

# How to Handle the Fiscal Crisis in Greece?

## Empirical Evidence Based on a Survey of Economic Experts

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## How to Handle the Fiscal Crisis in Greece? Empirical Evidence Based on a Survey of Economic Experts\*

### Abstract

We asked economic experts polled by the CESifo World Economic Survey how to handle the fiscal crisis in Greece in the year 2015. The sample includes about 850 experts from 110 countries. We find systematic differences in experts' recommendations. Our results suggest that policy advice is related to an expert's personal and country-level attributes. Country-level characteristics, especially credit default swaps as a measure of fiscal stability, predict views on whether Greece should exit the eurozone. An expert's educational background, age and professional affiliation predict opinions on the credit programs of the International Monetary Fund. We propose that policy-makers who seek balanced policy advice should consult experts from different countries and personal backgrounds.

JEL Code: H63, C83, H12, F53, E42, F45, D72

Keywords: Greece, Grexit, experts' survey, public debt crisis, IMF, international organizations, policy advice

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## 1. Introduction

We examine how country-level and personal characteristics of economic experts correlate with the economic advice they give and use the Greek sovereign public debt crisis that was in full swing from 2010 onwards as a high-profile case study. The results show that macro-level variables pertaining to experts' countries correlate with their opinions on whether Greece should exit the European Monetary Union. At the individual level, personal attributes influenced experts' opinions on the involvement of the International Monetary Fund (IMF) during the fiscal crisis in Greece.

Popper (1994) proposes that scientific objectivity cannot result from a value-free scientist, because “we cannot rob the scientist of his partisanship without also robbing him of his humanity, nor can we suppress or destroy his value judgements without destroying him (...) as a scientist.”<sup>3</sup> Instead, divergent policy advice may well be a result of different objectives of the experts who give the recommendations. Differences in economic advice arise, for example, from the trade-off between equity and efficiency (Hillman 2019, Ch. 7) and relate to different schools of thought (Hillman 1998, Prychitko 1998, De Benedictis and Di Maio 2011, 2015, Di Maio 2013). Economic experts may have political objectives that shape their advice (Coughlin 1989, Frisell 2005, Austin and Wilcox 2007, Kirchgässner 2014, 2016, Tombazos and Dobra 2014, Hillman and Ursprung 2016, Fuest 2016). Basu et al. (1990) show that an (economic) advisor may not recommend an otherwise optimal monetary policy rule if the rule will not be implemented by policymakers, because her or his advice would give rise to unwanted uncertainty regarding the actual monetary policy path. For the United States and Germany, empirical evidence shows that ideological positions influence the advice given by think tanks and councils of economic experts (McGann 2005, Potrafke 2013a, Ngo et al. 2018). Stiglitz (1998, p. 14) maintains that in “giving advice we (economists) are not just purveying economic science” because of “large differences in the understanding of our belief about economic issues.” Kirchgässner (2014, p. 17) concludes that “incentives of scientists depend on the environment they

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<sup>3</sup> Popper (1994) rather believes that the critical discussion of the expert and general audience gives rise to scientifically objective policy advice.

operate in.” In short, economic advice seems to depend on who is giving it. Policymakers who need to assess policy recommendations, however, may well consider the experts’ backgrounds.

To explore the factors behind diverging economic policy advice, we use the fiscal crisis in Greece as a high-profile case study. The Greek fiscal crisis came into full force in 2010.<sup>4</sup> It was coupled with a recession and a downgrade of Greek sovereign bonds by credit rating agencies that hampered Greece’s access to financial markets. In mid-2010, the European Commission, the European Central Bank and the IMF launched a first 110-billion-euro bailout program, which was followed by supplementary fiscal adjustment programs over the following years. During the fiscal crisis, commentators disagreed on whether Greece should default on its sovereign debt and exit the eurozone (dubbed Grexit) and how the IMF should be involved in resolving the crisis.

We use a novel dataset on economic experts’ opinions on whether Greece should have left the eurozone to investigate whether country or individual-level characteristics influence policy advice. Shortly after the Third Economic Adjustment Programme for Greece was agreed on in 2015, we asked economic experts worldwide for their opinion on how to handle the sovereign debt crisis in Greece via the CESifo World Economic Survey (WES). The ifo Institute has conducted the WES since 1981. Over 1,000 economic experts from around 120 emerging and developed countries are polled on a quarterly basis about their opinions on key economic areas. Experts from different affiliations were chosen according to their professional experience and specific knowledge of their host countries (see Garnitz et al. 2016, Boumans et al. 2016). The WES also includes a varying special question on current economic issues. We used a special questionnaire in the CESifo World Economic Survey to generate a novel dataset (ifo 2015). Around 850 experts from 110 countries answered our questions regarding the Greek fiscal crisis.

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<sup>4</sup> For details on the bailout negotiations see, for example, Sinn (2015) and Pitsoulis and Schwuchow (2017). Hansen and Shughart (2017) examine whether Greek political parties influenced the voters’ opinion on whether to accept or reject the reform program. On the economic and political developments in Greece before 2015 see, for example, Hodson (2015) and Katsimi and Moutos (2010).

We find that experts' recommendations differ systematically depending on their personal and country-level characteristics. For example, the results suggest that experts from countries with weaker fiscal stability were more likely to oppose Greece exiting the eurozone than experts from countries enjoying higher fiscal stability. Experts were more in favor of IMF credit provision if they were older, had a PhD degree or were affiliated with a financial institution. We describe the dataset in Section 2 and our empirical specification in Section 3. The results are shown in Section 4. We discuss robustness tests in Section 5. Section 6 concludes our study.

## **2. Survey data and descriptive statistics**

In October 2015, we asked WES economic experts for their opinion on how to handle the debt crisis in Greece. Experts from 110 countries answered all questions, among them experts from 92 non-eurozone and 67 developing countries. The survey featured four questions: in the first question, we asked whether the surveyed experts had advocated Grexit during the negotiations in summer 2015 before the WES survey took place ("Were you in favor of Greece exiting the eurozone in the course of the negotiations in June and July 2015?"). In the second question, we asked the experts about their opinion on Grexit at the time of the WES survey in October 2015 after the negotiations had taken place ("Should Greece exit the eurozone?"). We also asked the experts about the IMF involvement regarding financial stabilization ("Should the IMF provide credit to Greece?") and regarding the IMF's reform agenda ("Should the IMF engage in the economic reform program in Greece?").

