The Greek Crisis, a Tragedy without Catharsis?

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> *"The drive to define and create a public domain free from the incursion of familial and clientelistic networks in the nation's life has been less successful.* [...] *Modernizing Greece may be a task resembling that of Sisyphus, but with the difference that upward progress is greater than downward tumbles."*

John Koliopoulos and Thanos Veremis (2002: 363) conclude this regarding the development of Greece since 1821. To further understand the reasons for the current Greek crisis, we need to analyze the inherent weaknesses of the country that have existed since joining the European Communities (EC) in 1981.

Greek membership in the EC was not without controversy. Greece could not compete economically, given the large weight of the agricultural sector (*Neubäumer* in this issue). Further problems were linked to inflation, unemployment, and a trade deficit (Stergiou 2012). Joining the EU has not immediately resulted in economic growth. Instead a 15-year period of low economic growth followed, with a yearly real GDP increase of 0.9 percent on average. Investment contracted by an average of 2.2 percent per annum, while labor productivity languished. Unit labor costs—driven by wage indexation—increased more than a tenfold, while excessive product and labor market regulations deterred foreign investment. Although this lead to lower tax revenues and social security contributions, the government continued to increase health and pension spending as well as the number of civil servants and their wages. The result was predictable: public deficits and high inflation with negative spillovers affecting the private sector. And despite Greece's access to the common European market, it did not take advantage of it; instead its export quota fell from 19 percent of GDP in 1981 to a disastrous level of less than 9 percent in 1995.

The 1993 Maastricht Treaty gave Greece the opportunity to enter the European Monetary Union (EMU), if it could fulfill the convergence criteria. Thus, the government of Konstantinos Simitis

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in 1996 was induced to introduce a long list of serious and thorough reforms, including the abolishment of automatic wage indexation, the reshaping of collective bargaining, and a more restrictive monetary policy. At the turn of the century the only criterion that Greece did not meet was a maximum public debt of 60 percent of the GDP. Along with several other countries failing to meet this criterion, Greece entered the Euro zone.

During the 1996–2000 reform period, GDP growth averaged 3.7 percent annually. Housing investments showed a strong growth of 20.5 percent between 1996 and 1999, jumping by another 50 percent in 2000. Similarly, investments by companies in plants and equipment increased during the same time period by about 30 percent (*Neubäumer*). However, only investment in property continued to expand sharply after Greece joined the Euro in 2000, spurred by low interest rates due to foreign capital inflows. The housing boom led to the creation of a large number of jobs in construction and steep wage increases. Due to the rise in income, the demand for consumer goods increased, which was further stimulated by the use of credit cards and consumer loans.

Not only did private households live beyond their means, the government also took advantage of low interest rates and relied on loans to cover increasing expenditure on pensions and the growing public administration. At the same time, wide-spread tax evasion and a reduced tax quota did not allow revenues to keep up. This resulted in an average fiscal deficit of 6 percent of GDP. But Greece's growth prospects improved when it joined the Euro. Given the widespread findings on convergence of per capita income, Greeks expected higher growth rates and higher permanent incomes.

The housing boom in combination with increases in private consumption and government spending led to a rising GDP. Thus the economic growth was not due to innovation or expansion of capital stock and production capacities. The high growth, based on foreign credit, lasted until the beginning of the financial crisis, when capital inflows ran dry and the Greek economy dove into a depression.

1 Structural deficits of the Greek economy

Due to its enduring structural weakness, the Greek economy shows low levels of productivity relative to other EU member states and lacks a sustainable basis for economic growth. During the period of rather fast economic growth prior to the crisis, Greece in particular under the government of Kostas Karamanlis, failed to continue introducing further reforms that would have modernized its economic structures or to direct investment flows toward innovation. Hence, Greece was unable to take advantage of its EU membership and when the inflow of foreign capital came to a halt and the economic upswing ended abruptly, it—unlike its northern European neighbors—could not rely on exports to sustain its economic growth. Although the current account deficit decreased from 35 billion euro (2008) to about 4 billion euro (2014), this was more due to a drop in imports, caused by lower demand, than rising exports.

Overall, Greece's export intensity, with exports of goods and services constituting about 30 percent of GDP in 2014, remains low compared to countries like Hungary, Slovakia and Ireland, which have export intensities three times higher than Greece (see *Schrader, Benček* and *Laaser* in this issue). In the services sector, Greece relies heavily on sea transport and tourism, while business related services are underrepresented. Exports of goods center on agricultural products, raw materials, and labor-intensive products. Not even 17 percent of Greek exports originated from high or medium-high technology industries (OECD 2015), which limits opportunities for growth and hints at exactly how far away from Greece the technological frontier lies.

