

# Details matter: Institutional quality and the case for Greece

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## Introduction

The debate about the effect of the quality of institutions on the economy has been researched for centuries amongst economists. Acemoglu and Robinson (2012) posit that the reason why nations have such enormous differences in wealth is because of their institutions. They assert that nations with inclusive institutions are able to grow a lot faster and more consistently than those with extractive institutions. Their theory can explain how history turned out, even since the beginning of the Roman Empire, to a much larger extent than popular competing theories, such as the cultural, geographical and the ignorance hypotheses.

Numerous studies have attempted to quantify the effect of institutional quality on growth by using a plethora of regression techniques. However, due to the profusion of effects through which institutions can affect growth and the size of the literature, it is very difficult for a policymaker to take effective actions. The largest proportion of the literature on this topic focuses on developing countries, rather than OECD countries. There are very few papers that utilize the literature on institutional economics to make policy implications for struggling OECD coun-

tries, such as Greece, which means that further research is needed on this specific topic.

The relevance of this topic can be seen by the policy promises made by the recently elected Greek Prime Minister, Kyriakos Mitsotakis, who became in charge of Greece on the 7<sup>th</sup> of July 2019. It has been made clear that a large and important part of his electoral manifesto is to improve the institutional quality of the country. Some of the actions that he will take is to critically evaluate public employees' performance, to increase and improve the police force and to reduce bureaucracy by converting from traditional methods to electronic. Someone could contemplate whether such changes are truly important, given the state of the economy, which lead to the formation of the research question of this essay.

*Research Question:* Should the improvement of the quality of institutions be one of the primary priorities for the Greek government, given the limited budget available?

This literature review aims to combine findings from the institutional literature with findings from the underground economy and corruption literature, both of which significantly impact the Greek economy (Katsios, 2006). The

cardinal goal is to shed light in potential areas for policy improvement in Greece.

The first section analyses the various ways through which institutions affect growth. In the second section, the essay focuses on the effect of the shadow economy and corruption on the overall economy. Then, in the third section the difficulties that arise when making institutional policy recommendations are explained and potential policy implications for Greece are analysed. Finally, the last section concludes.

## 1 Institutions

### What are institutions and how are they operationalised?

The usage of the term *institutions* has become very popular in economic literature in recent years. North (1991), one of the most recondite and influential scholars on institutional economics, defined institutions as: “the humanly devised constraints that structure political, economic and social interaction”. He explains that they can be divided in two categories – formal and informal. On the one side, formal institutions consist of laws and regulations that people explicitly subscribe to. On the other side, informal institutions include norms, conventions, trust, traditions, and are the rules which are not explicitly written down. He further explains, mainly through a game-theoretical perspective, that they are responsible for the existence of economic, political and social incentives, necessary for human exchange.

Williamson (2000) proposes an alternative way to categorize different types of institutions. His explanation categorizes institutions in four levels according to their purpose and the amount of time needed for institutional change to take place. In the first level he includes primarily informal institutions such as traditions, norms, customs and religion which take approximately 100 to 1000 years to change. In Level 2, less embedded institutions (10 to 100 years to change) are included which he calls as the formal rules of the game – property rights, polity, judiciary and bureaucracy. Level 3 is about institutions with

embeddedness of 1 to 10 years aiming to align the government structure with transactions, especially via contracts. Finally, institutions that optimize resource allocation by aligning incentives (e.g. prices and quantities) are in Level 4 and they change continuously.

It is an undeniable fact that defining the term institutions has been an arduous task. Nevertheless, operationalising the term is even more onerous since it is truly unobservable. There is a surfeit of indices used in the literature as a measure of institutional quality. One amongst them, which has rapidly been gaining popularity since it was first published in 1996, is the index published annually in the Economic Freedom of the World (Gwartney, Hall, Lawson, & Murphy, 2018). This index measures the extent to which economic freedom – personal choice, freedom to enter markets and compete, voluntary exchange, and security of the individual and privately owned property – is supported by a country’s policies and institutions. For a country to acquire a good score in this index it needs to have secure protection for private property, an equitable and stable legal system, fair enforcement of contracts for all, and a stable monetary environment which is friendly for both domestic and international trade.