527 out of 857 experts (61.5%) were not in favor of Greece exiting the eurozone during the negotiations held in June and July 2015. When WES experts were asked about their position after the negotiations had taken place, the number of experts in favor of Greece remaining in the eurozone increased to 593 out of 853 (69.4%). Most experts favored maintaining the status quo and did not advocate Greece exiting the eurozone. In the European countries, the majority of experts in Germany, the United Kingdom, Sweden, the Czech Republic, Denmark and Slovakia were in favor of Greece

exiting the eurozone in June and July as well as in October 2015.<sup>5</sup> In Greece and Cyprus, no expert advocated Grexit in June and July or in October 2015. In Ireland only 25.0% of the experts were in favor of a Grexit in June and July 2015 (0% in October 2015), while in Italy 27.2% (19.0%), in Portugal 36.4% (30.8%) and in Spain 37.1% (24.2%) of all experts expressed their support for Grexit.

### 3. Empirical specification

We investigate whether the macroeconomic conditions of an expert's country and individual characteristics of a survey participant were correlated with her or his opinion on whether Greece should leave the eurozone. We estimate a probit model with standard errors robust to heteroscedasticity of the following form:

$$\text{Answer}_{icj} = \alpha_j + \mathbf{Macro\ Factors}_c \zeta_{cj} + \mathbf{Individual\ characteristics}_i \eta_{ij} + u_{icj} \quad (1)$$

where the dependent variable  $\text{Answer}_{icj}$  assumes the value 0 if an expert  $i$  from country  $c$  answered "no" and 1 if the expert answered "yes" to question  $j \in [1,4]$  of the special WES questionnaire regarding the Greek fiscal crisis. We exclude answers from Greek experts because we expect these experts to have a subjective bias.

$\mathbf{Macro\ Factors}_c$  is a vector of variables at the experts' country level. We include the average index *value of a credit default swap (CDS)*, a financial derivative which insures buyers against a country's default on a sovereign bond, according to Thomson Reuters (2018). We use the value of a CDS with a country's sovereign bond of the national government with a maturity of 5 years as the underlying asset. We take its 5-year average value over the period 2011 to 2015 to handle potential outliers in an individual year. A low CDS value indicates a higher perceived risk of a country defaulting on its sovereign debt, whereas a higher value means that the financial market evaluates a country's (fiscal) economic outlook as sounder.<sup>6</sup> As alternative measures of a country's fiscal

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<sup>5</sup> The other countries where the majority of experts were in favor of Grexit in June and July 2015 were India, Russia, China, the Philippines, Togo, Thailand, the United Arab Emirates, Chile, Egypt, Venezuela, Angola, Vietnam, Tunisia, Burundi and Lebanon.

<sup>6</sup> Argentina has the lowest average CDS index with a value of 74.7 in the sample, whereas the average CDS value for a 5-year US treasury bond is the highest at 105.1.

sustainability, the *public debt-to-GDP ratio* and the *primary surplus-to-GDP ratio* according to the IMF (2017), both as a 5-year averages over the period 2011 to 2015, are included as control variables to account for major triggers of the Greek crisis.<sup>7</sup> The average *Economic Freedom index* (Heritage Foundation 2018) between 2011 and 2015 of an expert's country is included.<sup>8</sup> Economic freedom measures the size and scope of government, and thus the extent to which societies prefer market-oriented policies which may be correlated with an expert's view on the Greek fiscal crisis. The mean *trade volume with Greece-ratio*, averaged over the period 2011 to 2015 to avoid outliers, as the sum of imports and exports of an expert's host country with Greece relative to GDP is included, using data from Barbieri and Keshk (2016). Experts from countries that enjoy close trade relationships with Greece may be inclined to advocate against Grexit, which would increase uncertainty and transaction costs and thus decrease bilateral trade flows. We include the average yearly *growth rates of the CDS value, public debt-to-GDP, primary surplus-to-GDP, Economic Freedom index* and *trade volume-to-GDP variables* between 2011 and 2015 to account for dynamic changes in an expert's country during the years preceding the Greek financial crisis. We also include the *income group* of an expert's country in the year 2015 according to World Bank (2018) to control for the development level of a country with values from 1 (high income) to 3 (low income). To account for eurozone-specific characteristics of the Greek crisis, we include an *IIPSC dummy variable* which takes on the value of 1 if an expert is from either Italy, Ireland, Portugal, Spain or Cyprus, i.e. eurozone countries that had a higher risk of exiting the eurozone relative to other eurozone member countries, and 0 otherwise. We include the predominant *religion shares relative to total population* in the individual countries (Maoz and Henderson 2013). The religions included are Catholic Christians, Protestant Christians, Orthodox Christians, other Christians, Muslims, Jews, Hinduists and Buddhists in the year 2010, which is the latest available data. The religion shares relate to cultural determinants which may influence experts' views on the Greek fiscal crisis.

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<sup>7</sup> Gärtner (1997) shows, for example, that citizens in countries with high public debt-to-GDP ratios were more in favor of introducing the Euro than citizens in countries with low debt ratios. For a critique of the introduction of the Euro see Homburg (1997).

<sup>8</sup> Only the most recent scores for Cuba (from 2005) and Sudan (from 2000) have been included.

**Individual characteristics<sub>i</sub>** describes expert-level control variables. We include the *age cohort* of an expert to control for experience, with the variable taking on values of 1 (expert aged 34 or younger), 2 (aged 35 to 44), 3 (aged 45 to 54), 4 (aged 55 to 65) and 5 (aged 66 or older). We also include the *sex* of the expert with the value 0 for males and 1 for females. The European economic crisis has had different effects on women than on men (Kantola and Lombardo 2017). It is conceivable that female experts have different views on the Greek economic crisis than male experts. To control for tertiary educational attainment, we include dummy variables for whether the *expert has obtained a PhD*, and whether he or she is a *trained economist*. Finally, we include dummy variables for the *affiliations of experts*, i.e. for their affiliation with an association or chamber, a central bank, a financial company, a non-financial company, a ministry or national agency, an embassy or consulate, an international organization, or other affiliations such as private economic consultancies, NGOs, law firms, journalists and self-employed or retired experts.<sup>9</sup> Table 1 shows descriptive statistics of all included variables.

#### 4. Results

All tables include four columns: the macro factors in levels only (column 1), macro factors in levels and individual characteristics (column 2), macro factors in levels and average growth rates of the macro factors (column 3), and the full set of explanatory variables (column 4). The number of observations varies across the columns because some individual characteristics are not available for the full sample. Including or excluding the individual characteristics and average growth rates of the macro factors shows the extent to which inferences of the macro factors change when the other explanatory variables are included or excluded. We report marginal effects evaluated at means.

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<sup>9</sup> The reference category is being affiliated with research institutes, think tanks and universities.

