Thinking about Corruption in Greece

by

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Abstract

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The paper addresses the issue of corruption, which appears to be endemic in Greece. It reviews the facts about corruption as a multifaceted phenomenon and its close relationship to tax evasion, by comparing Greece to its EU partners as well internationally. It addresses corruption as an instance of anti-social behavior by means of a number of simple metaphors that allow reliance on powerful tools of modern social interactions and property rights literatures. It emphasizes that whereas tepid enforcement might reduce somewhat corruption and other instances of anti-social behavior, drastic enforcement is required to move an economy and society to qualitatively different levels of such practices. The paper reviews different EU proposals regarding enforcement mechanisms and proposes three key constitutional amendments that are required to allow long-delayed reforms to take hold in Greece.

Keywords: Bribery, compliance, constitutional amendments, corruption, corruption perception index, economic growth, fiscal deficits, games, multiple equilibria, public goods, tax evasion, trust, whistleblowing,
1. Introduction

The Great Recession put a spotlight on the facts that show that corruption is an endemic problem in Greece. Other data on corruption, collected from extensive surveys and other sources, are summed up in Section 2. To start with, we note that the Transparency International Corruption Perception Index\(^4\) places Greece at the very bottom of the EU 28 countries; and 99% of the Greek respondents in a recent European Commission Eurobarometer survey (European Commission, Anti-Corruption Report, 2014) think that corruption is widespread in their country. The key questions are why Greek society appears to tolerate so much corruption, and what can be done to control it. To deal with the first question we propose to look at ideas from economic theory and political science which explain why and how individuals choose to seek bribes and engage in various forms of expropriating income from others. The second question takes us into a review of the policy recommendations made by the European Commission and others seeking to discourage corruption in Greece.

Greek citizens may experience corrupt practices at varying degrees, and such experiences may feed perceptions that “corruption is tolerated” and that “corruption pays.” Is there a link between widespread
perception of corruption and actual corruption? How do perceptions of corruption lead to actual corruption? It is interesting to pose this question in two different ways. One approach is to think of corruption as a tax on legitimate economic activity, that is, the wages and capital income earned by productive members of society. Perceptions of widespread corruption are equivalent to a high corruption tax which leads many citizens away from legitimate work and encourages more corruption. Another way to approach this problem is with the modern tools of the social interactions literature [Brock and Durlauf (2001); Durlauf and Ioannides (2010); Ioannides (2013), Ch. 2] in order to examine whether and under what conditions behaviors such as corrupt practices and widespread tax evasion can emerge as individuals interact within common social settings. It different occupational groups have different exposure to corrupt practices and in varying degrees, then the incidence of corruption will vary across the population. In such analyses, requiring self-consistency (in the sense that the extent of corruption that the typical individual expects to prevail actually does prevail) leads in general to equilibrium outcomes in which corruption can be widespread, moderate, or rare.

Corruption is defined by Transparency International as the “abuse of entrusted power for private gain.” While we emphasize this sense of corruption, which typically involves state action, we see it as an instance
of a range of related anti-social practices, which notably also includes tax evasion. This is of course literally corruption if tax evasion is aided and abetted by tax officials, which is widely reported to be rampant in Greece.\textsuperscript{6} Corruption and tax evasion are both instances of antisocial behavior. Antisocial behavior is probably present in all societies all the time, but its incidence varies across population groups within a particular society and across societies. From a practical policy viewpoint, the interesting question is how can economics, and social science more broadly, help inform policy design.

The next section reviews briefly some facts about corruption in Greece as background for the remainder of the exposition. Then we discuss a number of palpable facts about Greece involving tax evasion and corruption.

From a pragmatic point of view the key issue is what can be done about corruption and tax evasion. If expectations facilitate actual corruption, how do we change social perceptions of corruption and related practices? How do we persuade the public not to expect the worst? Although this is stated very loosely, complementarity between individual and collective decisions provides the basis for multiple equilibria, some of them corresponding to higher levels of social welfare than the others. The paper discusses ideas about what drives corruption and what stops it. The
ideas are rooted in economics and social science but are explained here in less formal language. Inducements against corruption include a variety of measures, some of them suggested by the European Union, others by Christopher Pissarides and ourselves in op-ed writings. For example, can social media and the web be used constructively in changing attitudes? Recent experiences with web-based organizing may provide some evidence of the extent and scope of social media in reaching individuals, leading the increase in awareness of the severity of the crisis and a lessening of a popular urge to search for obvious scapegoats. The thought of using social media to “shame” individuals and public officials has in fact taken hold. Another example is whistleblowing (like recent revelations of widespread wiretapping by the NSA in the United States) which can serve as a policy tool in order to help an economy move from a bad to a good equilibrium. In this endeavor, assistance from institutions like the Office of the Ombudsman in Greece can play a helpful role. Also, design of policies can draw from the sociology literature on the intensity of “strength” of links among peers across different cultures to understand the importance of peer pressure in Greece, etc. There is also a critical need for reconsidering the values inculcated by parents and schools. Are we teaching young people the right things?
2. Corruption in Greece and the EU

There is a growing body of information about corruption and tax evasion especially from various sources, especially the recent surveys conducted on behalf of the European Commission, and from regular annual reports from Transparency International. Taken in 2013, one of these surveys measure business attitudes towards corruption, published by the Eurobarometer; another is a Europe-wide anti-corruption report with annexes for each EU member country. These are particularly helpful because the data are of uniform quality. All the numbers reported for Greece are the highest among the EU 28 nations.

INSERT TABLE 1 HERE

Caption: Percent of Business Respondents Agreeing that the Following Take Place

These data are consistent with the information collected by Transparency International and by the World Bank. Transparency International ranks Greece at the bottom of the EU 28 for perceived corruption (see Figure 1), and the World Bank Doing Business Report has listed the country at around the 80th place among 185 countries for ease
of doing business for several years until an improvement to the 36th place occurred very recently.

