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Indicators of Business Performance and Progress Reform



Title of the contract: Preparation of a report with the identification and compilation of relevant and replicable indicators of business performance to improving capacity to monitor progress of reforms (tender VT/2013/083).

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1. Executive summary

In the context of the economic adjustment programme, the Greek authorities are implementing important reforms to increase economic growth and generate jobs, notably by improving the business environment. The further reduction of the administrative burdens and structural problems should be the main priority of the Greek government in the foreseeable future. Importantly, key ingredient for a successful continuation of the reform programme in Greece is the formation of a reliable system of monitoring and evaluation to ensure that reforms are implemented on time, are effective and can be adapted if needed. This report presents the key monitoring instruments (Market Efficiency Indicators and Policy Action Indicators) for the structural reforms in the area of public procurement, investment, competition and exports.

2. Introduction

To improve the business environment is a strategic priority and a main goal for the Greek government under the economic adjustment programme. The successful implementation of the relevant reforms is expected to stimulate economic recovery, improve economic growth and foster job creation in the long-term. Excessive regulatory burden on businesses, lack of internal competition and limited transparency, competition and efficiency of public procurement processes prevent the Greek economy from operating with the dynamism necessary to regain competitiveness. These obstacles produce an environment conducive to rent-seeking behaviour, in which incumbents are shielded from new competition. Businesses, notably the small and medium enterprises (SMEs) are suffering the most from these difficulties. The SMEs need better framework conditions to allow them to grow, create jobs, invest, export, innovate and participate in public procurement processes with clear and fair rules.

A number of reform processes have been set in motion in recent years which seek to improve the efficiency of product and service markets in Greece. It is expected that these reforms can boost the productive capacity of the Greek economy and employment by facilitating new entry, investment, competition, transparent and efficient practices in



procurement processes or eliminating transactional costs linked to excessive bureaucracy and related informal charges.

The structural reforms should be regularly monitored, using key performance indicators. Importantly, while some reforming steps have already been made, a key ingredient for a successful continuation of the reform programme is the formation of a reliable system of monitoring and evaluation to ensure that reforms are implemented on time, are effective and can be adapted if needed. This report aims to collect the key performance indicators related to the public procurement, investment, competition and exports. The report includes market efficiency indicators (business performance) and policy action indicators (progress reform). The first are indicators of the level of efficiency/inefficiency of markets for products, services and relevant inputs, while the latter are indicators that intend to measure the intensity of reform-instigated policy behaviour, designed to remedy structural weaknesses.

3. Market Efficiency Indicators

3.1 Procurement Efficiency Indicators

Public procurement constitutes one of the most crucial channels of the government spending in EU since it accounts for almost 16%-20% of the EU GDP per year. Improving public procurement is a priority goal of the European agenda to control deficits and foster economic development in the EU according to the Single Market paradigm. Nowadays, the efficiency of the public procurement systems depends mainly on the utilization and adoption of Information and Communication Technologies (ICT) solutions, the degree of centralization of procurement procedures, the intensity of bidders' competition and the standardization of relevant processes. Importantly, the efficiency of the public procurement processes is eliminated in a significant manner when the fundamental principle of transparency does not hold. Moreover, public procurement processes should seek and get the best value-for-money projects. Using procurement to stimulate innovation should be another powerful criterion in the relevant processes, by encouraging bidders to offer innovative solutions. Hence, the main goals that should govern a public procurement system are the following:

- Reducing prices without lowering significantly the perceived quality (value-for-money)
- Pulled innovation (or demand-driven innovation)
- Competition

- Openness
- Transparency

Additionally to these objectives, SME participation on public procurement processes should also be analyzed, given the business structure of the Greek economy, as it is widely known that Greek entrepreneurial activity is dominated by micro and family-owned businesses.

In this framework, countries that implement deep structural reforms in the area of public procurement systems, such as Greece, should monitor the core public procurement indicators and their progress. In doing so, the evaluation of the evolution and effectiveness of the new public procurement systems introduced by the relevant reforms (i.e., the adoption and development of e-procurement; the establishment of the Single Public Procurement Authority (SPPA); the centralization of processes) is feasible. Monitoring the progress of relevant indicators allows observing at what extent public procurement reforms consider the fundamental principles of public procurement. Data for most indicators are provided also for the other EU countries, allowing a comparative analysis to be conducted and consequently a better evaluation of these indicators to be realized.

It is worth noting that, public procurement indicators often exhibit a considerable difficulty to measure the effectiveness of public procurement process in terms of the potential benefits gained by businesses, citizens and the society from the production of the public sector, or improvement observed in the bureaucracy status. To the best of our knowledge a further drawback concerns the absence of available datasets providing information on useful indicators related to the qualitative aspects of the public procurement system.

The **Procurement Efficiency Indicators (PEI)** approximates the public procurement output, such as *total expenditure*, *value of tenders published in Tenders Electronic Daily (TED)* and *the number of tenders published in TED*.¹ Specifically for the total expenditure and the value of tenders published in TED, each variable is expressed also in terms of GDP of each country, in order to extract comparative results among countries, besides the absolute values which capture nominal evolution for each country.

¹ <http://ted.europa.eu>

Table 3.1 Total expenditure by general government and utilities on works, goods and services.

| Billion € | 2007 | 2008 | 2009 | 2010 | 2011 |
|--------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Austria | 53.6 | 59.3 | 62.5 | 65.5 | 66 |
| Belgium | 49.6 | 53.5 | 56.7 | 58.1 | 60.7 |
| Bulgaria | 5 | 7 | 6.5 | 6.5 | 6.5 |
| Cyprus | 1.5 | 1.6 | 1.9 | 1.9 | 1.9 |
| Czech Republic | 30.2 | 37.4 | 36.4 | 37.2 | 36.7 |
| Denmark | 34.6 | 37 | 39.3 | 41.1 | 41.1 |
| Estonia | 2.8 | 3.1 | 2.9 | 2.8 | 3 |
| Finland | 29.5 | 32.4 | 34.1 | 35.1 | 36.3 |
| France | 327.9 | 340.6 | 357.3 | 367.4 | 369.8 |
| Germany | 410.1 | 435.7 | 465.4 | 485.4 | 496.2 |
| Greece | 27.0 | 28.4 | 29.3 | 23.9 | 18.4 |
| Hungary | 20.6 | 21.4 | 21.1 | 22.4 | 22 |
| Ireland | 27.7 | 29.6 | 26.4 | 25.2 | 23.2 |
| Italy | 227.1 | 235 | 250.8 | 251.8 | 251.6 |
| Latvia | 4.2 | 3.7 | 3.8 | 3.7 | 4.1 |
| Lithuania | 4.7 | 5.3 | 4.5 | 4.9 | 4.9 |
| Luxembourg | 4.9 | 5.4 | 5.8 | 6.3 | 6.4 |
| Malta | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 |
| Netherlands | 151.5 | 162.4 | 173.7 | 177.6 | 177.6 |
| Poland | 56.3 | 66.8 | 62.3 | 73.1 | 73.5 |
| Portugal | 30.5 | 30.9 | 34.2 | 36.8 | 33.8 |
| Romania | 29.6 | 33.8 | 31 | 32.3 | 33.6 |
| Slovakia | 13 | 14.1 | 15.1 | 15.5 | 15.2 |
| Slovenia | 5.3 | 6 | 6.2 | 6.3 | 6.1 |
| Spain | 169.6 | 174.4 | 182 | 177.2 | 164.8 |
| Sweden | 59.4 | 61.3 | 59.3 | 68.2 | 73.7 |
| United Kingdom | 401.9 | 377 | 377 | 389.6 | 377.9 |
| Total EU 27 | 2,178.60 | 2,263.60 | 2,346.00 | 2,416.60 | 2,405.90 |

Source: European Commission. DG Internal Market [2010 utilities estimate re-used for 2011]

Table 3.2 Total expenditure on works, goods and services as a percentage of GDP

| | 2007 | 2008 | 2009 | 2010 | 2011 |
|-----------------------|------|------|------|------|------|
| Austria | 19.5 | 21.0 | 22.6 | 22.9 | 21.9 |
| Belgium | 14.8 | 15.4 | 16.6 | 16.3 | 16.4 |
| Bulgaria | 16.1 | 19.8 | 18.6 | 18.0 | 16.8 |
| Cyprus | 9.3 | 9.5 | 11.2 | 11.0 | 10.3 |
| Czech Republic | 22.9 | 24.3 | 25.6 | 24.8 | 23.5 |
| Denmark | 15.2 | 15.7 | 17.6 | 17.4 | 17.1 |
| Estonia | 17.4 | 18.8 | 20.9 | 19.6 | 18.8 |
| Finland | 16.4 | 17.5 | 19.8 | 19.6 | 19.2 |
| France | 17.4 | 17.6 | 18.9 | 19.0 | 18.5 |
| Germany | 16.9 | 17.6 | 19.6 | 19.4 | 19.1 |
| Greece | 12.1 | 12.2 | 12.7 | 10.7 | 8.8 |
| Hungary | 20.7 | 20.3 | 23.1 | 23.2 | 22.1 |
| Ireland | 14.7 | 16.5 | 16.3 | 16.1 | 14.6 |
| Italy | 14.6 | 14.9 | 16.5 | 16.2 | 15.9 |
| Latvia | 20.0 | 16.1 | 20.2 | 20.5 | 20.1 |
| Lithuania | 16.3 | 16.2 | 16.7 | 17.8 | 16.0 |
| Luxembourg | 13.2 | 14.5 | 16.1 | 15.7 | 15.0 |
| Malta | 14.1 | 13.5 | 13.8 | 13.4 | 14.0 |
| Netherlands | 26.5 | 27.3 | 30.3 | 30.2 | 29.5 |
| Poland | 18.1 | 18.4 | 20.1 | 20.6 | 19.9 |
| Portugal | 18.0 | 18.0 | 20.3 | 21.3 | 19.7 |
| Romania | 23.7 | 24.1 | 26.2 | 26.1 | 24.6 |
| Slovakia | 23.6 | 21.9 | 24.1 | 23.6 | 22.0 |
| Slovenia | 15.2 | 16.0 | 17.3 | 17.7 | 16.9 |
| Spain | 16.1 | 16.0 | 17.4 | 16.9 | 15.5 |
| Sweden | 17.6 | 18.4 | 20.3 | 19.5 | 19.0 |
| United Kingdom | 19.5 | 20.8 | 24.0 | 22.8 | 21.6 |
| Total EU 27 | 17.6 | 18.1 | 20.0 | 19.7 | 19.0 |

Source: European Commission. DG Internal Market

Table 3.3 Value of tenders published in TED

| Billion € | 2007 | 2008 | 2009 | 2010 | 2011 |
|--------------------|--------------|--------------|--------------|--------------|--------------|
| Austria | 4.6 | 6.9 | 6.4 | 6.6 | 5.5 |
| Belgium | 10.6 | 12.4 | 13.5 | 11.0 | 10.9 |
| Bulgaria | 2.5 | 3.0 | 4.1 | 2.3 | 2.8 |
| Cyprus | 0.8 | 0.8 | 1.4 | 0.9 | 0.9 |
| Czech Republic | 5.2 | 7.9 | 7.1 | 8.1 | 9.5 |
| Denmark | 7.3 | 6.9 | 8.8 | 10.3 | 11.8 |
| Estonia | 1.1 | 1.3 | 1.2 | 1.5 | 2.6 |
| Finland | 6.4 | 7.3 | 8.4 | 8.3 | 8.1 |
| France | 64.0 | 71.9 | 73.1 | 66.7 | 80.7 |
| Germany | 27.1 | 29.7 | 34.1 | 32.9 | 33.8 |
| Greece | 8.0 | 6.6 | 8.7 | 5.5 | 4.7 |
| Hungary | 4.6 | 5.5 | 5.9 | 5.5 | 5.1 |
| Ireland | 6.4 | 4.5 | 3.5 | 3.7 | 3.5 |
| Italy | 35.5 | 36.3 | 38.7 | 53.1 | 45.9 |
| Latvia | 2.6 | 2.2 | 1.6 | 2.1 | 3.6 |
| Lithuania | 1.2 | 1.2 | 1.3 | 1.3 | 1.7 |
| Luxembourg | 0.5 | 0.5 | 0.6 | 0.6 | 0.6 |
| Malta | 0.1 | 0.1 | 0.4 | 0.3 | 0.3 |
| Netherlands | 10.2 | 11.1 | 11.6 | 10.9 | 9.7 |
| Poland | 18.1 | 26.0 | 25.5 | 30.9 | 28.6 |
| Portugal | 2.9 | 4.3 | 5.8 | 7.1 | 3.7 |
| Romania | 9.1 | 10.3 | 7.6 | 7.6 | 10.4 |
| Slovakia | 2.0 | 2.4 | 4.3 | 7.6 | 4.0 |
| Slovenia | 2.3 | 1.9 | 2.1 | 1.6 | 1.9 |
| Spain | 43.0 | 39.3 | 35.5 | 34.1 | 25.1 |
| Sweden | 10.2 | 11.8 | 12.4 | 16.9 | 15.4 |
| United Kingdom | 81.2 | 80.6 | 96.9 | 109.9 | 94.7 |
| Total EU 27 | 367.2 | 392.4 | 420.4 | 447.0 | 425.5 |