Estimating the effect of institutions on growth has been a challenge for scholars because of endogeneity and reverse causality that make simple Ordinary Least Squares (OLS) regressions ineffective. On the one hand, endogeneity is caused because the explanatory variable (institutional quality) is correlated with the error term when the dependent variable is growth. This problem is particularly onerous to overcome because it is difficult, if not impossible, to control for every possible variable that might influence both growth and institutional quality. On the other hand, reverse causality arises because even though better institutions might cause larger growth, it is possible that larger growth causes the development of better institutions.

To overcome these obstacles, some researchers have come up with innovative instruments and used them in Instrumental Variable (IV) regressions, which has allowed them to causally

interpret the results. For example, Acemoglu, Johnson, and Robinson (2001) used as an instrument the rates of European settlers' mortality during the colonization era. They explain Europeans were more likely to set up extractive institutions in places where they faced high mortality rates and that the quality of institutions in the time of colonization is likely to persist, to a high degree, until the present time. Similarly, Hall and Jones (1999) use the geographical and linguistic characteristics of an economy as instruments. In more detail, they use the distance of a country from the equator, the share of the population that speaks English and the share of the population speaking any other of the five main Western European languages (English, French, German, Portuguese, and Spanish) to proxy for the quality of institutions. Finally, Engerman and Sokoloff (1994) use as an instrument the initial factor endowment – the amount of land, capital and labour owned by a country that can be exploited for manufacturing – faced by settlers in each area during the period of colonization.

### What are the effects of good institutions on the economy?

Institutions influence the behaviour of individuals which then impact growth. As Von Neumann and Morgenstern (1944, p. 11) said “If two or more persons exchange goods with each other, then the result for each one will depend in general not merely upon his own actions but on those of the others as well”. Since institutions influence the behaviour of individuals who exchange goods and services continuously, there is an obvious link between institutions and growth. Numerous studies have been conducted in an attempt to prove this and explain in more detail the indirect ways that growth is influenced by institutions. This section will focus on how institutions influence growth through *property rights, Foreign Direct Investment (FDI), corruption, social cohesion, productivity and trade*.

First, Leblang (1996) finds that nations with stronger **property rights** have higher growth rates. He explains that property rights are responsible for the measurement of assets, the

enforcement of contracts and the monitoring of activity, all of which determine the efficiency of conversion of factor inputs to outputs. In addition, he explains – from a game-theoretical perspective – that property rights shape the environment of repeated exchange, information collection and incentive alignment and thus allow for more optimal allocation of resources. Stronger property rights stabilize behavioural expectations of others, which effectively means a reduction of risk and therefore higher market efficiency. Likewise, Knack and Keefer (1995) find that institutions that protect property rights have higher growth and investment rates.

It is an undeniable fact that there is a general consensus amongst scholars that better institutions have a positive effect on **FDI** (Daude & Stein, 2007); Gani, 2007). FDI are investments – excluding portfolio investments where only a firm's equity is purchased – made by individuals or firms in one country into business opportunities of another country (Chen, 2019). Buchanan, Le, and Rishi (2012) find significant results on this issue and prove that institutional quality is strongly associated with FDI volatility which may have an unfavourable effect on growth. Their results imply that having an efficient macroeconomic environment is not enough for a country to flourish, unless it is supported by effective institutional reform. Moreover, Daude and Stein (2007) also find that poor institutional quality can preclude FDI because it can act as a tax and increase uncertainty, both of which are unfavourable for investors. Finally, Gani (2007) finds a strong positive correlation amongst corruption control, regulatory quality, rule of law, political stability and government effectiveness with a country's FDI.

