

Analysis of the deeper causes of the Greek crisis

3

3 The allocation of EU Funds in Greece

3.1 Amounts and levels of invested expenditure

Greece is an EU state that kept its structural support status over the decades. From 1989 until 2013, four programming periods took place under EU Regional and Cohesion policy support and guidance: the first (1989–94), known as the 1st Community Support Framework; the second, of the 2nd C.S.F. (1994–99); the third, of the 3rd C.S.F. (2000–06); and the fourth, of the 2007–13 National Strategic Reference Framework (N.S.R.F.), when a part of its territory was structurally supported. The last programming period is the current one (2014–20). During all these periods, EU funds were matched with Greek national expenditure—together composing public expenditure—and with private expenditure.

The Community's contribution remained the most important component of total and public expenditure over these years (Fig. 3.1). More than half of the funds invested from 1989 until 2013 (54.2 out of €100.1 billion) were provided by the EU. National expenditure was less than half of that amount (€23.9 billion), approximately €1.5 billion more than total private (€22.04 billion). For the 1989–2013 period alone, the total expenditure of €100.1 billion is proportionately divided into 23.9% of national expenditure, 54.1% community expenditure, and 22% of private sector contribution. Public sector expenditure accounts for 78% of total expenditure.

From 1989 to 2006, the Community's expenditure more than doubled in every programming period, reaching almost €23.8 billion in the 2007–13 period in Fig. 3.1.¹ This does not reflect simply the determination, willingness, and efforts made by the Community to support the Greek economy but also the association of financial support to each state's economic performance. This is also illustrated in the next programming period, when the Community expenditure falls because the Greek GDP reduces.

Public expenditure represented more than 91% in the 1989–93 programming period. It then fell approximately to 71% in the following period and increased afterwards to 76% and 81% in the 2000–06 and 2007–13 periods, respectively. On the other hand side, the private sector contributed with less than one-fourth of funds in all but the second programming period, when it reached its highest contribution at 29%.

From 1989 to 2013, the EU invested €2.2 billion per year, Greece invested €957.5 million per year and the private sector barely exceeded a contribution

¹ Deflated prices as explained in Figure.

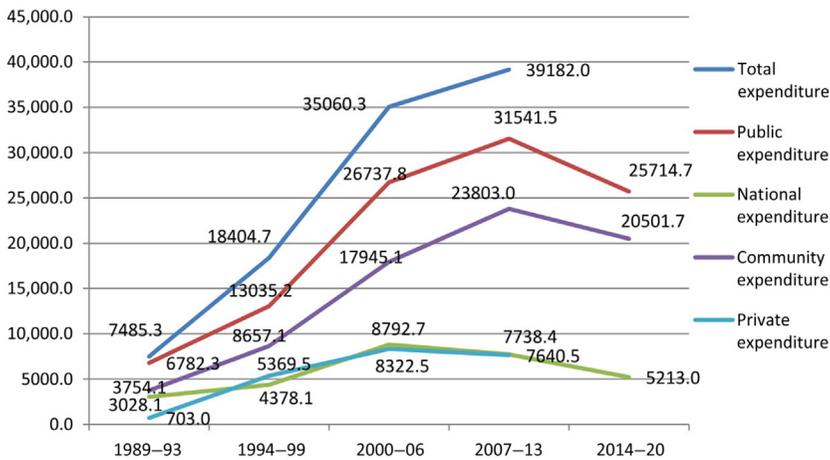


Figure 3.1 Levels of total, public, national, community, and private expenditure in five programming periods (1989–93, 1994–99, 2000–06, 2007–13 and 2014–20).

Source: Data for the four programming periods were extracted from Oikonomou et al., 2010: 241 and originally processed by the Ministry of Finance and Economics. For the 2014–20 period, data were collected from www.espa.gr and are not final. *Other notes:* (1) After 1989, the Mediterranean Integrated Programmes (implemented in the second half of 1980s) were integrated in the 1st C.S.F. (2) In the 3rd C.S.F., the financing of €3.3 billion from the Cohesion Fund and Community Initiatives (current prices) were not included (also excluded in the original dataset). (3) Prices in original dataset were turned to constant, using the harmonized consumer price index (AMECO series ZCPIH, 2015 = 100), BECUs in the 1st and 2nd C.S.F., B€ in the 3rd, 4th and 5th (1 ECU = 1 Euro). The base years selected were 1994 (for 1989–93, in the absence of data before 1994), and for the rest of the programming periods a yearly average was created for the consumer price index for each programming period (61.93 for 1994–99 period, 79.03 for 2000–06, 97.96 for 2007–13 and an average of 100.59 for the 2014–17 part of the 2014–20 period). *Note that sums are lower if calculated by using HCPI for the initial year of each period.*

of €881 million per year. Total expenditure was €4 billion per annum, almost multiplied five times from the first to the last period.

For the full period 1989–2020, the amount contributed by the Community reaches €74.6 billion, national expenditure is at €29.2 billion, and public expenditure, taken together, is at €103.8 billion. Annually these amounts are €2.4 billion of community contribution, €940 millions of national contribution, and an overall €3.35 billion of public expenditure (for the 2014–2020 period sums are estimates).

If the amounts were not deflated as previously, for the 1989–2013 period total expenditure is €127.7 billion, the Community's contribution is €68 billion, national expenditure is €30.4 billion, and private sector expenditure is €28.3 billion. Annually, the respective sums are €4.8 billion of total expenditure, €2.6 billion of Community's contribution, €1.2 billion of national expenditure, and €1 billion of private expenditure.

Measured as a percentage of GDP until the crisis erupts (Table 3.1), both the EU and national expenditure are reduced, an outcome which should relate to GDP rising

Table 3.1 Breakup of total expenditure as % of GDP

	Total expenditure (V = III + IV)	Public expenditure (III = I + II)	Community's contribution (I)	National contribution (II)	Private contribution (IV)
1st C.S.F. (1989–93)	6.25%	5.74%	3.26%	2.48%	0.50%
2nd C.S.F. (1994–99)	6.36%	5.07%	3.44%	1.63%	1.29%
3rd C.S.F. (2000–06)	4.41%	3.48%	2.40%	1.08%	0.93%
3rd C.S.F. (2000–06) ^a	4.32%	3.31%	2.19%	1.12%	1.01%

Note:

^aNovember 2005, after revision by the Greek Ministry of Finance.

Source: Giannitsis (2005), p. 293.

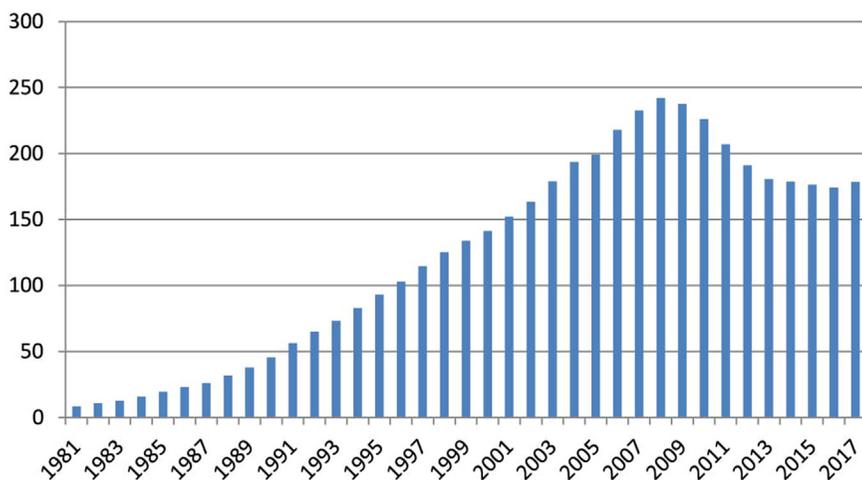


Figure 3.2 Greek GDP, market prices, 1981–2017.

Source: Hellenic Statistical Authority, www.statistics.gr.

(see Fig. 3.2). The EU's contribution as GDP percent increased in the 2nd C.S.F. but fell afterwards. National contribution fell in every period. In the 2nd C.S.F. they both accounted for a fall in public expenditure. As private contribution increased in the 2nd C.S.F., the levels of total contribution, as % GDP, finally increased.

In the 3rd C.S.F., the Community's contribution fell by more than 1% of Greek GDP. As Greek national expenditure fell by half a percent, public expenditure was also reduced by almost 1.5% of GDP. Due to the fall in private expenditure, the total expenditure fell by almost 2% of GDP.

A significant increase in private expenditure, as % GDP, occurred in the 2nd C. S.F. partially accounting for the total expenditure increases.

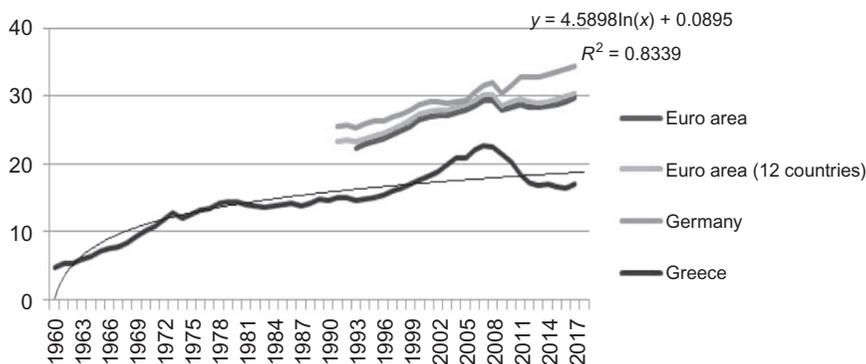


Figure 3.3 GDP per head in Greece, comparison to Germany, EA and EA12.

Source: AMECO series, variable RVGDP, at 2010 reference levels. *Note:* Data were available for Euro area of 12 countries (founding member-states and Germany from 1991 onwards and for the (current) Euro area from 1993 onwards. The dark line projects the trend for Greece's rise in GDP per head. The regression refers to Greece.

The rise in GDP, especially after the first programming period (1989–93) and in particular after 2000, is very high (Fig. 3.2), thus accounting for a large part of the reduction in the EU's and national expenditure measured as proportion of GDP. Obviously the GDP is multiplied within a few years and in particular in the 3rd programming period (up to 2008).

A substantial rising trend of GDP per head is also achieved since 1960. Greece's per capita GDP rises substantially from 1960 until 1972, it stabilizes after and increases again after 1993 and until 2008. The clear picture of a cycle for the Greek economy appears after 1993 for over two consecutive periods, taking a downward trend after 2008 (Fig. 3.3).

Seen as a long-term trend, GDP growth rates generally fluctuate and rise only in the 1993–2002 period, and after 2011 (Fig. 3.4).

3.2 Funding allocation and priorities

3.2.1 An imbalanced allocation of EU funds

From 1989 to 2013, a significant part of the EU expenditure allocated in Greece, approximately €30 billion, was directed to autonomous investment and infrastructure in transport, telecommunication, energy, health care, and environment (Table 3.2). Transport obtained €17.9 billion, the *lion's share* from the Community's expenditure. Proportionately, transport infrastructure represented 60.9% of the total Community's expenditure, while the proportion of total expenditure targeted at transport was even higher, at 69.2%. In other words, more than two-thirds of total funds targeted transportation. In the 1st C.S.F., transport comprised more than one-third of the Community's funds and increased to more than half in

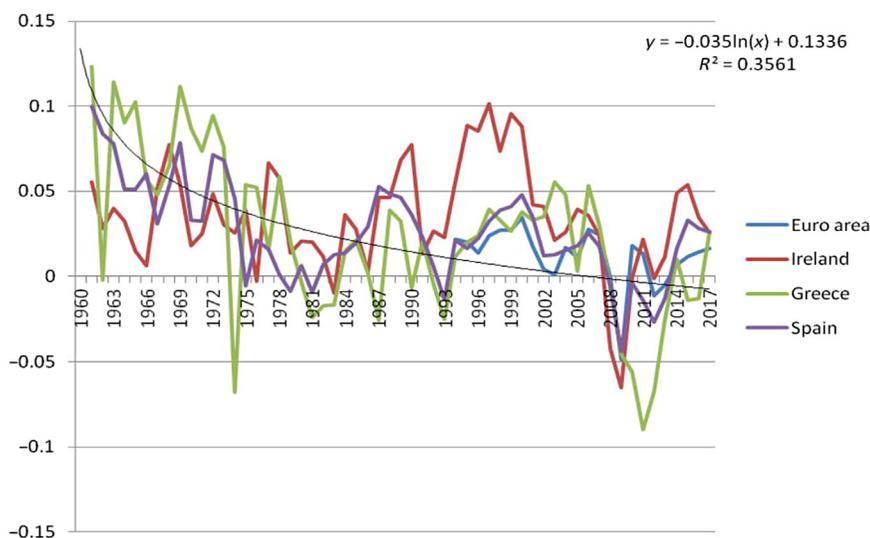


Figure 3.4 Long-term fall in GDP growth rates in Greece since 1960s, comparisons with Ireland, Spain, and the Euro area and logarithmic model fit.

Source: AMECO series, variable RVGDP, constant 2010 prices, calculated by author. *Note:* Calculations were made using the $(GDP_{t+i} - GDP_t)/GDP_t$ formula.

the 2nd C.S.F., reaching a remarkable 71.5% in the 3rd C.S.F., and falling to approximately two-thirds in the 1st N.S.R.F.

This evidence reveals an emphasis on transport infrastructure. Hard infrastructure policies were prevalent in large-scale transport projects of pan-European interest, such as the Athens METRO, the Rio–Antirrio bridge, and major highways and railways.