Source: European Commission. DG Internal Market

Table 3.4 Value of tenders published in TED as % of total expenditure

| | 2007 | 2008 | 2009 | 2010 | 2011 |
|-----------------------|------|------|------|------|------|
| Austria | 8.5 | 11.6 | 10.2 | 10.1 | 8.4 |
| Belgium | 21.3 | 23.1 | 23.8 | 18.9 | 18.0 |
| Bulgaria | 49.4 | 42.1 | 63.7 | 35.4 | 43.8 |
| Cyprus | 54.5 | 49.5 | 74.9 | 46.8 | 48.7 |
| Czech Republic | 17.3 | 21.1 | 19.5 | 21.7 | 26.0 |
| Denmark | 21.1 | 18.7 | 22.5 | 25.0 | 28.6 |
| Estonia | 40.4 | 43.2 | 39.9 | 53.8 | 87.2 |
| Finland | 21.7 | 22.5 | 24.5 | 23.5 | 22.4 |
| France | 19.5 | 21.1 | 20.5 | 18.2 | 21.8 |
| Germany | 6.6 | 6.8 | 7.3 | 6.8 | 6.8 |
| Greece | 29.6 | 23.4 | 29.7 | 22.9 | 25.4 |
| Hungary | 22.2 | 25.4 | 27.7 | 24.6 | 23.3 |
| Ireland | 23.0 | 15.2 | 13.4 | 14.5 | 15.0 |
| Italy | 15.6 | 15.5 | 15.4 | 21.1 | 18.3 |
| Latvia | 62.1 | 59.8 | 42.5 | 55.7 | 87.2 |
| Lithuania | 25.6 | 22.2 | 29.0 | 27.1 | 34.7 |
| Luxembourg | 9.1 | 9.4 | 9.8 | 9.8 | 8.7 |
| Malta | 14.3 | 8.8 | 49.6 | 31.1 | 32.0 |
| Netherlands | 6.7 | 6.9 | 6.7 | 6.1 | 5.5 |
| Poland | 32.2 | 38.9 | 41.0 | 42.3 | 38.9 |
| Portugal | 9.5 | 14.0 | 16.8 | 19.3 | 10.9 |
| Romania | 30.8 | 30.5 | 24.4 | 23.5 | 30.9 |
| Slovakia | 15.2 | 17.1 | 28.5 | 49.1 | 26.2 |
| Slovenia | 42.9 | 31.9 | 34.5 | 25.9 | 31.7 |
| Spain | 25.3 | 22.5 | 19.5 | 19.2 | 15.2 |
| Sweden | 17.2 | 19.3 | 20.9 | 24.8 | 20.9 |
| United Kingdom | 20.2 | 21.4 | 25.7 | 28.2 | 25.1 |
| Total EU 27 | 16.9 | 17.3 | 17.9 | 18.5 | 17.7 |

Source: European Commission. DG Internal Market

Table 3.5 Value of tenders published in TED as % of GDP

| | 2007 | 2008 | 2009 | 2010 | 2011 |
|-----------------------|------|------|------|------|------|
| Austria | 1.7 | 2.4 | 2.3 | 2.3 | 1.8 |
| Belgium | 3.1 | 3.6 | 4.0 | 3.1 | 3.0 |
| Bulgaria | 8.0 | 8.4 | 11.9 | 6.4 | 7.4 |
| Cyprus | 5.1 | 4.7 | 8.4 | 5.2 | 5.1 |
| Czech Republic | 3.9 | 5.1 | 5.0 | 5.4 | 6.1 |
| Denmark | 3.2 | 2.9 | 3.9 | 4.3 | 4.9 |
| Estonia | 7.0 | 8.1 | 8.4 | 10.5 | 16.4 |
| Finland | 3.6 | 3.9 | 4.9 | 4.6 | 4.3 |
| France | 3.4 | 3.7 | 3.9 | 3.4 | 4.0 |
| Germany | 1.1 | 1.2 | 1.4 | 1.3 | 1.3 |
| Greece | 3.6 | 2.8 | 3.8 | 2.5 | 2.2 |
| Hungary | 4.6 | 5.2 | 6.4 | 5.7 | 5.1 |
| Ireland | 3.4 | 2.5 | 2.2 | 2.3 | 2.2 |
| Italy | 2.3 | 2.3 | 2.5 | 3.4 | 2.9 |
| Latvia | 12.4 | 9.7 | 8.6 | 11.4 | 17.6 |
| Lithuania | 4.2 | 3.6 | 4.8 | 4.8 | 5.6 |
| Luxembourg | 1.2 | 1.4 | 1.6 | 1.5 | 1.3 |
| Malta | 2.0 | 1.2 | 6.8 | 4.2 | 4.5 |
| Netherlands | 1.8 | 1.9 | 2.0 | 1.9 | 1.6 |
| Poland | 5.8 | 7.1 | 8.2 | 8.7 | 7.7 |
| Portugal | 1.7 | 2.5 | 3.4 | 4.1 | 2.1 |
| Romania | 7.3 | 7.4 | 6.4 | 6.1 | 7.6 |
| Slovakia | 3.6 | 3.7 | 6.9 | 11.6 | 5.8 |
| Slovenia | 6.5 | 5.1 | 6.0 | 4.6 | 5.4 |
| Spain | 4.1 | 3.6 | 3.4 | 3.2 | 2.4 |
| Sweden | 3.0 | 3.5 | 4.2 | 4.8 | 4.0 |
| United Kingdom | 3.9 | 4.5 | 6.2 | 6.4 | 5.4 |
| Total EU 27 | 3.0 | 3.1 | 3.6 | 3.6 | 3.4 |

Source: European Commission. DG Internal Market

Table 3.6 Number of tenders published in TED

| | 2007 | 2008 | 2009 | 2010 | 2011 |
|-----------------------|---------|---------|---------|---------|---------|
| Austria | 2,971 | 3,188 | 3,089 | 2,941 | 3,042 |
| Belgium | 3,553 | 4,450 | 4,371 | 4,557 | 5,477 |
| Bulgaria | 953 | 1,777 | 1,323 | 1,397 | 1,821 |
| Cyprus | 386 | 446 | 496 | 473 | 458 |
| Czech Republic | 2,449 | 2,419 | 2,687 | 2,961 | 3,769 |
| Denmark | 1,707 | 1,979 | 1,873 | 2,169 | 2,619 |
| Estonia | 382 | 514 | 417 | 636 | 816 |
| Finland | 2,198 | 2,746 | 2,963 | 3,193 | 3,252 |
| France | 41,987 | 42,548 | 43,180 | 45,315 | 45,916 |
| Germany | 16,196 | 17,377 | 20,694 | 21,836 | 22,370 |
| Greece | 3,485 | 2,970 | 2,662 | 3,494 | 2,354 |
| Hungary | 1,904 | 2,354 | 2,777 | 2,741 | 2,640 |
| Ireland | 1,801 | 1,572 | 1,292 | 1,296 | 1,356 |
| Italy | 9,400 | 9,716 | 9,410 | 9,699 | 9,544 |
| Latvia | 1,068 | 1,023 | 694 | 790 | 986 |
| Lithuania | 1,675 | 1,637 | 1,340 | 1,809 | 2,413 |
| Luxembourg | 336 | 369 | 390 | 399 | 367 |
| Malta | 187 | 106 | 311 | 166 | 230 |
| Netherlands | 3,743 | 3,972 | 4,340 | 4,032 | 3,949 |
| Poland | 11,081 | 13,362 | 14,161 | 18,507 | 21,209 |
| Portugal | 1,246 | 1,445 | 1,539 | 1,798 | 1,623 |
| Romania | 5,650 | 5,480 | 3,859 | 3,676 | 4,001 |
| Slovakia | 505 | 619 | 813 | 781 | 1,164 |
| Slovenia | 1,161 | 1,240 | 1,310 | 1,280 | 1,485 |
| Spain | 9,909 | 10,843 | 11,469 | 10,539 | 8,811 |
| Sweden | 3,909 | 3,936 | 4,185 | 4,948 | 5,479 |
| United Kingdom | 12,849 | 13,360 | 13,182 | 11,625 | 11,009 |
| Total EU 27 | 142,691 | 151,448 | 154,827 | 163,058 | 168,160 |

Source: European Commission, DG Internal Market

3.2 Investment Performance Indicators

To enhance investment, the Greek authorities should adopt legislation to comprehensively facilitate the system of investment licenses and permits (operational, environmental, construction and use of public infrastructure licenses) by reducing the number of steps, the approval time and associated costs as well as by eliminating bureaucratic issues in line with

international best practices. We propose the following **Investment Performance Indicators (IPI)** to monitor the potential impact of reforms on investment performance: i) *the number of new established firms in Industrial Areas*, which measures the new industrial activities. The implementation of structural reforms mainly aims at the creation of efficient industrial areas or the modernization of existing ones which is an important step for the implementation of investment projects. The reforms are mainly focused on the update of equipment as well as the efficient planning of industrial areas and infrastructure and improvement of industrial facilities (sewage, gas, electric and water supply networks). These reforms aim to increase the number of established firms. So, monitoring this indicator, we measure the impact of reforms on business environment ii) *the business impact of rules on Foreign Direct Investment*, which measures the influence of regulation and law provisions on investment procedures. Many obstacles to investments arise from the incoherent and complicated regulations as well as bureaucratic issues. The scope of the reforms is the revision of policy framework and the simplification of rules of doing business in Greece. The assessment of the impact of reforms on investments can be done by using an indicator which directly monitors the impact of structural changes on the business environment and the performance of the system, regarding the law provisions and regulations to attract foreign investments. In that context, iii) *the Business Regulations²* indicator can be also monitored in order to measure the impact of reforms on regulations and law provisions in business environment iv) *the business Investment as percentage of GDP*, and v) *the Foreign Direct Investment as percentage of GDP*. By monitoring these indicators, we measure the impact of reforms (facilitation of licensing system, efficient planning) on attracting investments, as they indicate to what extent the structural reforms affect the business environment, in terms of business investments as percentage of GDP and foreign direct investment as percentage of GDP, as well. Next, we present the aforementioned indicators, and their performance in Greece compared to other countries.

Table 3.7 Industrial Areas in Greece in 2012

| | 2012 |
|--------------------------|-------------|
| Surface (acres) | 45,000 |
| Established firms | 2,500 |
| Workers | 40,000 |

Source: ETVA, Industrial Areas

² “Economic Freedom of the World”, Annual Report, Fraser Institute.



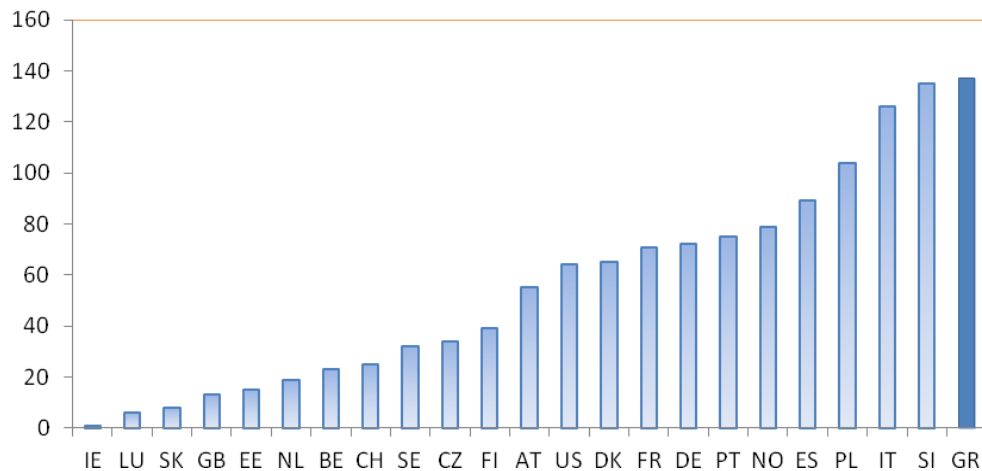
Table 3.8 Business impact of rules on FDI in Greece

| | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 |
|----------------------------------|------|------|------|------|------|------|------|
| Rank* | 137 | 129 | 122 | 111 | 107 | 94 | 90 |
| Total number of countries | 151 | 142 | 139 | 139 | 133 | 134 | 125 |

Source: World Economic Forum

* Relative position in a graded group [data is based solely on the views and perceptions of the respondents]

Figure 3.1 Business impact of rules on FDI – Economies ranking in 2013



Source: World Economic Forum

Table 3.9 Business Regulations* in 2013

| | Greece | Italy | Spain | Portugal | France | Germany | Belgium | Denmark |
|------------------|--------|-------|-------|----------|--------|---------|---------|---------|
| Rank** | 78 | 105 | 50 | 49 | 36 | 27 | 40 | 11 |
| Rating*** | 6.0 | 5.7 | 6.6 | 6.7 | 7.1 | 7.6 | 7.0 | 8.2 |

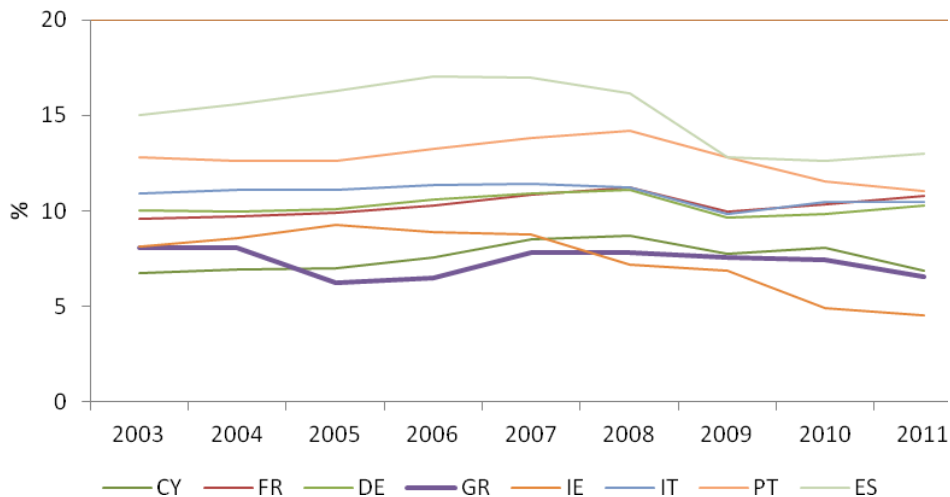
Source: Fraser Institute, Economic Freedom of the world

*Regulations encompass i) Administrative requirements, (ii) Bureaucracy costs, (iii) Starting a business, (iv) Extra payments/bribes/favouritism, (v) Licensing restrictions, (vi) Cost of tax compliance.