In particular, FDI can have various *spillover* effects on the domestic economy of a country. First of all, Lu, Tao, and Zhu (2017) use as an instrument the relaxation of the FDI regulation in 2001 in China's World Trade Organization and include it in a difference in difference regression which allows them to estimate and explain the spillover effect of FDI and the effect on domestic firms. They find that FDI has a significantly negative effect on the productivity of domestic firms of the same industry (horizontal FDI).

However, they also find a positive effect of horizontal FDI on firm survival and wage rate. Even though these latter findings might seem counterintuitive when compared with the negative domestic firm productivity finding, the authors provide logical reasons of how such a combination of findings can be explained. However, Liu (2008) focuses on whether FDI generates spillovers that benefit domestic firms in the host country. Overall, he finds that external benefits associated with FDI in terms of productivity gains accruing to domestic firms are positive and substantial. Therefore, the overall spillover effects on the domestic economy and specifically on the domestic firms seem to be positive, rather than negative.

Moreover, institutions affect growth rates through **corruption** levels (Mauro, 1995). Also, (Wei, 2000) supports this finding by showing that increasing the tax rate on multinational firms or corruption levels both reduce inward FDI and thereby limit growth. To signify the importance of corruption he finds that an increase of corruption level from that of Singapore to that of Mexico would be equivalent as raising the tax level by 18%-50% depending on the model specified. Corruption, unlike taxes, is not transparent and embeds uncertainty and arbitrariness which discourage investments and thus growth. It is important to note that even though corruption is deleterious to growth, it may be beneficial for a country to allow some level of corruption instead of an unqualified eradication since preventing corruption is costly (Acemoglu & Verdier, 1998). That's because it is only worth to reduce corruption if the marginal benefit of the reduction outweighs the marginal cost. Furthermore, despite the size of the literature on corruption and the heterogeneity in findings, the overall conclusion is that corruption does have a negative effect on growth and undermines the positive impact of institutions on growth (Campos, Dimova, & Saleh, 2010; Ugur, 2014).

Another path through which institutions influence growth is **social cohesion**. Even though it is a difficult concept to define and requires a lengthy explanation, a simple way to think about it is as the sum of peoples' willingness to cooperate in society. Having institutions that

promote social cohesion by allowing individuals to trust each other and operate in an environment of order and little uncertainty can induce higher growth rates (Stanley, 2003). In addition, Easterly, Ritzen, and Woolcock (2006) also find evidence for the effect of social cohesion on growth. Intuitively, people who live in an environment of trust can pursue more business opportunities. For example, an individual with an innovative idea can discuss with other people how to ameliorate it and put it into practice without being afraid that the other people will take advantage of him and steal his idea. As Surowiecki (2005) explains in his book, groups can usually make better decisions than an individual as long as they don't all have very similar backgrounds. He explains that the aggregate of peoples opinion on a topic can most of the time be more accurate than the opinion of a very intelligent individual. Thus, social cohesion allows for people to cooperate and use their collective intelligence to pursue better and more profitable business opportunities which can then lead to higher growth.

Additionally, it has been proven that institutions have a positive effect on **productivity** and thereby growth. Dawson (1998) finds that institutions have a direct effect on Total Factor Productivity (TFP) – TFP measures the efficacy of inputs in the production process and is usually higher because of technological progress. Also, Sobel (2008) finds evidence of higher productivity of entrepreneurship because of better institutions. Specifically, he demonstrates that countries with better institutional structures have higher rate of patents and venture capital investments per capita, as well as higher establishment birth rate. The intuition is that these countries allow entrepreneurs to pursue productive activities rather than wasting their money and skills in unproductive political and legal activities (such as lobbying and ceaseless lawsuits). Finally, Hall and Jones (1999) find evidence in favour of the hypothesis that better institutions promote growth through higher rates of productivity.