Greece's poor initial conditions necessitated the development of a relevant infrastructure. Basic public infrastructure was seen as a “precondition for long-term viable development” (Ministry of Finance, 2003: 6). Taking into account the increasing private sector contribution, as requested by EU Cohesion Policy, one can refer—along with other explanations—to sunk costs, invested interests in transport and construction for large Greek construction corporations, and the maturity of firms benefiting from this particular industry, which all impeded directing funds elsewhere to other industries. Some remarkable needs, whose satisfaction absorbed the major stake of funds, were not fully reduced through these efforts of Greek and EU authorities. Until today, infrastructure, again in transportation and physical environment, keeps absorbing a significant part of the investment pie.

The principal problems in implementing infrastructure policies were: (1) the lack of appropriate structures to develop projects and of managerial capacity of state authorities for large-scale projects. In every programming period, several changes in the management and operation of infrastructure programmes had to take place. Semiprivate corporations (in electricity, telecommunication, or gas) and ad-hoc

Table 3.2 Community's Funds and total expenditure in selected sectors

	1st C.S.F. (1989–93)	C.S.F. %	2nd C.S.F. (1994–99)	C.S.F. %	3rd C.S.F. (2000–06)	C.S.F. %	1st ESPA (2007–11)	ESPA %	Total	Total %
Transport	1296.6 (3542.3)	38.5% (40.25)	5394 (12,975)	53.7% (62.36)	7552.2 (17,125)	71.5% (81.05)	3700 (11,026)	67.3% (79.93)	17,942.8 (44,668.3)	60.9% (69.2)
Telecommunication	771 (1589)	22.9% (18.05)	358 (646)	3.6% (3.1)					1129 (2235)	3.8% (3.5)
Environment	163.1 (332.6)	4.8% (3.78)	2397 (2903)	23.9% (13.95)	2019.3 (2710.2)	19.1% (12.82)	1800 (2769)	32.7% (20.07)	6379.4 (8714.8)	21.6% (13.5)
Health and Care	53 (231)	1.6% (2.62)	323.4 (484.8)	3.2% (2.33)	445.4 (567)	4.2% (2.68)			821.8 (1282.8)	2.8% (2.0)
Energy	1086 (3106)	32.2% (35.29)	1235.7 (3053.8)	12.3% (14.68)					2321.7 (6159.8)	7.9% (9.5)
Culture			335.7 (742.8)	3.3% (3.57)	546.5 (736.3)	5.2% (3.48)			882.2 (1479.1)	3% (2.3)
Total	3369.7 (8800.9)	100%	10,043.8 (20,805.4)	100%	10,563.4 (21,138.5)	100%	5500 (13,795)	100%	29,477 (64,539.8)	100%

Notes:

1. 2010 prices, sums in million Euros, deflated.
2. Productive investments, human resources and agriculture are not included.
3. Total expenditure (comprising also private and national contribution) is included in parentheses (the columns with percentages also contain total expenditure percentages in parentheses).
4. 2nd and 3rd C.S.F. include funds from Community Initiatives and the Cohesion Fund but do not include Regional Operational Programmes.
5. % calculated against Community Contribution.

Source: Integrated Information System (O.P.S.), as presented in ELIAMEP (2011B: 1), adjusted by the author.

partnerships (in roads or METRO infrastructure) that were less dependent on state, were the most efficient in project implementation, absorbing more funds (ELIAMEP, 2011); (2) enhanced costs in most programmes due to voluntary overbooking and exorbitant discounts to cope with high competition (ELIAMEP, 2011; MoF, 2003); (3) the lack of a complete guide for costs to use in all projects (ELIAMEP, 2011); (4) the lack of project maturity because either the physical object was not accurately defined or not accepted by social and local actors, causing various delays. On many occasions, costs were raised because land that belonged to citizens had to be reallocated by the state and citizens had to be reimbursed, which was a time-consuming procedure (ELIAMEP, 2011); (5) problems related to studies (detective, inappropriate, scattered, geotechnical, and environmental problems) (MoF, 2003: 145); (6) expropriation problems; (7) problems related to the protection of archeological sites (and excavation rates) in a country with many such sites (MoF, 2003); (8) subsoil problems (MoF, 2003); and (9) legal difficulties (MoF, 2003).

As seen in [Table 3.2](#), “environment” was the second funding priority until the fourth programming period, representing more than a fifth (21.6%) of Community funds. In the 1st N.S.R.F., transport and environment comprised together more than 75% of Community’s contribution and an even higher percentage of total expenditure. For the whole period, these two priorities amounted to more than 80% of the Community’s intervention. They included several projects funded all over the country, for improving urban and transport infrastructure, water supply, drainage, waste and sewage collection, disposal, and management, the protection of natural and human-made environment, in the urban scenery and in rural land, and the building of institutions to protect areas under protection. Large-scale projects comprised resolving the problem of limited water resources and drought episodes in Attiki, the restoration of lake Karla, and the progressive implementation of the national land and property register.

To explain the imbalanced allocation of funds, one cannot neglect the influence of Greece’s physical geography and distance from EU centers, which increases costs and substitution effects from cheaper production elsewhere. For most of its integration period up to the early 2000s, Greece has also been physically isolated from the rest of EU markets. The country’s peculiar landscape affects business behavior that tends to turn to monopolistic in various places where market sizes are limited and competition is difficult to advance. Whichever is the principal explanation for the reasons favoring transport and physical environment, one has to acknowledge the serious transportation needs at EU level, which is envisaged by pan-European level projects. Also, the extent of funds transferred toward transport and environmental projects may have had some crowding-out effects for firms in other industries.

3.2.2 Other priorities funded

In the policy field of energy and gas, initial planning targets were achieved up to the early crisis years (ELIAMEP, 2011). As explained in ELIAMEP (2011) this was achieved because projects: (1) have been scheduled based on one or more

long-term strategic plans, backed up by major corporate “players”; and (2) were infrastructure projects of strategic importance, whose need from the side of the society was already matured.

Similarly successful were the policies focusing on culture (Table 3.2). They have focused on construction and the improvement of hard infrastructure, such as museums or theaters. However, approximately 70% of them were concentrated in the main urban areas, especially Athens and Thessaloniki (ELIAMEP, 2011).

Health and Care attracted more than €820 million from 1981 to 2011 (Table 3.2). Many of the related projects aimed at improving related infrastructure at the Greek periphery, especially through building hospitals and increasing the health sector personnel. Significant capacity was built in emergency help, centers for education, social support and formation of persons with special needs, and significant national-scale infrastructure projects in Greek hospitals were also advanced, strengthening the national health system. These investments had many delays, budgetary and programme deviations that revealed a lack of programming capacity and readiness in the sector (ELIAMEP, 2011).

The number and importance of social solidarity programmes increased (ELIAMEP, 2011). They appeared in the 2nd C.S.F. and continued thereafter. They helped to open various debates on supporting socially vulnerable groups and minorities, opening new policy paths for social policies. This is the case of clinics for persons having psychiatric and psychological needs or home support for the elderly, in the 2nd, 3rd, and 4th programming periods. Such social, health, and care infrastructure was also associated with high operational costs, not taken into account in planning and in times of crisis (ELIAMEP, 2011).

Numerous primary schools and kindergartens were created out of EU funding in social care, to reconcile work with family life. Many projects were implemented by the General Secretary of Equality and the Centre for Research in Equality Issues, as well as the application of EC initiative EQUAL that all promoted equality, in collaboration with various NGOs and the social economy, especially in the N.S.R.F. (ELIAMEP, 2011), including integration of immigrants, refugees, gypsies, and other minorities.

Most of the Greek Universities were equipped with new and improved infrastructure, created new labs and spaces, restructured and improved their syllabuses, mechanized their administrative and academic operations, managed to increase their operating capacity and their postgraduate programmes. The Hellenic Open University was also created and all universities made steps toward open and distance learning.

3.2.3 Human capital policies

A great portion of funds was allocated to human capital policies. Their allocation should be read simultaneously with unemployment rates at the same period (Table 3.3 and Fig. 3.5). The amounts for human capital have not increased much throughout the different programming periods.

Table 3.3 Human resource funds allocation

Operational Programme	Programming periods				Total
	1st CSF	2nd CSF	3rd CSF	NSRF 2007–13	
O.P. Human Capital Exploitation	3601				3601
O.P. Education and Initial Formation		1989			1989
O.P. Continuous Formation and Promotion of Employment		1674			1674
O.P. Combating Labor Market Exclusion		274			274
O.P. Public sector modernization		320			320
O.P. Employment and Professional Formation			1890		1890
O.P. Education and Initial Professional Formation			2325		2325
O.P. Human Resource Development				2260	2260
O.P. Education and Continuing Learning				1440	1440
O.P. Administrative Reform				505	505
Totals:	3601 (6101)	4257 (6379)	4215 (5685)	4205 (5903)	16,278 (24,068)

Notes:

1. 2010 prices, sums in million Euros, deflated.
 2. Total expenditure in parentheses (comprising private and national contribution).
 3. Human capital is also emphasized, and, as a result, unemployment remains in low levels.
- Source:* Integrated Information System (O.P.S.), as presented in ELIAMEP (2011C: 7).

It is logical to assume that the emphasis placed on human capital and unemployment policies for an extended period of time had as a result the low unemployment levels, in comparison to other Cohesion states (see Fig. 3.5).

From 1989 to 2006 more than 1.6 million (450,000 unemployed²) obtained some type of formation through ESF programmes (ELIAMEP, 2011). However, diffusing an entrepreneurial direction in human employment policies and promoting a broad range of social targets were not well considered (ELIAMEP, 2011).

²This figure includes cases of more than one beneficiaries.

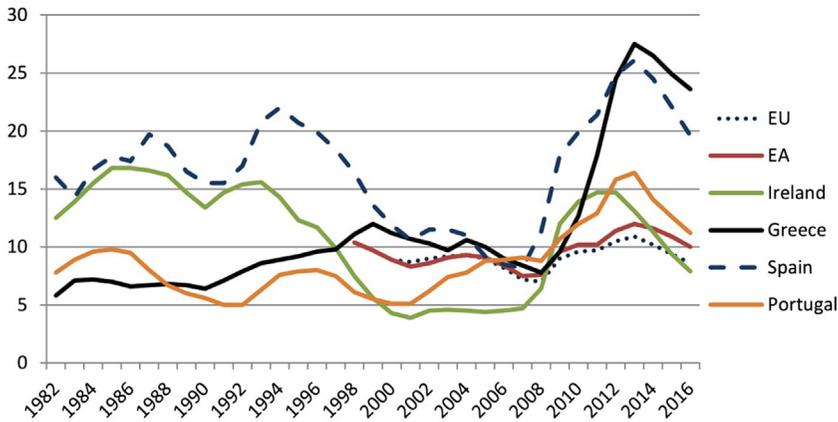


Figure 3.5 Unemployment levels in Greece, Spain, Ireland, Portugal, Euro-area (EA), and the EU (1982–2016).

Source: AMECO series, ZUTN, Eurostat, author's work. Note: Missing part for EU and EA is due to nonavailable data.

Table 3.4 Funding distinction between EAGGF-Guarantee and Cohesion Funds

	Total funds	EAGGF-Guarantee	%	Cohesion	%	Total %
1st C.S.F.	15,557.3	9410.2	60.5	5454.7	35.1	95.6
2nd C.S.F.	36,205.5	18,522.3	51.2	16,659.0	46.0	97.2
3rd C.S.F.	39,027.9	19,217.7	49.2	18,493.5	47.4	96.6

Source: ELIAMEP (2011A).

3.2.4 Agriculture as a principal funding priority

The Greek agricultural sector and its restructuring was a special funding priority since 1981 (Table 3.4). This is due to the significance of the sector for the Greek economy that was historically based on agriculture and the general context of Common Agricultural Policy. According to ELIAMEP (2011), from 1989 to 2006 (during the first three programming periods) the EU invested more than €47,150.2 million. The EAGGF-Guarantee fund has absorbed in the first three programming periods more than 50% of all EU funds (Table 3.4). This results in a picture of funds allocation that emphasizes the expenditure on agriculture and appears to be different from the aforementioned.

Significant economies of scale were created and capacity was built in several firms, giving rise to the Greek agro-industrial sector, one of the few sectors thriving in the Greek economy until now.

However, most of the principal problems in the Greek agriculture were not resolved, despite the plethora of measures targeted at them. This indicates simply that the size and intensity of investments are not their most important aspects. Other aspects, such as the philosophy of the Common Agricultural Policy (C.A.P.) are important too. The size of Greek agriculture land remained small and fragmented over the years, the costs of production remained high and have not fallen due to energy costs, the common currency has not reduced the intensity of competition from abroad and the economies of scale remained limited. The modernization of the Greek agricultural holdings has taken place only in some cases, agricultural infrastructure has not improved much despite the creation of several institutions, and the use of natural and human resources was far from optimum.

Many other problems remained over the years. These are the (1) reckless use and overconsumption of fertilizers and pesticides due to the limited knowledge of farmers; (2) lack of technical in-the-field knowledge of farmers; (3) high irrigation costs because waters were collected from sources deep inside the land that required the use of energy; (4) higher costs of borrowing for the Greek farmers in comparison to other European or non-European farmers; (5) inefficient structures of trade and distribution of products that kept a large price divide between producer's and retailer's prices; (6) bad production structure (i.e., high plant and low animal production and a lack of their combination); (7) inefficient use of water and irrigation that worsened problems, given Greece's irrigation problems in summers; (8) lack of labor mobility in the agricultural sector due to transportation problems, lack of information, and lack of transparency; (9) very limited possibility to become an entrepreneur with a very limited size of agricultural land; (10) lack of a clear distinction between agricultural land and forests; (11) desertification of agricultural land; (12) pollution and soil erosion; (13) lack of controls for waste; (14) high levels of agricultural imports and (15) the renaming of foreign products into Greek.