** Detailed historical information is provided for each of the 152 countries.

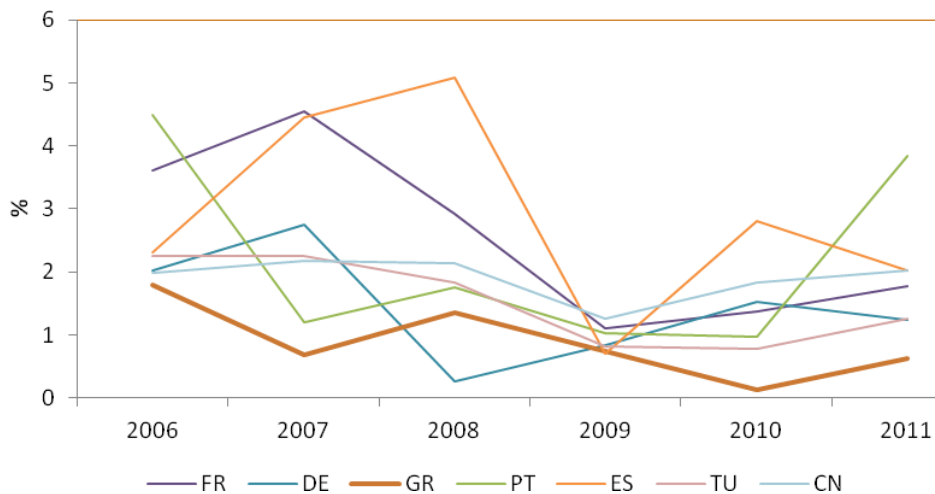
*** Business regulations-component is placed on a scale from 0 to 10 that reflects the distribution of the underlying data.

Figure 3.2 Business investment as percentage of GDP from 2003 to 2011 across countries



Source: Eurostat

Figure 3.3 Foreign Direct Investment as percentage of GDP from 2006 to 2011 across countries



Source: OECD, Fact Book Review

3.3 Competition Intensity Indicators

Competition Intensity Indicators (CII) measure the intensity of competition in a market. These measures take into consideration the structure and the characteristics of the market,



the behaviour or conduct of market participants and the performance (consumer benefits) of the relevant market.

However, there are some disadvantages in the empirical use of these measures. Firstly, these indicators are retrieved from firm-level balance sheet data in various industries, which are not publicly available as in the case of data published by Eurostat and other data sources. Hence, the evaluation of these indicators is based on turnover figures. Secondly, the breakdown is conditional on market definition, i.e., different sector classifications (e.g. digit level in NACE) may yield different results. For instance, when there exists high and low concentration in different relevant markets that are part of the same NACE sector, then the average NACE concentration becomes medium and will thus *hide* the high (as well as the low) concentration in some parts of the NACE sector. Thirdly, when the entry and exit of firms is taken into consideration (an index which is relevant to the intensity of competition) the result can be substantially affected by the coverage of the database. Therefore, when the database changes, as a result of different coverage, the entry and exit pattern would not convey firm dynamics. Similarly, when firms change their sector classification due to statistical procedures this would count as an entry in one market and exit in another, while it may not reflect a relevant change in activity.

Consequently, there is no specific and unique indicator, unit or measuring technique to capture directly the competition intensity. For that reason, the indicators employed in this section are believed to capture, at least partially, the relationship between the dimension and competition intensity. These indicators are the following: i) *Herfindahl-Hirschman Index* (HHI), ii) *Concentration Ratio* (Cn) and iii) *price changes*.

In the case of horizontal mergers, courts and competition agencies have employed market share and the HHI to quantify market power in a market. The HHI turns market share into a measure of market concentration. The indicator links market concentration with competition, in the sense that the former leads to a higher likelihood of collusive behavior and higher ability to set prices above marginal cost, thus, a lower level of competition. Although facing some methodological limitations, the likelihood of collusion makes the HHI a classical tool for preliminary analysis. HHI for a number of N firms is defined as the sum of

the square of the share s_i of each firm i , that is, $HHI = \sum_{i=1}^N s_i^2$.



The n-firm concentration ratio C_n is a concentration indicator alternative to HHI, which provides a sign of the oligopolistic nature of an industry and indicates how competition is developed. Considered to be as the percentage of market shares held by the largest firms (n) in an industry, it shows the extent of market control of the largest firms in the industry and illustrates the degree to which an industry is concentrated and thus competitive. Here, we define the concentration ratios for the five and ten largest firms respectively, according to their sales turnover (C_5 , C_{10}). As an example, we use data from six sectors of economic activity (manufacture of coke, refined petroleum products and nuclear fuel, manufacture of chemicals and chemical products, manufacture of rubber and plastics, manufacture of other non-metallic minerals, manufacture of basic metals, accommodation).

In the empirical literature, it is assumed that higher concentration leads to less competition intensity. In particular, for the HHI it is proposed that:

- If $HHI < 0.1$, the marketplace is intensely competitive
- If $0.1 < HHI < 0.18$, the marketplace is moderately concentrated and,
- If $HHI > 0.18$, the marketplace is highly concentrated

Another indicator which is presumed to be related to the level of competition is the price changes among various product markets and services.³ The main intuition behind the relative change of prices as a competition indicator is the idea that a change in the level of prices (e.g. in the sector's products) reflects how well the competition functions. In well-competing markets, there is a tendency to expect competitors to react respectively to the nature of price changes, so that they can efficiently compete to each other. As an example, this indicator is estimated by using data from the HCIP index (Harmonized Indices of Consumer Prices) compiled by Eurostat for October 2013 (year-on-year change). The relevant tables follow.

³ Defines an indicator which belongs to the group of Prices (not relative to concentration).

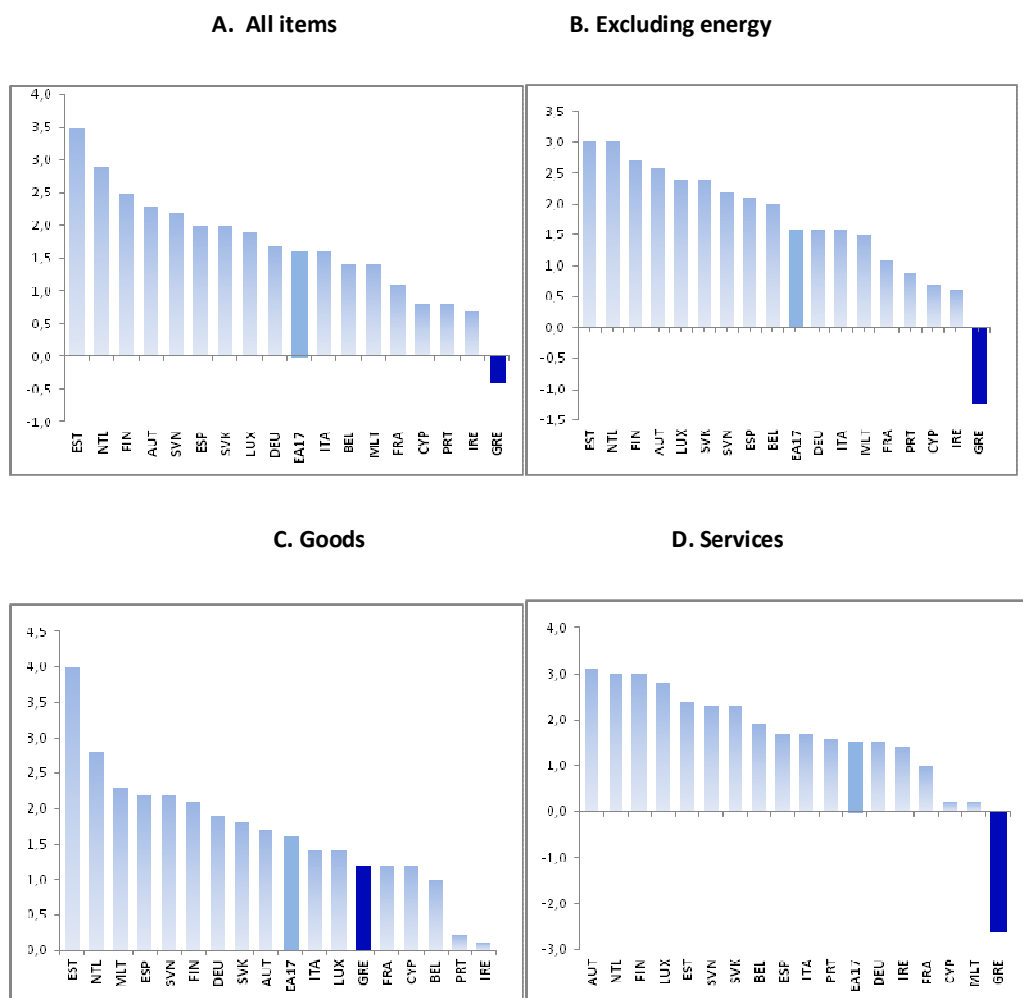
Table 3.10 Values of Indicators for Concentration in several Greek NACE sectors

| Herfindahl-Hirschman Index (HHI) | | |
|----------------------------------|-------|-------|
| SECTORS | 2011 | 2010 |
| NACE 23 | 0.498 | 0.518 |
| NACE 24 | 0.030 | 0.030 |
| NACE 25 | 0.020 | 0.017 |
| NACE 26 | 0.040 | 0.042 |
| NACE 27 | 0.100 | 0.097 |
| NACE 55 | 0.002 | 0.002 |
| Concentration Ratio (C5) | | |
| SECTORS | 2011 | 2010 |
| NACE 23 | 0.999 | 0.997 |
| NACE 24 | 0.301 | 0.280 |
| NACE 25 | 0.234 | 0.215 |
| NACE 26 | 0.373 | 0.372 |
| NACE 27 | 0.609 | 0.603 |
| NACE 55 | 0.051 | 0.052 |
| Concentration Ratio (C10) | | |
| SECTORS | 2011 | 2010 |
| NACE 23 | 0.999 | 0.999 |
| NACE 24 | 0.453 | 0.420 |
| NACE 25 | 0.373 | 0.335 |
| NACE 26 | 0.481 | 0.486 |
| NACE 27 | 1.000 | 1.000 |
| NACE 55 | 0.017 | 0.017 |

Source: Firm-level balance sheet data (turnover figures)

[NACE 23: Manufacture of coke (coke), refined petroleum products and nuclear fuel, NACE 24: Manufacture of chemicals and chemical products, NACE 25: Manufacture of rubber and plastics, NACE 26: Manufacture of other non-metallic minerals, NACE 27: Manufacture of basic metals, NACE 55: Accommodation]

Figure 3.4 Price changes of HICP on October 2013 (year-on-year change)



Source: Eurostat

3.4 Export Performance Indicators

One of the fundamental components of the Greek economic recovery strategy and arguably a pillar of the new growth pattern for Greece is the boost of the exports. Especially in times where the domestic demand is weak, targeting markets across borders is essential to facilitate the economic activity. In that context, the National Export Strategy in Greece - which has been designed by the Greek government with the cooperation of several ministries - sets two main goals: first, to minimize the trade deficit by 2014 and, second, to boost exports of goods to represent 16% of GDP by 2014.

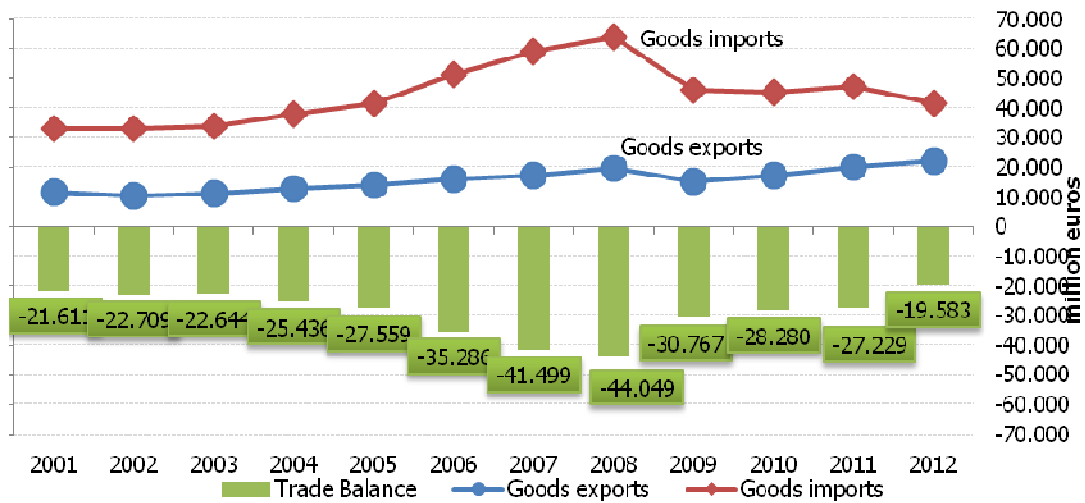
Therefore, the ultimate macroeconomic indicator (**Export Performance Indicators –EPI**) is *the value of exports or the exports as percentage of GDP*. While some progress has already



being achieved towards the two main goals, Greek goods exports continue to lag behind the EU average. Most policy makers would agree that the establishment and sustainability of a positive trade environment can be reached via combined and deep structural reforms. Thus, the National Trade Facilitation Strategy & Roadmap 2012-2015 (NTFS), which implements structural reforms to facilitate trade, is very important in setting a steady ground for the Greek exports and, subsequently, in accelerating the economic growth and job creation.⁴

It is also important to note that, since the NTFS initiative was basically launched in 2013, it is rather too early to expect market results immediately. Digesting these reforms may take some time, thus, the impact of the reforms might not be immediate in all cases and the potential results may prevail with a time lag. Furthermore, the overall macroeconomic environment should not be underestimated, as the basic trade partner of Greece, Eurozone is still in a recession phase and international trade is rather stable. Nevertheless, the important steps that need to be taken should not be delayed till the “good times” emerge.