**Trade** – arguably the most important part of a country's economy – is also influenced by the quality of institutions. Dollar and Kraay

(2003) find that trade and institutions both play an important role for growth in the long run but that institutions have only a moderate effect on growth in the shorter term relative to trade. More recently, Álvarez, Barbero, Rodríguez-Pose, and Zofío (2018) find support for the effect of institutions on trade, regardless of the difference in the quality of institutions between the importing and the exporting country. However, they explain that the numerical coefficient they find for the effect of institutions on trade is lower than those of labour export competitiveness, price levels at destination and market share. A notable exception, where institutions displayed the largest coefficient is the agricultural sector which has important policy implications for countries relying heavily on that sector.

Even though scholars seem to have reached an intellectual consensus about the causal link between institutions and growth; Glaeser, La Porta, Lopez-de Silanes, and Shleifer (2004) suggest that researchers should focus on studying actual laws and compliance procedures, which can be *amended* by policy makers, instead of focusing on conceptually ambiguous assessments of institutional outcomes. However, the authors make explicitly clear that their results do not mean in any sense that institutions do not matter.

## 2 The Shadow Economy and Corruption

As explained in the previous section, it has been firmly established within the economic literature that institutional quality is correlated with corruption. Katsios (2006) explains that corruption and the shadow economy are strongly linked. He suggests that this link arises because in some countries, especially in the south-eastern Europe, it is both difficult to find connections with bureaucrats and unaffordable for individuals to bribe them so individuals who are unable to resort to corruption join the shadow economy. This link is the reason why corruption and the shadow economy will be considered simultane-

ously in this section. In order to reduce either one of them, a policy-maker will need to take them both into account.

The economic literature has identified several potential causes for the shadow economy including the burden of tax and social security contribution, the quality of institutions, corruption, regulations that reduce freedom of choice (e.g. labour market regulation and trade barriers), the quality of public sector services, the tax morale of citizens, the effectiveness of deterrence policies, the development of the official economy, unemployment, self-employment, the size of the agricultural sector, the popularity of cash and the share of labour force (Schneider & Buehn, 2018).

Corruption and the shadow economy can have several effects on a country's economy. First of all, Del Mar Salinas-Jiménez and Salinas-Jiménez (2007) use a sample of OECD countries and find that corruption affects TFP growth and countries with lower levels of corruption record faster growth rates on average. They also, suggest that to minimize corruption it is necessary to increase government's transparency and accountably. Secondly, González-Fernández and González-Velasco (2014) investigate the link between shadow economy, corruption and public debt in Spain and find a significant relationship for both, although the impact of corruption was lower than that of the shadow economy. In addition, Cooray, Dzhumashev, and Schneider (2017) find support for these findings by using several regression techniques with data from 126 countries on a 16 year time-span. The authors also find that the size of the shadow economy has a negative correlation with tax revenue and thus increases public debt. They propose that, since there is complementarity between corruption and the shadow economy, reducing either one of them can be very beneficial. To achieve that, instead of increasing institutional quality which might be very time-consuming, they propose a shift of government spending away from programs prone to corruption to programs that can be effectively regulated.

Furthermore, Elgin and Uras (2013) use panel and cross-sectional datasets and find that a larger shadow economy is correlated with rela-

tively higher interest rates charged on sovereign debt, higher level of country financial instability, higher debt and higher probability of sovereign default. The policy they propose is for a nation to improve its tax and law enforcement, lowering its income taxes and implementing policies towards lower unemployment. Finally, Din, Habibullah, Baharom, and Saari (2016) assert that there is a long-run negative correlation between the size of the shadow economy and tourism. This finding is particularly interesting for countries, such as Greece, that depend heavily on the tourism industry.

Despite all these effects, the shadow economy can be particularly detrimental for a nation because it can create a vicious feedback loop. A large shadow economy not only hinders growth, but it also distorts the intended effect of government policies. When a policy maker needs to increase the budget surplus he/she can either cut-down on spending, raise taxes or try to boost the economy.