Institutional building in agriculture has not aimed at resolving these particular problems but emphasized payments, subsidies, certification, education, and formation. Technical, field-based support and applied research across the Greek territory, in collaboration with Universities or technical institutions, has never been prioritized in policies. Very limited amounts were left in Universities specializing in agriculture out of a very large part of the pie of funds offered to the sector. The emphasis, on the contrary, was placed on income support and the support of several products over the years.

Structural support has gained more importance, e.g., in the 2nd and 3rd programming periods (Fig. 3.6), with measures comprising investments in agricultural holdings, support of most deprived areas, incentives for new entrepreneurs, the resting of agricultural land, and early pension support.³ The market price support system

³ In a broader perspective, one has to judge agricultural policies in the EU with more sympathy, and acknowledge their value in sustaining strong interests in agricultural production, in food security and autonomy in EU markets, significant cohesion effects, taking into account the more general protective character of a sector that extends beyond strict national and EU borders and receives strong competitive pressure from the rest of the world. Besides, changes advanced to common agricultural policy have never been pursued from a single-nation perspective only.

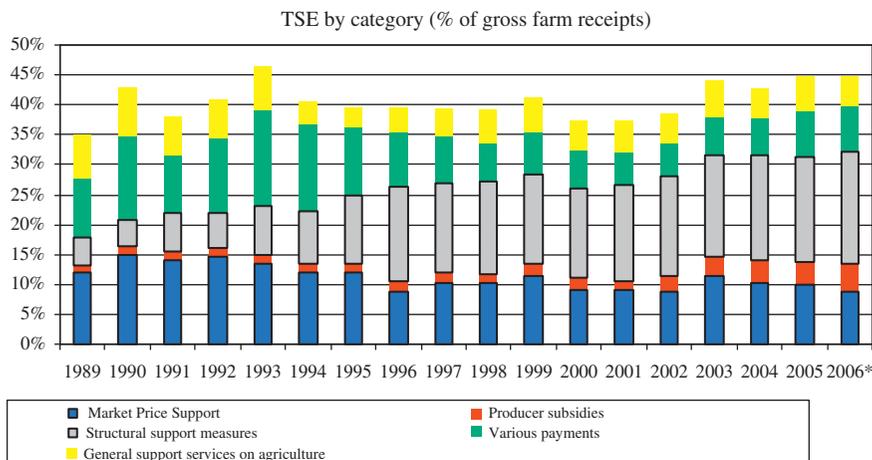


Figure 3.6 Types of support in Greek agricultural sector, 1989–2006 (as % gross farm receipts).
Source: ELIAMEP (2011A), provided by Karanikolas et al. (2008).

has become less significant after the 2nd programming period, because of the consecutive changes in C.A.P.

The emphasis placed on income support and subsidies, especially in the 1980s and 1990s, had several negative implications: It created (1) a “funding culture” amongst people working in agriculture; (2) the favoring of subsidies in the most fertile areas, of products with greater subsidies, and larger in size producers; (3) various distortions in production (e.g., the reckless expansion of cotton production) that substituted the production of various nutritious agricultural products; and (4) an overuse of water and other physical resources. The state has overemphasized in the targeting of its policies the need to maximize public benefit and has not managed to offer a solution to the rise in production prices.

Some positive effects took place, such as the stabilization and increase of income of farmers and of the agricultural population, reversing the rural flight that had been occurring in Greece since the 1950s. Production was significantly mechanized and both biological and organic agriculture were promoted. The level of production also increased, due to the use of fertilizers, machines, and the development of market and distribution chains.

The overabundance of financial resources replaced the use of agricultural planning; the technical and agricultural experience of agricultural planners was abandoned and replaced by the shallow knowledge of agricultural economists. Fights over various responsibilities, mixed duties, and dispersed authority impeded rescheduling the Ministry’s general authority and powers. Various problems appeared, such as budget deviations, corruption, untruth statements about agricultural property, and shadow business practices to gain from subsidies and the protectionist environment, constant attempts to bypass, neglect, or even to bribe authorities, tax-evasion malpractices, misleading calculations of agricultural holdings intended to absorb more income support from the declared amount of kilos, and, of course, the

resulting punishments from the EC authorities (ELIAMEP, 2011).⁴ Many of these problems appeared due to the absence of controls from the EU Commission, which were intensified after the year 2000, bringing many penalties for Greece (subscribed in its national agricultural bank and the state's budget).

All these points have brought a loss of a developmental direction, limiting the scope of spreading a healthy entrepreneurial model. The hard-working ethos and spirit that historically characterizes people working in the agriculture sector was overshadowed by this funding culture and its consequences. A combination of low educational levels, the average lifetime of farmers, and liquidity constraints may have contributed toward this direction. The agricultural strategies followed, failed to properly emphasize the strengths and to exploit the various opportunities opened for the Greek agriculture sector, given the intensification of international and European competition. Short-term interests, narrow perceptions and perspectives, and a continuous focus on absorbing funds and subsidies have won a historical battle over long-term planning and restructuring of land, the use of innovations and new technologies, the application of research and new techniques, new instruments and institutions related to their application (such as stock markets for agricultural products).

3.2.5 *Private investments*

Policies on private investments have centered around resolving liquidity constraints. An important component of these policies was the Greek investment law that was cofunded by the EU, in the various forms it took over the years. From 1989 to 2010, a range of policies were pursued on private investments, introducing new elements missing in the private sector, such as leasing, factoring, credit, and other financial support techniques and schemes. Policy novelties concerned mostly the financial domain, but the question of quality was also raised, especially in manufacturing and the agro-industry. Private sector investments were not sufficiently engaged with the softer aspects of business development, such as the need to improve management and business administration. They neglected important components of controls in the allocation of funds and the research required for their efficacy that was practically inexistent. Notable shifts should be underlined between the 1st C.S.F., when loose business support policies pursued mostly the support of semipublic companies; the 2nd C.S.F., promoting more enhanced and concrete forms of manufacturing policies through the Operational Programme for manufacturing and the implementation of sustainable business support mechanisms; and the 3rd C.S.F. and 1st N.S.R.F. that aimed at promoting the context of competitiveness through scattered institutional building, pilot initiatives, and support schemes but without any concrete and coherent, background plan for business and SME support.

3.2.5.1 *The invisible target of Competitiveness*

The economy's integration process arrived at a crossroad when Greece joined the Eurozone, in 2002. At this very critical moment, the 2000–06 Competitiveness programme was prepared in a wrong manner. First a series of sectoral operational

⁴ Such problems have been associated with C.A.P. in many other places in Europe and should be seen as side effects of both a protectionist form and the large amounts offered.

programmes were produced for Manufacturing, Tourism, Energy, and Research and Development, and then, these programmes were bound and presented as a collection, under the unifying umbrella-concept of competitiveness. Policies for strengthening the Greek manufacturing sector in the 1994–99 period, which required strong organizational efforts and the creation of a special office by the Prime Minister’s office, were no longer considered necessary in the subsequent programming period. Partly this is due to the fact that manufacturing policies were no longer emphasized in EU policies at the dawn of the new millennium. On the contrary, after 2000, manufacturing policies were bypassed and used simply to emphasize what was claimed to be of outmost significance, advancing competitiveness. Manufacturing problems were dealt within the context of competitiveness policies.

In funding terms, the 2000–06 Competitiveness Programme was again less significant, if compared against transport (Table 3.5). Competitiveness was allocated almost half of the funds that were directed to transport. What is more, half of these funds (49.8%) were directed to the private investments law (known also as Development Law) (Table 3.6). This is a rather fixed, historical instrument, with its core philosophy remaining intact until now. It is not necessarily promoting induced investment nor supporting innovation but it rather emphasizes subsidies and direct capital transfers to businesses and for a long period of time without any distinctions or groupings of businesses in size terms. Only 8.7% of the 2000–2006 Competitiveness programme was directed to technology and innovation. 16.9% out of it, was devoted to energy and 65.3% directed toward enterprises (priority axes 1–3), of which only 15.5% went to actions supporting enterprises beyond the Development Law (Table 3.6). Hence, it becomes evident that entrepreneurship, the setting-up of business, and small- and medium-sized enterprise policies were never a priority of the structural policies, as applied in Greece.

Similar conclusions on the significant misallocation of funds are reached when comparing the annual average of funds for basic infrastructure against those in productive environment, both for 2000–06 and 2007–13 (Tables 3.7).

Table 3.8 shows the initial resource allocation for the critical third programming period (2000–06), by strategic objective. Agriculture is included as part of the competitiveness strategic objective, without which the amounts devoted on entrepreneurship and the private sector are limited, when compared against the first and second strategic objectives (infrastructure and living conditions, respectively).

Table 3.9 illustrates the misprioritization of entrepreneurship policies for the 2007–13 period in funding terms and, among them, of research and innovation policies. Only €192 million of Community funds were directed to research (economy of knowledge), representing 14.88% of the total in the Programme, while less than half a billion were directed at the main axis to support Greek enterprises (priority axis 2). When the part that refers to energy policy (and sustainability) is removed, the Community contributes less than €1 billion in competitiveness and entrepreneurship for the whole period (out of many billions offered in the Greek economy). Clearly both the designers of the Programme and its funders had neither had in mind as a target the development of the Greek production nor realized the extent of problems appearing in postcrisis Greece. Hardly can one consider that the

Table 3.5 Distributed financial resources, 3rd programming period, 2000–2006

Priority axes	Public expenditure	Public expenditure %	Private contribution	Private contribution %	Total cost	Total cost %
Development of Human Resources	4,744,685,251	14.6	59,264,451	0.6	4,803,949,702	11.5
Transport	8,716,772,598	26.9	2,996,495,691	31.4	11,713,268,289	27.9
Competitiveness (Manufacturing, Tourism, Energy, Research and Development)	3,018,451,757	9.3	3,032,066,603	31.8	6,050,518,360	14.4
Rural Development and Fisheries	2,366,445,185	7.3	1,313,575,951	13.8	3,680,021,136	8.8
Improvement of Quality of Life (Environment, Culture, Health Care)	1,669,067,878	5.1	0	0	1,669,067,878	4
Information Society	2,167,474,859	6.7	508,500,000	5.3	2,675,974,859	6.4
Regional Development	9,620,137,733	29.7	1,622,805,056	17	11,242,942,789	26.8
Technical Assistance	114,996,704	0.4	0	0	114,996,704	0.3
Total	32,418,031,965	100	9,532,707,752	100	41,950,739,717	100

Source: Ministry of Economics and Finance, <http://www.hellaskps.gr/2000-2006.htm>, revision of C.S.F., December 2006, Euros.

Table 3.6 Allocation of funds per priority axis, for the Operational Programme “Competitiveness” 2000–06

No priority axis	Priority axis (title)	Measures	Actions	Planned total contribution (net figures and %)	Total public contribution (net figures and %)
1	Improving the entrepreneurial environment	<p>1.1. Industrial, Technological and entrepreneurial infrastructure</p> <p>1.2. National System of Quality</p>	<p>1.1.1. Projects of improvement of interventions of protection for the environment in selective industrial areas (“BI.IIE.”) of national scope of ETVA</p> <p>1.1.2. Projects of expansion, completion and improvement of existing industrial areas (“BI.IIE.”) of national scope, where private and public-private agencies are created</p> <p>1.1.3. Projects of improvement of derelict industrial buildings and their reuse for industrial purposes</p> <p>1.1.4. Creation of industrial areas (“BI.II E.”) of national scope</p> <p>1.1.5. Amelioration of infrastructure of the Greek Institute for Health and Safety</p> <p>1.1.6. Land sanitation for Technological Park in Lavrion</p> <p>1.1.7. Orientation/guidance Study for Actions 1.1.1.–1.1.4</p> <p>1.2.1. Standardization</p> <p>1.2.2. Certification</p> <p>1.2.3. Accreditation</p> <p>1.2.4. Metrology</p> <p>1.2.5. Surveillance and market control</p>	<p>167,707 (2.6%)</p> <p>117,400 (3.6%)</p> <p>44,015 (0.7%)</p> <p>44,015 (1.4%)</p>	

1	Total	1.3. Simplification of Entrepreneurial Environment	1.2.6. New techniques and tools for managing quality	15,886 (0.3%)	122,080
			1.2.7. Information and public awareness		
2	Encouraging the entrepreneurial spirit	1.4. Structures of SME support	1.3.1. Simplification of administrative processes for investments in energy	43,643 (0.7%)	(1,8%)
			1.3.2. Simplification of entrepreneurial environment		
			1.3.3. Centers for Welcoming Investments (one stop shop)		
			1.3.4. Information applications		
			1.3.5. General Trade Register		
		2.1. Support of investments in coproduction energy systems, environmental Renewable Energy Sources and saving of energy	1.4.1. Development of Network of Structures of SME support	43,643 (1.4%)	
			1.4.2. National Observatory for SMEs		
			1.4.3. Council for Competitiveness		
		2.2. Upgrade of accommodation and support of tourist SMEs	271,251 (4.3%)	1,072,006 (16.9%)	
			220,944 (6.9%)		
382,170 (11.9%)					
	2.1.1. Information, Support, Promotion and Diffusion of Coproduction of energy, Renewable Energy Sources and saving energy	358,812 (5.7%)			
	2.1.2. Expansion of infrastructure technical support in coproduction, Renewable Energy Sources and saving of energy				
	2.1.3. Financial incentives in support of individual private energy investments				
	2.2.1. Qualitative modernization of hotels and campings C and higher, based on (Development) Law 2601/98				