#### *4.1 Grexit in June and July 2015*

Table 2 shows the results when we use the question about an expert's opinion on Grexit during the negotiations in June and July 2015 as the dependent variable. The results indicate that experts from countries with a low average CDS value were less likely to advocate that Greece should have left the eurozone in June and July 2015 than experts from countries with a high average CDS value. The marginal effect of the credit default swap value is positive and statistically significant at the 1% level in columns (1) and (3), and at the 5% level in column (4). In column (2) the marginal effect is statistically significant at the 10% level. The less precisely estimated marginal effect is based on the smaller sample size in column (2): if we estimate the model using the very same sample for which we have observations in column (2), the marginal effects of the CDS variable columns (1) and (3) are statistically significant at the 5% level. Overall, when the CDS value increased by one standard deviation (5.35 points), the likelihood of survey participants favoring Grexit increased by 10.8 percentage points (column 4). The lower the assumed risk of a sovereign debt default of an expert's country, the higher was an expert's consent that Greece should leave the eurozone. Country-specific information available to experts are likely to be correlated with the CDS value. Risk and time preferences, economic philosophies and thus the attitude towards public debt prevail differently across countries, all of which may well influence an expert's opinion and are correlated with a CDS value. Experts may also have interpreted the questions as asking whether Grexit would be good for the country in which they provide economic advice. For example, it is conceivable that the expected local costs of Grexit for an expert's country (and hence her or his opinion) is correlated with a country's CDS value, or that experts in fiscally unstable countries favored fiscal transfers to Greece instead of Grexit as a precedence example in the event that their own country were to exhibit similar problems.

The marginal effects of the debt-to-GDP variable and its average growth rate do not turn out to be statistically significant. The same holds for the primary surplus-to-GDP ratio and its growth rate in all but one specification each. It is conceivable that information on these variables, which also measure fiscal stability, were already priced in by the CDS value. In any event, variance inflation

factor tests do not indicate that our specifications suffer from multicollinearity with no variance inflation factor exceeding a value of 10.

None of the other marginal effects is statistically significant at the 5% level. Our results do not suggest that either the trade volume with Greece relative to GDP, the share of Protestants, the income group, the IIPSC country group variables or all other expert-level variable are correlated with the expert's answers on the Grexit question in June and July 2015. The "other affiliation" dummy (with a positive sign), the Economic Freedom index in column (3) and the share of Catholics in column (4) (both with a negative sign), and the trade with Greece-to-GDP growth rate in column (3) (with a positive sign) are statistically significant at the 10% level. Overall, the results indicate that experts from countries enjoying a higher fiscal stability were more likely to favor Grexit than experts from countries with a weaker fiscal outlook.

#### *4.2 Grexit in October 2015*

The results for the question of whether Greece should leave the eurozone in October 2015 are shown in Table 3. Political circumstances in Greece changed between June/July and October 2015: 61% of Greeks voted against the bailout measures in a referendum and leading Greek politicians resigned, but the Greek Parliament finally approved the package of measures for the third bailout program. The factors explaining an expert's answer as to whether Greece should leave the eurozone altered between June/July and October 2015, too.

The results still indicate that experts from fiscally rather unstable countries were more likely to be against Grexit than experts from fiscally stable countries. When the averaged CDS value increased by one standard deviation, the likelihood of survey participants favoring Grexit increased by 6 to 7.7 percentage points. The results are now less conclusive, however: the marginal effect is statistically significant at the 5% level in columns (1) and (3), at the 10% level in column (4), and lacks statistical significance in column (2). Contrary to the uncertain situation in June and July 2015, experts saw that the Greek administration was willing to implement policy reforms in October 2015.

It may well be that experts in fiscally stable countries reassessed the feasibility that Greece could manage the fiscal crisis without leaving the eurozone. The samples in column (2) and (4) are about a third smaller than those of the other columns. If we estimate the model in column (1) but use the sample for which we have data on individual-level variables, the marginal effect of the CDS value does not turn out to be statistically significant.

The marginal effect of the average yearly growth rate of the CDS variable is positive and statistically significant at the 5% level in column (4). The greater an expert's country improved its own fiscal stability in the years preceding the survey, the higher the likelihood of an expert being against fiscal transfers for Greece. The marginal effects of debt-to-GDP, primary surplus-to-GDP and their growth rates all lack statistical significance, possibly because their effects were already priced in by the CDS variable. The income group, IIPSC country and trade volume with Greece-to-GDP ratio variables also do not help to explain the answers regarding a Grexit in October 2015.

The marginal effects of the Economic Freedom index are negative and statistically significant at the 5% level in column (3) and at the 10% level in column (1). The marginal effect of the Economic Freedom index in growth rates is negative, too, and statistically significant at the 5% level in column (4). Experts in market-oriented countries may have appreciated the economic reform programs in Greece which were passed in October 2015, and thus endorsed Greece remaining in the eurozone. It is conceivable that the expected economic costs of Grexit for an expert's own country were greater the higher the Economic Freedom index (and a country's vulnerability to international economic shocks) is, too. Once expert-level characteristics are included, however, the marginal effect of the Economic Freedom index lacks statistical significance. The affiliation variables are correlated with the Economic Freedom index, especially the affiliation with associations or chambers which is positively correlated and the embassy or consulate affiliation which is negatively correlated with the Economic Freedom index.

If the share of Catholics increased by 10 percentage points, the likelihood of survey participants favoring a Grexit decreased by 2.9 to 5.2 percentage points. The marginal effects are

statistically significant in all specifications. It is conceivable that many countries which experienced fiscal difficulties during the European public debt crisis had Catholic majorities (Chadi and Krapf 2017). The marginal effect of the share of Protestants is negative and statistically significant in columns (2) and (4) at the 10% level, but lacks statistical significance in the other columns.

At the individual expert-level, the marginal effect of the age cohort is statistically significant at the 10% level in column (2) and the 5% level in column (4). The likelihood of favoring Grexit decreases with an expert's age. The marginal effects of sex, educational attainment or economic training do not turn out to be statistically significant.

Experts may act in line with policymakers' interests to avoid policymakers not appreciating their recommendations (Wrasai and Swank 2007). However, we do not find that experts affiliated with ministries or national agencies, embassies and consulates, or associations and chambers are more likely to hold specific views on Grexit than experts affiliated with research institutes, think tanks and universities. Against the backdrop of how the ECB was involved in the economic adjustment programs, experts from central banks may well be less likely to advocate Grexit. The marginal effect of the central bank affiliation is negative and statistically significant at the 10% level in column (4). Experts affiliated with a non-financial company are more likely to favor Grexit than experts affiliated with research institutes, think tanks and universities.

#### *4.3 IMF credit provision for Greece*

Using the question on whether the International Monetary Fund (IMF) should provide credit to Greece as the dependent variable, the marginal effects of most country-level variables lack statistical significance, except for debt-to-GDP in the column (4) at a 10% significance level which has a negative sign (see Table 4). The findings do not suggest that the average CDS value correlates with an expert's opinion about IMF credit support.