**INSERT FIGURE 1 HERE**


International agencies point out that Greece has not implemented the OECD Anti-Bribery Convention which requires lobbyists to register with the government and to report contacts with public officials. The weak finances of Greek mass media have detract from their normal mission of exposing government corruption or safeguarding the public interest (Eleftheriadis, 2012). Greek law and constitutional rules require parliamentary approval before prosecutors can investigate or bring to trial any members of Parliament or serving government ministers without parliamentary approval. Even with such approval, the actions of current or past ministers are protected by statutes of limitations that expire within one year of the alleged misconduct. Malfeasance by politicians or civil servants seldom leads to punishment. A grand total of only 91 civil servants have been dismissed for bribery or corruption from the beginning

Closely related to corruption is the phenomenon of tax evasion because it is reported to involve large-scale bribery of public officials. Using micro data supplied by a large private bank, Artavanis, Morse and Tsoutsoura (2012) estimate unreported income in 2009 to be at least 10% of GDP and 30% of the government budget deficit. Matsagganis, Leventi and Flevotomou (2012) give alternative estimates based on Greek tax returns and on the EU Survey of Income and Living Standards conducted from 2006 to 2010. They find that the self-employed persons report on average only 60% of their actual income and farmers only 20%.

Two additional facts are worth mentioning. First, income tax evasion in Greece is facilitated by its extensive informal sector, which was estimated at 27.5% of GDP for 1999—2007, larger than any other EU country [Schneider (2012)]. Second, like income, the value-added tax is also evaded. IMF (2012) reports that the VAT gap in Greece in 2006 was 30%, compared to a EU average of 12%. VAT evasion too is facilitated by the extensive informal sector.

Corruption and tax evasion are two types of antisocial behavior which appear to be deeply rooted in Greece. Economists have recently made progress in understanding their origins, and such understanding
might be helpful in thinking about how to combat them. Papaioannou (2011) in his “Civic Capital(ism)” TEDx Talk did an excellent job of identifying some issues about proximate versus deep causes of the Greek crisis. Focusing on the ultimate role of social values and lack of civic capital as deep causes, Papaioannou sees legal institutions, property rights ambiguities, regulation, and protection of investors as generally determining the “rules of the game”. Behind all that, the deciding factor is trust, an essential part of civic-social capital. Phenomena like blood donations, propensity to evade taxes and willingness to pollute the environment are important proxies for civic capital. Many studies show that distrust is negatively correlated with income per capita and positively correlated with corruption.

Algan and Cahuc (2014) offer numerous tabulations of measures deriving from the World Values Survey, the European Values Survey (1981-2008) and the Afrobarometer (2005). The key variable used is the answer to the question: “Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?” Trust is recorded as 1, if the respondent answers “Most people can be trusted,” and 0, otherwise. Average trust levels over the study period, tabulated in Figure 2.1b, ibid. p. 64, reprinted below as Figure 2, place Greece below all other EU countries, except for Malta, Croatia,
Malta, Slovenia and Slovakia, and numerous non-EU countries. Relative to Norway, which ranks highest, and holding individual characteristics constant, the fact of living in Greece rather than Norway reduces trust by 51% (ibid., Figure 2.4, p. 69). Data show that generalized trust is an important contributor to economic growth. Algan and Cahuc also show that trust has a stronger effect on growth in poor countries that lack credit markets and appropriate rule of law.

INSERT FIGURE 2

Caption: Average trust levels in 111 countries

Trust is negatively correlated with the prevalence of labor market regulations (ibid., Figure 13), and with inequality, as measured by the Gini coefficient (ibid., Figure 16), positively correlated with the quality of the legal system (ibid., Figure 14), and with life satisfaction (ibid., Figure 19).

Researchers have used numerous variables, reported across many countries by the Social Values Survey, to measure social capital. Even within countries like Italy, local variations of blood donations are positively associated with the likelihood that corrupt politicians will be punished. Teaching practices at school and parenting practices at home are at the heart of trust creation. For example, Algan and Cahuc (2014), Figure 18,
and Algan et al. (2013), Figure 3 show that the greater the gap between "vertical and horizontal teaching," that is, teachers lecturing to students versus students working in groups, the smaller the generalized trust, and Greece is an outlier in the wrong direction. Examining the consequences of values inculcated at home shows that a distrust index is negatively correlated with the importance parents assign to children's being taught "tolerance and respect:" Aghion, Algan, Cahuc and Shleifer (2010) Fig. 28, show that Greece is an outlier, lowest on tolerance and respect, and highest in distrust.

One question asked of respondents in the Social Values Survey was: “Do you think it can always be justified, never be justified, or something in between to claim government/state benefits to which you have no rights?” Papaioannou (2013), Fig. 16b, shows that Greece is an outlier. While in most countries more than 60% of the population believes that people should never claim social benefits that they do not have a right to, in Cyprus, France, and Slovenia more than half of respondents argued that at least in some instances it is justifiable to claim such benefits." For Greece, the only survey available that includes this question is in 2000. It reports that almost 80% of the population replied that it was justifiable to get benefits from the state that one is not entitled to.
The provision of public goods requires cooperation to achieve socially beneficial outcomes in the presence of free-rider incentives. Voting, paying taxes, fighting corruption, contributing to public goods, teamwork, common pool resource management, recycling, are just some examples where cooperative behavior pays off. These are frequent situations with the common feature that cooperation leads to a group beneficial outcome but is jeopardized by selfish incentives to free ride on others’ contributions.