Manufacturing industries in Greece continue to remain underdeveloped, with a share of 8.5 percent in gross value added, as opposed to an EU-28 average of more than 15 percent. In Germany, for instance, the share exceeds 22 percent. These industries are crucial for R&D, innovation and economic growth (Hausmann and Hidalgo 2012). Greek manufacturing productivity amounted to slightly more than half of the EU-28 average. The focus in Greece is on labor intensive industries. In contrast, industries requiring skilled workers, leading to higher value-added, account for a comparatively small share of the manufacturing jobs (see Schrader et al. 2013).

In 2014, services generated 83 percent of the value added, in comparison to 74 percent in the EU-28. The composition of the service industries presents a bleak picture, as well: retail trade and tourism, both requiring low-skilled, low-paid workers, represent more than a quarter. The public sector and real estate together account for more than one fourth (see Schrader, et al. 2015).

Greece has rather fundamental institutional and structural problems, and not so much of a cost problem anymore, after cost disadvantages had been reduced over the last five years. Cutting costs will make Greece more competitive, but at a wage level far below European standards. If only the bare minimum, Troika-required, institutional reforms are made, Greece will have limited growth in sectors with low added value. Tourism, agriculture, and basic commodities are not enough to create sustainable, growing wealth for all Greeks.

2 Government revenues and expenditures

2.1 Bailout programs and reforms

In 2010 the Papandreou government signed the First Economic Adjustment Program for Greece, in which the country committed itself to a three-year program that aimed to stabilize the economy with a reduction of benefits and wages, as well as structural reforms that were supposed to enable a transformation toward an investment- and export- led growth model. Although some improvements were made, many underlying issues persist (Herrmann and Kritikos 2014).

In 2012 two actions were taken to restore debt sustainability: a haircut on privately held government bonds and a debt repayment. This has helped to reduce secondary market interest rates of government bonds and to lower the risk premium. However, since late 2014 interest rates have surged due to political struggles between the Greek government and its lenders. As a result, reform processes halted.

In August 2015 the Tsipras government signed a third bailout program, which provides liquidity up to a maximum of 86 billion euro. It will significantly increase public debt, even though part is intended to repay existing loans. *Schrader, Benček* and *Laaser* argue that Greece is unable to outgrow the accumulated public debt and that financing via capital markets is not an option.

Assuming an average long-term growth rate of 3 percent per annum, they argue that debt relief in the form of a haircut or debt restructuring of 17 to 30 percent is necessary for the country to return to more sustainable debt levels in the long term. Similarly, Belke and Dreger (2013) argue that another haircut could not only support the return to sustainable economic growth in Greece, but it would be also less expensive for European taxpayers in the medium and long run.

To achieve this growth, *Schrader, Benček* and *Laaser* consider implementing supply-oriented structural reforms to be indispensable in order to overcome the inherent structural weaknesses and foster investment- and export-led growth. However, the authors note that this is a medium- to long-term task, which comes at the cost of again lower incomes, wealth, privileges and social security in the short term. The Memorandum of Understanding between Greece and its creditors stipulates extensive reforms addressing labor and product markets, the educational system, the business environment, privatization, and reorganization of state institutions. *Schrader, Benček* and *Laaser* point out that the third bailout program includes many of the reforms that were part of the previous two, but have not yet been implemented. Considering the slow progress of reforms until now, it is doubtful that the current Greek government has the willingness or ability to implement and enforce a majority of these changes. But this is not new: the capacity of Greek public administration to carry out far-reaching reforms has long been questioned (OECD 2011b). To ensure progress in the future, *Schrader, Benček* and *Laaser* recommend the outsourcing of the implementation of reform measures to external experts, originating from European institutions or from other EU countries' public administration.

2.2 Austerity and its effects

Austerity measures constitute a key component of the bailout programs. These were introduced at a point when Greek price competitiveness had eroded; the country had an enormous current account deficit and was experiencing high capital outflows. The third of these bailout programs, passed in 2015, stipulates additional cuts in government expenditure and imposes tax increases. European finance ministers repudiate the opposition of the newly elected Syriza government to the reforms.

Gechert and *Rannenberg* estimate the effects of fiscal austerity in Greece since the crisis and find that government expenditure cuts have led to a stronger decline in economic activity during the recession than in normal times. If the austerity measures had been delayed and implemented after the recovery of the Greek economy, the negative impact on GDP could have been weaker. They also highlight that the Troika has underestimated the negative effects of austerity measures, although research on the subject was available at that time (Eggertsson 2009, Christiano, Eichenbaum and Rebelo 2011). *Gechert* and *Rannenberg* conclude that the decision to impose far-reaching austerity measures on Greece right from the outset has hampered the country's ability to repay its debt and to do so in a timely manner.