Regarding individual-level characteristics, the marginal effects of four variables are statistically significant. Experts in older age cohorts are more likely to support an IMF credit program than younger experts. If an expert held a PhD degree, the likelihood that she or he favored IMF credit provision increased by around 13.3 percentage points compared to non-PhD graduates. Both marginal effects are statistically significant at the 5% level. Moreover, the likelihood of experts favoring IMF credit provision increased by 19.4 to 20.2 percentage points if he or she was affiliated with a financial company. The marginal effects of the financial company affiliation are statistically significant at the 1% level. The results of the expert-level characteristics age, having a PhD degree and being affiliated with a financial company on the IMF credit program question may be linked to expressive behavior in which experts confirm the decision expected of their position and identity (see, for example, Hillman 2010 on expressive behavior). It is also conceivable, however, that these individual characteristics are positively correlated with a better understanding of IMF's working mechanisms and the (possibly positive) long-term impact of credit support interventions. In that case, the results would not necessarily indicate a subjective bias of an expert, but they would rather suggest that experts who were older, had a PhD degree and were affiliated with a financial company had more information at their disposal to answer the question than experts with other educational backgrounds and affiliations.

The marginal effect of the other affiliation category is positive and statistically significant at the 1% level. The interpretation of this result is difficult, however, because the category serves as a residual for all professions which cannot be classified into one of the other eight categories and captures a wide range of distinct affiliations. The marginal effects for all remaining affiliation variables, the sex of an expert, and whether she or he was an economist do not turn out to be statistically significant.

#### *4.4 The IMF reform program for Greece*

The results in Table 5 do not suggest that a country's averaged CDS value was related to an expert's view on whether the IMF should engage in economic reform programs for Greece. Only the marginal effect of the CDS value in column (3) is negative and statistically significant at the 10% level.

The marginal effect of the income group in column (4) has a negative sign and is statistically significant at the 5% level. IMF reform programs were often implemented in lower income countries in the past, especially in Latin America or Sub-Saharan Africa. Experts from countries with former IMF programs may overestimate the negative (short-term) aspects they experienced during such structural reform programs, but may underestimate the (long-term) benefit of IMF involvement. For the other affiliation category, the marginal effect is positive and statistically significant at the 1% level. As in the case of the question on IMF credit support, inference regarding the marginal effect of the other affiliation group should be treated with caution because of the heterogenous composition of professions in this category.

### **5. Robustness tests**

We subject our results to several robustness tests. We include the ideological orientation of the chief executive's party regarding economic policy of an expert's country (Scartascini et al. 2017). Government ideology in the experts' country is likely to be correlated with recommendations on how to handle the crisis in Greece. For example, right-wing governments are more likely promote economic freedom than left-wing governments (Bjørnskov and Potrafke 2012, Potrafke 2013b). When we use the first two questions on Grexit, the marginal effect of the party orientation is positive and statistically significant. Inferences regarding the CDS value do not change. The marginal effect of the CDS value is positive and statistically significant in all specifications for the Grexit question in June and July 2015, and in columns (1) and (3) for a Grexit in October 2015. The marginal effects of the financial company affiliation regarding IMF credit support are positive and statistically significant in all columns. The marginal effect of the age of an expert and the PhD degree lack

statistical significance. This result is based on the smaller sample size: if we use the sample for which we have information on party orientation and estimate the model in section 4.3, the marginal effects of age and the PhD degree lack statistical significance, too. We also use the government ideology data based on Potrafke (2009) and extended by Blum and Potrafke (2019), which are available for OECD and NATO countries. Including these government ideology variables therefore gives rise to a smaller sample. Inferences regarding the CDS value do not change. The marginal effects of the CDS value are statistically significant, except for columns (2) in both Grexit questions and in column (4) for the Grexit question in October 2015. For the question on IMF credit provision, the marginal effects of the financial company affiliation and the PhD degree are positive and statistically significant. The marginal effect of age lacks statistical significance, which again can be attributed to the smaller sample size.

Sinn (2015) describes Greece's major problem as its lack of competitiveness, which is likely to be improved by Greece exiting the eurozone. Experts from highly productive countries are expected to be more likely to favor Grexit than experts from low-productivity countries. We include the average productivity measured as output per hour worked (Conference Board 2017) and its average yearly growth rate between 2011 and 2015 as additional control variables. The productivity variable and its growth rate do not turn out to be statistically significant when we use questions on Grexit as the dependent variables. Inferences regarding the CDS value do not change. The CDS value's marginal effects remain positive and statistically significant, except for columns (2) for both Grexit questions and column (4) for the Grexit question in October 2015. For the question about the IMF credit provision, the productivity growth rate is positive and statistically significant at the 10% level in column (4). The marginal effects of a PhD degree and the financial company affiliation all remain positive and statistically significant. The marginal effect of age is positive and statistically significant in column (2), but lacks statistical significance in column (4) which is explained by the smaller sample size.

We examine whether inferences change when we include or exclude individual countries. The results are not driven by individual countries. Inferences regarding the CDS value, the age cohort of an expert, the PhD degree and the financial company affiliation variables are not sensitive to the inclusion or exclusion of individual countries. Inferences also do not change once we include Greek experts in the sample.

In April 2016, we asked experts whether they were in favor of the United Kingdom exiting the European Union (dubbed Brexit). This question relates to the scheduled referendum in the United Kingdom in June 2016. The factors behind Grexit and the motives for the United Kingdom exiting the EU differ significantly. Many commentators have considered Brexit to be a decision about the EU as such, related to political rather than fiscal policy questions. The discussion about Grexit, on the other hand, focused on the public debt situation in Greece. 620 out of 715 of the non-United Kingdom experts (86.7%) were not in favor of the United Kingdom exiting the European Union. We estimate the regression model described in section 3 by using the individual experts' answer on whether the United Kingdom should leave the European Union as the dependent variable, excluding experts from the United Kingdom (and including experts from Greece). We would not expect the CDS value in an expert's country to have a strong predictive power on the expert's answer on whether the United Kingdom should exit the EU. The marginal effect of a CDS value in an expert's country on the expert's answer on whether the United Kingdom should exit the EU is statistically significant at the 5% when the country-level variables with their growth rates are included. It lacks statistical significance, however, once we include the individual-level variables. We estimate the model using the answers on Grexit as the dependent variable for the very same (and about one third smaller) sample for which we have answers on Brexit. The marginal effect of the CDS value remains positive and statistically significant on predicting Grexit in June and July 2015 in all columns and in columns (1) and (3) for the question regarding a Grexit in October 2015. An expert's age, having a PhD degree or a financial company affiliation do not predict views on a Brexit.