First, by trying to boost the economy, and as long as the size of the shadow economy does not increase proportionally, the budget surplus can increase due to the higher tax revenue that will be collected. The problem is that the effects of such a policy might take a long time until they appear, which means that a country needs to consider carefully where to spend its money.

Second, cutting-down on spending is many times not a realistic option because it can cause or worsen stagnation in an economy. For instance, when a government stops spending money on infrastructure, people who used to work in such projects will now become unemployed. If unemployment rate is sufficiently large, these people will not be able to find a new job and will be thus forced to spend less. This in-turn implies that tax revenue will be lower which renders the effect of reduced government spending on budget surplus ineffective.

Finally, increasing the tax level, in a case of a country with weak institutions, can lead to a further enlargement of the shadow economy. Increasing the tax level induces more individuals to perform undeclared activities since the profitability of joining the shadow economy increases while the risk of getting caught

remains the same as before. *Equation 1* can help explain such a scenario more intuitively. In this simple equation, it is assumed that the satisfaction individual “i” receives from avoiding taxes is  $x_i$ , that the dissatisfaction he/she receives from getting caught is  $y_i$  (where  $x_i$  and  $y_i$  are some positive number), that the probability of getting caught performing illegal activities in the shadow economy is  $p_i$ , and his/her expected utility is  $E[U_i]$ .

$$E[U_i] = x_i - p_i y_i \quad (1)$$

Evidently, every individual  $i$  with a positive expected utility will join the shadow economy. The problem arises since increasing the tax level means that the utility received by an individual from avoiding taxes ( $x_i$ ) increases. Therefore, some individuals that previously did not find it profitable to join the shadow economy will now find it beneficial. These adverse and distortionary effects of increasing taxes can be avoided by improving the quality of institutions. Such an action will increase the probability of an individual getting caught performing illegal activities in the shadow economy ( $p_i$ ) and therefore reduce the number of individuals who find it profitable to participate in the shadow economy, thereby increasing the tax revenue. However, two problems arise with this solution. First, even though it may seem like a simple task, improving the quality of institutions can take a long time and a country with a large public debt might suffer from insolvency by then. Secondly, it might have the inauspicious effect of inducing the stagnation of the economy, and thereby reducing tax revenue. Acemoglu and Verdier (1998) suggest that for some countries it might be optimal to leave a certain level of corruption because of the costs needed to prevent it. The theory that underlies this conclusion is that corruption can have a *greasing* effect on the economy when there is a malfunctioning institutional system (Leff, 1964).

### 3 Policy Implications for Greece

#### Difficulties

Having described numerous ways through which corruption and the shadow economy impact a country's economy and in combination with the literature review on institutions in *Section* , there are some areas that a policy maker needs to pay attention to. However, one obvious difficulty of making policy recommendation in this topic is that the shadow economy is very difficult to measure accurately, since by its nature it is hidden and unrecorded. This causes problems with accurate policy evaluations and deciding what the best one is for a situation. Many scholars have tried to measure accurately the actual size of the shadow economy. For example, Bhattacharyya (1990) estimates the size of the shadow economy in the United Kingdom by using the amount of currency in circulation relative to GDP. More recently, Orviská, Čaplánová, Medved, and Hudson (2006) estimate the size of the shadow economy for the Czech Republic and Slovakia using cross-sectional data on individuals' survey responses. More recently, Medina and Schneider (2018) estimate that the size of the shadow economy in 2017 for Greece was 21.5% of GDP, while the average from 1991 to 2015 was 27.06%. Even though 21.5% is below its 25 year average, it certainly does not mean that there is no need for change. It is still a very large number which causes some law-abiding citizens to carry an excessively heavy tax burden.

