



The Impact of the Exchange Rates on the Economic Growth of Greece: An Update

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This paper is a follow up of a work published in 2015 which looked at the real exchange rate of euro on Greek economic growth from 1961 to 2014. In this study, I provide an update of some of the results obtained in the previous study by using the new data that came out thereafter. In addition, I look with more details into the various phases of the euro-dollar exchange rate from the 1999 to 2022 analyzing daily data. I discern four phases. However, the most important indicator is the real exchange rate which is also examined and related to economic growth of Greece during the euro years.

Keywords: *Euro, Real Exchange Rate, Economic Growth, Greece*

The Nominal Exchange Rate

The daily euro-dollar exchange rate provides a signal to the markets and might affect consumption decisions which in turn affect investment and production decisions. For example, in the case of Greece daily announcement of the Euro-Dollar Exchange Rate affect the international tourist decision to travel or not to Greece. Tourism constitutes a big part of the Greek GDP. Thus, in this paper the descriptive analysis starts by looking at daily data as this is reported in the news and quoted by many institutions such as the European Central Bank.

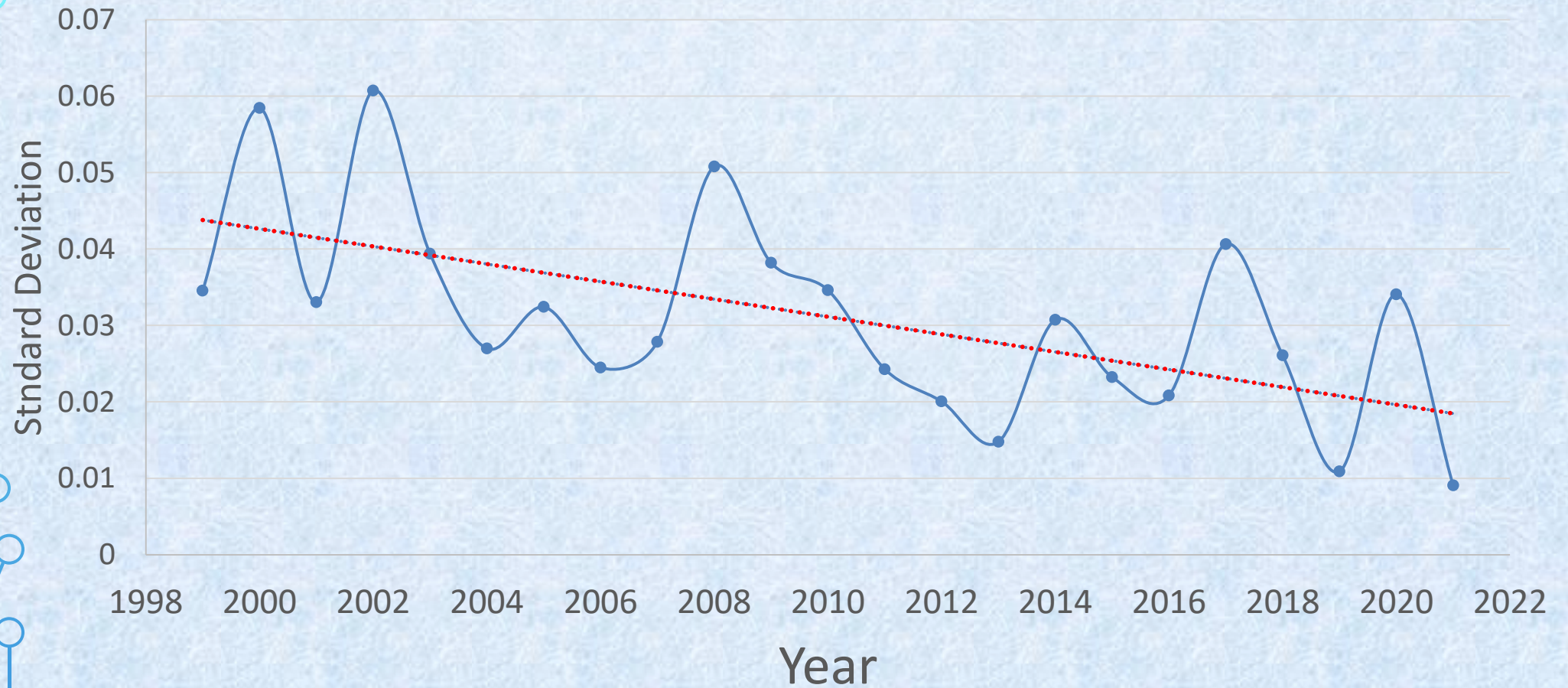
The Nominal Exchange Rate

Figure 1. Units of euro to buy one dollar



The Nominal Exchange Rate

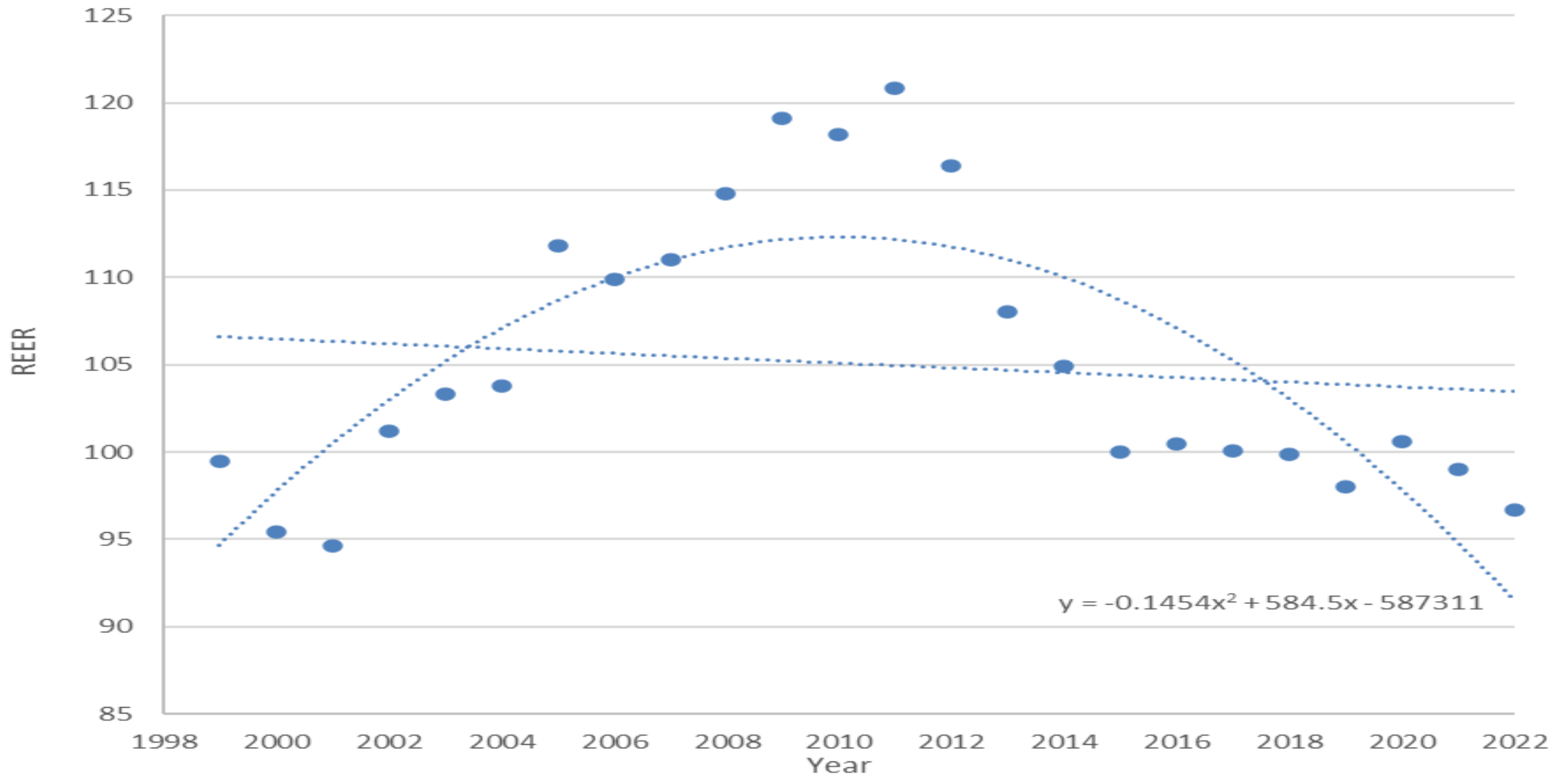
Figure 2. Annual standard deviations of the units of euro to buy one dollar