2.3 Wealth taxation of real estate

Another measure the Troika has pushed for is a substantial rise of the wealth tax on real estate (WTRE), to increase government revenues. The most recent program specifies that the tax revenue generated by the WTRE can amount to 2.7 billion euro annually, independent of overall changes to cadastral values (*Christelis* in this issue). The tax is levied on the total cadastral value of all real estate property that an individual owns. Thus it cannot easily be evaded, as opposed to other taxes in the current system. As policymakers have postponed adjustments to cadastral values until 2017, the tax base for the WTRE is now distorted, leaving some households worse off than others. Further, the WTRE does not take into account any loans, like mortgages. Hence, it especially hurts those households that have very limited liquidity, e. g. the elderly, for whom property is part of retirement provisions. *Christelis* explains that the tax scheme is designed in a way so that individuals with real estate with a nominal value of more than 600,000 euro will have to pay a disproportionately higher WTRE despite sharp drops in market values which discourages additional acquisitions and cools down the property market. As recurrent taxes on immobile property as a percentage of GDP quadrupled since the crisis, real estate prices plummeted and the property market virtually froze. For instance, in Athens the number and value of transactions have declined by about 95 percent since 2007. Due to the frozen market, households are unable to make use of the savings they have accumulated as real estate.

Christelis estimates the negative effects on tax proceeds originating from reduced disposable income and investment in dwellings, as well as a decline of consumption that is due to (perceived) financial insecurity. Further, he takes into account the decline in transaction tax revenue due to the frozen property market, which shows a drastically reduced number of real estate transactions and lower value of property sold. While the WTRE itself generates impressive gross tax receipts, *Christelis* estimates that the harm it does to the economy lets the revenue from other taxes shrink to such an extent that the effect on overall tax receipts is at best negligible, but most likely negative. This implies that the WTRE in its current form fails to achieve the government's aim to increase revenues and presents an obstacle to Greece's way out of the crisis. Therefore, *Christelis* argues that policymakers should lower the tax significantly, or abolish it altogether. This would help to revitalize the real estate market and to increase investment, both contributing to economic recovery.

2.4 Taxing wealth and only wealth?

As a way to address the inefficiency of the Greek tax system, *Papanikos* (in this issue) proposes a radically different tax scheme based on a flat tax on overall wealth—not only real estate—as the only source of government revenues. Such a tax would then be levied on real estate property, bank deposits, durable consumption goods, etc. and implemented together with the abolishment of all other taxes that do not exist for the purpose of correcting market failures and externalities.

At present, the Greek shadow economy and widespread corruption are the main reasons for large-scale tax evasion that results in unequal treatment of tax payers and unfair competition. Income tax, VAT and social security contributions are avoided by the large numbers of self-employed workers and SMEs, as well as those who bribe officials. This in turn leads to production inefficiencies.

Papanikos argues that a tax on overall wealth could not be avoided, that it would ensure fair treatment of taxpayers and through equal treatment of firms it could intensify competition and promote competitiveness of Greek firms. Abolishing all other taxes (unless they are used to correct market failures) would lead, according to *Papanikos,* to increased investment and a rise in wealth accumulation, as there would be no tax on inheritance. If this tax scheme is implemented, GDP should increase, as the wealth originating from the shadow economy can no longer be hidden. The simplification of the tax collection could lead to further economic growth.

In practice, such a tax would find strong resistance from those who currently avoid taxes, especially those who are extremely wealthy and have power to exert influence on the media and politicians. It remains subject to discussion whether wealth taxes are more suitable to establish a fairer horizontal distribution than consumption and income taxes.

3 Product market reforms in Greece beyond austerity measures

For decades product market regulations in Greece have discouraged investment and exports, thus impeding economic growth and productivity (*Richter, Giudice* and *Cozzi* in this issue). Business activity is hampered by complex regulations, time- and cost-intensive procedures that are subject to uncertainty, price rigidity, entry restrictions and an ineffective special planning system (Herrmann and Kritikos, 2014). With the economic crisis the pressure to overcome these regulatory hurdles has increased and reforms implemented by previous Greek governments are still underway. Improvements have been achieved in different areas, but many reforms face strong resistance from vested interests and are, thus, experiencing delays and are not yet fully implemented. The business environment has improved, as witnessed by the Doing Business indicators of the World Bank (2015), but Greece is still below EU average. *Richter, Giudice* and *Cozzi* report in this issue that restrictions on practicing professions as well as minimum fees and fixed prices have been abolished, which had previously kept prices for professional services at exceedingly high levels. Some legislative barriers to competition that led to inefficient production and higher prices have been removed. A successful example is the case of milk formulas for infants, for which the restriction to pharmacies as the only retail channel was lifted; prices in supermarkets were 12 percent lower than what pharmacies offered. The long-standing issue of a weak export performance is now being addressed, as the national trade facilitation strategy initiated in 2012 helped to simplify customs procedures.