Hermann et al. (2008) report results from laboratory experiments with public goods games, focusing on a phenomenon that has been largely neglected: People might punish not only free-riders, but cooperators too. For example, in the game participants who had been punished in the past for contributing too little might retaliate against cooperators because cooperators are precisely those individuals most likely to punish the free-riding low contributors. The experimental evidence obtained by these researchers from 16 participant pools with various cultural and economic backgrounds shows that antisocial punishment of prosocial cooperators is indeed widespread in many participant pools. Societies represented in their participant pools diverge strongly according to several widely used criteria developed by social scientists in order to characterize societies.
Hermann et al. report on the following public goods game played by groups of four members: Each member received an endowment of 20 tokens. Participants had to decide how many tokens to keep for themselves and how many to contribute to a group project. Each of the four group members earned 0.4 tokens for each token invested in the project, regardless of whether he or she contributed any. Because the cost of contributing one token in the project was exactly one token whereas the return on that token was only 0.4 tokens, keeping all one's own tokens was always in any participant's material self-interest, irrespective of how much the other three group members contributed. Yet, if each group member retained all of his or her tokens, there were no earnings to be shared, while, each member would earn $0.4 \times 80 = 32$ tokens if each of them invested their entire 20-token endowment.

Two types of experiments, P and N, were conducted and the only difference between the P experiments and the N experiments was that participants in the P experiment could punish fellow group members after they were informed about the others’ investments, whereas the N experiments ended after participants were informed about the other group members’ contributions. A punishment decision was implemented by assigning the punished member between zero and 10 deduction points. Each deduction point assigned reduced the punished member’s earnings
by three tokens and cost the punishing member one token. All punishment decisions were made simultaneously. Participants were not informed about who punished them. Punishments were for both low contributors (free riders) as well as high contributors, which the authors label as antisocial punishment. The results are notable. The Athens pool, made up of samples of Panteion University students, scored lowest, of all 16 cities in the experiment, in terms of the mean contributions to the public good over the 10 rounds of the P experiment. At the same time, the Athens pool scored the second highest in terms of mean antisocial punishment, with mean antisocial punishments and mean contributions per participant pool being very strongly and significantly negatively correlated across all periods. The authors interpret the findings as suggesting that the quality of the formal law enforcement institutions and informal sanctions are complementary. Informal sanctions might be more effective in sustaining voluntary cooperation when formal law enforcement institutions operate more effectively because antisocial punishment is lower in these societies. The detrimental effects of antisocial punishment on cooperation (and efficiency) also provide a further explanation why modern societies shun revenge and centralize punishment in the hands of the state.

3. Good and Bad Equilibria
Let us think about a typical situation where individual welfare depends on the consumption of a private good, of leisure and of a public good. Next add a government that imposes a proportional tax on labor incomes to finance the provision of the public good. To set ideas, it is simplest to think of situations where labor income taxation does not affect labor supply. A benchmark for the analysis is provided by a benevolent government that sets the income tax rate to achieve maximum social welfare by balancing the loss of individual welfare when taxes go up and private consumption declines against the improvement in social welfare from the increased provision of the public good.

To study the impact of rampant tax evasion, we assume that individuals can ignore the official tax rate, and in effect set their own tax rates by recognizing that public good provision has to be financed from tax revenue. Since public goods cannot be financed out of nothing, individuals must decide how they wish to contribute, assuming a given level of contribution by other taxpayers. All others of course act in like manner: they all recognize that they stand to benefit from the provision of the public good at some level and, as a result, each one of them free-rides on everyone else. When people decide how much to contribute, they take as given and beyond their control the amounts they expect the other people will contribute. The resulting level of the public good, that is financed from
the sum total of everyone’s contribution, is lower than what a benevolent
government would bring about by extracting mandatory contributions from
all. This reflects the lack of social coordination which, in turn, leads to an
inferior social outcome.

The inferior social outcome becomes a “race to the bottom”; it is the
outcome of free riding by each individual who contributes in order to
prevent a wholly undesirable loss of welfare to himself, all along assuming
that others will also contribute. The greater the number of other individuals
contributing, the less each one will want to pay. The individually optimal
“voluntary tax rates” sum up to less than what would have been the
socially optimal rate. This is a caricature of a tax system intended only to
underscore a government’s inability to enforce compliance by individuals
with taxes it imposes. Nonetheless, as a way to think about Greece’s tax
problem, it is quite a useful one, as we discuss next.

Implicit in the above description is the idea that each individual’s
optimally chosen “own tax rate” is unique, given the behavior of others.
This does not have to be true in general, and indeed it is likely not to be in
many settings where the social context matters. Suppose that individuals
are conformist, that is, they follow what they expect others to do. Then the
more similar individuals are in terms of their underlying characteristics, the
more likely it is that social factors are decisive in determining choice. In
that case, there could indeed exist at least three equilibria. Any difference in individual characteristics can be overcome by the impact of one’s social milieu, that is by a strong urge to conform to what others are doing. As the social effect continues to strengthen, initially it improves individual propensities to engage in the dominant social behavior. Ultimately, the impact of social norms on individual behavior weakens and may vanish, but there will be some “reasonable “norms of behavior that are self-confirming.

This possibility is demonstrated in Figure 3, where the horizontal axis measures a typical individual’s expectation of the social outcome and the vertical axis measures an individual’s expected outcome. The three different curves A, B, and C picture different sets of fundamentals, which could be consistent with different social outcomes. When expected outcome for an individual coincides with a typical individual’s expectation of the social outcome self-confirming behavior is produced. This is pictured when the 45-degree line through the origin intersects with the respective curve.