(Continued)

Table 3.6 (Continued)

No priority axis	Priority axis (title)	Measures	Actions	Planned total contribution (net figures and %)	Total public contribution (net figures and %)
			2.2.2. Qualitative modernizations of hotels, campings, and rooms to let, rooms with furniture and houses, according to Law 2601/98 2.2.3. Entrepreneurial plans for SMEs in all tourist industries	116,818 (3.6%)	
		2.3. Support of private investments of Law 2601/98	2.3.1. Support of private investments of Law 2601/98	405,514 (6.4%) 160,303 (49.8%)	
		2.4. Completion of investments of Law 2601/98	2.4.1. Completion of investments of 4 projects (103,000) 2.4.2. Completion of investment of 2 projects (263,000)	541,775 (8.6%) 205,857 (6.4%)	
		2.5. Technological Modernization of Enterprises	2.5.1. Technological Modernization of Enterprises 2.5.2. Organizational Modernization of SMEs	279,161 (4.4%) 192,723 (6.0%)	
		2.6. Financial Support of SMEs & micro firms	2.6.1. Financial Support of SMEs and micro firms	89,689 (1.4%) 44,016 (1.4%)	
		2.7. Improvement of Competitiveness in SMEs and micro firms	2.7.1. Business Plans in SMEs and micro firms 2.7.2. Promotion of networking of SMEs (clustering)	318,453 (5.0%) 132,123 (4.1%)	
		2.8. Encouraging Entrepreneurship in groups of population	2.8.1. Promotion of youth entrepreneurship 2.8.2. Promotion of female entrepreneurship	117,258 (1.9%)	

			2.8.3. Promotion of entrepreneurship of people with special needs	58,361 (1.8%)	
		2.9. Support of entrepreneurship in the sector of environment	2.9.1. Industrial Policy for Sustainable Development	146,754 (2.3%)	
			2.9.2. Support of Environmental Plans		
			2.9.3. Support of Environmental Cooperations	58,707 (1.8%)	
			2.9.4. Support of Unit for Management and Exploitation of Sewage		
			2.9.5. Support of SMEs for their Investments toward the prevention and facing of Industrial accidents of Big Scale		
		2.10. Founding and Operation of Guarantee Fund for the SMEs and micro firms "TEMIIME"	2.10.1. Founding and Operation of Guarantee Fund for the SMEs and micro firms "TEMIIME"	102,715 (1.6%) 102,715 (3.2%)	
2 Total				3,423,117 (54.1%) 1,364,391 (42.4%)	4,169,147 (62.5%)
3	Promotion of excellence	3.1. Promotion of Entrepreneurial Excellence in the Sector of Energy	3.1.1. Application of projects that demonstrate innovative technology	7714 (0.1%)	
			3.1.2. Defining credibility & efficiency of energy infrastructure & energy products	5400 (0.2%)	
		3.2. Promotion of Entrepreneurial Excellence in manufacturing and tourist enterprises	3.2.1. Organization and Functioning of National Prize of Quality		
			3.2.2. Support and reward of enterprises adopting the European Model of entrepreneurial excellence or the national prize of quality or for developing systems of entrepreneurial excellence	20,214 (0.3%) 9214 (0.3%)	
		3.3. Promotion of Excellence for technological development and research	3.3.1. Excellence of Research Institutions, under the aegis of the General Secretary of Research	16,000 (0.3%)	

(Continued)

Table 3.6 (Continued)

No priority axis	Priority axis (title)	Measures	Actions	Planned total contribution (net figures and %)	Total public contribution (net figures and %)
3 Total 4	Technological innovation and research	<p>4.1. Support of Research Units for standardization and commercial exploitation of research results. Identification and Use of research results with the creation of new enterprises—technological spin-offs</p> <p>4.2. Incubation of new knowledge-intensive enterprises in scientific and technological parks and research centers with the participation of enterprises</p> <p>4.3. Encouraging of research, transfer and diffusion of technology in enterprises, support of activity of international scientific and technological cooperation and transfer of technology</p>	<p>3.3.2. Excellence of Higher Education Institutions – Universities</p> <p>3.3.3. Excellence in Firms</p> <p>4.1.1. Support of Research Units for standardization and commercial exploitation of research results. Identification and Use of research results with the creation of new enterprises—technological spin-offs</p> <p>4.2.1. Incubation of new knowledge-intensive enterprises in scientific and technological parks and research centers with the participation of enterprises</p> <p>4.2.2. Funding support for public research centers and labs (“AKMΩN”)</p> <p>4.2.3. Intermediation Bureaus (in Universities and public research centers, for professional and careers purposes)</p> <p>4.3.1. Projects of industrial research for old enterprises (“IIABET”)</p> <p>4.3.2. Projects of industrial research in new enterprises, under the support law 760/00 (“IIABET-NE”)</p>	<p>13,300 (0.4%)</p> <p>43,928 (0.7%) 27,914 (0.9%) 67,452 (1.1%) 36,000 (1.1%)</p> <p>123,000 (1.9%)</p> <p>71,000 (2.2%)</p> <p>138,687 (2.2%)</p> <p>82,576 (2.6%)</p>	<p>68,728,284 (1.0%)</p>

			<p>4.3.3. Promotion of projects of demonstration and innovation for enterprises under the law 545/01</p> <p>4.3.4. Support of firms in technology, under the law 70/2001</p> <p>4.3.5. Support in participation of SMEs in international R&D programmes</p> <p>4.3.6. International scientific and technological cooperation</p> <p>4.3.6.1. Project Funding of international cooperation</p> <p>4.3.6.2. Project Funding of international cooperation in industrial research</p> <p>4.3.6.3. Project Funding of international cooperation for space research</p> <p>4.3.6.4. Cooperation with International Organizations</p>		
		4.4. Public awareness of common and new technologies, Support and Shaping of Research and Technology Policy, Management of Information in Research and Technology	<p>4.4.1. Development of two museums in Athens and Thessaloniki</p> <p>4.4.2. Creation of a network among museums</p> <p>4.4.3. Support actions in learning in Higher Education Technological Institutes (“Τεχνολογικό Αθηνών”)</p> <p>4.4.4. Project “Hydropolis” (suspended)</p> <p>4.4.5. Project “Hermes” (research, technology and the human)</p> <p>4.4.6. Public awareness, information and acquaintance in industrial property matters</p> <p>4.4.7. Management of scientific and technological information</p>	32,992 (0.5%)	
				28,909 (0.9%)	

(Continued)

Table 3.6 (Continued)

No priority axis	Priority axis (title)	Measures	Actions	Planned total contribution (net figures and %)	Total public contribution (net figures and %)
<p>4 Total</p> <p>5</p>	<p>Transformation of the tourism product and promotion of tourism</p>	<p>4.5. Research and Technology Development Complexes in Sectors of National priority</p>	<p>4.4.8. Project for orientation of research until 2020 (“Foresight”)</p> <p>4.4.9. Policy support in R&D with statistical data and indexes</p> <p>4.4.10. Public awareness and information in Science and Technology matters</p> <p>4.5.1. Promotion of cooperation between productive and research agencies in projects of research and technological development of long-term scope, with the purpose to produce innovative products or services and to cover social and cultural needs that affect the competitiveness of the Greek economy</p>	<p>134,978 (2.1%)</p> <p>82,980 (2.6%)</p> <p>497,108 (7.9%)</p> <p>301,465 (9.4%)</p> <p>123,408 (1.9%)</p>	<p>577,247 (8.7%)</p>
		<p>5.1. Support of special tourism infrastructure (Provision of Integrated Tourist Infrastructure-“IIOTA”)</p> <p>5.2. Integrated actions for alternative tourism and tourist “ΑΓΚΥΡΟΒΟΛΙΑ”</p>	<p>5.1.1. Provision of Integrated Tourist Infrastructure-“IIOTA”</p> <p>5.1.2. Private investments in special tourism infrastructure</p> <p>5.2.1. Creation of networks of cultural elements and journeys of cultural tourism</p> <p>5.2.2. Interventions for supporting enterprises in tourist sector and exploitation of cultural stock</p>	<p>45,661 (1.4%)</p> <p>49,039 (0.8%)</p> <p>45,829 (1.4%)</p>	

			5.2.3. Building of tourism “ΑΓΚΥΡΟΒΟΛΙΑ”		
			5.2.4. Actions for the development of ecotourism		
		5.3. Tourist promotion—reduction of seasonality	5.3.1. Plans for tourist promotion of the Greek National Tourism Organization (“EOT”), in synergy with respective plans of the private sector	13,962 (0.2%)	
			5.3.2. Plans for reducing seasonality through actions that attract demand beyond the tourist period, in areas having the appropriate tourist product	13,962 (0.4%)	
5 Total				186,402 (2.9%) 105,452 (3.3%) 523,333 (8.3%)	268,671 (4.0%)
6	Energy supply security and the continued liberalization of the energy market	6.1. Access in alternative sources of supply of natural gas	6.1.1. Connection of the Greek system of transport of energy with the Italian		
			6.1.2. Connection of the Greek system of transport of energy with the Asean	303,500 (9.4%)	
		6.2. Promotion of Flexibility, Stability and Credibility of the Systems of Supply of Natural Gas	6.2.1. Station of Liquidified Natural Gas at Revithoussa	172,747 (2.7%)	
			6.2.2. Creation of underground deposit of natural gas in the area of South Kavala	77,720 (2.4%)	
			6.2.3. Installation of stations of compression of high-pressure conductors		
		6.3. Special Energy Infrastructure in the islands and promotion of renewable energy sources	6.3.1. Submarine connections of high and average voltage	317,468 (5.0%)	
			6.3.1.1. Submarine connections of average voltage		
			6.3.1.2. Submarine connection of high voltage	158,734 (4.9%)	

(Continued)

7	Energy and sustainable development	7.1. Penetration of Natural Gas in households and the service sector, in new industrial consumers and the sector of transport	7.1.1. Penetration of Natural Gas in households and the service sector		
			7.1.2. Penetration of Natural Gas in new industrial consumers	310,973 (4.9%)	
			7.1.3. Penetration of Natural Gas in the sector of transport	129,030 (4.0%)	
		7.2. Safety Infrastructure for storage and transportation of Petroleum products	7.2.1. Transport and underground installations for storage of fuel	91,399 (1.4%)	
			7.2.2. Promotion of the Public Safety for storage and transportation of Petroleum products	26,360 (0.8%)	
		7.3. Use of natural resources and support in keeping environmental commitments	7.3.1. Studies of distribution, evaluation and, technological and financial assessment and use of mineral raw materials and geothermal energy	62,702 (1.0%)	
			7.3.2. Distribution and Assessment of water resources		
			7.3.3. Project of Technical Support of the 2 previous actions	61,760(1.9%)	
			7.3.4. Development and promotion of new materials, new technologies and new uses of mineral raw materials		
			7.3.5. Projects and activities to support water resource policy		
			7.3.6. Support of Technical Environmental Commitments		
7 Total				465,074 (7.3%)	396,760
				217,150 (6.7%)	(6.0%)
8	Human resources	8.1. Education and Training in the Sector of Tourism	8.1.1. Action Plan, studies and researches for restructuring and upgrading of tourist education and training	46,327 (0.7%)	
			8.1.2. Development of network of national and international cooperations		
			8.1.3. Change and improvement of programmes of study in tourist education and training, pilot policies	43,733 (1.4%)	

(Continued)

Table 3.6 (Continued)

No priority axis	Priority axis (title)	Measures	Actions	Planned total contribution (net figures and %)	Total public contribution (net figures and %)
		<p>8.2. Human resources in manufacturing and services</p> <p>8.3. Human Research and Technology Resources and Potential</p>	<p>8.1.4. Connection of education to production</p> <p>8.1.5. Programmes of training in the context of integrated plans supporting the targets of tourist policy, as addressed in the Competitiveness Programme</p> <p>8.1.6. Training of workers in the enterprises of the tourist sector</p> <p>8.1.7. Public awareness activities</p> <p>8.2.1. Training of human resources in enterprises that will receive support by Measure 2.5</p> <p>8.2.2. Training for starting entrepreneurial activity in Measure 2.8</p> <p>8.2.3. Training of employees in General Secretaries of Industry and of Trade and their supervised agencies (and employees working in Measures 1.2, 1.3, 1.4 and 2.9)</p> <p>8.2.4. Training targeted in the needs of SMEs and micro firms</p> <p>8.2.5. Training in the context of programme “Connected” (“ΔΙΚΤΥΩΘΕΙΤΕ”)</p> <p>8.3.1. Education and training of new research potential (“ΠΙΕΝΕΔ”)</p>	<p>65,155 (1.0%)</p> <p>48,866 (1.5%)</p>	

			8.3.2. Incentives to support development & diffusion of research activities ("HPΩN")	129,364 (2.0%)	
			8.3.3. Subsidies for employment of research and technology employees in public research centers	100,400(3.1%)	
			8.3.4. Observatory of Research and Development needs in labor markets		
			8.3.5. Education and management of research and Technology		
			8.3.6. Special Technological Matters		
8 Total				240,848 (3.8%)	236,107
9 Total	Technical assistance	9.1. Technical Assistance	9.1.1. Technical Assistance	193,000 (6.0%)	(3.5%)
All Total				125,548 (2.0%)	103,344
				125,548 (3.9%)	(1.6%)
				6,329,333	6,666,610
				(100%)	(100%)
				3,217,421	
				(100%)	

Note: Amounts in thousands of Euros.

Source: Interim Report of Competitiveness 2000–2006, p. 96 and EC (2016).