Richter, Giudice and *Cozzi* as well as Herrmann and Kritikos (2014) emphasize that it is essential that Greece consistently follows through the reform process according to a comprehensive approach, as bottlenecks will otherwise restrict economic growth: e. g. investment is blocked by complicated licensing procedures and by the ineffective geographical planning system. Greece still needs to consolidate 400 land registry offices into 16 cadastral offices, of which merely two are so far operational. It is the only EU country without a computerized land registry, and although the digitalization project is long underway, full implementation is nowhere in sight. *Richter, Giudice* and *Cozzi* point out that in order for product market reforms in Greece to be successful, the country needs to coordinate the reforms centrally, and should support its implementation, closely monitoring its reform progress.

They stress that in addition to product market reforms, Greece needs the recovery of the financial sector, a functioning judicial system and an efficient public administration in order to succeed. There is the general need for higher trust in the public authorities and the Greek government.

4 Labor markets, SME policies, and investments

Driven by the economic recession, unemployment rose to rates exceeding 25 percent; with youth unemployment exceeding 50 percent (*Bozani* and *Drydakis* in this issue). At the same time Greek labor market legislation has been subject to a range of reforms with the aim of improving employment (ILO, 2014). Regulatory changes geared toward enhanced labor market flexibility and better matching between labor demand and supply (Immervoll and Scarpetta 2012). *Bozani* and *Drydakis* find that labor market legislation has undergone a sustained reform process under previous governments. Most of the reforms addressed labor taxation in order to limit tax dodging. Legislation on flexible contracts and working-hours programs has been put in place and regulations regarding severance payments and collective dismissals have been loosened. In order to induce decreased labor costs, wages of state employees as well as the minimum wage have been reduced. Labor cost in Greece declined by 11.8 percent in the 2010–2013 period, while the decrease amounted to 0.1 percent in the other member states of the euro area. Disincentives to early retirement and stricter conditions for social benefits have been introduced.

While these initiatives have helped to make Greece more competitive, the Greek government needs to continue the reform process in order to shape an environment that fosters job creation and economic growth. Still, there is the need for far-reaching reforms, e. g. to better targeted support for groups with specific labor market risks, to tie wages closer to productivity (European Commission 2015) and to reform the tax system in such a way that companies are encouraged to move from the informal to the formal economy and to grow within the country.

Bozani and *Drydakis* recommend that reforms should also address labor demand, e. g. by improving the competitiveness of the tourism industry and the agricultural sector (ILO 2014). Further, they suggest that the government should encourage investment in innovative SMEs in order to foster long-term growth and to create jobs. Access to funding is currently a major impediment, which can be improved, e. g. if Greece makes better use of the European Structural and Investment Funds (European Commission 2015). The funds could be used to finance support programs for start-ups (OECD 2015) and to strengthen ties between research institutions and businesses in order to promote innovation (Herrmann and Kritikos 2013, ILO 2014). Collaborative research with public institutions can help SMEs to introduce innovative and competitive products, which in turn supports large companies through their supply chains. According to *Bozani* and *Drydakis,* the decision of the European Commission (2015) to create a Structural Reform Support Service is an important step to improve the absorption of those financial resources. In addition, they suggest that Greece should found an institution that grants loans to SMEs and engages private investors (European Commission 2015, OECD 2015, ILO 2014). However, the current Greek government is rolling back some of the structural reforms in labor markets that previous Greek parliaments had approved.

Using a stock-flow approach, *Dreger* and *Reimers* reveal an important impact of public investment on private investment from a different angle. To analyze this link, they examined 12 European countries, finding that public investment leads to higher private investment in the long run, as the returns of private investment projects will increase. Argimón, González-Páramo and Roldán (1997) find that an increase in public investment in infrastructure can raise productivity and private investment. For instance, improved telecommunication networks may make private investment more worthwhile (Pereira and Andraz 2013). However, in Greece we observe an opposing development: Given the low investments in the pre-crisis period, in the course of the economic crisis the share of public investment to overall public spending dropped from 12 percent to less than 6 percent; recovering only slightly in 2015. As a consequence, private investment and GDP growth continues to suffer in Greece.

5 Health and education in the economic crisis

Currently, the education and the health system are characterized by unequal treatment of Greek citizens with regard to provision, coverage, accessibility, affordability and equal opportunities for all (*Dassiou* in this issue). Both sectors operate without proper mechanisms for quality assurance and cost containment. As a consequence of the financial crisis and the austerity measures, lower government spending led to a decline in service quality.

Dassiou argues that the country has experienced frequent changes of health and education policy in past decades. Greek ministers had little opportunity to oversee the implementation of a specific policy during their short tenures. The financial crisis further compounded this situation with various implementations of poorly designed policies as well as frequent reversals of previous changes by new governments or even new ministers within the same governments. Also, there is high resistance to reforms and enforcement of legislation lags. In the health and education sectors, the establishment of an independent regulator is recommended to safeguard the consistent implementation of policies and guarantee continuity.