## **6. Conclusion**

Using the CESifo World Economic Survey, we have examined economic experts' views on the appropriate policy responses to the fiscal crisis in Greece in 2015. Our results suggest that country-level characteristics predict an expert's opinion on whether Greece should leave the European Monetary Union. Experts from countries with a lower average value of credit default swaps (CDS) were more likely to be against Grexit. When the CDS value increased by one standard deviation, the likelihood of participants favoring Grexit in June or July 2015 increased by around 10.8 percentage points. Experts' views on an IMF credit program for Greece were linked to their personal attributes. Older experts tended to be in favor of an IMF support. If experts held a PhD degree or were affiliated with the financial sector, the likelihood of supporting IMF credit provision increased by 13.3 and 20.2 percentage points. We do not find evidence that experts who were affiliated with their government held different views than experts from research institutes, universities or think tanks. The diversity of views suggests that the opinion of experts varies depending on both the experts' local environment and her or his individual characteristics. We propose that policymakers who seek balanced policy advice should consult experts from different countries and personal backgrounds. Future research should examine the channels that give rise to experts' country and personal characteristics being correlated with their views on economic policy issues.

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**Table 1: Descriptive statistics**

| <b>WES questionnaire variables</b>                                    | <b>Obs.</b> | <b>Mean</b> | <b>Std. Dev.</b> | <b>Min.</b> | <b>Max.</b> | <b>Source</b>                                |
|---|-------------|-------------|------------------|-------------|-------------|--|
| Q1: Grexit in June and July 2015 <sup>a</sup> .                       | 857         | 0.39        | 0.49             | 0.00        | 1.00        | Ifo (2015)                                   |
| Q2: Grexit in October 2015 <sup>a</sup> .                             | 853         | 0.31        | 0.46             | 0.00        | 1.00        | Ifo (2015)                                   |
| Q3: IMF credit <sup>a</sup> .   | 837         | 0.72        | 0.45             | 0.00        | 1.00        | Ifo (2015)                                   |
| Q4: IMF reforms <sup>a</sup> .  | 842         | 0.84        | 0.37             | 0.00        | 1.00        | Ifo (2015)                                   |
| Q5: Brexit <sup>b</sup> .   | 715         | 0.13        | 0.34             | 0.00        | 1.00        | Ifo (2015)                                   |
| <b>Country-level variables</b>  | <b>Obs.</b> | <b>Mean</b> | <b>Std. Dev.</b> | <b>Min</b>  | <b>Max</b>  | <b>Source</b>                                |
| Credit default swaps value <sup>a</sup> .                             | 660         | 96.97       | 5.35             | 74.68       | 105.07      | Thomson Reuters (2018)                       |
| Average growth rate of credit default swaps value <sup>a</sup> .      | 656         | 2.36        | 4.17             | -10.82      | 20.92       | Thomson Reuters (2018), own calculations     |
| Debt-to-GDP <sup>a</sup> .  | 874         | 62.12       | 40.98            | 0.35        | 230.18      | IMF (2017)                                   |
| Average growth rate of debt-to-GDP <sup>a</sup> .                     | 874         | 4.29        | 6.93             | -25.52      | 45.69       | IMF (2017), own calculations                 |
| Primary surplus-to-GDP <sup>a</sup> .                                 | 847         | -1.38       | 2.35             | -11.78      | 8.25        | IMF (2017)                                   |
| Average growth rate of primary surplus-to-GDP <sup>a</sup> .          | 847         | -64.5       | 303.9            | -1500.6     | 1820.2      | IMF (2017), own calculations                 |
| Economic Freedom index <sup>a</sup> .                                 | 858         | 65.2        | 9.55             | 36.48       | 89.72       | Heritage Foundation (2018)                   |
| Average growth rate of Economic Freedom index <sup>a</sup> .          | 858         | 0.17        | 1.09             | -3.87       | 5.92        | Heritage Foundation (2018), own calculations |
| Trade volume with Greece-to-GDP <sup>a</sup> .                        | 855         | 0.00        | 0.01             | 0.00        | 0.12        | Barbieri and Keshk (2016)                    |
| Average growth rate of trade volume with Greece-to-GDP <sup>a</sup> . | 855         | 11.25       | 73.88            | -100.00     | 1322.4      | Barbieri and Keshk (2016), own calculations  |
| Trade volume with UK-to-GDP <sup>b</sup> .                            | 703         | 0.02        | 0.03             | 0.00        | 0.19        | Barbieri and Keshk (2016)                    |
| Average growth rate of trade volume with UK-to-GDP <sup>b</sup> .     | 703         | 2.64        | 30.58            | -40.93      | 291.85      | Barbieri and Keshk (2016), own calculations  |
| Income group <sup>a</sup> .   | 874         | 1.43        | 0.57             | 1.00        | 3.00        | World Bank (2018)                            |
| IIPSC country   | 874         | 0.09        | 0.28             | 0.00        | 1.00        | Own classification                           |
| Share of Catholics <sup>a</sup> .                                     | 872         | 0.35        | 0.32             | 0.00        | 0.89        | Maoz and Henderson (2013)                    |
| Share of Protestants <sup>a</sup> .                                   | 872         | 0.14        | 0.18             | 0.00        | 0.81        | Maoz and Henderson (2013)                    |
| Share of Orthodox Christians <sup>a</sup> .                           | 872         | 0.07        | 0.20             | 0.00        | 0.95        | Maoz and Henderson (2013)                    |
| Share of other Christians <sup>a</sup> .                              | 872         | 0.04        | 0.09             | 0.00        | 0.46        | Maoz and Henderson (2013)                    |
| Share of Moslems <sup>a</sup> .                                       | 872         | 0.12        | 0.26             | 0.00        | 0.99        | Maoz and Henderson (2013)                    |
| Share of Jews <sup>a</sup> .  | 872         | 0.00        | 0.05             | 0.00        | 0.73        | Maoz and Henderson (2013)                    |
| Share of Buddhists <sup>a</sup> .                                     | 872         | 0.04        | 0.15             | 0.00        | 0.87        | Maoz and Henderson (2013)                    |

|   |     |       |       |      |       |   |
|---|-----|-------|-------|------|-------|---|
| Share of Hinduists <sup>a.</sup>                                      | 872 | 0.02  | 0.11  | 0.00 | 0.80  | Maoz and Henderson (2013)                 |
| Output per hour worked <sup>a.</sup>                                  | 692 | 41.15 | 18.45 | 3.78 | 91.76 | Conference Board (2017)                   |
| Economic ideology of chief executive's party (leftwing) <sup>a.</sup> | 573 | 1.94  | 0.92  | 1.00 | 3.00  | Scartascini et al. (2017)                 |
| Government ideology (leftwing) <sup>a.</sup>                          | 463 | 2.68  | 0.74  | 2.00 | 4.00  | Potrafke (2009), Blum and Potrafke (2019) |