INSERT FIGURE 3 HERE

Caption: Multiple Equilibria in Anti-social Behavior
This result may be refined further as follows. When individuals are really different, large fractions of the population will experience large differences in the random factors that determine choice, which will make those factors more important relative to others. Included among the determinants are social effects, that is, the effects on individuals stemming from the perceptions of the actions of others. That will narrow the scope for self-confirming behavior. Curve A corresponds to the situation where non-compliance is inherently more attractive, relative to an individual’s evaluation of the social outcome, and thus non-compliance prevails as the unique social outcome (\(m\_\sim\) for curve A is on the negative half-axis). In such a case, marginal improvement in enforcement, either by means of more audits and/or larger penalties can increase the inherent attractiveness of compliance. However, given fundamentals, they need to be sufficiently powerful to shift the curve to a higher position, like to curve B, and if they are drastic enough to shift it to curve C. Similarly, curve C corresponds to the situation where compliance is inherently more attractive, relative to an individual’s evaluation of the social outcome, and thus compliance prevails as the unique social outcome (\(m^*\) for curve C is on the positive half-axis). This line of reasoning also illustrates that tepid enforcement could lessen non-compliance, like by shifting the curve
upwards but still allowing it to still have a unique equilibrium associated with non-compliance.

If individuals are broadly similar, the social effect is more powerful relative to the other determinants. The social effect at first dominates individual attitudes, then becomes proportional to them, and at the end tapers off. This is exactly the analytical setting that allows multiple self-confirming behaviors in socio-economic systems. This is pictured by curve B, Figure 3, which intersects with the 45-degree line at three points, $m_\sim$, $m$, and $m^*$. We note that such a situation could indeed be the outcome of stricter enforcement, relative to curve A, but still not strong enough to shift it up to curve C, which is associated with compliance as a unique equilibrium. We underscore that it is drastic enforcement that can move the economy from, say, point $m$ on curve B to point $m^*$ on curve C, that is, from widespread to rare non-compliance. This mode of thinking validates, _inter alia_, use of perception of corruption (which underlies the Transparency International Rankings) as an indicator of corruption.

The conceptual framework presented above helps sharpen our understanding of the scope for different policies. Suppose that the high-level outcome is associated with greater provision of the public good. Suppose that the government institutes rewards for those who comply and
punishments for those who do not. How does this change the equilibrium outcome?

So far we have discussed taxation as motivated by the need to finance the provision of public goods. Of course, taxation also finances redistribution and the demand for redistribution is often a justification for larger governments. An interesting literature, of particular relevance to Greece, links bigger governments to more corruption, which in turn raises the support for redistributive policies to mitigate the effects of unequal access to returns from corruption across the population. That is, to the extent that opportunities to engage in corruption and rent seeking are unequally distributed in the population and/or generate wealth that is unequally distributed, a positive feedback from past to present corruption emerges which in turn reinforces persistence of bigger governments. Alesina and Angeletos (2005a) show that under certain conditions multiple steady state equilibria may exist, that are entirely due to the presence of corruption. Thus, political support for redistributive policies intended to reduce inequality can bring about more corruption. Thus once again we see how corruption can beget more corruption, through its link to bigger governments. Ilesina and Angeletos (2005b) explore another source of political support for redistributive policies, namely the extent in which societies are more likely to redistribute wealth when they are dominated
by widespread beliefs that income and wealth are the result of luck, privilege and favoritism. Anecdotally, Greeks do appear to believe in the overwhelming importance of such factors.

4. Tax Evasion

(a) Revenue Losses

Lost tax revenue is a multifaceted issue in Greece [see IMF (2013), June]. Revenue is lost because business activity is not formally declared and registered but operates underground in the shadow economy; because individuals evade taxes; and, because individuals avoid taxes using legal but often unfair means. First, regarding the shadow economy, Schneider and Buehn (2012) estimate it in Greece at an average of 27% of GDP for the period 1999—2010, compared to an OECD average of 20% over the same period. In and of itself, this generates a loss of revenue at around 9% of GDP.

Tax avoidance plausibly due to reliance on ambiguities, loopholes and convenient interpretations that help reduce tax obligations. For example, social security contributions are much smaller for self-employed relative to salaried employees, which increases the attractiveness of self-employment and reduces the average size of business organizations.
Actual VAT and corporate income tax collections relative to the VAT are much lower in Greece compared to the EU average. Undisputed tax arrears reached 56 billion euro at the end of 2012, nearly 90% of annual revenue collection, more than 60% higher than any other EU country except Slovakia. Third, income and VAT tax rates are at the high end among OECD countries.

Audits tend to focus on bookkeeping formalities rather than assessing of tax liabilities, and are generally not as productive because they use limited third party information (like access to bank account information) to detect inconsistencies between declared and actual income and wealth. In spite of high stipulated penalties for tax evasion, the management of audits and administration of penalties when individuals have the option to apply for an amnesty combine to reduce effective tax rates so as to make it attractive for taxpayers to accrue tax liabilities plus interest for amounts owed relative than to borrow at commercial lending rates. Thus, it is cheaper not to declare tax liabilities even if the taxable income is eventually detected.

Corruption in the delivery of public services along with poor quality and excessive bureaucracy combine with social norms of non-compliance to generate widespread tax evasion. Furthermore, the glaring inability of the government to pursue tax evasion by particular groups of the
population feeds into the public perception of an unjust tax collection system. Specifically, salaried employees have fewer opportunities to evade audits than otherwise similar self-employed professionals and pay more in taxes.

(b) Whistleblowing and Whistleblowers

Whistleblowing is defined as deliberate acts by individuals with access to privileged information to reveal wrongdoing by persons or organizations to outside authorities for the purpose of preventing or limiting wrongdoing by private and public entities. Whistleblowing is increasingly being recognized as an effective tool against corruption that helps maintain the rule of law. Nonetheless, in spite of the obvious contribution to the public interest, whistleblowing is often very costly to whistleblowers. Protection of whistleblowers is in its infancy in Greece. It is often practiced with assistance from investigative journalists, and for that reason, it could be misunderstood as promotion of special interests by press organizations. A review of the legal status of whistleblower protection in Greece [see Transparency International Greece (2013)] shows that Greek laws do provide for some protection against retaliation, but whistleblowing is weakly protected by confidentiality rules and certainly does not enjoy full
protection. The report also offers anecdotal evidence according to which some instances of egregious wrongdoing in connection with illegal wiretaps of politicians and with defense systems procurement could have been fully investigated, if whistleblowers had been more adequately protected.