A further complication, as Pickhardt and Prinz (2014) point out, is that most studies on tax-evasion do not differentiate between the kind of person/organization engaging in tax-evasion or between the type of tax (VAT, income tax, property tax or any other type). They also indicate that trust is essential for cooperative tax behaviour by individuals. The authors suggest that authorities should not exhibit a distrustful attitude against law abiding individuals (by implementing very strict tax enforcement laws

against them) because this will have the adverse effect of reducing tax-compliance amongst individuals who were voluntarily abiding the law. Moreover, another problem arises because of the heterogeneity amongst citizens of different countries and the state of their economy throughout time. Just because a policy had a certain effect in one country, it does not mean that it will have a similar effect in another country. Therefore, because of all these obstacles, making accurate and confident policy recommendations is virtually impossible.

#### The current situation in Greece and implications

According to Gwartney et al. (2018), in 2016 Greece ranked 107<sup>th</sup> out of 162 countries in terms of economic freedom. This index effectively measures the extent to which a nation's policies and institutions allow individuals to freely make their own economic decisions. It is important to note that in 2016, Greece ranked 143<sup>rd</sup> in terms of court impartiality, 106<sup>th</sup> in terms of protection of property rights, 136<sup>th</sup> in labour market regulations and 124<sup>th</sup> in terms of regulations in general. The reliability of these rankings is undisputable and unfortunately for Greece, this means that the country's institutional quality is amongst the worst in Europe and in the 3rd quartile of the World. In addition, according to the World Justice Project (2019), in 2019, Greece ranked 21<sup>st</sup> out of 24 EU, EFTA and North American countries. Particularly important is Greece's deficient performance in terms of unreasonable delays and effective enforcement of civil law. On the bright side, this also implies that there is a lot of room for improvement.

Kyriakos Mitsotakis (the new Greek prime minister) has promised to perform an evaluation of public sector employees. This will probably help increase the efficiency of the public sector, productivity and reduce bureaucracy, all of which can be beneficial for the country. Also, he has promised to increase the police force which can help establish a more stable and safe environment. Nevertheless, there are many more areas that could benefit from reform.

First, due to the state of the Greek economy in the past 10 years, a large part of the population does not have the economic affluence to engage in lengthy court rulings. It is therefore necessary to improve the legal system, and especially the civil justice system which has been performing poorly (World Justice Project, 2019). An effective enforcement of civil law can encourage people to take part in economic activity which can boost the economy, without having to worry so much about being treated unfairly – a risk which can make them go insolvent. The business sector is likely to flourish under an efficient legal system as more people will be willing to pursue business opportunities expecting that they will not be deceived or treated unfairly by anyone. As explained in *Section* , a better legal system can improve property rights, increase FDI and productivity which can all increase growth. The reduced risk that people need to hedge against and the ability to allocate their resources on more productive activities, rather than unnecessary ones, can increase the efficiency of a country's economy significantly.

Secondly, the size of the shadow economy is another topic that deserves more attention. The large underground economy could explain both the poor quality of public services and the general consensus amongst Greek people that taxes are too high, since the formal economy is taxed at a higher rate. Increasing the frequency of audits can be very beneficial for the economy as, if the probability of a person getting caught for being part of the shadow economy increases, more people will abide the law. Also, targeting the audits on specific groups of people can be very salubrious for the economy. The audits should not be targeted at people who are part of the shadow economy just because they can't subsist otherwise as the welfare effects will be detrimental in such cases. Furthermore, even though it may seem unnecessary, it should be made clear that audits will not be targeted at law-abiding citizens. That's because the existence of discretion can cause law-abiding citizens to lose their intrinsic motivation to act properly (Pickhardt & Prinz, 2014). It may even be optimal, taking into consideration the relative stagnation that has existed in the Greek economy for the

past 10 years, to avoid auditing citizens below a certain income level, even though they might engage in illicit activities. The reason behind this argument is that a large part of the economy depends on the informality of transactions. For example, a student that takes private lessons at home and pays his teacher 30 € per hour (as part of the shadow economy) might be unable to afford a lesson that costs 37.2 €, which is the cost of the same lesson but includes the 24% VAT. The teacher will then be forced to limit her spending and thus cause the economy to stagnate further.