5.1 The education system

The education system in Greece is bloated and suffers from cost inefficiency, although there are some initiatives to improve it (*Dassiou*). Part of the inefficiency arises from the geography of the country: nearly half of elementary school pupils attend small schools that are scattered across islands and mountainous regions. As many schools in Greece have very few pupils, 1,933 schools were merged into 877 in 2011. Nevertheless, pupil to teacher rates and net teaching time in Greece remain comparatively low (OECD 2011a), which leads to relatively high expenditure on teachers' salaries. The author reports that further issues arise from the tight regulations that do not give schools the ability to hire and fire teachers or to determine their salaries. Progression rules favor senior teachers rather than effective ones, even though younger and less experienced teachers currently have to teach more hours. Many reforms have not been implemented or have been reversed.

Dassiou highlights that tertiary education is characterized by inefficiency as well: while Greece has the highest number of tertiary education enrolments per 100,000 people (OECD 2011a), graduation rates are low. The performance of Greek universities continues to be meager, with low ranks in league tables of research institutions. The unemployment rate among graduates is nearly 20 percent. *Dassiou* sees glimmers of hope, e. g., in merging university departments and sharpening their research focus, as required by the 2011 bailout program and enforced under the Papademos government in 2012. In addition, Greek universities have harmonized their degree programs and adopted quality assurance (Mattheou 2004) under the Bologna Process, thus opening the flow of research funding from the EU. Through the Operational Programme of Education and Initial Vocational Training (OPEIVT) university departments and technological education institutes have been founded throughout Greece. However, as *Dassiou* reports this primarily contributed to local government's prestige and was realized with subsidized plane tickets for "flying professors". Moreover, at the beginning of 2016, the government decided to roll back reforms that had brought the Greek universities closer to European standards.

5.2 The health system

Health coverage in Greece consists of a compulsory social insurance (SSF), a National Health System (ESY) and co-payments (*Dassiou*). When the crisis struck, coverage and health benefits depended significantly on employment. As unemployment surged, many people were left without coverage. Non-coverage, in turn, exerts negative externalities to the society: as the health status of the workforce decreases, labor productivity and living standards decline. As Greece's economy crashed, few Greeks could afford private healthcare.

Furthermore, inefficiencies in the Greek health system arise e. g. from disincentives for physicians: As they receive modest salaries, and as there is no clear evaluation system that provides opportunities for promotion, bribes for preferential treatment and operating a private practice to bolster their salaries are commonplace.

As the Greek healthcare system is fragmented and mismanaged, and thus ineffective and inefficient, the bailout program included health reforms, to ensure broader provision and better quality of healthcare services while cutting costs (*Yfantopoulos* and *Yfantopoulos* in this issue). A series of measures were successfully implemented, such as merging the four largest insurance funds that cover 95 percent of the Greek citizens (Economou 2010), introducing internal auditing and cost accounting systems in hospitals as well as the implementation of a centralized procurement system. Electronic prescriptions, increased generic drugs usage and the introduction of a claw-back system have helped to significantly cut pharmaceutical costs. After 2010, benefits were standardized for all citizens (Economou et al. 2014). However, reforms must continue: while centralized procurement has led to reduced expenses, it only covers a quarter of hospital's purchases.

Among OECD countries Greece has experienced the steepest cuts in health expenditure as a percentage of GDP: 34 percent from 2009 to 2014. Along with expenditures, the satisfaction of Greek people with healthcare (and other welfare benefits) has declined and is now lower than in any other EU country (OECD 2014: 117). In that direction, *Yfantopoulos* and *Yfantopoulos* present the results of 5,500 face-to-face interviews in the Athens area that used quality of life instruments to measure the subjective health status before and during the crisis. Individuals report a decline in subjective health, which is especially pronounced for vulnerable groups with low income, signifying a need for targeted health policies. Moreover, persistent inefficiencies and corruption in healthcare provision must be addressed. To coherently implement and enforce reforms, as well as to set incentives that facilitate efficient resources usage, *Dassiou* suggests introducing an independent health regulator.

6 Is there a way out of the crisis?

The future looks bleak: there are no obvious signs that the Greek economic crisis will come to an end. Unemployment, in particular youth unemployment, remains exceptionally high. How bad the actual income situation for the Greek working population is, is revealed by the following relation: As of today, the main source of income for over half of Greek households is a pension, while only about 37 percent mainly rely on wages (see MacroPolis 2016).

Greece is facing continual institutional and structural deficits in combination with a small industrial basis, low export ratio, few large businesses, and many closed professions. If decreasing labor costs and the bare minimally necessary institutional reforms remain to be the only active policy, then Greeks are doomed to providing other, innovative, economies a low wage factory workbench. The existing tourism, agriculture and trade are not a strong enough foundation to build sustainable, growing wealth for the whole country. If Greece is to grow while a Euro-zone member, it must move beyond institutional reforms and make better use of its hidden assets that are substantially underappreciated and otherwise overlooked in analyses of its economic prospects.