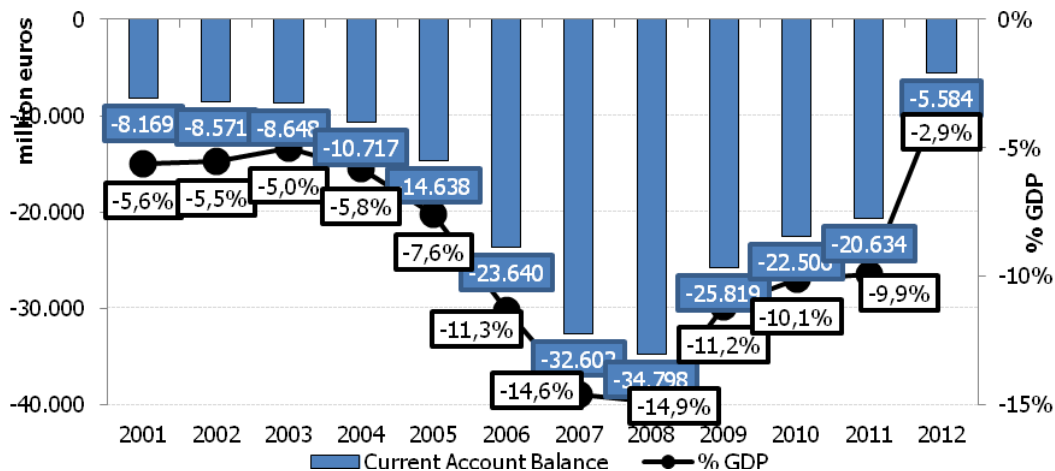
Figure 3.5 Greek goods imports and exports 2001-2012



Source: Bank of Greece

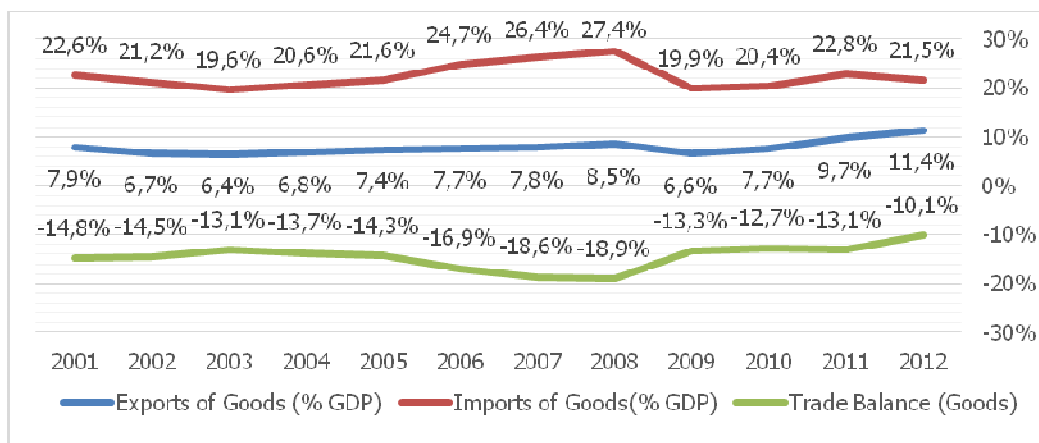
⁴ The policy action indicators on trade facilitation are presented in the next section.

Figure 3.6 Greek Current Account Balance 2001-2012



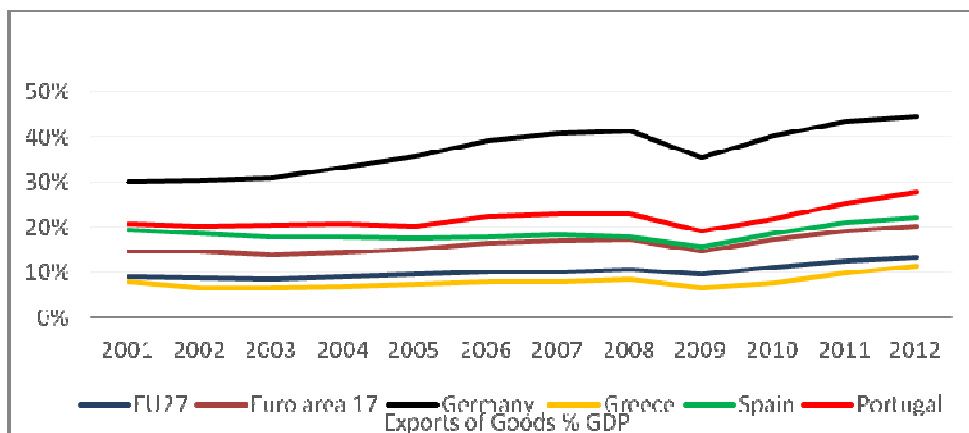
Source: Bank of Greece

Figure 3.7 Greek imports and exports % GDP 2001-2012



Source: Bank of Greece

Figure 3.8 Performance of the Greek exports % GDP compared to EU average 2001-2012



Source: Eurostat

3.5 Summary

Table 3.11 summarizes the Market Efficiency Indicators with some extra metadata such as the economic area referring to the areas studied, the measure definition, the units, information explaining shortly why it is important to monitor and analyze each indicator and the data source. We also present below some summarizing remarks on the evolution of the Market Efficiency Indicators in Greece.

Procurement Efficiency Indicators

Table 3.1 provides a very broad estimate of the total expenditure of the government, public sector and utility service providers on public works, goods and services for the period 2007-2011. Total expenditure increases during the period of 2007-2010, while in 2011 falls by EUR 10.7 billion, half of them because of the Greek reduction in public spending by EUR 5.2 billion. In Greece public spending in 2011 is almost on 60% of the 2009 level, due to the implementation of the economic adjustment programme. Table 3.2 provides a better picture of public procurement spending, expressed as a percentage of GDP, allowing thus a comparative analysis with other European countries. In 2007 Greek expenditures accounts for 12.1% of GDP, while in 2011 falls to 8.8%, the lowest among EU27. EU average spending rate also falls after 2009 but with a lower speed.

Table 3.3 depicts the value of tenders published in TED which provides access to most important information about public procurement in Europe. In Greece the value of tenders is contracted at the same rate as total expenditures do (Table 3.1) between 2007 and 2011. However, in EU27 the value of tenders publishes in TED increases by 15% in the same period. Table 3.4 and Table 3.5 provide data for value of tenders expressed as a percentage of total expenditures and as percentage of GDP, respectively. The value of tenders published as a percentage of total expenditures increase in Greece in 2011, although it stands in a lower level compared to 2007. In EU27, the value of tenders as a percentage of total expenditure is 17.7% in 2011, while in 2007 was 16.9%. Finally, in EU27, the value of tenders published in TED as a percentage of GDP is about 3.4% in 2011, while in Greece is about 1/3 lower. The number of tenders published in TED is apparently lower in Greece in 2011, than previous years, and the same holds for other 8 countries between 2010 and 2011. In EU27 as a total, we can observe that the number of tenders is continuously increasing in the period 2007-2011.

Investment Performance Indicators

Related to industrial areas in Greece, there are 2.5 thousand established firms in 2012, while the workers account for 40 thousand (Table 3.7). The scope of the reforms is the creation of conditions that enhance investments and attract new businesses in these areas. The implementation of reforms (update equipment, redesign the facilities, efficient planning) will have significantly positive impact on local economy and employment.

The indicator “Business impact of rules on FDI” shows the relative position of Greece in a graded group of countries regarding to impact of regulations and law provisions on FDI in Greece (Table 3.8). According to the views of respondents, Greece position seems to deteriorate through time, indicating the negative impact of regulations in business environment, and therefore, an incoherent and complicated legislative system. Moreover, Greece possess the last position of ranking reflecting the negative view of correspondents about policy framework of investment procedures in Greece compared to other European countries (Figure 3.1).

Concerning the “Business investment as percentage of GDP” indicator, its lowest value is observed in 2005 (6.25%) and in 2011 (6.57%), while for the remaining years, it doesn’t exceed 10% of GDP. Moreover, the “business investment” indicator in Greece is lower than in other countries that have significantly higher percentage rate of GDP (e.g. PT 11.07% and IT 10.48% in 2011). In addition the lowest value of “Foreign direct investment” indicator is 0.12% in 2010, while the highest value (1.80%) is observed in 2006, implying strongly the need for reforms that facilitate the business and enhance business environment. It is important to mention that the indicator in Greece fluctuates at the lowest value among other countries (e.g. PT 3.84% and ES 2% in 2011).

Competition Intensity Indicators

The results obtained with respect to the HHI and the Concentration ratios exhibit differences for the sectors examined. For instance, in the Accommodation industry the lower value of the respective indices compared with those in manufacturing related sectors associates with the large number of businesses in the sector (Table 3.10). As far as the price level is concerned, Greece is the only country in the Eurozone with deflation during the last months of 2013. Even though this trend is mainly the result of the long recession and the burgeoning unemployment, it can be argued that the reforms undertaken thus far have also an impact on prices of products and services.



Export Performance Indicators

Figure 3.5 shows that in 2009 there was a deep decrease in the Greek good exports and an even deeper decrease in the Greek good imports and this can be mainly explained as a result of the economic crisis. The Trade Balance (and the Current Account Balance in Figure 3.6) is improving from 2009 but appearing with a negative sign. Greek exports as percentage to GDP (Figure 3.7) seem to improve after 2009, reaching the 11.4% level in 2012 (but still lagging behind the 16% target for 2014 according to the National Export Strategy). In addition, Greek goods exports lag behind the EU 27 average and the Euro area 17 (Figure 3.8).

Since the overall macroeconomic environment in Greece and its neighboring markets is rather unstable, the establishment and sustainability of a friendly trade environment via combined and deep structural trade reforms in Greece is a prerequisite to keep the Greek exports “alive”.



Table 3.11 Market Efficiency Indicators

| | Indicator name | Economic Area | Measure Definition | Unit | Objective | Source | #Table/Figure |
|----|---|---------------|--|------------------------------------|------------------------|--|---------------|
| 1α | Total expenditure by general government and utilities on works, goods and services | PEI | | Mil. Euros | Monitoring expenditure | European commission - DG Internal Market | Table 3.1 |
| 1b | Total expenditure by general government and utilities on works, goods and services as a percentage of GDP | PEI | <u><i>Total expenditure by general government and utilities on works, goods and services</i></u> <i>GDP</i> | % of GDP | Monitoring expenditure | European commission - DG Internal Market | Table 3.2 |
| 2α | Estimated Value of tenders published in TED | PEI | | Mil. Euros | Openness, Transparency | European commission - DG Internal Market | Table 3.3 |
| 2b | Value of tenders published in TED as % of total expenditure | PEI | <u><i>Value of tenders published in TED</i></u> <i>1α</i> | % of total Procurement expenditure | Openness, Transparency | European commission - DG Internal Market | Table 3.4 |
| 2c | Value of tenders published in TED as % of GDP | PEI | <u><i>Value of tenders published in TED</i></u> <i>GDP</i> | % of GDP | Openness, Transparency | European commission - DG Internal Market | Table 3.5 |
| 3 | The number of | PEI | | Number | Openness, | European | Table 3.6 |

2 Indicators of Business Performance and Progress Reform

| Indicator name | Economic Area | Measure Definition | Unit | Objective | Source | #Table/Figure |
|---|---------------|---|---|--|---|---------------|
| tenders published in TED | | | | Transparency | commission - DG Internal Market | |
| 4 Price paid for specific products ⁵ | PEI | Price paid for specific supplies *100 / Price paid for specific supplies (3 EU countries with lower prices) | Index >100. lower efficiency of the procurement process <100. higher efficiency | Reducing cost | General Secretariat for Commerce, Various sources for other countries | |
| 5 Industrial Areas in Greece in 2012 | IPI | Surface/Established firms/Workers | Acres/Number/Number | Monitoring investment | ETVA, Industrial Areas | Table 3.7 |
| 6a Business impact of rules on FDI in Greece | IPI | Relative position in a graded group | Ranking | Influence of regulation and law provisions | World Economic Forum | Table 3.8 |
| 6b Business impact of rules on FDI – Economies ranking | IPI | Relative position in a graded group | Ranking | Influence of regulation and law provisions | World Economic Forum | Figure 3.1 |
| 7 Business Regulations in 2013 | IPI | Relative position in a graded group/Rating on a scale from 0 to 10 | Ranking/Rating | Measuring regulations | Fraser Institute | Table 3.9 |

⁵ It is expected that in later stages of the public procurement reform, there will be a sufficient database for contracts, where information for prices in each product can be easily extracted and compared to other countries.



| Indicator name | Economic Area | Measure Definition | Unit | Objective | Source | #Table/Figure |
|--|---------------|--|------------|---------------------------------|--|---------------|
| 8 Business investment as percentage of GDP across countries | IPI | $\frac{\text{Business investment}}{GDP}$ | % of GDP | Monitoring investment | Eurostat | Figure 3.2 |
| 9 Foreign Direct Investment as percentage of GDP across countries | IPI | $\frac{\text{Foreign Direct Investment}}{GDP}$ | % of GDP | Monitoring investment | Eurostat | Figure 3.3 |
| 10a Herfindahl-Hirschman Index (HHI) | CII | $\sum_{i=1}^N s_i^2$ | Number | Measuring competition intensity | Firm-level balance sheet data (turnover figures) | Table 3. |
| 10b Concentration Ratio(five biggest firms, C5) | CII | $\sum_{i=1}^5 s_i$ | Number | Measuring competition intensity | Firm-level balance sheet data (turnover figures) | Table 3. |
| 10c Concentration Ratio(ten biggest firms, C10) | CII | $\sum_{i=1}^{10} s_i$ | Number | Measuring competition intensity | Firm-level balance sheet data (turnover figures) | Table 3. |
| 11 Price changes | CII | | Number | Measuring competition intensity | Eurostat | Figure 3.4 |
| 12a Greek goods | EPI | | Mil. Euros | Monitoring | Bank of | Figure 3.5 |

| | Indicator name | Economic Area | Measure Definition | Unit | Objective | Source | #Table/Figure |
|------------|---|---------------|--|---------------------|--------------------|----------------|---------------|
| | imports and exports | | | | exports | Greece | |
| 12b | Greek Current Account Balance | EPI | | Mil. Euros/% of GDP | Monitoring exports | Bank of Greece | Figure 3.6 |
| 12c | Greek imports and exports % GDP | EPI | $\frac{\text{Imports}}{\text{GDP}}, \frac{\text{Exports}}{\text{GDP}}$ | % of GDP | Monitoring exports | Bank of Greece | Figure 3.7 |
| 12d | Performance of the Greek exports % GDP compared to EU average | EPI | | % of GDP | Monitoring exports | Eurostat | Figure 3.8 |



4. Policy Action Indicators

The Policy Action Indicators aim at the monitoring of the level of government activity. These indicators are intended to measure the intensity of reform-instigated policy behaviour designed to remedy structural weaknesses. The Policy Action Indicators for the public procurement, investment and exports follow. The structural reforms to boost competition are illustrated solely in the Market Efficiency Indicators (impact indicators) presented in the previous section.

