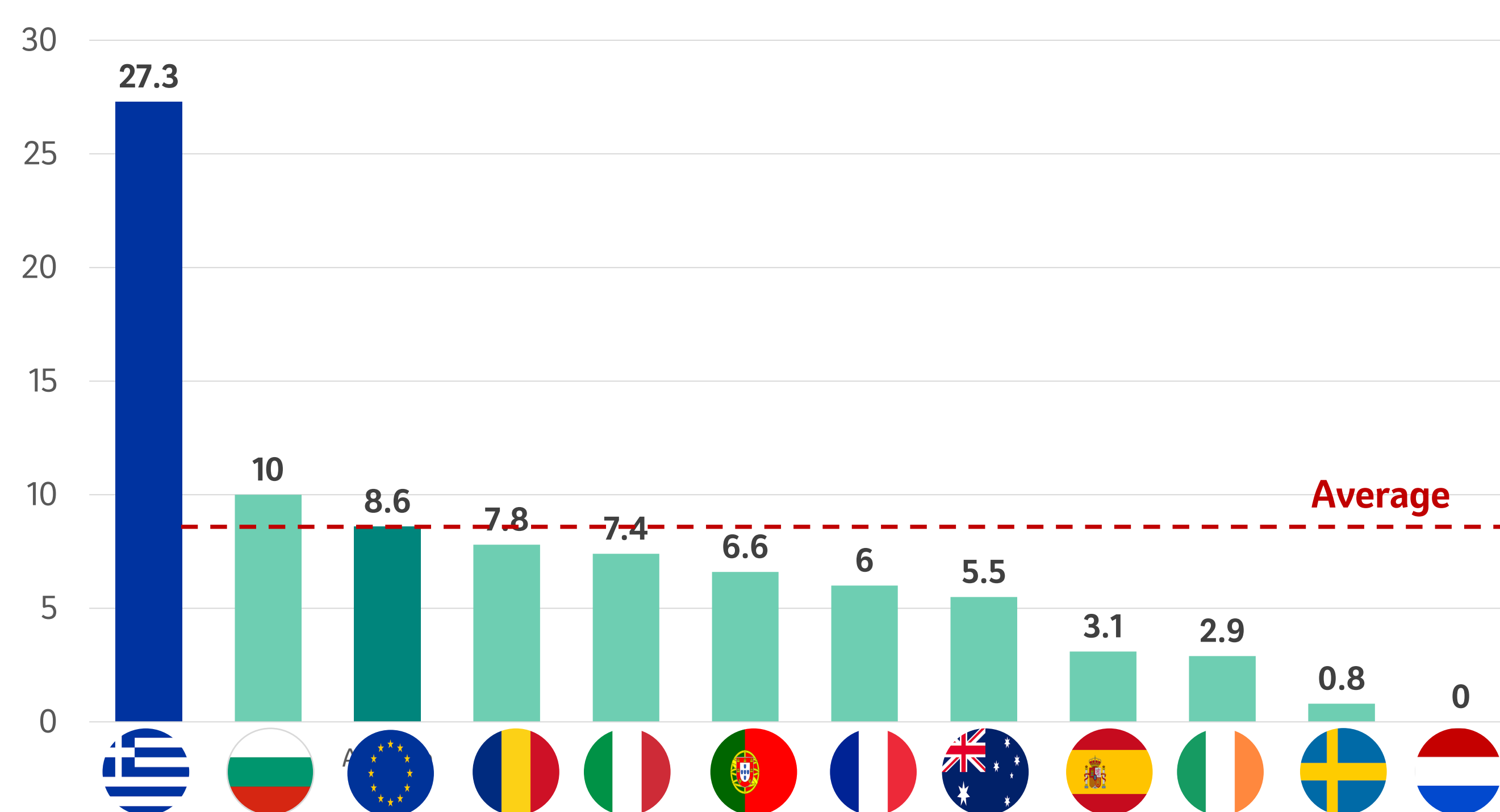
- A substitution effect is observed in the funding of pharmaceutical expenditures in Greece. (Figure 2) A 10% reduction in public pharmaceutical expenditure imposed an increased financial burden in the pharma industry in the form of clawback by 53% and in the form of rebate by 21%. (Figure 2)