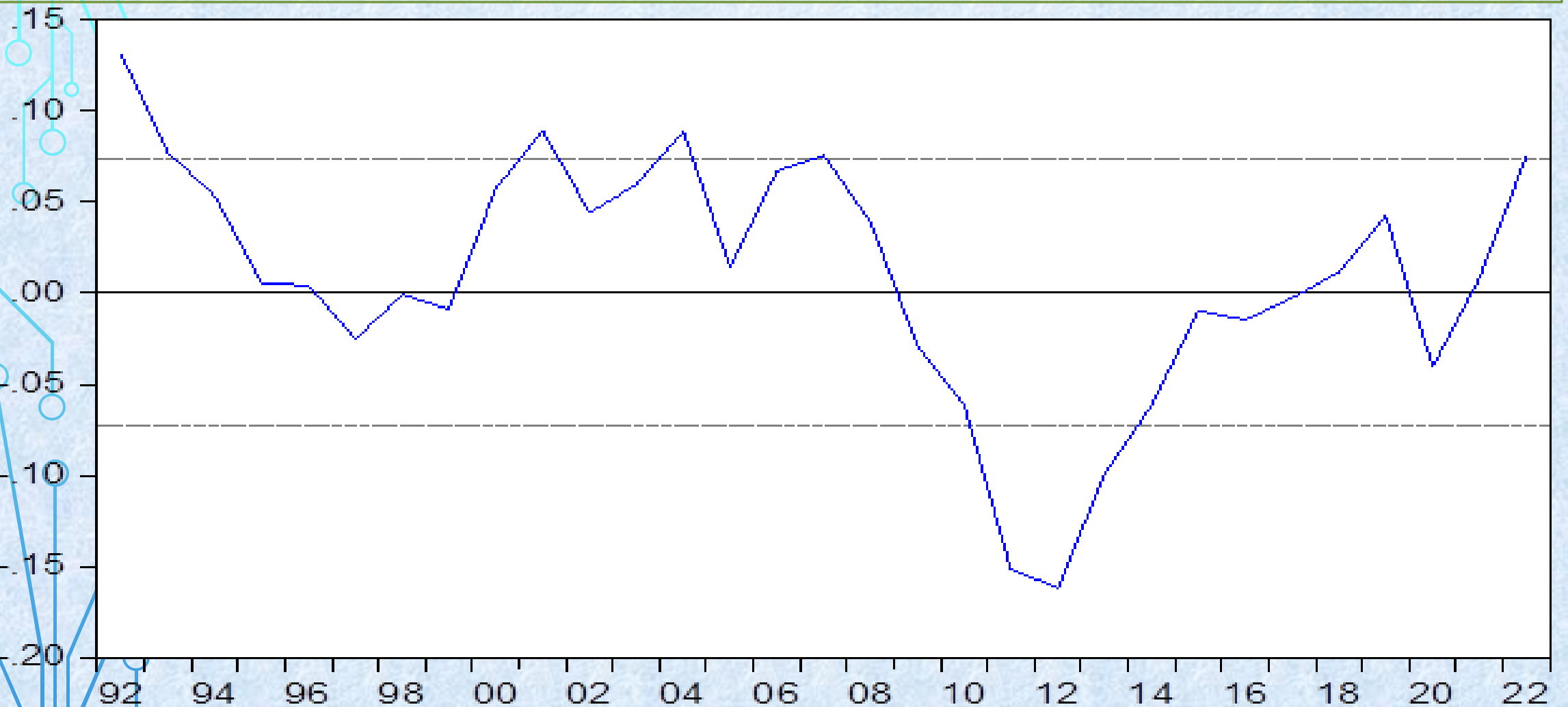
The Nominal Exchange Rate: Phases

- Phase A: Pre-euro years with locked currencies between the eurozone countries (1999-2001)
- Phase B: The Early Euro Years (2002-2008)
- Phase C: The Stable Euro Years (2009-2014)
- Phase D: The Stable Euro Years (2015-2022)

The Greek Real Effective Exchange Rate



The Misalignment Index of the Greek REER



The Impact on Greek Economic Growth

- Large overevaluations have a negative effect on economic growth. This effect can be directly measured:
- $GDPGR = \alpha + \beta * \ln(GDPGR)_{-1} + \delta * \ln(Eou) + u$
- $GDPGR = 0.15 + -0.052 \ln(GDPGR)_{-1} + 0.4 \ln(Eou)$

$R^2\text{-Adj} = 0.4576$

Conclusion

As in the previous study (Papanikos, 2015), it is found that a devaluation of the REER has a positive effect. A 10% undervaluation would have increased the rate of growth of per capita GDP by almost 52% or by an additional 1.7% per annum.



THANK YOU