Table 3.7 Annual mean expenditure, 2000–06 and 2007–13 periods

	Real annual mean of 2000–06 period						Annual mean prediction for 2007–13 period					
	Total public expenditure	Of which public enterprises	C.S.F.		Outside C.S.F.	Total	Total public expenditure	Of which public enterprises	National Strategic Reference Framework		Outside C.S.F.	Total
	National and EU ^a	National and EU	EU	National	National	National	National and EU ^a	National and EU	EU	National	National	National
	2 = 4 + 5 + 6	3	4	5	6	7 = 5 + 6 = 2 - 4	8 = 10 + 11 + 12	9	10	11	12	13 = 11 + 12 = 8 - 10
Basic infrastructure	5172 (53.1)	1380	731	525	3916	4491	5649 (53)	1522	1146	579	3923	4503
Transport	3699 (38)	723	558	440	2699	3139	3764 (35.3)	796	623	315	2825	3141
Telecommunication and information society	73 (0.7)	64	19	7	48	55	345 (3.2)	70	154	78	113	191
Energy	552 (5.7)	467	56	36	460	496	608 (5.7)	515	59	30	520	550
Environment and waters	526 (5.4)	49	41	18	466	485	577 (5.4)	54	256	129	192	321
Health	323 (3.3)	79	57	23	244	267	355 (3.3)	87	54	27	274	301
Human resources	2425 (24.9)	144	403	147	1875	2 023	2696 (25.3)	159	551	279	1867	2145
Education	1837 (18.9)	0	239	86	1511	1597	1923 (18)	0	242	122	1560	1682
Formation	347 (3.6)	144	141	48	158	206	509 (4.8)	159	238	120	151	271
Research and technology	241 (2.5)	0	21	13	206	219	264 (2.5)	0	72	36	156	192
Productive environment	683(7.0)	19	194	96	392	489	721 (6.8)	21	172	87	463	549
Manufacturing	384 (3.9)	16	75	40	269	309	353 (3.3)	18	92	46	215	262
Services	68 (0.7)	3	1	7	47	55	62 (0.6)	3	16	8	38	46
Tourism	231 (2.4)	0	106	49	75	125	305 (2.9)	0	64	32	209	242
Other	1462(15.0)	0	75	31	1355	1387	1602 (15)	0	138	69	1394	1464
Total	9742(100)	1543	1403	799	7539	8339	10,667(100)	1702	2007	1014	7464	8661

^aFor total public expenditure, percentages of the total are indicated in parenthesis.

Source: MoF (2007), p. 133, M€, rounded.

Table 3.8 Initial Recourse Allocation, 3rd programming period, 2000–06, expenditure by strategic objective, category and EU Fund, public, national, and private

	Total	Public expenditure						Total national expenditure	Private expenditure
		Total public expenditure	Contribution of Structural Funds						
	Total		ERDF	ESF	EAGGF	FIFG			
	1 = 2 + 9	2 = 3 + 8	3	4	5	6	7	8	9
Strategic objective 1: Infrastructure	6,410,878	4923.293	2810.247	2769.274	40.973	0	0	2113.046	1487.585
1. Road axes and accessibility	3467.861	2410.852	1446.468	1446.468	0	0	0	964.385	1057.009
2. Railways	534.062	534.062	320.481	320.481	0	0	0	213.581	0
3. Telecommunications	478.328	474.696	273.188	232.215	40.973	0	0	201.508	3.632
4. Energy	1031.189	689.677	383.703	383.703	0	0	0	305.974	341.512
5. Natural gas	899.438	814.006	386.408	386.408	0	0	0	427.598	85.432
Strategic objective 2: Living conditions	2553.587	2553.587	1458.207	1436.413	21.794	0	0	1095.381	0
i. Urban development	1706.470	1706.470	853.235	853.235	0	0	0	853.235	0
ii. Health and social welfare	369.432	369.432	246.708	224.914	21.794	0	0	122.724	0
iii. Environment	477.685	477.685	358.264	358.264	0	0	0	119.421	0
Strategic objective 3: Competitiveness	7888.300	4403.480	3022.172	1192.916	81.836	1605.758	141.661	1381.307	3484.820
9. Industry and services	3060.847	1294.858	784.584	746.445	38.140	0	0	510.274	1765.990
10. R&D	615.157	443.868	344.563	311.763	32.800	0	0	99.304	171.289
11. Tourism and culture	564.469	219.830	123.812	112.915	10.897	0	0	96.018	344.639
12. Agriculture	3308.199	2226.984	1605.758	0	0	1,605.758	0	62,226	1081.215
13. Fisheries	339.628	217.940	163.455	21.794	0	0	141.661	54.485	121.688
Strategic objective 4: Human resources	4097.273	3797.605	2781.241	406.458	2374.783	0	0	1016.363	299.668
14. Education and initial training	2008.971	2008.971	1505.638	236.465	1269.174	0	0	503.332	0
15. Continuous training and employment promotion	1398.086	1098.418	823.813	27.351	796.462	0	0	274.604	299.668

(Continued)

Table 3.8 (Continued)

	Total	Public expenditure						Total national expenditure	Private expenditure
		Total public expenditure	Contribution of Structural Funds						
	Total		ERDF	ESF	EAGGF	FIFG			
	1 = 2 + 9	2 = 3 + 8	3	4	5	6	7	8	9
16. Combating exclusion from the labor market	357.422	357.422	268.066	10.897	257.169	0	0	89.355	0
17. Modernization of Public administration	332.794	332.794	183.723	131.745	51.979	0	0	149.071	0
Strategic objective 5: Reducing regional disparities	7259.566	6578.492	4934.455	4101.909	253.914	578.632	0	1644.037	681.073
Total C.S.F.	28,209.605	22,256.457	15,006.322	9906.971	2773.301	2184.390	141.661	7250.134	5953.147

Note: ERDF, ESF, EAGGF, and FIFG are initial for EU Structural Funds, €. Source: EEO (2003), ME, constant 1999 prices.

Table 3.9 Allocation of funds in Priority axis of the Operational programme Competitiveness and Entrepreneurship, 2007–13

Priority axis	Community Funding	Participation in the axis %
Axis 1: Accelerating the economy's transition in the economy of knowledge	192,083,000	14.88
Axis 2: Enhancing entrepreneurship and outward looking, upgrade of productive tissue of the country	466,020,000	36.10
Axis 3: Strengthening of entrepreneurial environment—enhancing competition and consumer's protection	272,907,000	21.14
Axis 4: Completion of energy system and support of sustainability	330,990,000	25.64
Axis 5: Technical support	29,000,000	2.25
Total	1,291,000,000	100

Note: In Euros, €.

Source: MoF (2007b:153).

Community has contributed in enhancing Greece's competitiveness and entrepreneurship, at a time when problems for the Greek economy were culminating.

Needless to argue that the state's contribution from resource reallocation might have been greater, if the Community had exempted from getting involved in funding such policies. In practice, one can refer more to an invisible target of competitiveness, whose extent and scope is significantly low and misprioritized.

A similar conclusion is reached from [Table 3.10](#) that refers to initial and final allocation of Community funds in the 2007–13 period and the amounts transferred from a category to another (net shift). [Table 3.10](#) shows the limited importance of entrepreneurship in funding terms, initially planned to represent only 1.1% of all financial aid and finally obtaining 4.2%. On the other hand, road transportation finally accounted for 29% of all aid, and together with energy and other social and cultural infrastructure accounted for 52.8% of all Community funds. The substantial net shifts of amounts, revealing programming weaknesses, do not alter this picture ([Tables 3.11 and 3.12](#)).

3.3 Comparing the allocation of funds in Greece and other Cohesion countries

When compared against the other three states that started to obtain EU Cohesion Policy funds over the same period as Greece, namely Spain, Portugal, and Ireland,⁵ several conclusions can be reached. For instance, the distribution of Cohesion support in Greece in the 2nd C.S.F. emphasized infrastructure and human resources rather than productive investments ([Table 3.13](#)). This has not been the case in

⁵ All less advanced and known as "Cohesion 4" in the 1990s.

Table 3.10 The allocation of Community funds in the 2007–13 period, by category, initial (2007) and last (April 2016), and shift between categories (measured as difference between added and deducted amounts)

	2007	2016	Added	Deducted	Net shift	% Total 2007	% Total 2016
Innovation and RTD	11,921	1287.4	457.7	– 362.5	95.3	7.5	8.1
Entrepreneurship	182	660.8	478.8	–	478.8	1.1	4.2
Other investment in enterprise	498	1039.7	689.6	– 147.9	541.7	3.1	6.6
ICT for citizens and business	1345.9	737.8	48.4	– 656.4	– 608	8.5	4.7
Environment	2716.1	2057	141.8	– 800.8	– 659	17.1	13
Energy	625.2	861.3	596.7	– 360.5	236.1	3.9	5.4
Broadband	210.9	87.4	–	– 123.4	– 123.4	1.3	0.6
Road	3672.4	4603	1811.8	– 881.2	930.6	23.2	29
Rail	810.7	530.6	–	– 280.1	– 280.1	5.1	3.3
Other transport	1574.4	1096.8	304.2	– 781.9	– 477.7	9.9	6.9
Human capital	–	–	–	–	–	–	–
Labor market	96.4	0.2	–	– 96.3	– 96.3	0.6	0.0
Culture and social infrastructure	1888.2	1713.5	176.9	– 351.6	– 174.7	11.9	10.8
Social inclusion	–	–	–	–	–	–	–
Territorial dimension	602.1	665.5	159.5	– 96.2	63.4	3.8	4.2
Capacity building	25.1	6.2	3	– 21.9	– 18.9	0.2	0.0
Technical assistance	407	499.3	145	– 52.7	92.3	2.6	3.2
Total	15,846.5	15,846.5	5013.4	– 5013.4	–	100.0	100.0

Note: “Added” is the sum of additions made to resources in OPs where there was a net increase in the funding going to the category. “Deducted” is the sum of deductions made to resources in OPs where there was a net reduction in funding. “Social inclusion” includes measures to assist disadvantaged groups and migrants. “Territorial dimension” includes support for urban and rural regeneration and tourist services and measures to compensate for climate conditions. The sums are in thousands of Euros.

Source: EC, 2016b, original source DG Regional and Urban Policy, Inforegio database, April 2016.

Table 3.11 Community fund allocation (scheduled) in the priority axes of the 2014–20 programming period

	Total amounts
Competitiveness, entrepreneurship, and innovation	3,646,378,290.48
Transport infrastructure, environment, and sustainable development	4,333,917,413.04
Human resource development, education, and long-life learning	1,933,409,508.56
Initiative for youth employment	171,517,029.00
Public sector reforms	377,228,417.18
Regional Operational Programmes	4,495,184,442.57
Agricultural development	4,223,960,793.00
Technical Support	317,612,062.97
Total	19,499,207,956.80

Source: Ministry of Finance and Competitiveness (2014: 139).

Table 3.12 Community fund allocation (scheduled) per thematic target, in 2014–20 programming period

Thematic targets	Amounts scheduled
Support of research, technological advancement, and innovation	1,286,693,707.58
Improvement of access to ICT, their use, and quality	826,739,456.56
Improvement of competitiveness of SMEs, including agricultural sector (FEOGA) and fisheries	2,420,967,802.22
Support of transition in a low carbon emission economy in all industries	1,614,846,358.72
Promotion of necessary adjustments to climatic change and risk precaution	776,602,898.48
Sustainability and protection of environment and promotion of efficient use of resources	3,714,794,842.02
Promotion of sustainable transports and removal of obstacles for basic infrastructure in networks	3,202,735,447.68
Promotion of sustainable and qualitative employment and support of labor mobility	1,926,199,580.44
Promotion of social inclusion and combating of poverty and any prejudice	1,303,336,729.60
Investment in education and formation for skills acquisition and long-life learning	1,304,175,573.92
Support of institutional capacity of public services and agencies, and of efficient public administration	281,126,069.76
Technical support	669,472,460.40
Total	19,327,690,928.00

Source: Ministry of Finance and Competitiveness (2013: 122–123).

Table 3.13 Distribution of Structural Fund and Cohesion Funds expenditure in “Cohesion 4,” 2nd C.S.F., 1994–99 (as %)

Type of expenditure	Greece	Spain	Ireland	Portugal
Structural Fund expenditure				
Infrastructure	45.9	40.4	19.7	29.7
Human resources	24.6	28.4	43.9	29.4
Productive investments	27.8	30.5	36.2	35.7
Cohesion Fund expenditure^a				
Transport infrastructure	51.2	49.7	50.0	48.1
Environment	48.8	50.3	50.0	51.9

Note:

^aCohesion Fund expenditure refers to the period 1993–99.

Source: European Commission.

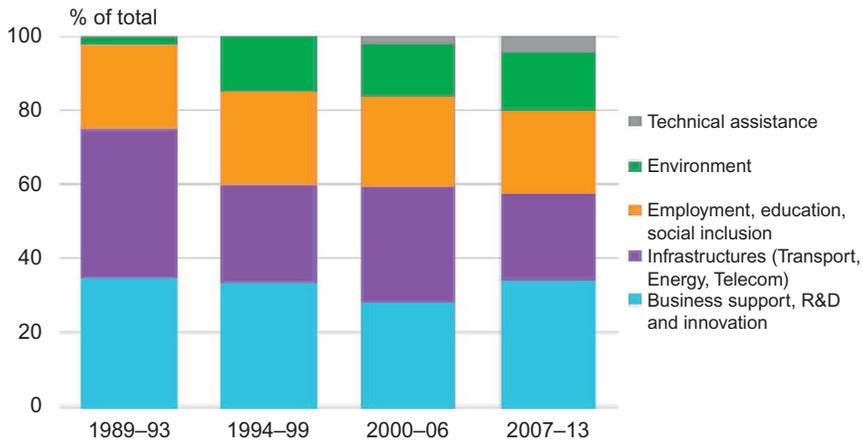


Figure 3.7 Distribution of Cohesion Policy Investments in less developed regions, 1989–2013, different programming periods.