Figure 2. Evolution of the substitution effect between pharmaceutical expenditure and clawback (left) and rebates (right)²



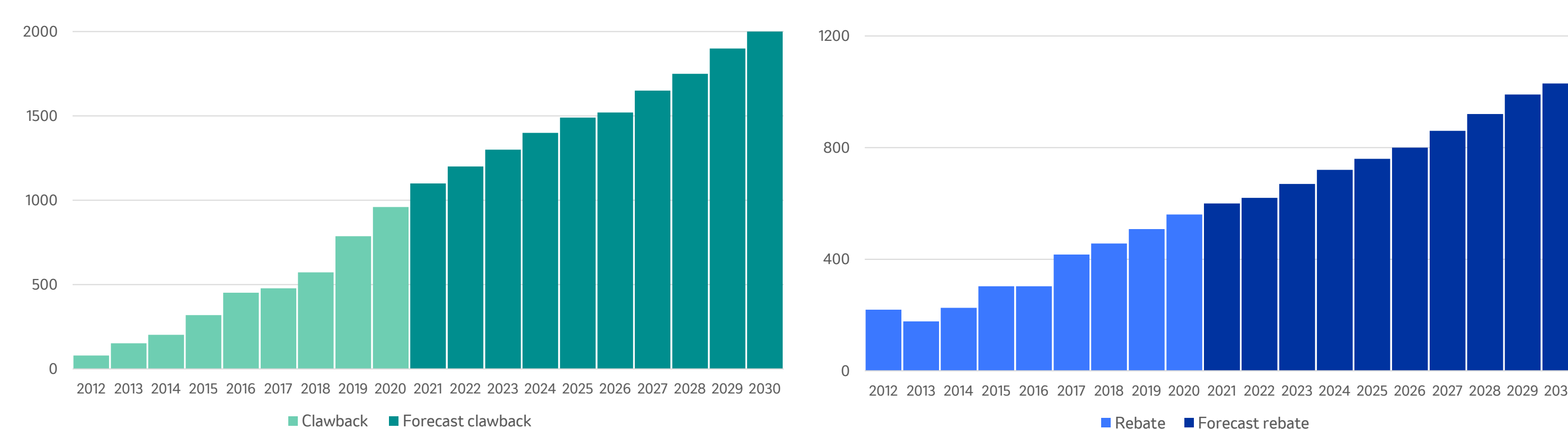
- The analysis showed that the highest clawback rate (27.3%) was observed in Greece (including rebates & clawback), compared to other EU countries (8.6%), without achieving an optimal and efficient utilization of the limited available resources. (Figure 3)

Figure 3. Clawback rates (%) in Europe and Australia



- Looking into the evolution of clawback and rebate from 2012 to 2030, (Figure 4), a substantial increase is forecasted in the evolution of both measures, which are expected to reach by 2030:
 - Clawback: €2,07bil. (Standard Deviation +/- €323mil)
 - Rebates: €1,05bil. (Standard Deviation +/- €192mil), imposing uncertainties and issues on the long-term sustainability of the pharmaceutical industry in Greece.

Figure 4. The forecasted evolution of clawback (left) and rebates (right) by 2030



- The clawback increase signals the deepening of the inefficiency observed in the public sector, in controlling and managing public resources.

CONCLUSION

- The substantial cuts applied on the public pharmaceutical expenditure, as part of the austerity measures adopted since the onset of the economic crisis, created a non-sustainable environment for the Greek pharmaceutical market.
- The role of the public sector as the main funding pillar of the pharmaceutical care in Greece was gradually substituted, with measures shifting the costs towards patients and the industry.
- The exhausting rebates and clawback mechanisms forced the industry to undertake a significant burden of the pharmaceutical care financing, which is projected to become unsustainable by 2030, reaching € 2,07 bil. and €1,05 bil. respectively in terms of clawback and rebates.
- Health policy strategies under the Recovery and Resilience Plan³ are needed to achieve clawback reduction targets (-€50mil, -€150mil, -€300mil and -€400mil. respectively in 2022, 2023, 2024 and 2025).
- Negotiations between the Government and the pharmaceutical industry could support the pharmaceutical sector’s long-term sustainability in Greece.

References

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