(c) Explaining Tax Evasion via Social Interactions

Individuals’ attitudes toward tax evasion are shaped by social forces.¹⁴ Still, there is remarkably little research on tax evasion along such lines¹⁵, and virtually no empirical research with actual data. Notable among existing research are the following; Fortin et al. (2007), Kaplanoglou and Rapanos (2013), and Llacer et al. (2013). Fortin et al. (2007) allow for social interactions in the standard model of tax evasion by Allingham and Sandmo (1972) by introducing a social effects term into individuals’ utility functions. Specifically, their model includes an individual’s subjective expectation of the average tax compliance (as measured by reported incomes) of the other members of the individual’s reference group. Thus, taxes paid reflect both the difference between an individual’s and the group tax rates and the respective difference in the audit probabilities.
They find fairness effects in term of horizontal equity: for a same before-tax income, those with higher than mean group tax rate evade more in order to restore equity.

Interestingly, support for horizontal equity concerns is also obtained by Llacer et al. (2013). Simulations with their agent-based model using Spanish data shows stronger tax evasion than other estimates for Spain, unless deterrence is set at unrealistically high levels. This suggests an important role for deterrence (via audits and fines), a feature that is absent from standard formulations of social interaction effects.

Kaplanoglou and Rapanos (2013) report results with an experimental study, where 350 volunteers, recruited from among undergraduates at the University of Athens, were assigned to four hypothetical settings where they were told they lived in a fictitious country run by a high (alternatively, low) trust government and where tax authorities had high (alternatively, low) power to enforce tax laws. Subjects were asked the following questions: “How likely is it that you will fill in your tax return honestly?” “How much of your yearly income would you declare completely honestly?” “Generally speaking, tax evasion is never justified, always justified or something in between?” They asked additional questions pertaining to individual characteristics (age, income, and gender), which were treated as independent variables. Their
econometric analysis shows that trust increases voluntary compliance, and power increases enforced compliance. Power has no influence on voluntary compliance in the high trust setting, but high power is associated with lower voluntary compliance in low trust setting. The authors interpret these findings as suggesting that power of tax authorities is perceived as legitimate in high trust conditions, but as coercive otherwise.

We conclude this section by recalling that presence of social effects in individual decisions about tax compliance will typically lead to multiple equilibria in tax evasion outcomes. Nonlinearity is critical for equilibrium multiplicity and is associated with presence of endogenous social effects. Unfortunately, there have been no empirical studies anywhere with real data that can be brought to bear on the question of social effects in tax compliance, however compelling their presence might be.

5. Corruption and Growth

Perceptions of corruption are an important factor influencing actual corruption. Olken and Pande (2012) review the evidence on corruption in developing countries in light of recent advances by economists in the measurement of corruption, focusing on assessing the extent of corruption, its efficiency consequences and the determinants of the level of corruption. They find robust evidence that corruption responds to
standard economic incentive theory, but also conclude that effects of anti-corruption policies often attenuate as officials find alternate strategies to pursue rents.

The latest surveys, reported by Transparency International Greece (2013), show a decline in reports of corruption cases: the fraction of households in the sample reporting corruption declined from 13.4%, in 2009, to 10.4%, in 2010, and to 8.2% in 2012. The extent in which this is related to the crisis is not known, except that it has persisted since its onset. The Annual Report for 2012 of the Inspector General for Public Administration documents an increased drive, tabulated below on Table 2, to bring charges and to convict civil servants in Greece.

INSERT TABLE 2 HERE

Caption: Prosecutions, Indictments and Convictions, 2007-2012

Transparency International blames a multitude of factors for the high level of corruption in Greece: dysfunctional democracy, weak rule of law, lack of transparency in the work of the government, dependence of public administration on political parties, excessive discretion in the exercise of public authority, legislative complexity, bureaucracy, lack of audits and sanctions, lack of codes of conduct in the public and private
sector, complex mechanisms for identifying corruption, anemic civil society, the mentality of tolerance that is nurtured by society and influences people’s behavior, and inadequate education of citizens in matters of corruption. There is, naturally, also a multitude of consequences which include waste of financial resources, distortion of competition, collapse of the system of moral values, consolidation of a culture of tolerance and fatalism, and prevalence of a system of corrupt legality [ibid., p. 26]. This report also outlines the evolving legal framework for combating corruption in Greece.

Finally, it is tempting to interpret propensity to engage in corrupt practices as an intrinsic Greek characteristic. However, a comparison with Cyprus, a country that is culturally and linguistically very similar to Greece, might suggest otherwise. Cyprus has consistently scored much higher in Transparency International rankings, while Greece has been slipping, as we discuss above. Furthermore, indirect evidence that cultural origin effects in corruption may be overcome by institutions is reported by Barr and Serra (2010). These authors conducted a bribery lab experiment in the UK and found that, among undergraduates, they could indeed predict who would act corruptly with reference to the level of corruption in their home country. That effect disappeared, however, among graduate students. They replicated their result in 2007 and also found that time
spent in the UK was associated with a decline in the propensity to bribe, although that finding did not explain their inability to predict behavior among graduate students. These authors conclude that while corruption may, in part, be a cultural phenomenon, individuals should not be prejudged with reference to their country of origin.