6.1 Greek assets

The first asset is the small number of basic research institutes producing considerable research (Grant et al. 2011). Unfortunately, knowledge transfer is lacking: the valuable research results are trapped inside the gates, often unapplied and unexploited or used by firms in other countries. Without a way to transfer this new knowledge, the scientists remain isolated and unappreciated —with top researchers moving to places beyond the Greek borders, where they are rewarded for their work.

This hints at the second hidden asset: the large number of top Greek scientists. Although Greeks make up a mere 0.2 percent of the world's population, more than 3 percent of all researchers are Greek (Ioannidis 2014). But 85 percent of these researchers have already self-exported to other EU or US research institutions. If this "brain power" could be unleashed in Greece instead, Greece would quickly become an innovation driven economy.

Third, Greece retains a few innovative companies despite the adverse innovation environment. Many are in the IT business, typically based in Athens. These firms sporadically work with the existing research institutes, but they are neither clustered nor co-located, despite the obvious potential for mutually beneficial cooperation. But while a few have stayed, many others have left the country and developed their innovations abroad. The response to the capital controls introduced in July 2015 and the mere plans for increasing tax and social security payments should be unnerving: not only innovative firms but more and more regular businesses are exiting at an even higher pace. And it is not only the US and Western Europe anymore, now they are moving even to Albania and Bulgaria (The Economist 2016).

This brings us to the fourth "hidden asset" of Greece: Its attractiveness in terms of climate and quality of life. In an increasingly global race for the best talents, quality of life outside labs is crucial. So far, Europe lacks a place where high-level academic research and entrepreneurial activities are matched with an attractive climate. Thus, Greece could take advantage of its inherent climate, add investments into research, and gain a competitive advantage, while simultaneously resolving a collective EU conundrum where these two components have remained mutually exclusive. Once quality of life is matched with excellent research and public administration, Greece will go beyond attracting tourists to also attracting global talents (see Herrmann and Kritikos 2013). At the moment these hidden assets are, at best, ignored; at worst they are held in contempt.

6.2 The reform agenda for Greece: A growth strategy for the future

Combining the insights from this volume on the Greek crisis, allows us to derive a number of significant additional reforms that need to be implemented in order to create the necessary structure and a business and innovation friendly environment. Moreover, while these reforms and policy changes are ultimately the responsibility of the Greek government, Greek investors, company owners, and citizens must support, endorse, and even lobby for them.

Thus, while Greece currently has

- unsustainable public debt;
- a badly working tax system and a non-viable real estate tax;
- fundamental institutional and structural problems in labor and product markets;
- overregulation, with too many civil servants and a bureaucracy that acts arbitrarily; and
- badly functioning public services that are worsening with time,

we recommend the following specific policy measures designed to stimulate economic growth processes in Greece and to accelerate its transformation process to a modern, innovation-driven economy.

1) The Greek public debt must be made sustainable. There are two ways of realizing this target, either by debt restructuring or by introducing GDP—linked loans. Restructuring would induce lower interest rates, longer maturities, and a temporary suspension of interest payments. Under the second solution, interest payments would be linked to the development of Greece's GDP.[1]

In doing so, markets, investors, Greek citizens and its European partners will start regaining trust in the Greek government. Only then can capital controls be cancelled; these controls are strongly and negatively affecting the Greek economy. Ceasing capital controls will also stop if not turn around, the exodus of Greek and foreign capital, and Greek companies, once public debt is sustainable.

2) To support the regaining of trust into the Greek government, it must continue the otherwise incomplete structural and institutional reforms. This not only includes the further opening of closed professions and liberal trades. In addition, Greek regulation remains excessive, especially for new firms: hindering them and imposing substantial costs. Administrative efforts for business activities need to be massively reduced and codified. This should include reducing the efforts needed to register new businesses, as well as reducing the number of regulations, fees and reporting duties for existing businesses and for closing down businesses (Kritikos 2014). Moreover, courts must support the reforms, while all administrative officials must be appropriately trained. Reducing the daily bureaucratic hurdles confronting Greek citizens, entrepreneurs,

1 See Fratzscher et al. (2014) for a discussion on the advantages of GDP-linked loans.

business owners and managers is also critical. Thus, the still oversized and inefficient public administration must be reformed.

3) Despite six years of reform process, the most important structural reforms have not been implemented and efforts to do so through existing structures appear futile. Greece remains nearly as overregulated in 2016 as before the crisis. This clarifies that the reform process needs to be organized in a different way in the future. So, this third point relates to how reforms should be organized, rather than what reforms need to be done. The Greek government should commission outside experts, for instance strengthening institutions like the EU Task Force for Greece, to redesign the system and how the public interacts with it. Careful attention to ensure that the modern, reformist part of the Greek society has a voice in the process is critical. Reforms "against" the society, as often stipulated by the Troika, do not work and will be not lead to effective changes of the overregulated system (Kritikos 2015).