Furthermore, another policy that could prove to be effective is to increase both the fine for those caught having taken part in undeclared economic activity, and the publicity received by this topic. By increasing the cost and fear of getting caught more people will be reluctant to engage in such activities. To increase publicity, the government could regularly publish reports on the effectiveness of its policies against the shadow economy and corruption. The Prime Minister could also discuss this topic whenever he is giving a public statement to the media or making an appearance on TV such that the citizens realize that the government has committed to reducing the size of the shadow economy. Such actions have been used several times in the past by the authorities and government institutions in order to show the public that they intend to commit to something. For instance, in 1990, William Bratton, who was appointed chief of the New York City Transit Police when crime rate in the city was prodigious, instructed police officers to leave arrested fare-beaters (one of the main problems at the time) standing at the platform in handcuffs for some time (Gladwell, 2000). The intend was to send a signal that the police was not going to tolerate any form of crime from now on. Activities that signal a credible commitment to an action, from a game-theoretical perspective, can be welfare enhancing both from the side of the government, and the general public. Therefore, one of the outcomes of attracting public attention to the efforts and accomplishments of authorities on audits, will be that people who do not *need* to take part in the shadow economy for their



subsistence, will be more reluctant to do so.

Additionally, the government could attempt to tackle issues that seem of secondary importance, such as removing graffiti from buildings, checking if people have a valid ticket when using public transport, enforcing the non-smoking rules in closed spaces, etc., as such policies do not cost a lot and can have a much larger effect than expected. As Gladwell (2000) explains in his book, people are heavily influenced by the immediate context, their surroundings and the personalities of those around them. Incremental alterations in the context can incite significant changes in other aspects. For example, as Darley and Batson (1973) show, when students in an experiment were told that they were going to be late for a meeting, they were less likely to help someone in need. Another case that shows how important context and surroundings are for how people behave in society is that authorities in New York focused on repainting walls that had graffiti on them between 1984 to 1990 in an attempt to tackle crime (Gladwell, 2000). Similarly, the Greek government could commit to fixing seemingly harmless issues that appear to be of secondary importance in order to improve the context, the surrounding and the way people behave, which in turn can help boost the economy.

It is evident that the policies proposed are not particularly costly to implement which can allow Greece to simultaneously achieve the required 3.5% budget surplus target. However, the effect of these policies might take a long time before they can be actually perceived by individuals. Also, due to the nature of the shadow economy, it might be difficult to realise if its size is actually diminishing, which can be discouraging for policy makers.

## Conclusion

This paper argues that the improvement of institutions should be in Greece's top priorities. The benefits of institutional growth have been firmly established in the economic literature and the results hold not only for developing nations, but also for OECD countries. Institutional quality influences growth by increasing FDI, productiv-

ity, trade and social cohesion; improving property rights; and reducing corruption and the shadow economy. The link between institutions, corruption, the shadow economy and growth has been firmly established by several scholars and it is particularly important for Greece due to the large available room for improvement. Both the legal system and the audit services could be amended in many ways, without needing to spend excessively large sums of money. Also, this paper contends that it could be beneficial for the government to signal its commitment on the improvement of the institutional quality and to focus more on improving the context and surroundings that people live in. Seemingly irrelevant details, such as the possibility to use public transportation without a valid ticket and not get punished or the existence of inappropriate graffiti on buildings can have much more profound effects on society than expected. However, the outcome of amendments in these areas, as is the case with most other ways that can improve the quality of institutions, will probably not be immediately realised. Several years will be needed before visible signs of improvements arise, which can discourage short-sighted policy makers from pursuing such policies.

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