(a) Fiscal Deficits and Corruption

Corruption affects a country’s government spending through several channels. First, a given amount of public expenditure delivers less in terms of goods and services. Welfare fraud, lack of transparency and corrupt practices in awarding public projects stand out and have regularly been blamed in many countries, including Greece for the presence of corruption. In these circumstances. Second, corruption in the form of tax evasion lowers the tax yield of standing legislation. Corrupt practices in the management of public debt add to the deficit by increasing borrowing costs and thus spreads. They may also increase the perceived uncertainty associated with a country’s public debt. By increasing the cost of doing business, corruption may cause loss of competitiveness and thus contribute to external deficits, too.
In industrialized countries, possible causal links between fiscal deficits and corruption have not been talked about until relatively recently. Kaufmann (2010) is a notable exception. He draws attention to the fact that large differences across EU countries in measures of control of corruption, as by the World Governance Indicators --- one standard deviation between Greece and Spain and more than two standard deviations between Greece and Finland --- correspond to large differences in fiscal balances, positive for Finland, negative for Spain and even more so for Greece. The coexistence of several channels between corruption, government spending and taxes leads to a correlation coefficient between control of corruption and fiscal balance of 0.52 [Kaufmann (2010)]. Achury, Koulouvatianos and Tsoukalas (2013) show that among Eurozone countries during 1996-2010, fiscal balance improves one percent per unit increase of the Corruption Perception Index!

Achury, Koulouvatianos and Tsoukalas (2013) also offer a political economy theory of how excessive rent seeking and non-cooperation by rent seekers worsens a country’s ability to handle fiscal deficits and thus exacerbating debt dynamics. The mechanism they model is as follows. A vicious circle of high interest rates and default emerges due to a (tragedy-of-the-) commons problem. If rent-seeking groups are not prepared to cooperate in fiscal governance, then excessive debt issuance is inevitable.
Noncooperating rent-seeking groups wish to avail themselves of additional resources earlier, before other groups do so, which amounts to collective "impatience." The higher the number of rent-seeking groups the higher the collective impatience. This impatience leads to demands for high interest rates from the nation’s creditors and immediate sovereign default. By increasing the uncertainty about a country’s fiscal management as perceived by the markets, corrupt practices fuel a spiral of increasing borrowing spreads and further increases in deficits, very much like self-fulfilling currency crises. Their model implies that to prevent such a dysfunctional outcome in the presence of rent seekers, a country needs to maintain a lower debt to GDP ratio.

(b) Institutions and Growth

If corruption is not an inherent attribute in any society, it must be a matter of choice for some or all of its citizens. This trivial syllogism means that Swiss citizens have made a deliberate choice in favor of sound institutions while the citizens of many nations in South Asia, Latin America and Southern Europe have gone the other way. How societies choose institutions has been a central theme in political economy and economic history since the 1970’s [cf.North (1990), Skaperdas (1992), Acemoglu et
al. (2005)]. Of particular importance in this literature is the social choice of property rights, that is, of the fraction of income earned by labor and capital which society chooses to shield from the rapacity of thieves, corrupt officials and other rent-seekers.

To understand what is at stake, consider an economy consisting of many different individuals. Suppose all of them are equally good at rent seeking (say, with gross productivity equal to one unit) but unequal at earning honest income (say, gross productivity varies from one-half to two units). How will individuals divide into mutually exclusive groups of workers and rent-seekers, that is, between productive activities and corruption? How will voters collectively decide how much to protect property rights?

Firmly enforced property rights in this context function like a tax on the productivity of rent-seekers, which reduces revenue from dishonest work. Strong property rights will deter rent-seekers from appropriating honestly earned income and, perhaps more importantly, reduce the attractiveness of rent-seeking as an occupation. On the minus side, good institutions are expensive: they need to be implemented by a judicial system of laws, judges, prosecutors, inspectors and policemen who must be paid by taxes levied on honest citizens. Societies seem to face a trade-
off between two taxes: the cost of corruption and the cost of enforcement. For any level of property rights, rational individuals will choose the occupation—thieving or honest work— that gives them the highest income. For example, a relatively expensive regime of firm property rights will tax honest work and deliver low corruption and few rent seekers. This choice will appeal to most productive citizens but not to those who have a comparative advantage in rent-seeking. Having many educated citizens raises the chances that society will choose firm property rights over lax ones, and good institutions over feeble ones.

What does this mean for the questions asked at the beginning of this subsection? Why have Swiss citizens consistently opted for stronger, and more expensive, institutions than those in other countries? Four reasons seem to be of relevance to the Swiss experience. One, a large mass of Swiss citizens are sufficiently educated to earn incomes above those of rent seekers. Two, Switzerland is rich enough in capital to the point where relatively labor intensive rent-seeking does not pay off as well as honest work which is more capital intensive, Three, expectations of strong property rights discourage rent seekers and raise the fraction of citizens who favor good institutions. And four, any political bias towards the status quo discourages changes in existing institutions—good or bad. Switzerland benefits from this inertia. Greece suffers from it.
6. Policy Recommendations and Conclusions

Writing in the *New Yorker*, July 11, 2011, James Surowiecki states:

“If a hefty chunk of the population is cheating on its taxes, people who don’t (or can’t, because of the way their income is reported) feel that they’re being abused.

In Greece, we face a vicious circle: because tax evasion is so common, people trust the system less, which makes them less willing to pay taxes. And, because so many don’t chip in, the government has chosen to raise taxes on those who do. That only increases the incentive to cheat, since there tends to be a correlation between higher tax rates and higher rates of tax evasion.”

The literature points clearly to a vicious circle between incidence of tax evasion and actual policy, especially tax and enforcement policy is part of the cause. A country with widespread corruption simply has no option in order to be able to compete in the international arena. Ultimately, corrupt practices translate to increased costs. Similarly, corruption and tax evasion are patently unfair practices, and their elimination is indispensable for social cohesion in a modern society.