| <b>Expert-level variables</b>                      | <b>Obs.</b> | <b>Mean</b> | <b>Std. Dev.</b> | <b>Min</b> | <b>Max</b> | <b>Source</b> |
|--|-------------|-------------|------------------|------------|------------|---------------|
| Age cohort of expert <sup>a.</sup>                 | 585         | 3.19        | 1.19             | 1.00       | 5.00       | ifo (2015)    |
| Sex of expert (female) <sup>a.</sup>               | 586         | 0.12        | 0.33             | 0.00       | 1.00       | ifo (2015)    |
| Expert having a PhD <sup>a.</sup>                  | 550         | 0.44        | 0.50             | 0.00       | 1.00       | ifo (2015)    |
| Expert being an economist <sup>a.</sup>            | 549         | 0.74        | 0.44             | 0.00       | 1.00       | ifo (2015)    |
| Association or chamber affiliat. <sup>a.</sup>     | 874         | 0.10        | 0.30             | 0.00       | 1.00       | ifo (2015)    |
| Central bank affiliation <sup>a.</sup>             | 874         | 0.03        | 0.18             | 0.00       | 1.00       | ifo (2015)    |
| Financial company affiliation <sup>a.</sup>        | 874         | 0.12        | 0.33             | 0.00       | 1.00       | ifo (2015)    |
| Non-financial company affiliat. <sup>a.</sup>      | 874         | 0.26        | 0.44             | 0.00       | 1.00       | ifo (2015)    |
| Ministry or agency affiliation <sup>a.</sup>       | 874         | 0.05        | 0.23             | 0.00       | 1.00       | ifo (2015)    |
| Embassy or consulate affiliation <sup>a.</sup>     | 874         | 0.04        | 0.19             | 0.00       | 1.00       | ifo (2015)    |
| International organization affiliat. <sup>a.</sup> | 874         | 0.03        | 0.16             | 0.00       | 1.00       | ifo (2015)    |
| Research institute affiliation <sup>a.</sup>       | 874         | 0.31        | 0.46             | 0.00       | 1.00       | ifo (2015)    |
| Other institutions affiliation <sup>a.</sup>       | 874         | 0.05        | 0.22             | 0.00       | 1.00       | ifo (2015)    |

Note a.: Descriptive statistics without experts from Greece. Note b.: Descriptive statistics without experts from the United Kingdom.

**Table 2: Regression results for experts' answer to Grexit in June and July 2015**

|  | (1)                   | (2)                  | (3)                   | (4)                  |
|--|-----------------------|----------------------|-----------------------|----------------------|
| Credit default swaps value                                   | 0.0170***<br>(0.0060) | 0.0127*<br>(0.0076)  | 0.0205***<br>(0.0070) | 0.0201**<br>(0.0091) |
| Debt-to-GDP ratio  | -0.0011<br>(0.0009)   | -0.0004<br>(0.0013)  | -0.0007<br>(0.0010)   | 0.0004<br>(0.0015)   |
| Primary surplus-to-GDP ratio                                 | -0.0029<br>(0.0115)   | -0.0269*<br>(0.0159) | 0.0011<br>(0.0148)    | -0.0118<br>(0.0196)  |
| Economic Freedom index                                       | -0.0055<br>(0.0040)   | -0.0040<br>(0.0053)  | -0.0076*<br>(0.0042)  | -0.0052<br>(0.0057)  |
| Trade volume with Greece-to-GDP ratio                        | -0.2727<br>(2.4598)   | -1.8239<br>(2.9951)  | -0.6978<br>(2.6193)   | -3.2943<br>(3.2788)  |
| Income group   | -0.0754<br>(0.0684)   | 0.0161<br>(0.0941)   | -0.0475<br>(0.0744)   | 0.0731<br>(0.1059)   |
| IIPSC  | 0.0934<br>(0.0907)    | -0.0827<br>(0.1128)  | 0.0377<br>(0.0977)    | -0.1378<br>(0.1132)  |
| Share of Catholics   | -0.1197<br>(0.1465)   | -0.3352<br>(0.2047)  | -0.1721<br>(0.1515)   | -0.3484*<br>(0.2062) |
| Share of Protestants   | -0.0633<br>(0.1624)   | -0.2901<br>(0.2100)  | -0.0408<br>(0.1662)   | -0.2718<br>(0.2118)  |
| Age of expert  |                       | -0.0187<br>(0.0242)  |                       | -0.0171<br>(0.0242)  |
| Sex of expert (female)                                       |                       | 0.1017<br>(0.0861)   |                       | 0.0948<br>(0.0881)   |
| Expert having a PhD  |                       | -0.0167<br>(0.0625)  |                       | -0.0197<br>(0.0617)  |
| Expert being an economist                                    |                       | 0.0879<br>(0.0636)   |                       | 0.0939<br>(0.0631)   |
| Association or chamber affiliation                           |                       | -0.0778<br>(0.0991)  |                       | -0.0632<br>(0.0986)  |
| Central bank affiliation                                     |                       | -0.1192<br>(0.1370)  |                       | -0.1821<br>(0.1284)  |
| Financial company affiliation                                |                       | -0.0752<br>(0.0823)  |                       | -0.0953<br>(0.0805)  |
| Non-financial company affiliation                            |                       | 0.0842<br>(0.0838)   |                       | 0.0805<br>(0.0843)   |
| National ministry or agency affiliation                      |                       | 0.0562<br>(0.1313)   |                       | 0.0312<br>(0.1305)   |
| Embassy or consulate affiliation                             |                       | 0.1416<br>(0.2535)   |                       | 0.1360<br>(0.2598)   |
| International organization affiliation                       |                       | -0.1034<br>(0.2608)  |                       | -0.1658<br>(0.2318)  |
| Other affiliation  |                       | 0.2224*<br>(0.1180)  |                       | 0.2232*<br>(0.1211)  |
| Average growth rate of credit default swaps value            |                       |                      | 0.0109<br>(0.0072)    | 0.0100<br>(0.0097)   |
| Average growth rate of debt-to-GDP ratio                     |                       |                      | 0.0012<br>(0.0060)    | 0.0035<br>(0.0079)   |
| Average growth rate of primary surplus-to-GDP ratio          |                       |                      | 0.0001<br>(0.0001)    | 0.0002*<br>(0.0001)  |
| Average growth rate of Economic Freedom index                |                       |                      | -0.0334<br>(0.0391)   | -0.0727<br>(0.0501)  |
| Average growth rate of trade volume with Greece-to-GDP ratio |                       |                      | 0.0033*<br>(0.0020)   | 0.0035<br>(0.0028)   |
| Other religion shares included?                              | ✓                     | ✓                    | ✓                     | ✓                    |
| Observations   | 640                   | 397                  | 638                   | 396                  |
| Pseudo R <sup>2</sup>  | 0.0288                | 0.0682               | 0.0357                | 0.0787               |

Robust standard errors in parentheses. \*, \*\*, \*\*\* indicate statistical significance at 10, 5, 1% level. Marginal effects evaluated at means.