4.1 Public procurement

The **Public Procurement Policy Action Indicators (PPPAI)** involve policy action indicators, or "input" indicators that could potentially influence public procurement process output. For example indicator "Public sector contracts are sufficiently open to foreign bidders" could be a proxy for foreign competition intensity, improving outcomes of the public procurement system. We propose the following Public Procurement Policy Action Indicators: i) *government's procurement of advanced tech products*, ii) *public sector contracts are sufficiently open to foreign bidders*, iii) *enterprises using Internet for accessing tender documents and specifications in electronic procurement systems of public authorities* and iv) *enterprises using Internet for offering goods or services in public authorities' electronic procurement systems*. The objective of each indicator is presented in Table 4.13.

Table 4.1 Government's procurement of advanced tech products, 1-7 (best)

| | Score | | | | | | Rank | | | | | |
|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 08-09 | 09-10 | 10-11 | 11-12 | 12-13 | 13-14 | 08-09 | 09-10 | 10-11 | 11-12 | 12-13 | 13-14 |
| Austria | 4.0 | 3.8 | 4.1 | 4.2 | 3.8 | 3.7 | 40 | 55 | 38 | 26 | 50 | 47 |
| Belgium | 4.0 | 4.1 | 4.0 | 4.1 | 4.1 | 3.7 | 41 | 35 | 47 | 36 | 25 | 45 |
| Bulgaria | 3.4 | 3.3 | 3.4 | 3.5 | 3.4 | 3.3 | 82 | 97 | 87 | 77 | 81 | 90 |
| Croatia | 3.5 | 3.3 | 2.9 | 2.9 | 2.7 | 2.6 | 69 | 94 | 121 | 122 | 129 | 136 |
| Cyprus | 4.0 | 4.3 | 4.2 | 4.1 | 3.7 | 3.5 | 36 | 19 | 29 | 37 | 55 | 72 |
| Czech Republic | 4.0 | 4.2 | 4.2 | 3.5 | 2.9 | 2.8 | 35 | 23 | 31 | 81 | 122 | 124 |
| Denmark | 4.5 | 4.6 | 4.6 | 4.3 | 3.7 | 3.4 | 10 | 8 | 9 | 20 | 63 | 87 |
| Estonia | 4.3 | 4.0 | 4.1 | 4.2 | 4.0 | 3.9 | 18 | 36 | 43 | 25 | 35 | 34 |
| Finland | 4.7 | 4.7 | 4.7 | 4.7 | 4.5 | 4.2 | 7 | 6 | 6 | 8 | 14 | 21 |
| France | 4.3 | 4.0 | 4.0 | 4.0 | 3.8 | 3.6 | 19 | 37 | 48 | 48 | 49 | 60 |
| Germany | 4.0 | 3.9 | 4.2 | 4.2 | 4.3 | 4.3 | 34 | 45 | 32 | 29 | 21 | 17 |
| Greece | 3.2 | 3.3 | 3.2 | 3.0 | 2.7 | 2.4 | 103 | 91 | 108 | 113 | 130 | 141 |
| Hungary | 2.9 | 2.9 | 3.2 | 3.4 | 3.1 | 3.0 | 116 | 118 | 106 | 90 | 110 | 114 |
| Ireland | 3.9 | 3.7 | 3.6 | 3.4 | 3.5 | 3.5 | 43 | 59 | 75 | 82 | 80 | 70 |
| Italy | 2.9 | 2.8 | 3.0 | 3.0 | 2.9 | 2.7 | 117 | 120 | 117 | 114 | 121 | 129 |
| Latvia | 3.2 | 3.2 | 3.1 | 3.4 | 3.4 | 3.2 | 100 | 102 | 111 | 87 | 85 | 101 |
| Lithuania | 3.4 | 3.2 | 3.2 | 3.3 | 3.2 | 3.0 | 83 | 100 | 104 | 96 | 96 | 109 |
| Luxembourg | 4.4 | 4.9 | 4.9 | 4.7 | 4.6 | 4.4 | 14 | 3 | 4 | 7 | 8 | 11 |
| Malta | 3.9 | 4.2 | 4.4 | 4.3 | 3.9 | 3.9 | 44 | 21 | 19 | 19 | 44 | 35 |
| Netherlands | 4.0 | 4.1 | 4.3 | 4.3 | 4.2 | 4.1 | 37 | 31 | 24 | 22 | 23 | 26 |
| Poland | 3.7 | 4.2 | 3.7 | 3.3 | 3.2 | 3.1 | 62 | 29 | 61 | 100 | 101 | 103 |
| Portugal | 4.0 | 4.3 | 4.4 | 4.2 | 4.0 | 3.7 | 31 | 17 | 17 | 28 | 36 | 50 |
| Romania | 3.5 | 3.4 | 3.2 | 3.1 | 3.1 | 3.2 | 73 | 75 | 105 | 111 | 114 | 99 |
| Slovak Republic | 3.2 | 3.0 | 2.7 | 2.8 | 2.8 | 2.6 | 97 | 111 | 127 | 129 | 127 | 134 |
| Slovenia | 3.4 | 3.7 | 3.7 | 3.4 | 3.1 | 2.9 | 89 | 61 | 64 | 84 | 106 | 121 |
| Spain | 3.7 | 3.6 | 3.4 | 3.4 | 3.3 | 3.2 | 55 | 66 | 88 | 85 | 89 | 102 |
| Sweden | 4.7 | 4.4 | 4.5 | 4.5 | 4.5 | 4.2 | 8 | 14 | 13 | 10 | 12 | 22 |
| United Kingdom | 4.0 | 4.0 | 3.8 | 3.9 | 3.9 | 3.6 | 32 | 43 | 53 | 49 | 45 | 56 |

Source: World Economic Forum, Global Competitiveness Index

Table 4.2 Public sector contracts are sufficiently open to foreign bidders (Updated: MAY 2013, IMD WCY executive survey based on an index from 0 to 10)

| Public sector contracts | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|-------------------------|------|------|------|------|------|------|------|------|
| Austria | 7.92 | 7.32 | 6.77 | 6.31 | 6.96 | 6.67 | 6.51 | 6.84 |
| Belgium | 6.90 | 6.67 | 6.32 | 6.69 | 6.66 | 7.80 | 7.16 | 7.47 |
| Bulgaria | 4.92 | 4.61 | 3.86 | 4.34 | 5.39 | 5.15 | 4.86 | 4.35 |
| Croatia | 4.85 | 4.81 | 5.05 | 4.61 | 4.50 | 5.11 | 4.87 | 5.80 |
| Czech Republic | 6.69 | 5.20 | 5.94 | 5.57 | 4.94 | 5.05 | 5.38 | 5.75 |
| Denmark | 8.15 | 7.90 | 7.74 | 7.97 | 7.62 | 7.53 | 7.71 | 7.72 |
| Estonia | 7.33 | 7.09 | 7.16 | 6.41 | 6.70 | 6.74 | 6.94 | 7.40 |
| Finland | 8.13 | 6.80 | 6.72 | 8.07 | 7.60 | 8.08 | 7.64 | 7.96 |
| France | 5.74 | 5.54 | 5.03 | 5.70 | 5.92 | 5.86 | 5.95 | 6.68 |
| Germany | 6.60 | 6.75 | 6.84 | 6.99 | 6.89 | 7.26 | 7.80 | 7.57 |
| Greece | 6.15 | 6.63 | 6.24 | 5.18 | 5.70 | 5.44 | 5.24 | 5.67 |
| Hungary | 7.47 | 7.55 | 6.92 | 6.31 | 6.97 | 5.66 | 5.13 | 5.12 |
| Ireland | 7.86 | 8.08 | 7.76 | 7.80 | 7.96 | 7.96 | 8.08 | 8.51 |
| Italy | 5.02 | 5.05 | 4.88 | 4.54 | 4.51 | 5.10 | 5.13 | 4.92 |
| Lithuania | - | 5.09 | 4.17 | 5.00 | 4.73 | 3.78 | 4.83 | 5.49 |
| Luxembourg | 7.50 | 6.97 | 6.68 | 6.62 | 6.80 | 6.77 | 6.98 | 6.23 |
| Latvia | - | - | - | - | - | - | - | 5.48 |
| Netherlands | 7.37 | 7.66 | 7.28 | 7.62 | 7.07 | 7.71 | 7.77 | 8.10 |
| Poland | 4.14 | 4.39 | 5.65 | 5.33 | 7.21 | 5.88 | 6.82 | 8.29 |
| Portugal | 6.62 | 7.08 | 6.63 | 7.00 | 6.41 | 6.80 | 7.00 | 6.81 |
| Romania | 3.31 | 4.68 | 4.70 | 2.63 | 4.00 | 5.56 | 3.88 | 4.56 |
| Slovak Republic | 6.04 | 4.97 | 5.33 | 5.61 | 4.81 | 5.24 | 5.38 | 5.14 |
| Slovenia | 5.38 | 5.14 | 5.20 | 5.20 | 4.74 | 4.60 | 4.89 | 4.63 |
| Spain | 5.28 | 5.18 | 5.28 | 5.17 | 5.29 | 6.16 | 5.87 | 5.58 |
| Sweden | 7.05 | 7.07 | 7.20 | 7.23 | 7.27 | 7.70 | 8.03 | 7.71 |
| United Kingdom | 7.25 | 7.14 | 6.96 | 7.37 | 7.20 | 7.74 | 8.00 | 7.96 |

Source: IMD World Competitiveness Yearbook

Table 4.3 Enterprises (without financial sector) using Internet for accessing tender documents and specifications in electronic procurement systems of public authorities (as a % of enterprises) - 2012

| | SMEs | Large enterprises | All Enterprises |
|-------------------------------|------|-------------------|-----------------|
| Austria | 26 | 41 | 27 |
| Belgium | 15 | 23 | 16 |
| Bulgaria | 13 | 27 | 13 |
| Croatia | 18 | 26 | 18 |
| Cyprus | 30 | 52 | 30 |
| Czech Republic | 24 | 32 | 25 |
| Denmark | 25 | 37 | 25 |
| Estonia | 22 | 35 | 23 |
| Finland | 31 | 34 | 31 |
| France | 32 | 45 | 32 |
| Germany | 18 | 23 | 19 |
| Greece | 7 | 12 | 7 |
| Hungary | 19 | 24 | 19 |
| Ireland | 43 | 64 | 43 |
| Italy | 18 | 37 | 18 |
| Latvia | 32 | 46 | 32 |
| Lithuania | 30 | 56 | 30 |
| Luxembourg | 22 | 39 | 22 |
| Malta | 35 | 36 | 35 |
| Netherlands | 19 | 36 | 20 |
| Poland | 27 | 36 | 27 |
| Portugal | 21 | 53 | 22 |
| Romania | 18 | 36 | 19 |
| Slovakia | 25 | 31 | 25 |
| Slovenia | 40 | 56 | 41 |
| Spain | 14 | 32 | 14 |
| Sweden | 32 | 39 | 32 |
| United Kingdom | 21 | 42 | 22 |
| European Union (28 countries) | 22 | 35 | 22 |

Source: Eurostat

[SMEs (10-249 persons employed), Large enterprises (250 persons employed or more)]

Table 4.4 Enterprises (without financial sector) using Internet for offering goods or services in public authorities' electronic procurement systems (eTendering), in own country - 2012

| | SMEs | Large enterprises | All Enterprises |
|-------------------------------|------|-------------------|-----------------|
| Austria | 12 | 28 | 13 |
| Belgium | 7 | 18 | 8 |
| Bulgaria | 8 | 16 | 9 |
| Croatia | 17 | 24 | 17 |
| Cyprus | 10 | 17 | 11 |
| Czech Republic | 17 | 26 | 18 |
| Denmark | 19 | 31 | 19 |
| Estonia | 18 | 27 | 19 |
| Finland | 5 | 10 | 5 |
| France | 12 | 29 | 12 |
| Germany | 7 | 14 | 7 |
| Greece | 6 | 11 | 7 |
| Greece | 6 | 11 | 7 |
| Hungary | 11 | 14 | 11 |
| Ireland | 26 | 45 | 26 |
| Italy | 8 | 19 | 8 |
| Latvia | 18 | 21 | 18 |
| Lithuania | 27 | 44 | 27 |
| Luxembourg | 9 | 14 | 9 |
| Malta | 13 | 14 | 13 |
| Netherlands | 11 | 27 | 12 |
| Poland | 25 | 28 | 25 |
| Portugal | 17 | 40 | 18 |
| Romania | 12 | 26 | 13 |
| Slovakia | 22 | 19 | 22 |
| Slovenia | 0 | 0 | 0 |
| Spain | 4 | 12 | 4 |
| Sweden | 16 | 25 | 16 |
| United Kingdom | 14 | 28 | 14 |
| European Union (28 countries) | 11 | 22 | 12 |

Source: Eurostat

[SMEs (10-249 persons employed), Large enterprises (250 persons employed or more)]

4.2 Investment

To monitor the progress of the structural reforms aiming at the boost of the Greek investments, we propose the following **Investment Policy Action Indicators (IPAI)**: i) *dealing*

with *construction permits*, from the Doing Business report of the World Bank⁶, which includes the procedures, the time and costs required to grant a construction permit. This indicator assesses the process of granting licenses and permits⁷, the completion of required notifications and inspections⁸, as well as the process of obtaining utility connections⁹. This indicator monitors the progress of the reforms regarding the construction licensing procedures. ii) *procedures for starting up a business*, from the Doing Business report of the World Bank, which includes the required number of procedures the entrepreneurs should expect to go through to startup a business,¹⁰ the average time, the cost and minimum capital required as a percentage of gross national income per capita to startup a business. The main scope of the reforms is the facilitation of licensing system in construction works as well as for starting up a business by reducing the approval time and associated costs and by simplifying the procedures for granting a license. The coordination and the cooperation among involved public agencies, as well as informed and educated civil servants are prerequisite for efficient functioning of the system. By monitoring the aforementioned indicators, the reforms progress is observed. Next, we present the aforementioned indicators, and their performance in Greece compared to other countries.