The essence of this paper is that research suggests both bad and good news. The bad news is that corruption is rampant in Greece, and
with a much higher incidence than in other EU countries. One way to deal with it is by means of zero tolerance and vigorous relentless vigilance. As we now know, the successful (at least as of the time of writing) criminal prosecution of Former Minister A. Tzochatzopoulos and his accomplices (for fiscally significant egregious abuse of power and acceptance of bribes) has been particularly welcome by the Greek population. A second way to deal with corruption is to design institutions that encourage honest behavior and facilitate reporting of abuses. The good news from this paper is that an economic and social equilibrium that is permeated by corrupt practices is not the only possible social outcome. Taste for proper social behavior can be taught and learned, and adverse practices discussed in this paper may be altered by suitable reforms and retraining of public servants. The EU Task Force for Greece is a very good case in point, and so is the Greek Annex of the EU Anti-Corruption Report. The latter details a specific legislative agenda to combat anti-social practices in Greece.

In announcing the US District Court verdict in the prosecution of Rod J. Blagojevich, former governor of Illinois, for corruption, US District Court Judge James B. Zagel said before telling Mr. Blagojevich his fate: “The harm here is not measured in the value of property or money, the harm is the erosion of public trust in government.”
Governing requires trust. This is true for firms and organizations of all sizes and types. It is also true for every modern state. To restore public trust in the political process, we believe that Greek citizens will have to witness political events that have never happened in the last fifty years, in particular severe limits on the privileges of professional politicians, an all-out war on corruption, and fair taxation. Serious political reform, including all the draconian proposals we list below, requires not only changes in the current law but also constitutional amendments that facilitate prosecuting members of the executive, legislative and judicial branches of government for embezzlement, for bribery, for tax evasion, and for other forms of illegal enrichment.

The policies we propose below to combat corruption fall into two categories: proposals that require legislative changes within the existing constitutional framework, and amendments that need constitutional tinkering. Among the proposals contained in the Greek Annex of the EU Anti-Corruption Report for 2014, we judge the following to be most urgent:

i. Legislative protection of whistleblowers;

ii. Compelling lobbyists to register with the Office of the Inspector General of Public Administration and report all contacts with public officials.
iii. Requiring political parties to keep and to publish audited income-and-expense statements.

iv. Abolishing all statutes of limitations on crimes committed by members of Parliament and government ministers.

v. Improving the transparency of public procurement, and the capacity of the Supreme Audit Council to oversee state purchases.

vi. Devising and implementing strategies to combat fraud in pensions, healthcare, and the tax administration.

Implementing these proposals will be immensely helped by restoring the citizens’ trust in government. To achieve that, we suggest the following constitutional amendments.

To discourage politics as a lifetime career we propose

**Amendment 1:** Parliament is reduced to 100 members. After a maximum of 12 years of service, members become ineligible for re-election or for any paid or unpaid work in the broader public sector.

To combat embezzlement and bribery at high levels we propose a draconian

**Amendment 2:**

(a) Embezzlement, bribery and other serious misuses of public funds or positions of authority are a high crime for politicians, labor and business leaders and for high-level civil servants. Charges of these
crimes can be filed with no statute of limitations by any citizen or public prosecutor, and must be adjudicated to a final conclusion within one year by specially constituted administrative courts. Those convicted face mandatory penalties that include loss of pension rights, forfeiture of embezzled wealth, and life imprisonment.

(b) The forfeited wealth of convicted embezzlers is shared between the Greek State and citizens who filed charges.

(c) Victims of unproven or disproved corruption charges are entitled to compensation from their accusers.

To combat tax evasion, which amounts to 25% of Greek public debt as of this writing, we propose Amendment 3: Major tax evasion is a crime punishable by fines and incarceration. Tax returns of wealthy individuals are audited regularly and randomly by anonymous tax officials.

These three amendments must be accompanied by attempts to build up civic capital. The goal is to change the entire value system of nihilism and anti-social behavior that parents and schools have allowed to percolate through Greek society. We realize that deep structural changes
go against long-held privileges of established interest groups and also against the inertia of the inherited status quo. As we have all learned from experience, investment and material progress are very difficult within the institutional corruption that is so thoroughly ingrained in the Greek body politic.

The key question is the same as it was when the present depression erupted in Greece around 2009: Will public opinion embrace the long-delayed reforms that are essential for the country’s survival in the global environment of the 21st century? Or will they stand by and watch the nation slide into the backwater of the Balkans as it did from the 13th to the 18th century?
REFERENCES


Presentation.


http://www.brookings.edu/research/opinions/2010/04/19-corruption-kaufmann


Registers in the Context of EU-SILC: Challenges and Opportunities.

Eurostat methodology and working papers.


http://www.youtube.com/watch?v=S5nth5jlCP0.


http://www.transparency.gr/Uploads/File/AcA_Rakintzis.pdf


TABLES

Table 1

Caption: Percent of Business Respondents Agreeing that the Following Take Place

<table>
<thead>
<tr>
<th></th>
<th>EU</th>
<th>Greece</th>
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<tr>
<td>Tax fraud</td>
<td>42</td>
<td>52</td>
</tr>
<tr>
<td>Widespread bribery</td>
<td>23</td>
<td>48</td>
</tr>
<tr>
<td>Very widespread corruption</td>
<td>76</td>
<td>99</td>
</tr>
<tr>
<td>Daily life affected by corruption</td>
<td>26</td>
<td>63</td>
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</tbody>
</table>

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50
Table 2

Prosecutions, Indictments and convictions, 2007-2012


Page 30,


<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th>Per cent</th>
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<tr>
<td>2007</td>
<td>302</td>
<td>10</td>
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<tr>
<td>2008</td>
<td>478</td>
<td>16</td>
</tr>
<tr>
<td>2009</td>
<td>375</td>
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<tr>
<td>2011</td>
<td>561</td>
<td>19</td>
</tr>
<tr>
<td>2012</td>
<td>866</td>
<td>29</td>
</tr>
</tbody>
</table>
FIGURES

Figure 1


Figure 2

Caption: Average trust levels in 111 countries.