**Table 3: Regression results for experts' answer to Grexit in October 2015**

|  | (1)                   | (2)                  | (3)                    | (4)                   |
|--|-----------------------|----------------------|------------------------|-----------------------|
| Credit default swaps value                                   | 0.0113**<br>(0.0057)  | 0.0049<br>(0.0071)   | 0.0137**<br>(0.0065)   | 0.0144*<br>(0.0081)   |
| Debt-to-GDP ratio  | -0.0010<br>(0.0008)   | -0.0008<br>(0.0012)  | -0.0004<br>(0.0010)    | 0.0003<br>(0.0014)    |
| Primary surplus-to-GDP ratio                                 | 0.0035<br>(0.0109)    | -0.0132<br>(0.0140)  | 0.0036<br>(0.0141)     | 0.0020<br>(0.0187)    |
| Economic Freedom index                                       | -0.0065*<br>(0.0038)  | -0.0034<br>(0.0050)  | -0.0088**<br>(0.0039)  | -0.0060<br>(0.0053)   |
| Trade volume with Greece-to-GDP ratio                        | 2.4447<br>(2.2463)    | 1.0786<br>(2.6650)   | 2.0166<br>(2.3903)     | -0.9919<br>(2.9549)   |
| Income group   | -0.0849<br>(0.0638)   | -0.0236<br>(0.0886)  | -0.0678<br>(0.0689)    | 0.0436<br>(0.1028)    |
| IIPSC  | 0.0425<br>(0.0888)    | -0.0536<br>(0.1019)  | -0.0198<br>(0.0910)    | -0.1321<br>(0.0997)   |
| Share of Catholics   | -0.2892**<br>(0.1384) | -0.3866*<br>(0.2009) | -0.3969***<br>(0.1432) | -0.5196**<br>(0.2106) |
| Share of Protestants   | -0.1999<br>(0.1528)   | -0.3654*<br>(0.2065) | -0.1993<br>(0.1566)    | -0.3853*<br>(0.2127)  |
| Age of expert  |                       | -0.0427*<br>(0.0223) |                        | -0.0457**<br>(0.0231) |
| Sex of expert (female)                                       |                       | 0.0557<br>(0.0843)   |                        | 0.0405<br>(0.0859)    |
| Expert having a PhD  |                       | 0.0143<br>(0.0577)   |                        | 0.0141<br>(0.0576)    |
| Expert being an economist                                    |                       | 0.0354<br>(0.0597)   |                        | 0.0346<br>(0.0599)    |
| Association or chamber affiliation                           |                       | -0.0837<br>(0.0927)  |                        | -0.0594<br>(0.0959)   |
| Central bank affiliation                                     |                       | -0.1530<br>(0.1306)  |                        | -0.2148*<br>(0.1120)  |
| Financial company affiliation                                |                       | 0.0294<br>(0.0825)   |                        | -0.0028<br>(0.0820)   |
| Non-financial company affiliation                            |                       | 0.1635**<br>(0.0814) |                        | 0.1594*<br>(0.0826)   |
| National ministry or agency affiliation                      |                       | 0.0212<br>(0.1266)   |                        | -0.0015<br>(0.1254)   |
| Embassy or consulate affiliation                             |                       | 0.2751<br>(0.2391)   |                        | 0.2759<br>(0.2417)    |
| International organization affiliation                       |                       | -0.0847<br>(0.2045)  |                        | -0.1443<br>(0.1648)   |
| Other affiliation  |                       | 0.1952<br>(0.1191)   |                        | 0.1894<br>(0.1227)    |
| Average growth rate of credit default swaps value            |                       |                      | 0.0107<br>(0.0069)     | 0.0178**<br>(0.0089)  |
| Average growth rate of debt-to-GDP ratio                     |                       |                      | 0.0014<br>(0.0056)     | 0.0054<br>(0.0074)    |
| Average growth rate of primary surplus-to-GDP ratio          |                       |                      | 0.0000<br>(0.0001)     | 0.0001<br>(0.0001)    |
| Average growth rate of Economic Freedom index                |                       |                      | -0.0226<br>(0.0374)    | -0.1013**<br>(0.0472) |
| Average growth rate of trade volume with Greece-to-GDP ratio |                       |                      | 0.0047**<br>(0.0018)   | 0.0068**<br>(0.0029)  |
| Other religion shares included?                              | ✓                     | ✓                    | ✓                      | ✓                     |
| Observations   | 638                   | 399                  | 635                    | 397                   |
| Pseudo R <sup>2</sup>  | 0.0301                | 0.0657               | 0.0412                 | 0.0889                |

Robust standard errors in parentheses. \*, \*\*, \*\*\* indicate statistical significance at 10, 5, 1% level. Marginal effects evaluated at means.

**Table 4: Regression results for experts' answer to IMF credit provision for Greece**

|  | (1)                 | (2)                   | (3)                 | (4)                   |
|--|---------------------|-----------------------|---------------------|-----------------------|
| Credit default swaps value                                   | -0.0019<br>(0.0052) | -0.0008<br>(0.0074)   | -0.0036<br>(0.0060) | -0.0062<br>(0.0083)   |
| Debt-to-GDP ratio  | -0.0007<br>(0.0008) | -0.0014<br>(0.0011)   | -0.0012<br>(0.0010) | -0.0022*<br>(0.0013)  |
| Primary surplus-to-GDP ratio                                 | 0.0146<br>(0.0111)  | 0.0203<br>(0.0144)    | 0.0076<br>(0.0138)  | 0.0056<br>(0.0187)    |
| Economic Freedom index                                       | 0.0012<br>(0.0036)  | 0.0056<br>(0.0053)    | 0.0009<br>(0.0038)  | 0.0060<br>(0.0057)    |
| Trade volume with Greece-to-GDP ratio                        | -1.5364<br>(2.0539) | -0.2847<br>(2.7022)   | -0.4522<br>(2.2332) | 1.8169<br>(3.0091)    |
| Income group   | -0.0692<br>(0.0598) | -0.1050<br>(0.0891)   | -0.0861<br>(0.0644) | -0.1540<br>(0.1036)   |
| IIPSC  | 0.1007<br>(0.0692)  | 0.1066<br>(0.0950)    | 0.1077<br>(0.0714)  | 0.1467<br>(0.0936)    |
| Share of Catholics   | 0.0815<br>(0.1345)  | 0.2892<br>(0.2000)    | 0.1046<br>(0.1382)  | 0.3198<br>(0.2106)    |
| Share of Protestants   | 0.0084<br>(0.1483)  | 0.1052<br>(0.2061)    | 0.0234<br>(0.1503)  | 0.1337<br>(0.2120)    |
| Age of expert  |                     | 0.0461**<br>(0.0220)  |                     | 0.0455**<br>(0.0224)  |
| Sex of expert (female)                                       |                     | -0.0220<br>(0.0808)   |                     | -0.0277<br>(0.0851)   |
| Expert having a PhD  |                     | 0.1291**<br>(0.0579)  |                     | 0.1331**<br>(0.0578)  |
| Expert being an economist                                    |                     | 0.0487<br>(0.0622)    |                     | 0.0303<br>(0.0624)    |
| Association or chamber affiliation                           |                     | 0.0899<br>(0.0887)    |                     | 0.0838<br>(0.0899)    |
| Central bank affiliation                                     |                     | -0.0876<br>(0.1550)   |                     | -0.0335<br>(0.1545)   |
| Financial company affiliation                                |                     | 0.1942***<br>(0.0621) |                     | 0.2015***<br>(0.0614) |
| Non-financial company affiliation                            |                     | 0.0207<br>(0.0774)    |                     | 0.0245<br>(0.0786)    |
| National ministry or agency affiliation                      |                     | 0.0252<br>(0.1110)    |                     | 0.0519<br>(0.1077)    |
| Embassy or consulate affiliation                             |                     | 0.0000<br>(0.0000)    |                     | 0.0000<br>(0.0000)    |
| International organization affiliation                       |                     | -0.1158<br>(0.2653)   |                     | -0.0517<br>(0.2607)   |
| Other affiliation  |                     | 0.2218***<br>(0.0662) |                     | 0.2255***<br>(0.0661) |
| Average growth rate of credit default swaps value            |                     |                       | -0.0000<br>(0.0067) | -0.0081<br>(0.0092)   |
| Average growth rate of debt-to-GDP ratio                     |                     |                       | -0.0038<br>(0.0056) | -0.0078<br>(0.0079)   |
| Average growth rate of primary surplus-to-GDP ratio          |                     |                       | -0.0000<br>(0.0001) | -0.0001<br>(0.0001)   |
| Average growth rate of Economic Freedom index                |                     |                       | 0.0112<br>(0.0359)  | 0.0454<br>(0.0479)    |
| Average growth rate of trade volume with Greece-to-GDP ratio |                     |                       | -0.0004<br>(0.0018) | -0.0011<br>(0.0028)   |
| Other religion shares included?                              | ✓                   | ✓                     | ✓                   | ✓                     |
| Observations   | 622                 | 382                   | 618                 | 379                   |
| Pseudo R <sup>2</sup>  | 0.0221              | 0.0749                | 0.0245              | 0.0823                |