Source: DG REGIO (as it appears in EC, 2014: xix).

Ireland that emphasized human resources and productive investments in structural support at the critical time when the bases were laid for an entrepreneurial, self-reinforced economy. Similarly, in the rest of these Cohesion supported states, other priorities were made.

From 1989 to 2013, the allocation of Cohesion Funds for all less developed regions (Fig. 3.7) offers clearly a different picture from that of Greece, as they emphasize business support, R&D, and innovation. Infrastructure was the principal policy priority for the European Communities in the 1989–93 period.

This picture for the EU as a whole reverses when one examines Fig. 3.8A and 3.8B. Proportionately to the total EU Cohesion Funds received (100%), Greece obtained substantial amounts for agriculture and fisheries and both ERDF structural

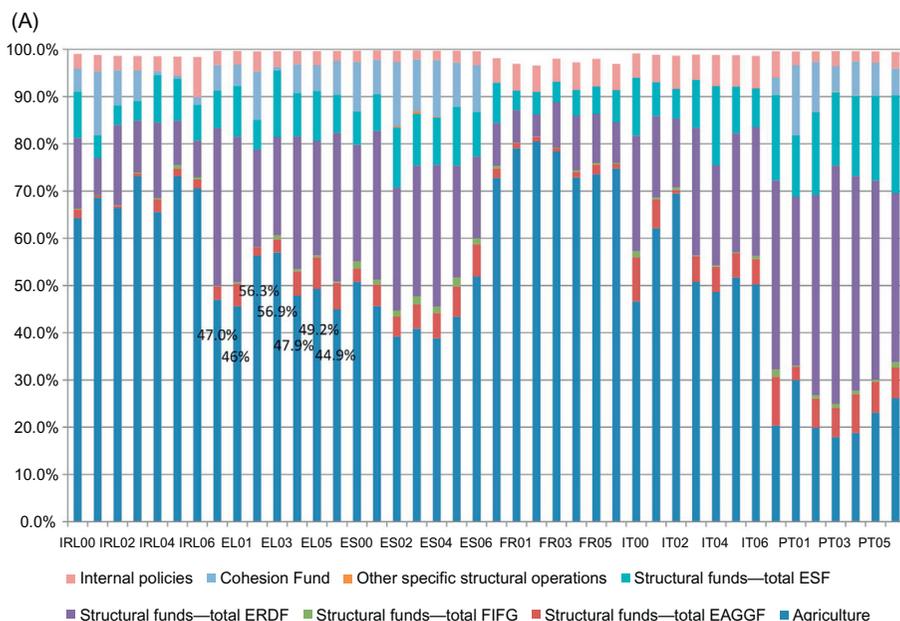


Figure 3.8A Expenditure breakdown in Agricultural, Structural Funds support (per Structural Fund) and internal policies, 2000–06.

Source: EU, ec.europa.eu, accessed the 16/5/2016 from ec.europa.eu/budget/library/biblio/.../2014/Internet%20tables%202000-2014.xls, data processed by the author. Note: The rest of financial support includes the following categories: external actions, administration, reserves, preaccession countries, compensations. IRL: Ireland, EL: Greece, ES: Spain, FR: France, IT: Italy, PT: Portugal.

actions in the 2000–06 period, and actions in the Convergence Objective in the 2007–13 period arrive second. Since the latter priorities include also investments in transport, energy, and telecommunication, we identify again the lack of focus on the business and competitiveness sector in Greece and a misallocation that opposes the European example (in Fig. 3.7). This picture is for example far from that of Portugal.

3.4 The programming of Cohesion policy in Greece

The programming of EU cofunded policies from 1989 to 2020 is seen in the following, extended in size, Tables (Tables. 3.14, 3.15, 3.16, 3.17. and 3.18) that include the principal institutions involved, their actions and aims promoted. The main priorities, tools, and incentives selected by the Greek state (in agreement with the EU authorities) are presented for the different economic sectors and programmes (for Sectoral Operational Programmes and Regional Operational Programmes), in different programming periods. The Tables also provide the series of institutions involved in the implementation of EU Cohesion Policy, mostly Ministries and their surrounding institutions, as well as the new institutions created by EU Cohesion Policy.

(B)

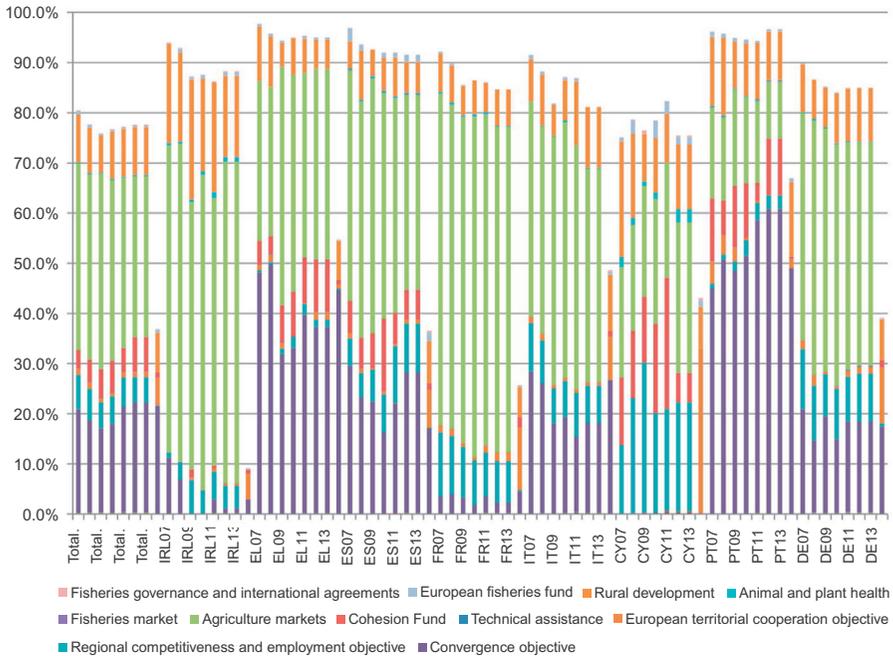


Figure 3.8B Expenditure breakdown in Agricultural, Structural Funds support (per Structural Fund), and internal policies, 2007–13.

Source: EU, ec.europa.eu, accessed the 16/5/2016 from ec.europa.eu/budget/library/biblio/.../2014/Internet%20tables%202000-2014.xls, data processed by the author. *Note:* The above mentioned categories represent the most important categories (but not all categories) out of the three main priorities at the 2007–13 programming period, which were (1) sustainable growth, (2) preservation and management of natural resources, and (3) citizenship, freedom, security and justice). Three more priorities were included in the original dataset (4) “the EU as a global partner,” (5) administration, and (6) compensation. These priorities and the rest of categories not included in the figure add up to the total of 100% in the table.

The 1989–93 is a period of intense development needs, where whole sectors such as telecommunications are underdeveloped and many services were insufficiently provided, for example in banking, insurance, electricity, etc. Economic programming was centered around covering the relevant needs and providing the necessary infrastructure (Table 3.14).

In the 1994–99 C.S.F. (Table 3.15, pp. 162–176), the strategic targets were five: infrastructure; improving living conditions; competitiveness; human potential and; the reduction of regional imbalances. Infrastructure was allocated 46% of total expenditure, of which 28.6% was used for transport infrastructure; 23.5% was used for human capital expenditure, of which 13.5% for education; 30.2% was directed to production, of which 15.6% was for agriculture (MoF, 2003).

In the 2000–06 period (Table 3.16, pp. 177–191), the strategy centered around supporting human resources, transport, competitiveness, agricultural development, fisheries, quality of life, information society, and regional development.

Table 3.14 National and regional economic and social programming, 1989–93

Axis of Priority: ENERGY						
	Reduction of petrol dependence (creation and development of Public Gas Enterprise (“Δημόσια Επιχείρηση Αερίου,” “Δ.Ε.Π. Α.”))	Exploitation of domestic energy sources-	Intensive research in Greek physical space for identification of new energy deposits	Economizing energy	Promotion of renewable energy sources	Increase of share of Greek enterprises in investments in the energy sector
Principal institution Involved	Public Enterprise of Electricity (“Δημόσια Επιχείρηση Ηλεκτρικού,” “Δ.Ε.Η.”)					
Aims of institution	Optimal development of electrical system, securing of long-term base of electric energy for the country’s needs, improvement of energy balance					
Actions to be taken	Development of new sources, such as lignite mines, thermoelectric power stations, hydroelectric power stations, thermal power stations Exploitation of renewable energy sources Transport and distribution infrastructure projects					
TELECOMMUNICATIONS						
	Expansion and modernization of conventional circuits and introduction of new technologies (cellular, optical fiber, etc.) with the purpose to cover a great part of existing demand in the whole of country’s territory, especially in deprived regions and areas					
Principal institution Involved	Greek Organization of Telecommunication (“Οργανισμός Τηλεπικοινωνιών Ελλάδας,” “Ο.Τ.Ε.”)					
Aims of institution Actions to be taken	Network of optical fibers and cables, domestic, and international connection	Development of radio-electrical networks, mobile and wireless telephony	Development of multiplex cellular systems and centers of cellular technology	Development and expansion of faxing, of network of data transmission	Satellite communications and satellite stations	Construction of buildings

(Continued)

Table 3.14 (Continued)

				(HELLASPAC), and provision of new services (VIDEO, TELETEX, TELEFAX, VIDEO CONFERENCE etc.)	(INMARSAT, EUTELSAT etc.)	
TRANSPORT						
Principal institution Involved	Organization of Greek Railways (“Οργανισμός Σιδηροδρόμων Ελλάδας,” “Ο.Σ.Ε.”), Olympic Airways (“Ολυμπιακή Αεροπορία,” “Ο.Α.”)					
Aims of institution						
Actions to be taken	Creation of a national railway axis of high quality of provided services, connected with European railways of equal quality	Improvement of regional networks that will empower the basic axis along Athens, Thessaloniki, and Eidomeni	expansion of aviation network and improvement of level of services with renewing and organization of fleet, with concrete actions for creation of freight stations, city terminals, creation of centers for training all types of airplane employees, and the expansion and modernization of Olympic Airways’s infrastructure in the Athens Airport			New Athens Airport in Spata
MANUFACTURING						
ECONOMIC INFRASTRUCTURE & SERVICES	Economic infrastructure and services for the support and modernization of industries in manufacturing and SMEs					
Principal institution Involved	Greek Bank of Industrial Development (“Ελληνική Τράπεζα Βιομηχανικής Ανάπτυξης,” “ΕΤΒΑ”)					
	Greek Organization for small and medium-sized enterprises and craftsmanship (“Ελληνικός Οργανισμός Μικρομεσαίων Επιχειρήσεων,” “ΕΟΜΜΕΧ”)					

Aims of institution	In “ETBA”: Organization and equipment of industrial areas, provision of financial consultant services, loan or equity participation in productive investments					
	In “EOMMEX”: Support in business start-ups, improvement of organization methods, Support of export activity, computerization and technical installation and equipment					
Actions to be taken						
INDUSTRIAL LAW 1262/82						
SPECIAL PROGRAM FOR DEVELOPMENT of LOCAL GOVERNMENT (“EITTA”)						
	Modernization of organizational and functional structures of local government	Organizational connection of agencies with maximum achieved development effort	Creation of preconditions for endogenous local growth			
Principal institution Involved	Local government organizations (“Οργανισμοί Τοπικής Αυτοδιοίκησης,” “Ο.Τ.Α.”), in collaboration with the Ministry of Internal Affairs					
Aims of institution	Infrastructure improvements	Startup of private and semipublic enterprises that expand the entrepreneurship horizon	Improvement of quality of life at local level	Training and improvement of human resources	Organizational and economic support of information, programming, publicity, and encouragement	
Actions to be taken						
Axis of Priority: METRO ATHENS						
RESEARCH & TECHNOLOGY						
Principal institution Involved	General Secretary of Research					
Aims of institution Actions to be taken	Connecting research and production, by financially	Transfer and diffusion of technology,	Financial and organizational support for basic	Improvement of buildings and mechanical equipment of the General Secretary of Research	Actions of the Hellenic Organization for	

(Continued)

Table 3.14 (Continued)

	supporting intrafirm research and research of specific industrial research firms, through important contribution of technology parks in Patras, Thessaloniki and Herakleion	through the National Documentation Center (“Εθνικό Κέντρο Τεκμηρίωσης”), libraries, databases etc.	research, with the support of human, scientific potential and research cooperations. Priority is given to industries in informatics/ telecommunications, chemical technology, biotechnology, energy, health and in studies for physical environment		Standardization for the creation of certification centers for products and materials and the Hellenic Statistical Services for development of statistical infrastructure adjusted in the needs of an integrated European System of Statistical database	
ENVIRONMENT						
PROFESSIONAL TRAINING & EMPLOYMENT						
	Training of already employed in new technologies, in products, management, organization, and business transformation	Training of newcomers in labor market and adjustment of their qualifications to technological change	Subsidy of employment for reducing unemployment			
Principal institution Involved	Undertaken by many institutions, across transport, energy, telecommunication, banking, insurance, private and public enterprises, health					
Principal institution Involved (cont.)	<i>In Transport:</i>	<i>In Energy:</i>	<i>In Telecommunications:</i>	<i>In Banking - Insurance:</i>	<i>In Research:</i>	<i>In Health:</i>
	Olympic Airways, Olympic Aviation (“Ολυμπιακή	Public Power Corporation S.A. (“Δ.Ε.Η.”) Public		Banks	General Secretary of Research and Technology,	Ministry of Health, National Health