Moreover, the use of professional regulators will help improve public services like the health and the education system to overcome the failures of the past. These regulators will need to make sure that no unreasonable changes are executed with the change of every government or even of every minister, persons who were sometimes replaced four times a year. These regulators will need to make sure that changes in these systems are implemented consistently, despite changes of governments or ministers.

4) Expanding Greece's industrial base requires actively investing in a better innovation system. The country can only become prosperous if it uses its comparative advantages and lays the groundwork for higher value-added goods production. R&D investments are critical because these investments yield innovative, exportable goods, while simultaneously creating jobs and prosperity. The institutional reforms under way are not enough: R&D needs an innovation-oriented industrial structure and a well-functioning innovation system. This is a considerable challenge: Other Euro-zone economies invest around 3 percent of their gross domestic product in R&D. Greece invests 0.67 percent. Another major difference is that governments elsewhere are committed to R&D, no matter which party is in control. The budget is set and the scientists are given wide latitude to do their work. As a result, their economies are driven by innovation and continual refinement, with new products and technologies regularly introduced.

Thus, Greece must close this investment gap by increasing its expenditure in R&D, by investing in new, additional cutting-edge applied research centers, and by ensuring that high-quality science supports and serves entrepreneurs developing new technologies. To unleash this potential, Greece also needs to encourage strong ties and knowledge transfer between its universities, research institutions and private companies. Building scientifically competitive research clusters, with co-located participants, will help close the gaps in the innovation chain and attract talent, both Greek and non-Greek.[2]

2 This investment in people and research can be partly financed through the EU's Horizon 2020 program, which is designed to strengthen both European and national research systems. Of particular importance for Greece are the programs to develop cutting-edge research centers. Horizon 2020 could be the foundation underlying an integrated and comprehensive Greek investment strategy for creating scientific excellence in the country if public expenditures are shifted from consumption to investments into research and development.

Moreover, this approach will only work if universities and research institutes are independent of political influence. Ministers and MPs need to provide an overall budget and then get out of the way, leaving, for instance, the selection of new researchers to internationally recognized scientists. Of course, whether or not Greece actually becomes an innovation hub depends not just on investments in R&D and research centers, but also on establishing a partnership between the spheres of research, business and entrepreneurship, where ideas can be freely exchanged. Creating an environment that brings both Greek researchers and entrepreneurs back to Greece, and that also supports the local innovation chain, is critical for the country's future.

5) Last but not least, Greece needs to reorganize its public finances. The dysfunctional tax system needs to be reformed to become a tool that helps Greece move forward instead of stagnate (Börsch-Supan and Tinios 2001). In general, future Greek governments should avoid seeking their salvation in ever-increasing taxes as the current government does. The better way is to improve the enforcement of existing taxes (like income or value-added taxes) while rather decreasing tax rates and simultaneously broadening the tax base. This includes the creation of a business friendly tax system at the local and federal level, which will give incentives to businesses to become legally recognized, and to those business owners who aim to grow their companies to stay in Greece. This further includes a complete reform of real estate taxes, which would bring back life into this otherwise frozen market.

Potential alternatives include the introduction of a flat tax (see Peichl 2014) or of a wealth tax as discussed by *Papanikos*. In any case, taxes need to be designed in a way that enforcement is possible and that the private sector gets positive incentives.

Put in a nutshell, Greece's economic recovery will only start once it is able to produce products with higher value-added, thus making its economy more competitive in international markets. This recovery requires simultaneously addressing several key issues. Making the Greek public debt sustainable, while substantially improving the tax base is one decisive part within the public sector, improving public services like health and education is another. Fundamental institutional and structural reforms in labor and product markets are a third. At the same time, red tape must be cut and bureaucracy streamlined in order to make the business environment attractive, while investing in the Greek innovation system is crucial.

But such substantial reforms will only come about if familial and clientelistic approaches stop being the main driving force behind political decisions; the same forces underlying the Greek crisis. Greek statesmen are wanted who make decisions that look beyond vested interests, instead focusing on those that benefit all of Greece. This is the core reform required to engender a fundamental change to Greek society. For that Catharsis is needed.