Robust standard errors in parentheses. \*, \*\*, \*\*\* indicate statistical significance at 10, 5, 1% level. Marginal effects evaluated at means.

**Table 5: Regression results for experts' answer to IMF reform program for Greece**

|  | (1)                 | (2)                   | (3)                  | (4)                   |
|--|---------------------|-----------------------|----------------------|-----------------------|
| Credit default swaps value                                   | -0.0060<br>(0.0040) | -0.0006<br>(0.0045)   | -0.0086*<br>(0.0046) | -0.0037<br>(0.0051)   |
| Debt-to-GDP ratio  | 0.0006<br>(0.0007)  | -0.0002<br>(0.0007)   | -0.0002<br>(0.0008)  | -0.0012<br>(0.0009)   |
| Primary surplus-to-GDP ratio                                 | 0.0144<br>(0.0091)  | 0.0129<br>(0.0097)    | 0.0046<br>(0.0115)   | -0.0006<br>(0.0116)   |
| Economic Freedom index                                       | 0.0045<br>(0.0028)  | 0.0032<br>(0.0039)    | 0.0044<br>(0.0029)   | 0.0019<br>(0.0039)    |
| Trade volume with Greece-to-GDP ratio                        | -2.3082<br>(1.5492) | -2.0638<br>(1.7200)   | -1.3139<br>(1.6552)  | -0.2323<br>(1.8126)   |
| Income group   | 0.0445<br>(0.0472)  | -0.0819<br>(0.0534)   | 0.0193<br>(0.0497)   | -0.1419**<br>(0.0630) |
| IIPSC  | 0.0603<br>(0.0537)  | 0.0719<br>(0.0484)    | 0.0515<br>(0.0605)   | 0.0477<br>(0.0535)    |
| Share of Catholics   | -0.0024<br>(0.1072) | 0.1885<br>(0.1205)    | 0.0295<br>(0.1103)   | 0.2141*<br>(0.1206)   |
| Share of Protestants   | 0.0628<br>(0.1234)  | 0.2226<br>(0.1391)    | 0.0701<br>(0.1270)   | 0.2357*<br>(0.1406)   |
| Sex of expert  |                     | -0.0235<br>(0.0150)   |                      | -0.0193<br>(0.0142)   |
| Gender of expert (female)                                    |                     | 0.0240<br>(0.0461)    |                      | 0.0099<br>(0.0478)    |
| Expert having a PhD  |                     | -0.0466<br>(0.0378)   |                      | -0.0485<br>(0.0360)   |
| Expert being an economist                                    |                     | -0.0190<br>(0.0395)   |                      | -0.0246<br>(0.0374)   |
| Association or chamber affiliation                           |                     | -0.0903<br>(0.0830)   |                      | -0.0867<br>(0.0787)   |
| Central bank affiliation                                     |                     | 0.0274<br>(0.0783)    |                      | 0.0558<br>(0.0589)    |
| Financial company affiliation                                |                     | -0.0644<br>(0.0600)   |                      | -0.0419<br>(0.0536)   |
| Non-financial company affiliation                            |                     | -0.0334<br>(0.0569)   |                      | -0.0254<br>(0.0541)   |
| National ministry or agency affiliation                      |                     | 0.0220<br>(0.0734)    |                      | 0.0387<br>(0.0644)    |
| Embassy or consulate affiliation                             |                     | 0.0000<br>(0.0000)    |                      | 0.0000<br>(0.0000)    |
| International organization affiliation                       |                     | 0.0074<br>(0.1700)    |                      | 0.0410<br>(0.1164)    |
| Other affiliation  |                     | 0.1189***<br>(0.0299) |                      | 0.1148***<br>(0.0279) |
| Average growth rate of credit default swaps value            |                     |                       | 0.0037<br>(0.0070)   | 0.0060<br>(0.0083)    |
| Average growth rate of debt-to-GDP ratio                     |                     |                       | -0.0024<br>(0.0050)  | -0.0008<br>(0.0059)   |
| Average growth rate of primary surplus-to-GDP ratio          |                     |                       | -0.0001<br>(0.0001)  | -0.0001*<br>(0.0001)  |
| Average growth rate of Economic Freedom index                |                     |                       | 0.0160<br>(0.0302)   | 0.0305<br>(0.0321)    |
| Average growth rate of trade volume with Greece-to-GDP ratio |                     |                       | -0.0015<br>(0.0016)  | -0.0010<br>(0.0018)   |
| Other religion shares included?                              | ✓                   | ✓                     | ✓                    | ✓                     |
| Observations   | 627                 | 380                   | 624                  | 378                   |
| Pseudo R <sup>2</sup>  | 0.0360              | 0.1029                | 0.0428               | 0.1238                |

Robust standard errors in parentheses. \*, \*\*, \*\*\* indicate statistical significance at 10, 5, 1% level. Marginal effects evaluated at means.