	Αεροπορία), Organization of Greek Railways ("Ο.Σ.Ε."), Ministry of Mercantile Marine	Corporation of Petroleum ("Δ. Ε.Π."), Hellenic Aspropyrgos Refinery ("Διυλιστήρια Ασπροπύργου"), ΕΚΟ			Hellenic Pasteur Institute, Research Center of Crete	System, Public hospitals
Aims of institution	<i>In Transport:</i>	<i>In Energy:</i>	<i>In Telecommunications:</i>	<i>In Banking - Insurance:</i>	<i>In Research:</i>	<i>In Health:</i>
	To serve the broader efforts for the modernization and rational organization of the system of transportation	Support the restructuring and modernization programme of Public Power Corporation S.A. ("Δ.Ε.Η."), for projects of introduction, transport and distribution of natural gas, and exploitation of new resources	Adjustment of labor force in technological changes in the industry (cellular technology, optical fiber, information technology, etc.)	Deregulation of banking market, consolidation and improvement of effectiveness of financial and insurance industry that requires a flexible human resource with broader capacity in planning and study of new banking activities and the exploitation of new technologies in banking and insurance industry		Adjustment of nursing personnel in needs created from introducing new technologies in health industry, adjustment of professional qualifications of nursing personnel from needs created out the expansion and improvement of services of the national health system
Actions to be taken	<i>In Transport:</i>	<i>In Energy:</i>	<i>In Telecommunications:</i>	<i>In Banking - Insurance:</i>	<i>In Research:</i>	<i>In Health:</i>
	Improvement of basic training for	Improvement of basic training for	Improvement of basic training for	A progressive change to a new training	Personnel training and executive	Training actions

(Continued)

Table 3.14 (Continued)

	newcomers in the industry, continuous improvement of already employed for adjustment in technological change, acquisition of relevant professional experience in the context of secondary and tertiary professional education, and employment subsidies for increasing of new job positions	newcomers in the industry, continuous improvement of already employed, and employment subsidies	newcomers in the industry and employment subsidies of new job positions	model of seminars in high quality structured training and employment subsidies of new job positions	specialization in new technology sectors	
Principal institution Involved (cont.)	<i>In Secondary Education:</i>		<i>In technical support:</i>	<i>In private enterprises:</i>	<i>For collective needs:</i>	
	Ministry of Education				Ministry of Education, Ministry of Culture, Manpower Employment Organization (“Οργανισμός Απασχόλησης Εργατικού Δυναμικού,” “Ο.Α.Ε.Δ.”)	
Aims of institutions (cont.)	<i>In Secondary Education:</i>		<i>In technical support:</i>	<i>In private enterprises:</i>	<i>For collective needs:</i>	
	Adjustment in labor market, expansion and improvement of the whole system of technical		Specific studies, programmes and	To cope with the significant	Easing of employment of	

	professional training, with parallel reduction of general education	assessment of educational programmes are required to develop and extensive knowledge that improves the effectiveness of educational programmes, in relation to labor market needs	problems in the system of intrafirm training, so that human potential and resources are accurately employed	long-term unemployed that allows gaining complementary training and professional experience	
Actions to be taken (cont.)	<i>In Secondary Education:</i>	<i>In technical support:</i>	<i>In private enterprises:</i>	<i>For collective needs:</i>	
	New specializations are added, as requested in regional labor markets and, simultaneously, improvements are offered in training to cover needs from the introduction of new technologies in education, improvement in the methodology and organization of professional training, and the change in structures adjusted to needs and technological changes in labor markets	Actions at the national level, at the level of each operational programme, as well as innovative actions and social dialog. New measures, such as exchange of experience, transfer of technological knowledge, experimentation in new professions, as well as developmental actions in the context of social dialog	Along with encouraging private investments through the Industrial Law, actions are promoted to encourage productivity and competitiveness of enterprises and the sustaining and creation of new job positions Actions addressed at types of employees: Training of already employed in new technologies, new products, management, organization and	Actions included in a specific operational programme	

(Continued)

Table 3.14 (Continued)

			<p>business transformation</p> <p>Training of financial executives and managerial personnel</p> <p>Training of newcomers in labor market</p> <p>Subsidy of newcomers in public and semi-public sector enterprises</p>		
ANIMAL-HUSBANDRY					
Principal institution Involved	Ministry of Agriculture				
Aims of institution	<i>In agriculture:</i>	<i>In Forests:</i>	<i>In Fisheries:</i>		
	Adjustment of imbalances in markets of agricultural products	To turn forests to a basic developmental factor that substantially improves incomes in mountainous areas, keeps populations in those areas and sustains and improves the physical environment	To cover the maximum possible needs in consumption in fishery products for increasing income of employees in the industry and promote the scope of a development policy in the industry		
Actions to be taken	<i>In agriculture:</i>	<i>In Forests:</i>	<i>In Fisheries:</i>		
	<p>Imbalances and chronic surpluses will be tackled through:</p> <p>1. Restructuring of cultivation</p> <p>Higher quality production</p> <p>Price and subsidy policies</p>	<p>Protection of forests and physical environment from various dangers (fires, deforestations, land abuses, and various other interventions against forest wealth)</p> <p>Increase in the surface of forest land, through reforestations in burnt and degraded forest</p>	<p>Protection and rational management in domestic fisheries wealth and expansion of activity in new fishery fields, Greek and foreign</p> <p>Improvement of physical conditions and management methods of fish farms and</p>		

	<p>2. Improvement of adjustment and structures of agricultural sector through many interventions to modernize structures, improve the supply of services to farmers, improvement of training and agricultural training of agricultural population, modernization of agricultural land, infrastructure improvement, etc.</p>	<p>lands, as well as various improvements in the composition and shape of existing forests through agile forestry manipulations</p> <p>Improvement of forest production by 10%–15% annually, especially in industrial timber and timber for construction, to increase autonomy in timber items</p> <p>Increase in production of various other products and services that come out of the forest through the development of basic infrastructure that will make them more accessible to the society</p>	<p>exploitation of the rest of internal waters, to the extent that economically viable products are produced</p> <p>Development of water cultivation in sustainable units</p> <p>Increase of productivity in fishery units and improvement of safety and living of employees working on them</p> <p>Improvement of conditions of trade of fishing products and promotion of exporting and manufacturing activity</p> <p>Promotion of organization of producers in cooperations and associations of producers for increasing their intervention in the exploitation and distribution of production</p> <p>Development and organization of supporting activities in the industry, such as research, education, credit in fisheries, technical support, production inflows in the industry, etc.</p>
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REGIONAL OPERATIONAL PROGRAMMES

Principal institutions Involved	State and Regional authorities
Aims of institution	Separate strategy at regional level
Actions to be taken	Regional Operational Programmes, actions differ at regional level, for each region: ROP Eastern Macedonia and Thrace, ROP Central Macedonia, ROP Western Macedonia, ROP Epirus, ROP Thessaly, ROP Ionian Islands, ROP Western Greece, ROP Central Greece (Sterea Ellada), ROP Attica, ROP Peloponnesus, ROP Northern Aegean, ROP Southern Aegean, ROP Crete

Table 3.15 National and regional economic and social programming, 1994–99

Axis 1: Reduction of Peripheral Character of Country and Promotion of Internal Integration Through Development Of Large-Scale Infrastructure Networks					
	1.1. Accessibility and road axes (highways, ports, airports)	1.2. Railway network	1.3. Telecommunication	1.4. Energy	1.5. Natural gas
Principal institution Involved	Ministry of Environment, Planning and Public Works (former “ΥΠΕΧΩΑΕ”)	Greek Railways (“Οργανισμός Σιδηροδρόμων Ελλάδας” or “Ο.Σ.Ε.”)	Telecommunication service provider, in particular Greek Organisation of Telecommunication (“Οργανισμός Τηλεπικοινωνιών Ελλάδας,” or “Ο.Τ.Ε.”), Greek postal services (“Ελληνικά Ταχυδρομεία” or “ΕΑΤΑ”)	Public Enterprise of Electricity (“Δημόσια Επιχείρηση Ηλεκτρικού,” or “Δ.Ε.Η.”)	
Aims of institutions	<p>Priority in axes linking to Trans European Networks (TENs) or forming part of it</p> <p>Doubling the length of Greek highways</p> <p>Increase expenditure per GDP in TENs</p> <p>Reducing deaths by accident in highways by half</p> <p>Reducing time distance (Athens to Patras by 30’ and Athens to Thessaloniki by 60’)</p>	<p>In Athens-Thessaloniki line: increase the speed of trains up to 200 km/h reduction of time distance by (from 6&15’ in 1993 to 4&20’ by year 2000)</p> <p>increase in two- sided part of the line (both directions), at 88%</p> <p>Study of the Eleusina-Corinthe axis and its financing</p> <p>Raise the length of railway network from 2484 to 2588 km, of unidirectional line from 8.5% to 13.3%, of electric power movement</p>	<p>In telecommunications:</p> <p>Improving quality of provided services and efficacy in the sector</p> <p>Provide the capacity to provide services on a commercial basis (including the creation and pursuing of a long-term business plan)</p> <p>Business plan of the Greek Organisation of</p>	<p>Improving performance through an operational plan for the industry</p> <p>Saving energy, rational management and promotion of renewable resources</p> <p>Increase in consumption as % of GDP from 440KGOE/TECU92 in 1992 to 452 in 1999 and in industry consumption from 742 in 1992 to 760 in 1999</p>	<p>Continuation of the project to introduce natural gas (that started with 1st C.S.F. and REGEN Community Initiative)</p> <p>4% of households using natural gas by 1999</p> <p>Increase in natural gas production from 0% to 12% in 1999</p>

	<p>Increasing connectivity to Italy (from ports)</p> <p>Increasing connection to Balkan countries</p> <p>Improving capacity and functionality of Greek airports</p> <p>Helipad network that satisfies social needs (passenger transfer, supplies, etc.) and reduces isolation in isolated areas</p>	<p>from 3% to 21.2%, of network exceeding 140 km/h from 0.6% to 13.3%</p>	<p>Telecommunication (“O.T.E.”)</p> <p><i>In postal services:</i></p> <p>Business plan of the Greek postal services (“Ελληνικά Ταχυδρομεία” or “EATA”)</p>	<p>Increase in production capacity from 9.1 MW in 1993 to 11.5 in 1999</p> <p>Reduction in conventional thermal station electrical production from 92.6% to 88.3% in total production</p> <p>Renewable energy sources from 7.4% in 1993 to 11.7% in 1999</p> <p>Fall in SO₂ emission from 11.8 in 1993 to 8.9 tonnes in 1999. Fall in COs emissions from 1.12 tonnes in 1993 to 984 tonnes in 1999</p>	
Actions to be taken	<p><i>In roads:</i></p> <p>Axis Patras-Athens-Thessaloniki</p> <p>Egnatia Road (“Εγνατία Οδός”)</p> <p>Rio–Antirrio bridge-Peripheral Athens road</p> <p>Few parts of Ioannina-Antirio road</p>	<p>Creating a business plan for the Organization of Greek Railways (“Οργανισμός Σιδηροδρόμων Ελλάδας,” “Ο.Σ.Ε.”),</p> <p>Creating a railway connection among Patras, Athens and Thessaloniki (a Trans European Network)</p> <p>Creating a new railway line Eleusina-Corinthe and its connection to Thessaloniki</p> <p>Modernization of Corinthe-Patras railway line</p>	<p><i>In telecommunications:</i></p> <p>Securing service provision in areas with relatively high cost through improving access in the network</p> <p>Introduction of new technology in distant and geographically inaccessible areas</p> <p>Accelerating and improving the</p>	<p>Operational plan for the industry that includes aspects of production capacity for lignite and natural gas</p> <p>Creation of an effective management structure that will allow assessing the real effect of implemented actions</p>	<p>Use of INTEREG Community Initiative to continue the natural gas project</p> <p>Regulatory work needed that includes technical and security guidelines, as well as operational rules for low pressure networks in urban areas</p>

(Continued)

Table 3.15 (Continued)

Axis 1: Reduction of Peripheral Character of Country and Promotion of Internal Integration Through Development Of Large-Scale Infrastructure Networks					
	<p>Few parts of Thessaloniki—borders with Bulgaria</p> <p>Northern part of Crete</p> <p><i>In ports:</i></p> <p>Western part of the country —“western gate,” increasing connectivity to Italy</p> <p>Modernization of Igoumenitsa and Patras ports</p> <p>Actions for Corfu port</p> <p>Development projects in 3 principal ports in Eastern shore (Alexandroupoli, Kavala, Volos), to increase freight transportation and connection with Balkan countries</p> <p><i>In airports:</i></p> <p>Emphasis in international</p>	<p>Supply of railway line material/ equipment</p> <p>Improvements in the rest of the country, connection with Kavala airport, horizontal actions, technical support, operational plan</p>	<p>provision of new, advanced and commercially viable in groups of users important for the economy</p> <p>Public sector administration modernization and development of rural, border and island areas</p> <p>Training measures for introducing new technologies and modern methods of management</p> <p><i>In postal services:</i></p> <p>Modernization of the Greek postal services (“EATA”) through a business plan that requires its organizational planning, the use of its resources, their relation to productivity and effectiveness, cost and price policies, definition of</p>		

	airport of Athens, relocation to SPATA Modernization projects in airports of Thessaloniki, Herakleion, Corfu, Rhodes Creation of a network of helipads		minimum provision requirements and basic services as a social service provider		
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Axis 2: Improvement of Living Conditions