Table 4.5 Dealing with construction permits in Greece from 2010 to 2013

| | 2013 | 2012 | 2011 | 2010 |
|--------------------------------------|-------|-------|------|-------|
| Procedures (number) | 19 | 15 | 14 | 15 |
| Time (days) | 105 | 89 | 169 | 169 |
| Cost (% of income per capita) | 27.1% | 27.5% | 3.4% | 52.9% |

Source: World Bank Doing Business

⁶ World Bank publishes on an annual basis, the Doing Business report which tries to assess the ease of doing business in a wide set of countries around the globe.

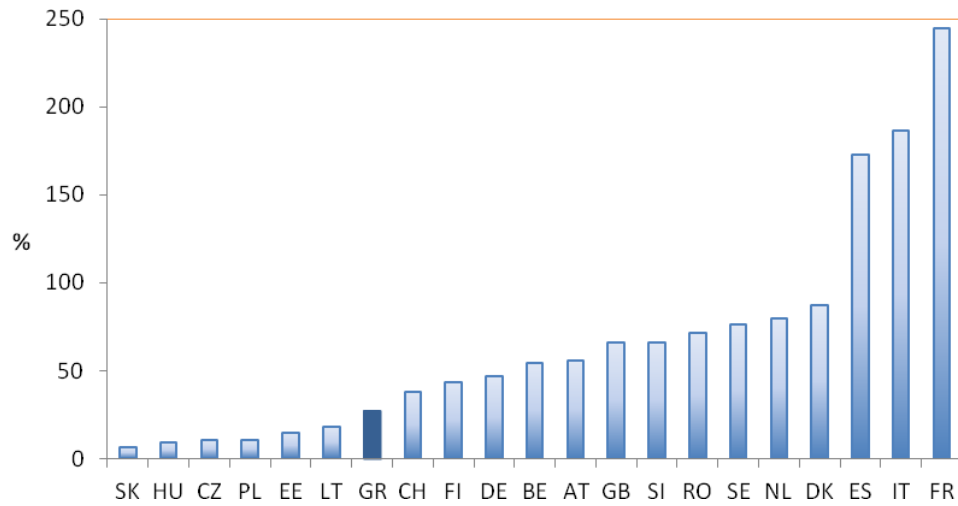
⁷ This includes the archeological certificate, fire protection approval, land registry certificate, Hygiene Agency of the feasibility of the project, payment to the Social Security, initial permit/approval from the Municipality and building permit from the Municipality.

⁸ This includes the processes: notify the archeological department of commencement of works, the police of the commencement of works and the municipality of the commencement of works, request and obtain the foundation work inspection, request and obtain structural inspection.

⁹ This includes the processes: apply/obtain water and sewage connection, obtain telephone connection, register the building at the Municipal Authorities.

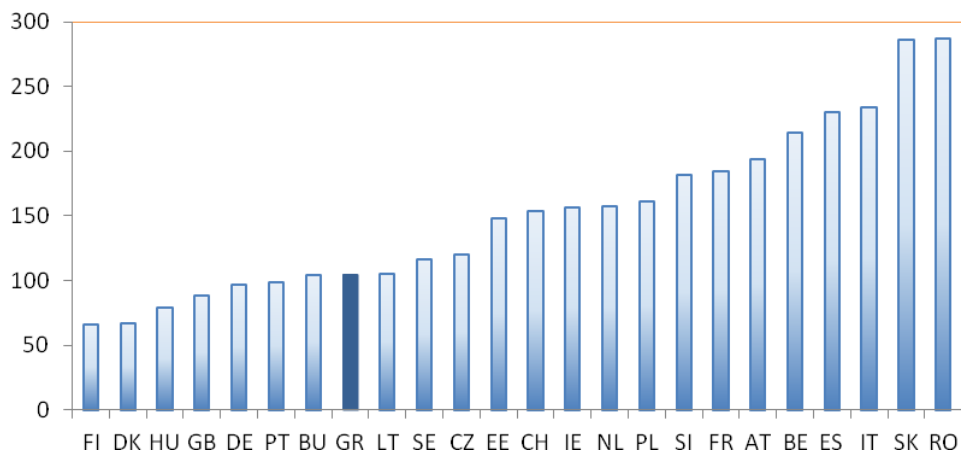
¹⁰ This includes the processes: obtain Tax Clearance form A7 from Tax Authority, submit with GEMI the application of establishment and its forms, register the employees with IKA (Social Security Organization), register with OAEI (Insurance Organization for the Self-Employed).

Figure 4.1 Associated costs (as % of income per capita) for granting construction permits in 2013 across countries



Source: World Bank Doing Business

Figure 4.2 Days required for granting construction permits in 2013 across countries



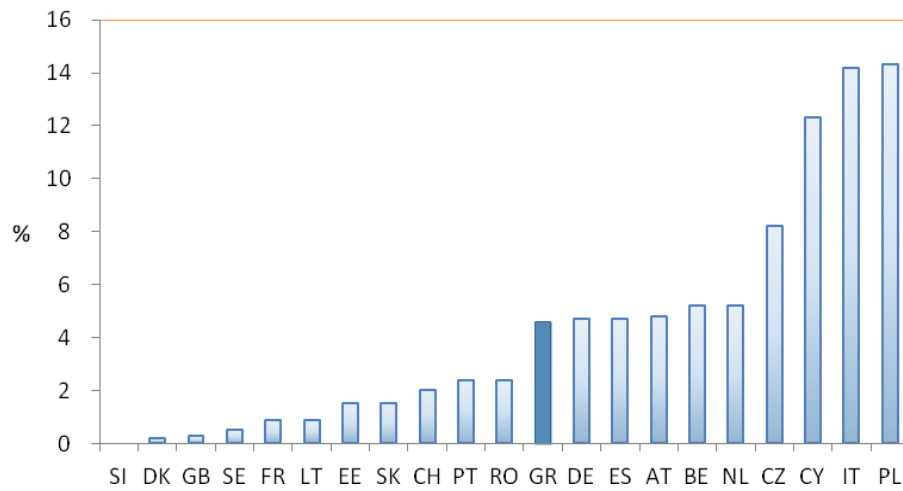
Source: World Bank Doing Business

Table 4.6 Licensing to startup a business in Greece from 2010 to 2013

| | 2013 | 2012 | 2011 | 2010 |
|--|------|--------|--------|--------|
| Procedures (number) | 5 | 11 | 10 | 15 |
| Time (days) | 14 | 11 | 10 | 19 |
| Cost (% of income per capita) | 4.6 | 20.50% | 20.10% | 20.70% |
| Paid-in Min. Capital (% of income per capita) | 0.0 | 24.40% | 22.80% | 22.30% |

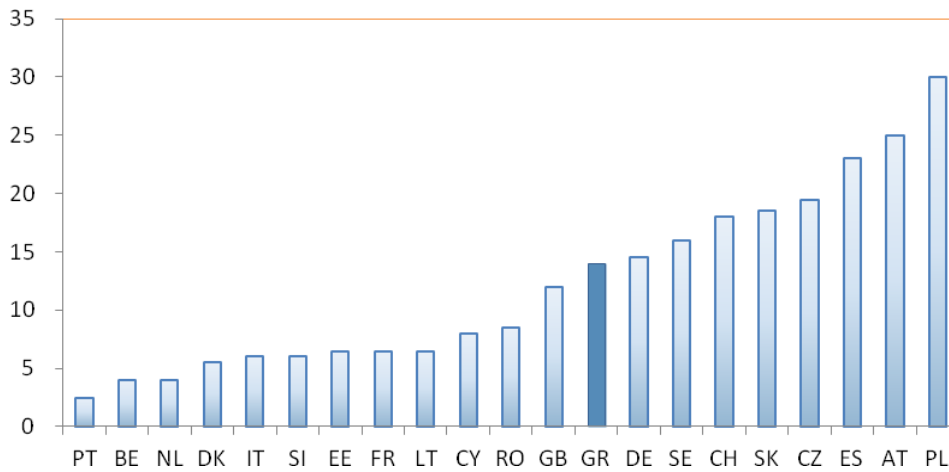
Source: World Bank Doing Business

Figure 4.3 Associated costs (as % of income per capita) for starting up a business in 2013 across countries



Source: World Bank Doing Business

Figure 4.4 Days required for starting up a business in 2013 across countries



Source: World Bank Doing Business

4.3 Exports

The Greek trade facilitation Operational Steering Committee has been formed to monitor the progress of the implementation of the NTFS. According to the first Newsletter (October 2013) of this committee, significant progress and reforms have been achieved with direct

impact in the time and cost of the export procedures and the volume of documentation.¹¹ In April 2012 has been implemented the productive operation of the electronic submission of the export declaration via the ICISnet (Integrated Customs Information System), while the first results in the pilot programs in the selected custom offices are positive.

More specifically, in the 5th and 6th custom office of Piraeus port and the custom office of Athens airport, important reforms have been implemented: i) there is electronic submission of the export declaration, ii) after the submission of the declaration, the exporter is directly informed if the declaration is approved or not, iii) there are additional areas (approved by the custom officers) apart from the custom offices where the exports can bring the goods about to export, iv) the Export Accompanying Document can be received also by an authorized person, apart from the custom representative and v) the custom office hours are expanded.

In the pilot custom offices, the time to export the low risk goods has been reduced significantly and the custom controls of the medium and high risk goods has been aligned to the EU standards (5%). The trade facilitation Operational Steering Committee also presents some progress in all custom offices concerning the simplification of the custom procedures, like: i) custom clearance can be done also by other persons apart from the custom clearer, ii) there is no authenticity requirement of the signature of the exporter in the authorization of the legal representative, iii) there is the possibility of electronic submission of the supporting to the export declaration documents in pdf, iv) the simplified import and export procedures are applied with common criteria as in all the member states of the EU.

In the near future, the Greek custom offices plan to make additional changes in the productive operation of the ICISnet. The main changes include: i) the electronic submission of the import declaration as well, ii) the ability to pay the various tariffs and taxes electronically, iii) the immediate release of the low risk declarations, iv) The ability to print the export accompanying document by the exporter himself, v) The gradual implementation of the processes involved in the pilot program also at the other Greek custom offices.

The second Newsletter (November 2013) of the Greek trade facilitation Operational Steering Committee presents the formation of a practical guide on e-commerce that will help inform the Greek firms on how to build an e-shop and, thus, will facilitate the online trade. Finally, the third Newsletter (December 2013) of the Greek trade facilitation Operational Steering

¹¹ The Newsletters of the Greek trade facilitation Operational Steering Committee are available at <http://www.mindev.gov.gr/?p=6807>.

Committee presents three important measures that target the export facilitation. First, from December 3, 2013 the full productive operation of the ICISnet is implemented where the necessary export documents are exchanged electronically. Second, a special team on legal issues created a useful guide that includes all the national and international trade rules sorted by product and by export destination. Third, the Ministry of Rural Development and Food targets the export facilitation of the Greek fresh agricultural products by the establishment of the Authorised Trader of fresh agricultural products that enjoys reduced administrative and economic burdens and reduced export time. In addition, a new Risk Analysis System is introduced for the fresh agricultural products according to the EU recommendations and the best practises of the EU countries, while the information system of the Ministry of Rural Development and Food is interconnected with the ICISnet, thus, the collaboration of the Ministry with the custom offices is achieved electronically leading to the facilitation of the pre-custom and custom procedures. All these measures target the reduction of the export barriers and the boost of the extroversion of the Greek agricultural products by rewarding the firms that trade safe, competitive and of high quality products in the international markets.

Therefore, the regular updates and newsletters of the trade facilitation Operational Steering Committee could act as an information device to monitor the implementation and the progress of the trade facilitation reforms. Apart from the information provided by the trade facilitation Operational Steering Committee, we additionally propose some key performance indicators to monitor the progress of the export facilitation reforms.

The **Export Facilitation Policy Action Indicators (EFP AI)** that can be used are:
i) *Trading Across Border ranking (TAB)* from the Doing Business report of the World Bank, which ranks the countries according to the ease of trading across borders.^{12,13} ii) *the time to*

¹² *Doing Business-Trading Across Borders* measures the time and cost (excluding tariffs) associated with exporting and importing a standardized cargo of goods by sea transport. The time and cost necessary to complete every official procedure for exporting and importing the goods are recorded; however, the time and cost for sea transport are not included. All documents needed by the trader to export or import the goods across the border are also recorded. The most recent round of data collection was completed in June 2013.