Source: Figure 2.1b, Algan, Y., and Pierre Cahuc (2014).

Figure 3

Caption: Multiple Equilibria in Anti-social Behavior

Source: Authors
Figure 1

Page 2 of

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Figure 2

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Algan_Cahuc_Trust_Fig_2_1_bs.pdf

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Figure 2.1b Average trust levels in 111 countries. Sources: Trust is computed as the country average from responses to the trust question in the five waves of the World Values Survey (1981–2008), the four waves of the European Values Survey (1981–2008) and the third wave of the Afrobarometer (2005). The question asks “Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?” Trust is equal to 1 if the respondent answers “Most people can be trusted” and 0 otherwise.
Figure 3

File name/URL: Azariadis_Ioannides_Figure_3 May_24_2014.pptx

Submitted in pptx.
Endnotes

1 Earlier version presented at the GreekEconomistsforReform.com Workshop on “Crisis in the Eurozone Periphery and Policy Options for Greece,” May 27-28, 2013, Athens. We are grateful to Adair Morse for some useful tabulations with the Artavanis, Morse and Tsoutsoura data that are referred to herein. We are also grateful to editors C. Meghir, C.A. Pissarides, N. Vettas but especially to D. Vayanos, participants at the workshop, Anna Hardman, and Alexandros Kyrtsis for very thoughtful comments. All errors are ours.

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Corruption is defined by the Eurobarometer Survey more broadly as
“including, offering, giving, requesting and accepting bribes or kickbacks,
valuable gifts and important favours, as well as any abuse of power for
private gain.”

A particularly egregious practice is the so-called “4:4:2” rule, according to
which in dealing with tax liabilities produced by audits, revenue officers
authorize a discount of 40%, collect 40% themselves, and let 20% accrue
to the Treasury. This practice received notoriety when it was alleged by
Professor Diomidis Spinellis, a former tax official during a public
presentation at ELIAMEP, Athens. See
http://www.tovima.gr/vimamen/guys/article/?aid=447524. We thank
Alexandros Kyrtsis for this source.
The appearance of such political formations as Creation Again (Dhmiourghia Ksana), in the May 2012 elections and the River (To Potami), in the May 2014 euro elections are cases in point.

See http://www.bbc.co.uk/news/magazine-20874650. Sites like http://www.edosafakelaki.org (“edosa fakelaki” is Greek for “I paid a bribe”) invite anonymous (and eponymous) reports of corrupt practices, but it is unclear at this point what their impact is likely to be. The site www.ipaidabribe.com was set up by Janaagraha NGO, located in Bangalore, India, as a forum for public awareness on corruption in receiving services from the Indian public sector. See Tanaka (2013).

Encouraging signs do appear from time to time in Greece. The fact that the government’s firing of the CEO of the Hellenic Republic Asset Development Fund, apparently for having demonstrated egregious disregard to serious conflict of interest, and the furor it caused in the press, are both hopefully indicative of changing sensitivities, if not attitudes.

For an evaluation of this relatively new Greek institution to date, see Ladi (2011).
Artavanis, Morse and Tsoutsoura (2012) use micro data for Greek households, provided by a large private bank in Greece, and work on the premise that the bank makes lending decisions based on the bank's assessment of borrowers' true income, instead of what the respondents report. They replicate the bank's models of credit capacity, credit card limits, and mortgage payments to infer the bank's estimate of individuals' true income. This insight leads to a novel approach to estimate tax evasion by the private sector in Greece. Their estimate of a lower bound of 28 billion euros of unreported income for Greece and the associated tax revenue foregone amounts to 31 percent of the deficit for 2009. Principal tax-evading occupations are doctors, engineers, private tutors, accountants, financial service agents, and lawyers. The authors' evidence across different industries suggests that industries with low paper trail and industries that are favored by parliament members engage in more tax evasion.
Another look at the Artavanis, Morse and Tsoutsoura data (shared with us privately by Adair Morse) data suggests a general pattern of greater tax evasion in rural than in urban areas. This is not so surprising since more salaried workers live in cities than in rural areas, and thus there are fewer opportunities for tax evasion. Generally, the self-employed have higher tax evasion than the wage earners (measured by mean tax evaded income), higher median untaxed income and a higher incidence of tax evasion. Their actual income, as imputed by the bank, is 192% of what they report to the tax authorities.

12 http://www.youtube.com/watch?v=S5nth5jCP0

13 A full analytical justification of these possibilities, using social interactions theory, may be found in the authors’ technical appendix to this paper, available at: http://sites.tufts.edu/yioannides/working-papers-2/

14 See Korobow, Johnson and Axtell (2007). As they put it, “if in fact most crime does have an element of social interaction as its cause, then it would not be unreasonable to conclude that, since tax evasion is a crime, evasion has social drivers as well.”
15 Alm (2012) in the latest review of research on tax evasion does discuss briefly works in the “social interactions theory” strand, p. 13, but he too is stymied by the lack of empirical research.


17 As reported by the New York Times, December 8, 2011:


Mr. Rod Blagojevich was sentenced to 14 years in prison on his 18 corruption counts, that included wire fraud, attempted extortion, conspiracy to solicit bribes and notably trying to sell or trade the U.S. Senate seat that became vacant when U.S. Senator Barack Obama was elected US president in Fall 2008.