References

- Argimón, I., J. M. González-Páramo, and J. M. Roldán (1997): Evidence of public spending crowding-out from a panel of OECD Countries. Applied Economics, 29 (8), 1001–1010.
- Belke A., and C. Dreger (2011): Ramifications of debt restructuring on the euro area—The exposure of large European economies to Greece. Intereconomics, 46, 188–196.
- Börsch-Supan, A., and P. Tinios (2001): The Greek pension system: Strategic framework for reform. In: R. C. Bryant, N. C. Garganas, and G. S. Tavlas, (eds.) (2001): Greece's economic performance and prospects. Bank of Greece and Brookings Institution, 361–442.
- Christiano, L. J., M. Eichenbaum, and S. Rebelo. (2011): When is the Government Spending Multiplier Large? Journal of Political Economy, 119 (1), 78–121.
- Economou, C. (2010): Greece: Health system review. Health Systems in Transition, 12 (7), 1–180.
- Economou, C., D. Kaitelidou, A. Kentikelenis, A. Sissouras, and A. Maresso (2014): The impact of the financial crisis on the health system and health in Greece. World Health Organization for the European Observatory on Health Systems and Policies.
- Eggertsson, G. B. (2009): What Fiscal Policy Is Effective at Zero Interest Rates? Federal Reserve Bank of New York Staff Reports, Nr. 402.
- European Commission (2015): Communication From the Commission to the European Parliament, The Council, The European Economic and Social Committee and the Committee of the Regions. A New Start for Jobs and Growth in Greece.
- Fratzscher, M., C. Große Steffen, and M. Rieth (2014): GDP-Linked Loans for Greece. DIW Economic Bulletin 9, 40–49.
- Grant, J., T. Ling, D. Potoglou, and D. M. Culley (2011): A rapid review of the Greek research and development system, Rand Europe. Discussion Paper, September 2011.
- Hausmann, R., and C. A. Hidalgo (2012): Economic Complexity and The Future of Manufacturing. In: J. Moavenzadeh, P. Philip, C. A. Giffi, and A. Thakker (eds.): The Future of Manufacturing. Opportunities to Drive Economic Growth. A World Economic Forum Report.
- Herrmann, B., and A. S. Kritikos (2013): Growing out of the Crisis: Hidden Assets to Greece's Transition to an Innovation Economy. IZA Journal of European Labor Studies, 2 (1), 1–23.
- Immervoll, H., and S. Scarpetta (2012): Activation and Employment Support Policies in OECD Countries. An Overview of Current Approaches. IZA Journal of Labor Policy, 1 (1), 1–20.
- International Labor Office (2014): Productive Jobs for Greece. Geneva, International Labor Office.
- Ioannidis, J. (2014): The Best Greek Scientists Exiled from Greece, available at http://greece.greekreporter.com/2014/08/01/the-best-greek-scientists-exiled-from-greece.
- Koliopoulos, J. S., and T. M. Veremis (2002): Greece, the Modern Sequel. New York, New York University Press.
- Kritikos, A. S. (2014): Entrepreneurs and their Impact on Jobs and Economic Growth. IZA World of Labor, 2014 (8).
- Kritikos, A. S. (2015): Das Scheitern der Troika. Cicero, 3, 80–81.
- MacroPolis Bulletin (2016): More than half of Greek households rely mainly on pensions, January 28, 2016. www.macropolis.gr/?i=portal.en.society.3589.

— Mattheou, D. (2004): Marketing a new institutional identity for the University in Europe. The Bologna Process and the national context. In: E. Bulk-Berge, S. Holm-Larsen, and S. Wiborg (eds.): Education across borders- comparative studies. Oslo, Didakta, 57–72.
— OECD (2011a): Education policy advice for Greece; strong reformers and successful reformers in education. OECD publishing.
— OECD (2011b): Greece: Review of the Central Administration. OECD Public Governance Reviews. OECD Publishing.
— OECD (2014): Society at a Glance 2014: OECD Social Indicators. OECD Publishing.
— OECD (2015): Financing SMEs and Entrepreneurs 2015: An OECD Scoreboard. OECD Publishing.
— Peichl, A. (2014): Flat-rate tax systems and their effect on labor markets. IZA World of Labor, 2014 (61).
— Pereira, A. M., and J. M. Andraz (2013): On the Economic Effects of Public Infrastructure Investment: A Survey of the International Evidence. Journal of Economic Development, 38 (4), 1–37.
— Schrader, K., D. Benček, and C.-F. Laaser (2013): IfW-Krisencheck: Alles wieder gut in Griechenland? Kieler Diskussionsbeiträge 522/523. Kiel Institute for the World Economy, Kiel.
— Schrader, K., D. Benček, and C.-F. Laaser (2015): Greece: How to Take a Turn for the Better. Kiel Policy Brief 83. Kiel Institute for the World Economy, January.
— Stergiou, A. (2012): Anatomie eines Niedergangs? Griechenland und die Europäische Union. Bundeszentrale für politische Bildung, December 23. www.bpb.de/apuz/142837/griechenland-und-die-europaeische-union?p=all (in German).
— The Economist (2016): An actual Grexit. Big tax rises are driving companies out of the country. The Economist, February 20. www.economist.com/node/21693213.
— World Bank (2015): Doing Business 2015: Measuring Regulatory Quality and Efficiency. Washington, D.C.

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