¹³ All Doing Business yearly rankings have been recalculated to reflect changes to the methodology and revisions of data due to new information. The methodology for the trading across borders indicators was updated in 2013. Documents that are required purely for purposes of preferential treatment are no longer included in the list of documents (for example, a certificate of origin if the use is only to qualify for a preferential tariff rate under trade agreements).

export and cost to export from the Doing Business report of the World Bank¹⁴; since the Greek government targets time and cost reduction in the exports procedures, these indicators can act as relevant monitoring instruments. iii) the *OECD Trade Facilitation Indicators* that include measurement such as Advance rulings, appeal procedures, formalities-Automation/Documents/Procedures etc (see the definitions in Table 4.11). This indicator is not published in an annual basis. iv) the *Enabling Trade Index* (ETI) from the Global Enabling Trade report of the World Economic Forum. The ETI measures the extent to which individual economies have developed institutions, policies, and services facilitating the free flow of goods over borders and to destination. The structure of the Index reflects the main enablers of trade, breaking them into four overall issue areas that are captured in four sub indices: A. market access (1st pillar), B. border administration (2nd- 4th pillar), C. transport and communications infrastructure (5th-7th pillar), D. business environment (8th-9th pillar).¹⁵

Table 4.7 Trading Across Border Rankings for 2013 and 2012 across countries

| Economy | TAB Ranking out of 188 countries | TAB Ranking out of 185 countries |
|----------|----------------------------------|----------------------------------|
| | 2013 | 2012 |
| Greece | 52 | 60 |
| Germany | 14 | 14 |
| Spain | 32 | 35 |
| Portugal | 25 | 17 |

¹⁴ Definitions and methodology is available at <http://www.doingbusiness.org/methodology/trading-across-borders>.

¹⁵ The *border administration subindex* is the most relevant for the current study as this subindex assesses the extent to which the administration at the border facilitates the entry and exit of goods through three pillars: the efficiency of customs administration, the efficiency of import-export procedures and the transparency of border administration. For example, the *Customs services index* measures the extent of services provided by customs authorities and related agencies. The services included are the following: clearance of shipments via electronic data interchange; separation of physical release of goods from the fiscal control; full-time (24 hours/7 days a week) automated processing; customs working hours adapted to commercial needs; fee for services in normal service hours; inspection and release of goods arriving by air by the operator's facility; automated risk assessment as primary basis for physical examination of shipments; multiple inspections (inspections by agencies other than customs), and the promptness of those inspections; exemptions from full customs formalities for shipments of minimal value; exemptions from a duties and taxes for shipments of minimal value; clearance of shipments by a third party; appeal of customs decisions to a higher level or an independent tribunal; and use of reference prices or arbitrary uplifts to invoice values (all index definitions are presented in the World Economic Forum-Global Enabling Trade report at the Technical Notes and Sources). Finally, the *Government Online Service Index* by the World Economic Forum – Enabling Trade Index could act as a proxy for the digitization of export procedure. The Government Online Service Index assesses the quality of government's delivery of online services.

| | | |
|----------------|----|----|
| Poland | 49 | 50 |
| Belgium | 28 | 28 |
| United Kingdom | 10 | 11 |

Source: World Bank Doing Business

Table 4.8 Time and cost to export for Greece and OECD average in 2013

| Indicator | Greece | OECD |
|-------------------------------------|--------|------|
| Documents to export (number) | 4 | 4 |
| Time to export (days) | 16 | 11 |
| Cost to export (US\$ per container) | 1040 | 1070 |

Source: World Bank Doing Business

Table 4.9 Nature of Export Procedures in 2013 for Greece

| Nature of Export Procedures | Duration (days) | US\$ Cost |
|---|-----------------|-----------|
| Documents preparation | 11 | 160 |
| Customs clearance and technical control | 1 | 230 |
| Ports and terminal handling | 2 | 300 |
| Inland transportation and handling | 2 | 350 |
| Totals | 16 | 1040 |

Source: World Bank Doing Business

Table 4.10 Time and cost to export in 2010-2013 across countries

| Economy | <u>Documents to export (number)</u> | | | | <u>Time to export (days)</u> | | | | <u>Cost to export (US\$ per container)</u> | | | |
|----------|-------------------------------------|------|------|------|------------------------------|------|------|------|--|------|------|------|
| | 2013 | 2012 | 2011 | 2010 | 2013 | 2012 | 2011 | 2010 | 2013 | 2012 | 2011 | 2010 |
| Greece | 4 | 4 | 4 | 4 | 16 | 19 | 20 | 20 | 1040 | 1040 | 1078 | 1078 |
| Germany | 4 | 4 | 4 | 4 | 9 | 9 | 9 | 8 | 905 | 902 | 902 | 902 |
| Spain | 4 | 4 | 4 | 4 | 10 | 10 | 10 | 10 | 1310 | 1310 | 1271 | 1271 |
| Portugal | 4 | 4 | 4 | 4 | 15 | 13 | 16 | 16 | 780 | 730 | 730 | 730 |
| Poland | 5 | 5 | 5 | 5 | 17 | 17 | 17 | 17 | 1050 | 1050 | 1050 | 884 |

| | | | | | | | | | | | | |
|-----------------------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|-------------|-------------|-------------|
| Belgium | 4 | 4 | 4 | 4 | 9 | 9 | 9 | 9 | 1240 | 1240 | 1240 | 1240 |
| United Kingdom | 4 | 4 | 4 | 4 | 8 | 8 | 8 | 8 | 1005 | 1000 | 1000 | 1000 |

Source: World Bank Doing Business

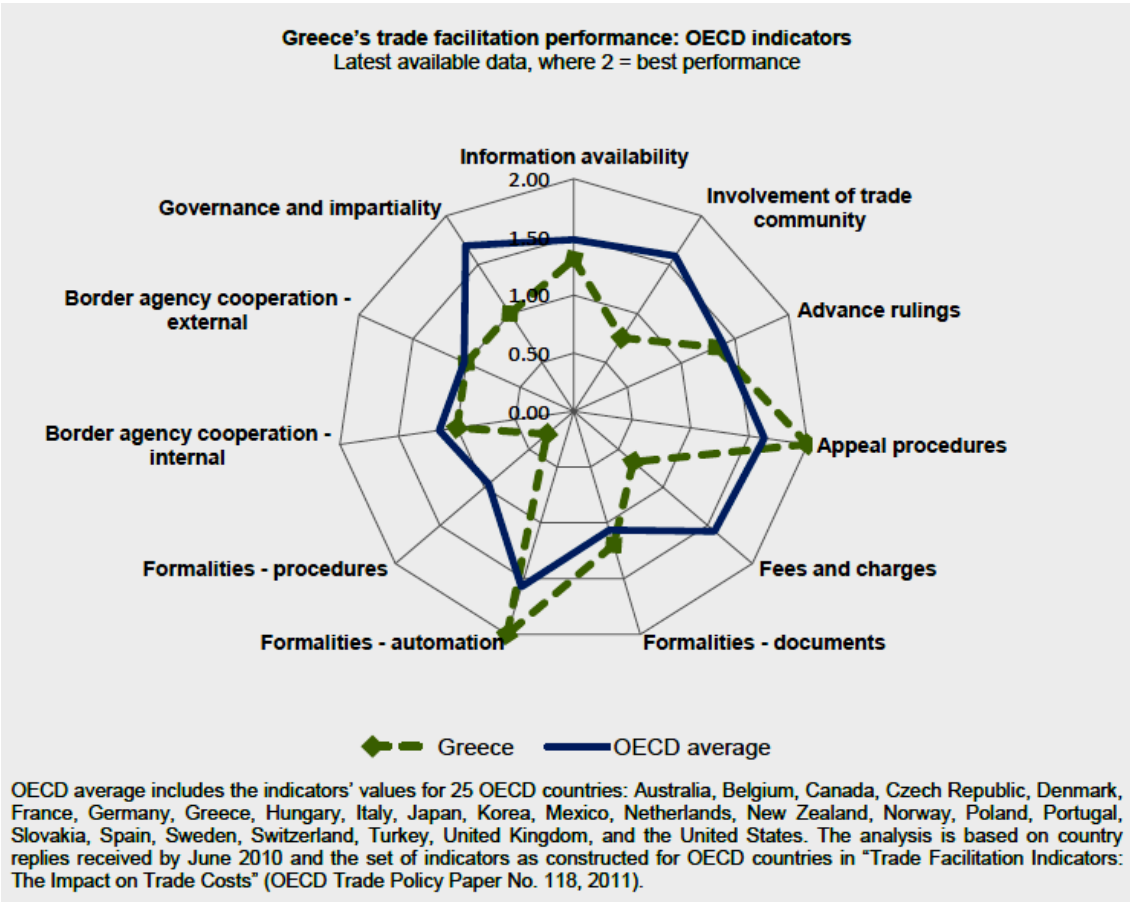


Table 4.11 OECD Trade Facilitation Indicators

| OECD Indicators | |
|---|---|
| Advance Rulings | Prior statements by the administration to requesting traders concerning the classification, origin, valuation method, etc., applied to specific goods at the time of importation; the rules and process applied to such statements. |
| Appeal Procedures | The possibility and modalities to appeal administrative decisions by border agencies. |
| Co-operation – External | Co-operation with neighbouring and third countries. |
| Co-operation – Internal | Co-operation between various border agencies of the country; control delegation to customs authorities. |
| Fees and Charges | Disciplines on the fees and charges imposed on imports and exports. |
| Formalities – Automation | Electronic exchange of data; automated border procedures; use of risk management. |
| Formalities – Documents | Simplification of trade documents; harmonisation in accordance with international standards; acceptance of copies. |
| Formalities – Procedures | Streamlining of border controls; single submission points for all required documentation (single windows); post-clearance audits; authorised economic operators. |
| Governance and Impartiality | Customs structures and functions; accountability; ethics policy. |
| Information Availability | Publication of trade information, including on internet; enquiry points. |
| Involvement of the Trade Community | Consultations with traders. |

Source: OECD

Figure 4.5 Greece's OECD Trade Facilitation Indicators, June 2010



Source: OECD



Table 4.12 Enabling Trade Index 2012 in detail for Greece



| The Enabling Trade Index 2012 in detail | | | | ■ Competitive Advantage ■ Competitive Disadvantage | |
|---|--|----------|------------------------------|--|--|
| INDICATOR, UNITS | RANK/132 | SCORE | BEST PERFORMER | SCORE | |
| 1st pillar: Domestic and foreign market access67.....3.9 | | | | | |
| 1.01 | Tariff rate, (%)..... | 3..... | Singapore..... | 6.2 | |
| | | | Hong Kong SAR..... | 0.0 | |
| 1.02 | Non-tariff measures, index 0-100 (worst) ¹ | 34..... | Cambodia..... | 4.7 | |
| 1.03 | Complexity of tariffs, index 1-7 (best)..... | 105..... | Hong Kong SAR..... | 7.0 | |
| | Tariff dispersion, standard deviation..... | 57..... | Hong Kong SAR..... | 0.0 | |
| | Tariff peaks, %..... | 95..... | Multiple economies (23)..... | 0.0 | |
| | Specific tariffs, %..... | 102..... | Multiple economies (49)..... | 0.0 | |
| | Distinct tariffs, number..... | 104..... | Hong Kong SAR..... | 1.0 | |
| 1.04 | Share of duty-free imports, %..... | 39..... | Hong Kong SAR..... | 100.0 | |
| 1.05 | Tariffs faced, %..... | 79..... | Chile..... | 3.6 | |
| 1.06 | Margin of preference in destination mkt, index 0-100 (best)..... | 89..... | Malawi..... | 93.8 | |
| 2nd pillar: Efficiency of customs administration96.....3.5 | | | | | |
| 2.01 | Burden of customs procedures, 1-7 (best)..... | 74..... | Singapore..... | 6.2 | |
| 2.02 | Customs services index, 0-12 (best)..... | 90..... | Multiple economies (2)..... | 12.0 | |
| 3rd pillar: Efficiency of import-export procedures71.....4.6 | | | | | |
| 3.01 | Efficiency of the clearance process, 1-5 (best)..... | 89..... | Singapore..... | 4.1 | |
| 3.02 | No. of days to import..... | 91..... | Singapore..... | 4.0 | |
| 3.03 | No. of documents to import..... | 37..... | France..... | 2.0 | |
| 3.04 | Cost to import, US\$ per container..... | 65..... | Malaysia..... | 435.0 | |
| 3.05 | No. of days to export..... | 79..... | Multiple economies (4)..... | 5.0 | |
| 3.06 | No. of documents to export..... | 29..... | France..... | 2.0 | |
| 3.07 | Cost to export, US\$ per container..... | 69..... | Malaysia..... | 450.0 | |
| 4th pillar: Transparency of border administration67.....3.3 | | | | | |
| 4.01 | Irregular payments in exports and imports, 1-7 (best)..... | 66..... | New Zealand..... | 6.7 | |
| 4.02 | Corruption Perceptions Index, 0-10 (best)..... | 68..... | New Zealand..... | 6.7 | |
| | | | New Zealand..... | 9.5 | |
| 5th pillar: Availability and quality of transport infrastructure28.....5.2 | | | | | |
| 5.01 | Airport density, number per million pop..... | 11..... | France..... | 6.3 | |
| | | | Iceland..... | 21.9 | |
| 5.02 | Transshipment connectivity, index 0-100 (best)..... | 32..... | United States..... | 100.0 | |
| 5.03 | Paved roads, % of total..... | 25..... | Multiple economies (17)..... | 100.0 | |
| 5.04 | Quality of air transport infrastructure, 1-7 (best)..... | 42..... | Singapore..... | 6.9 | |
| 5.05 | Quality of railroad infrastructure, 1-7 (best)..... | 68..... | Switzerland..... | 6.8 | |
| 5.06 | Quality of roads, 1-7 (best)..... | 62..... | France..... | 6.6 | |
| 5.07 | Quality of port infrastructure, 1-7 (best)..... | 65..... | Singapore..... | 6.8 | |
| 6th pillar: Availability and quality of transport services52.....3.9 | | | | | |
| 6.01 | Liner Shipping Connectivity Index, 0-152.1 (best)..... | 32..... | Singapore..... | 6.1 | |
| 6.02 | Ease and affordability of shipment, 1-5 (best)..... | 87..... | China..... | 152.1 | |
| 6.03 | Logistics competence, 1-5 (best)..... | 73..... | Hong Kong SAR..... | 4.2 | |
| 6.04 | Tracking and tracing ability, 1-5 (best)..... | 63..... | Finland..... | 4.1 | |
| 6.05 | Timeliness of shipments in reaching destination, 1-5 (best)..... | 68..... | Finland..... | 4.1 | |
| 6.06 | Postal services efficiency, 1-7 (best)..... | 38..... | Singapore..... | 4.4 | |
| 6.07 | GATS commitments in the transport sector, index 0-1 (best)..... | 43..... | Japan..... | 6.8 | |
| | | | Jamaica..... | 0.7 | |
| 7th pillar: Availability and use of ICTs50.....4.4 | | | | | |
| 7.01 | Extent of business Internet use, 1-7 (best)..... | 89..... | Netherlands..... | 6.3 | |
| 7.02 | Mobile phone subscriptions/100 pop..... | 53..... | Sweden..... | 6.5 | |
| 7.03 | Broadband Internet subscriptions/100 pop..... | 30..... | Hong Kong SAR..... | 195.6 | |
| 7.04 | Government Online Service Index, 0-1 (best)..... | 46..... | Netherlands..... | 38.1 | |
| 7.05 | Individuals using Internet, %..... | 53..... | Multiple economies (3)..... | 1.0 | |
| | | | Iceland..... | 95.0 | |
| 8th pillar: Regulatory environment97.....3.5 | | | | | |
| 8.01 | Property rights, 1-7 (best)..... | 52..... | Singapore..... | 5.7 | |
| 8.02 | Ethics and corruption, 1-7 (best)..... | 101..... | Finland..... | 6.4 | |
| 8.03 | Undue influence, 1-7 (best)..... | 85..... | Singapore..... | 6.5 | |
| 8.04 | Government efficiency, 1-7 (best)..... | 124..... | New Zealand..... | 6.1 | |
| 8.05 | Domestic competition, 1-7 (best)..... | 112..... | Singapore..... | 5.9 | |
| 8.06 | Efficiency of the financial market, 1-7 (best)..... | 82..... | Saudi Arabia..... | 5.5 | |
| 8.07 | Openness to foreign participation, index 1-7 (best)..... | 73..... | Qatar..... | 5.4 | |
| | Ease of hiring foreign labor, 1-7 (best)..... | 69..... | Luxembourg..... | 5.9 | |
| | Prevalence of foreign ownership, 1-7 (best)..... | 87..... | Albania..... | 5.9 | |
| | Business impact of rules on FDI, 1-7 (best)..... | 119..... | Luxembourg..... | 6.5 | |
| | Openness to multilateral trade rules, index 0-100 (best)..... | 8..... | Singapore..... | 6.4 | |
| 8.08 | Availability of trade finance, 1-7 (best)..... | 85..... | Slovenia..... | 93.1 | |
| | | | Hong Kong SAR..... | 5.6 | |
| 9th pillar: Physical security73.....4.7 | | | | | |
| 9.01 | Reliability of police services, 1-7 (best)..... | 74..... | Finland..... | 6.5 | |
| 9.02 | Business costs of crime and violence, 1-7 (best)..... | 69..... | Finland..... | 6.7 | |
| 9.03 | Business costs of terrorism, 1-7 (best)..... | 73..... | Saudi Arabia..... | 6.5* | |
| | | | Slovenia..... | 6.8 | |

¹ This indicator is not included in the pillar calculation.

* Syria was replaced with second-best Saudi Arabia; see "How to Read the Country/Economy Profiles" for details.

Source: World Economic Forum, Global Enabling Trade Report 2012

4.4 Summary

Table 4.13 summarizes the Policy Action Indicators with some extra metadata such as the economic area referring to the areas studied, the measure definition, the units, information explaining shortly why it is important to monitor and analyze each indicator and the data source. We also present below some summarizing remarks on the evolution of the Policy Action Indicators in Greece.

Public Procurement Policy Action Indicators

Table 4.1The **Public Procurement Policy Action Indicators (PPPAI)** involve policy action indicators, or "input" indicators that could potentially influence public procurement process output. For example indicator "Public sector contracts are sufficiently open to foreign bidders" could be a proxy for foreign competition intensity, improving outcomes of the public procurement system. We propose the following Public Procurement Policy Action Indicators: i) *government's procurement of advanced tech products*, ii) *public sector contracts are sufficiently open to foreign bidders*, iii) *enterprises using Internet for accessing tender documents and specifications in electronic procurement systems of public authorities* and iv) *enterprises using Internet for offering goods or services in public authorities' electronic procurement systems*. The objective of each indicator is presented in Table 4.13.

Table 4.1 depicts data, based on survey of WEF, on which level government's procurement process provides advanced tech products. This table depicts the score and the rank of each



country, where the best score in the relevant scale is 7. Public procurement process in Greece seems to weaken the supply of advanced technological products, from 3.3 in 2010 to 2.4 in 2014. This is also depicted in the rank, where Greece is ranked in 141st position, while in 2010 was in 91st. Table 4.2 provides how sector contracts are sufficiently open to foreign bidders, indicating the level of competition. An index near to 10 shows high level of openness and competition. Greece seems to have a moderate index, near to 6, which increases after 2009. In Table 4.3 is depicted the percentage of enterprises using Internet for accessing tender documents and specifications in electronic procurement systems of public authorities (as a % of enterprises). Only 7% of the total enterprises in Greece uses internet for this reason, 12% for large enterprises, while in EU28 is 22%.

In accordance to the previous table, in Table 4.4 is depicted the percentage of enterprises using Internet for offering goods or services in public authorities' electronic procurement systems (eTendering). Again, only 7% of the total enterprises in Greece uses internet for this reason, 11% for large enterprises, while in EU28 it is not much different.

Investment Policy Action Indicators

According to the “Dealing with construction permits” indicator, the number of procedures for granting a construction permits in 2013 has increased significantly (+27%) compared to the previous years (Table 4.5), while the approval time for granting a construction permit, also, increases by almost 18% from 89 days to 105 days in 2013, when in the years before 2011 it accounted for 169 days. Concerning the associated costs, Greece posses a high ranking position, since major European economies impose higher associated costs for granting a construction permits.

The indicator “licensing to startup a business” in Greece shows that the number of procedures and the associated costs decrease significantly in 2013 implying that the process to startup a business has been improved compared to the past (Table 4.6). However, the associated costs seem to be higher compared to the other European economies, implying that the indicator could be lower with the appropriate structural reforms, in order to accelerate the investment projects (Figure 4.3). Regarding the days required for starting up a business, there is, also, need for structural reforms, since Greece is among countries with long approval time for new businesses.

Export Facilitation Policy Action Indicators



Recently the World Bank published the Doing Business survey and database that includes the TAB indicators for 2013. Greece is currently ranked 52 out of 188 countries in the ease of trading across borders list (Table 4.7). Compared to 2012, Greece has improved its TAB ranking by 8 points as Greece was ranked 60 out of 185 countries last year. According to the survey for 2013, Greece made trading across borders easier by implementing a system allowing electronic submission of customs declarations for exports. Despite the progress made, the time and cost of trading across borders in Greece still lags behind several economies in the European Union. Germany ranks 14 and UK 10 out of 188 countries, while Spain and Portugal ranks 32 and 25, respectively, in 2013. Compared to the OECD average (Table 4.8) Greece needs 5 days more to complete its export procedures, although the number of necessary documents is the same and the cost to export slightly lower and this is due to the high duration in the documents' preparation phase as indicated in Table 4.9 (i.e., there are high delays at the pre-custom phase).

Similarly, Table 4.10 appears Greece in a similar position with respect to the number of documents to export and a slightly worst position with respect to the cost to export compared to other EU countries such as Germany and the United Kingdom. Nevertheless, the time to export is still in 2013 at a high level (although improved 4 days compared to 2010). Finally, the cost to export is rather constant the last four years but this should be reduced in order to reach the Greek goals of the National Trade Facilitation Strategy.

Based on earlier data (June 2010), OECD has published the OECD Trade Facilitation Indicators of the Greek economy in comparison to the OECD average that includes 25 OECD countries (Figure 4.5). Greece, maybe surprisingly, performs much better than the OECD average in the area of Formalities – Automation, which includes the electronic exchange of data, the automated border procedures and the use of risk management (Table 4.11). This indicator mainly answers to the question whether the (import and export) declarations are cleared or can be cleared electronically, that is, it refers mainly to the automation and IT systems at the custom phase. This indicator does not specify the efficiency of the border procedures or these IT systems, for example, by measuring the clearance time, the pre-custom procedures and the necessary documents to export or the number and time of inspections, which are included at the Formalities – Documents and Formalities – Procedures OECD indicators in Figure 4.5. Thus, Greece according to the Formalities – Automation indicator performs well, which means that there exist automated custom procedures but this does not mean that are the more efficient ones as one can see from the

bad performance of the Formalities – Documents and Formalities – Procedures OECD indicators.

Finally, in Table 4.12 Greece is ranked 67 out of 132 countries worldwide in the Domestic and Foreign market access, while Singapore being the best performer. Greece ranks 79 out of 132 on border administration, holding the 96th position on the efficiency of custom administration. Greece holds a slightly better position on the efficiency of import-exports procedures (71st) and on the transparency of border administration (67th). Finally, in 2012 Greece has a competitive disadvantage on the following indices: Burden of customs procedures, Customs services index, Efficiency of the clearance process, Number of days to export, Cost to export, Irregular payments in exports and imports and Corruption Perceptions Index. Competitive advantage is recorded only on the number of documents to export (and to import).



Table 4.13 Policy Action Indicators

| Indicator name | Economic Area | Measure Definition | Unit | Objective | Source | #Table/Figure | |
|----------------|--|--------------------|--|--|--|---|------------|
| 1 | Government's procurement of advanced tech products | PPPAI | In your country, to what extent do government purchasing decisions foster innovation? | index from 1-7 [1 = not at all, 7 = to a great extent] | Pulled Innovation | World Economic Forum, Global Competitiveness Report, survey | Table 4.1 |
| 2 | Public sector contracts are sufficiently open to foreign bidders | PPPAI | Public sector contracts are sufficiently open to foreign bidders | index from 0 (are not sufficiently open) to 10 (are sufficiently open) | Competition | IMD WCY executive survey | Table 4.2 |
| 3 | Enterprises using Internet for accessing tender documents and specifications in electronic procurement systems of public authorities | PPPAI | Enterprises using Internet for accessing tender documents and specifications in electronic procurement systems of public authorities | (% of enterprises) | Competition, SME diffusion | Eurostat | Table 4.3 |
| 4 | Enterprises using Internet for offering goods or services in public authorities' electronic procurement systems | PPPAI | Enterprises using Internet for offering goods or services in public authorities' Electronic procurement systems (e-Tendering) | (% of enterprises) | Competition, SME diffusion, Transparency | Eurostat | Table 4.4 |
| 5a | Dealing with construction permits in Greece | IPAI | Procedures/ Time/ Cost | Number/Days/% of income per capita | Ease of obtaining a permit | World Bank, Doing Business | Table 4.5 |
| 5b | Associated costs for granting construction permits across countries | IPAI | Cost | % of income per capita | Ease of obtaining a permit | World Bank, Doing Business | Figure 4.1 |
| 5c | Days required for granting | IPAI | Time | Days | Ease of obtaining a permit | World Bank, Doing Business | Figure 4.2 |

| Indicator name | Economic Area | Measure Definition | Unit | Objective | Source | #Table/Figure |
|--|---------------|--|---|---------------------------------------|--|-----------------------|
| construction permits across countries | | | | | | |
| 6a Licensing to startup a business in Greece | IPAI | Procedures/ Time/ Cost/ Paid-in Min. Capital | Number/Days/% of income per capita/% of income per capita | Ease to startup a business | World Bank, Doing Business | Table 4.6 |
| 6b Associated costs for starting up a business across countries | IPAI | Cost | % of income per capita | Ease to startup a business | World Bank, Doing Business | Figure 4.3 |
| 6c Days required for starting up a business across countries | IPAI | Time | Days | Ease to startup a business | World Bank, Doing Business | Figure 4.4 |
| 7 Trading Across Border Rankings | EFP AI | Relative position in a graded group | Ranking | Competitive advantage | World Bank, Doing Business | Table 4.7 |
| 8a Time and cost to export | EFP AI | Documents/ Time/ Cost to export | Number/ Days/ US\$ per container | Ease to export | World Bank, Doing Business | Table 4.8, Table 4.10 |
| 8b Nature of Export Procedures | EFP AI | Documents/ Time/ Cost to export per nature of export procedure | Number/ Days/ US\$ per container | Ease to export | World Bank, Doing Business | Table 4.9 |
| 9 OECD Trade Facilitation Indicators | EFP AI | Table 4.11 | index from 0-2 [2 = best performance] | Ease to export, competitive advantage | OECD | Figure 4.5 |
| 10 Enabling Trade Index | EFP AI | Includes subindices | index from 1-7 [1 = not at all, 7 = to a great extent] | Ease to trade | World Economic Forum, the Enabling Trade Index, survey | Table 4.12 |





5. Conclusions

The implementation of deep structural reforms to increase economic growth and employment, notably by improving the business environment, is a fundamental component of the strategy for economic recovery in Greece. Excessive regulatory and administrative burden on businesses, lack of internal competition, limited transparency and inefficiency of public procurement processes, and high costs for export activities prevent the Greek economy from operating with the dynamism necessary to regain competitiveness.

Key ingredient for a successful reform programme is the formation of a system of monitoring and evaluation to ensure that reforms are effective and can be adapted if needed. However, significant challenges remain, especially with respect to lack of skills (retraining of the personnel), incentives (motivation to apply the new working methods), coordination and financial resources to implement the reforms.

It is evident that the deep structural reforms to boost the Greek economy are not an easy task. However, these reforms are necessary to foster the Greek economy and build a solid base for a sustained economic growth. The Greek state should proceed fast and with decisiveness with the implementation of these deep reforms, in order to eliminate the barriers and rigidities that still impede job creation and economic growth.