	2.1. Urban Development (Athens Metro and Thessaloniki Metro) State, regional and local authorities, METRO S.A. Modernization of public infrastructure in historical neighborhoods Management of obsolete industrial spaces and areas, in downgraded environment Continuation of METRO of Athens and METRO of Thessaloniki to reduce important circulation problems and pollution of the city of Athens	2.2. Health and Social Protection Ministry of Health, Health institutions of the National System of Health Improvement of quality of provided health services Reduction of regional inequalities (reducing by 50% between less favored areas and urban centers) Improvement of organizational and managerial health services and the efficacy of its personnel Increasing effectiveness Continuation of the restructuring process in the psychiatric sector (based on Community Regulation) Improving and framing of social security policy on the basis of Structural Funds, its needs (for infrastructure, organization, human labor shortage) and its finance	2.3. Environment Ministry of Environment, Planning and Public Works Effective, active and energetic prevention Combating pollution at its source Implementation of the “polluter pays principle” Environmental sustainability Precautionary principle, if needed
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Table 3.15 (Continued)

Axis 1: Reduction of Peripheral Character of Country and Promotion of Internal Integration Through Development Of Large-Scale Infrastructure Networks			
<p>Actions to be taken</p>	<p>Interventions through Regional Operational Programmes for urban development in greater Greek cities</p> <p>URBAN Community Initiative</p> <p>Completion of Athens METRO, as programmed through the 1st C.S.F. by constructing line 2 (Sepolia-Dafni) along North-South axis (9.2 km), with 12 stations and line 3 (Keramikos–Ethniki Amaryna) along East-West axis (8.4 km), 12 stations</p> <p>Following the 1993 international procurement competition for Thessaloniki METRO, the 25 stations and 9.5 km project has been planned and private sector contribution needs to be secured</p>	<p>Modernization of infrastructure and equipment with scientific labor of health institutions with needs (Centres of Health, hospitals, National Centre of First Aid, telemedicine)</p> <p>Some of these actions conducted through the Regional Operational Programmes</p> <p>Integrated actions of modernization of management of hospitals and other services, including development of informatics</p> <p>Vocational training of nurses, which comprises basic professional training and continuous training and retraining of existing personnel</p> <p>Formation, launch and operation of National Blood Donation Centres</p> <p>Actions compatible with Structural Funds and their regulations and study of additional actions of complementary character, especially for combating unemployment and exclusion from labor market</p>	<p>Launch of surveillance mechanisms of environmental factors (in collaboration with European Environment Agency), improvement environmental impact assessment</p> <p>Creation of mechanisms for environmental controls in primary and secondary sector activities, especially in public works</p> <p>Support of activities targeting at conforming with EU regulations for environmental protection, especially for polluted waters, waste, toxic waste and drinking water, land protection, soil protection and air quality (especially in Athens)</p> <p>Support of actions to enhance knowledge in planning, and forest and natural reserve protection</p> <p>Management of household and toxic waste, through sanitation of public spaces, creation of waste disposal spaces, creation of centers for recycling, adoption of rational management processes and techniques</p> <p>Management of public dangers</p> <p>Actions to reduce sound pollution</p> <p>Actions for the management of physical environment, such as protection of the seas and natural reserves, biodiversity, soil protection, protection of 10 main sea areas, actions for species in extinction, 100 natural reserve places and 300 places of natural beauty, as well as ecosystems</p>

Axis 3: Development and Competitiveness of the Economic Tissue					
Principal institution Involved	3.1. Manufacturing and Services Ministry of Development	3.2. Research and Technology General Secretary of Research	3.3. Tourism and Culture Ministry of Tourism and Culture	3.4. Agriculture (Targets 1 & 5a) Ministry of Agriculture	3.5. Fisheries (Targets 1 and 5 a) Ministry of Agriculture
	Aims of institution Supporting firm start-ups and industrial tissue modernization Improvement of business environment and business infrastructure Improving competitiveness of small and medium-sized enterprises (SMEs) Creation of new implementation mechanism, acquisition of knowledge, simplification of procedures Radical change of the Greek Development Law Cofunding and support of manufacturing actions included in regional operational programmes (service provision for the SMEs, manufacturing	Support of technical and economic human labor, so as to attract productive investments Massive introduction of R&D and innovation in all productive mechanisms to advance competitiveness To increase human research potential, by 60%	Improvement of quality in provided tourist services to enhance international competitiveness Preservation and exploitation of culture and civilization, in particular as a tourist attraction instrument Effective cooperation among involved institutions and agencies Private sector participation and involvement Integrated interventions, not scattered	Improving competitiveness through Structural adjustment in production Improvement of conditions of manufacturing, trade and marketing of agricultural and forestry products Adjustment of agricultural land units that support vegetable production, meat production support, emphasis in quality and product diversity Improvement, technological support, specialization of various agencies of the agricultural sector Modernization of agricultural land units and infrastructure via Reallocation of agricultural land units	Adjustment of the fisheries sector Modernization and improvement of fleet Protection and improvement of fishing ports and infrastructure

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Table 3.15 (Continued)

Axis 1: Reduction of Peripheral Character of Country and Promotion of Internal Integration Through Development Of Large-Scale Infrastructure Networks					
	and industrial parks, regional support schemes, integrated actions for restructuring of deindustrialized areas)			Rational use of water resources Improvement of agricultural infrastructure Increase of % of youth in agricultural population Rural development Maintenance of rural population through alternative job generation and incomes Revitalization and removal of isolation of rural land, improvement of living conditions Protection and exploitation of physical resources, including forests	

<p>Actions to be taken</p>	<p>Supporting firm start-ups and industrial tissue modernization with: creation of systems of support, ad-hoc adjusted in the needs of domestic and foreign investors finance of activities in business plans, for firms that can compete internationally regional support system, of limited fund availability</p> <p>Creation of “One-stop-shop” agency</p> <p>Improvement of business environment and business infrastructure with: creation of a high quality standardization system progressive transfer of management in industrial and manufacturing spaces in specialized agencies, including private sector creation of private utilities, especially in Northern Greece</p>	<p>Productive sector cooperation of scientific and technological institutions in sectors of interest (new materials, biotechnology, environment)</p> <p>Creation of mechanisms for technology transfers and innovation, the exploitation of four existing technological parks, and those newly created, and improvement of information networks.</p> <p>Integrated actions for exploitation of innovativeness</p> <p>Reorientation and expansion of existing R&D infrastructure and its rational organization and use</p> <p>New infrastructure building</p> <p>Renewal of human labor potential, with greater emphasis in the acquiring extra knowledge by researchers, the training of young researchers, in updated technologies, especially in training techniques and management of R&D and innovation</p>	<p>Modernization of tourist firms, through business plans proving effectiveness from private and public enterprises through financing of market studies, vocational training, leisure equipment, innovative services, intra-firm networks and cooperation</p> <p>Common infrastructure funding in areas of sufficient tourist capacity, such as marines, golf fields or conference centers, based on effectiveness studies</p> <p>Balanced development of a limited number of tourist poles.</p> <p>Development of infrastructure, hotel infrastructure, leisure equipment, transport, human labor etc.</p> <p>Integrated approach based on feasibility studies</p> <p>Local actions of limited funding that will differentiate supply of the tourist product, e.g., through ecological,</p>	<p>Structural adjustments, including implementation of all regulations relevant to 5a target</p> <p>Actions improving initial manufacturing and trade of agricultural products and forestry products (target 5a)</p> <p>Actions for vegetable production, such as improving control systems for plants, including relevant checks, the creation of integrated systems of cultivation and vegetable protection, and continuation of actions for restructuring of vineyards.</p> <p>Actions in meat production, for the expansion of meat capital, its health and protection, the organization of meat production in space, the creation of infrastructure for genetic, health and qualitative checks, increase in meat production per meat</p>	<p>Adjustment of fishery activity</p> <p>Reduction of fleet</p> <p>Renewal and modernization of fleet</p> <p>Increase in water cultivation, through modernization or removal of existing firms</p> <p>Fish products adjustment to market requirements</p> <p>Protection of sea zones</p> <p>Equipment of fishing ports</p> <p>Manufacturing and trade of products</p> <p>Product promotion</p> <p>Infrastructure of ports and sea-ports</p> <p>Research in the fisheries sector</p> <p>Vocational training and social support</p> <p>Technical support</p>
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Table 3.15 (Continued)

Axis 1: Reduction of Peripheral Character of Country and Promotion of Internal Integration Through Development Of Large-Scale Infrastructure Networks					
	<p>(intrafirm communication networks, logistics, storage and freezing facilities, etc.)</p> <p>incentives/measures for the protection of environment, and business relocation outside urban environments- integrated actions for deindustrialized areas</p> <p>Improving competitiveness of small and medium-sized enterprises</p> <p>finance of business services for the modernization of SMEs, a competitive system based on the demand for SMEs</p> <p>measures for the accessibility of SMEs in financial markets, using modern financial techniques</p> <p>Vocational training to finance business plans prepared by firms. Actions for certification in the national system of vocational training</p>		<p>cultural or mountainous tourism</p> <p>Funding of vocational training actions incorporated in business plans</p> <p>Management of historical centers, modernization of museums, renovation of monuments, recording of monuments and sites</p>	<p>head. Priority of complementary interventions of vertical integration in sectors</p> <p>Rational management of water sources, with such actions as hydraulic measures for water storage and provision, protection of waters and lands, improvement of quality of irrigation waters</p> <p>Forrest protection measures, forest development and complementary measures (such as recording, mapping, equipment, studies etc.)</p> <p>Actions that improve the terms of agricultural research, promotion of products and their exporting, promotion and increase of information</p> <p>Technical support</p>	

Axis 4: Development of Human Potential and Promotion of Employment					
Principal institution Involved					
Aims of institution					
Actions to be taken	<p>Actions to improve the capacity to access and to improve the quality of systems of elementary education and professional training. Both qualitative and quantitative enforcement of various existing structures requires: more flexible systems, open to the world of labor with the aim to guarantee a greater mobility of specialized labor force and improve its capacity to new technologies and improve knowledge transfer in economic activities</p> <p>Improvement of competitiveness through supporting adjustment of employees in the evolution of systems of production. The principal weight to be given in a systematic approach in the organization of activities of continuous formation and continuous education, in the context of business and labor market demand</p> <p>Improvement of employment opportunities, through implementing a series of coherent measures against unemployment and nonprivileged and in favor of other categories endangered with exclusion from labor market. The principal weight to be given in enhancing employment organizations and promotion of special actions in matters of professional orientation, consulting, professional training and employment enhancement. Support and investigation of the modernization effort of public administration. The principal weight to be given in the exploitation of human force, with the support of measures of initial and continuous professional training of high quality.</p>				
	4.1. Education and initial professional training	4.2. Continuous training and promotion of employment	4.3. Combating exclusion from labor markets	4.4. Modernization of public administration	
Principal institution Involved					
Aims of institution	<p>Guaranteeing, based on the White Paper “Growth, Competitiveness and Employment” for all young people below 20 years old access to a recognized form of education or professional training that includes schooling or other forms connecting work with professional training. The creation of Institutes of Professional Training (“IEK”) in the 1st CSF is a basis upon which new propositions toward this direction. Enriching and enhancing national schooling system, especially with respect to organization and practice and job experience gained</p>	<p>Development of an effective system of continuous training that would respond in priorities created in the demand of economies. Emphasis is given is the creation, especially during the first phase, in the development of</p>	<p>Measures will concern disadvantaged people, people with body or mental problems, immigrants, refugees, as well as drug addicts, single-parented families, people released from prison, and other</p>	<p>Undertaking a complete action for improving management of human resources and increasing productivity and efficacy of public sector employees</p>	

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Table 3.15 (Continued)

Axis 1: Reduction of Peripheral Character of Country and Promotion of Internal Integration Through Development Of Large-Scale Infrastructure Networks				
	<p>Enhancing secondary education, after compulsory education, and making it more attractive and adjusted in the needs of labor markets. Modernization, enrichment and adjustment of educational programmes and programmes of study (e.g., introduction and/or expansion of new technologies, foreign languages, professional orientation, supportive and special modules, and measures in favor of school leavers, weak students and minorities, environmental education etc.), precautionary measures with the aim to reduce early school leaving, and low performance. As far as infrastructure is concerned, and after taking into account demographic changes, a selective approach adopted: priority given in educational equipment matters, abolishing of double-shifts in secondary education, the improvement of school infrastructure and libraries</p> <p>Training of school teachers, educators, school principals, educational consultants and the rest of personnel, as a primary concern to guarantee educational adjustments</p>	<p>basic structures that would guarantee qualitative upgrade and the opportunity to respond to economic changes. Greece has a critical number of centers of professional training developed in the 1st CSF (under regulation 815/84)</p> <p>A. Continuous formation for employees</p> <p>Development of special requirements for centers of professional training, educational material and the educational personnel, exploring the</p>	<p>population groups facing the danger of exclusion</p> <p>Basic research to trace better social target groups, their problems and needs, the number of people, their geographical distribution, and assessment of existing system of service provision. Setting in operation mechanisms for constant tracing of needs and priorities</p> <p>Enhancing and improving existing structures and, if needed, creating new structures, including hard infrastructure. This</p>	<p>This leads in the formation of public sector employees, especially in issues concerning the introduction of new technologies, as well as better preparation of new employees for their entrance in the public sector</p> <p>Continuous formation of middle and higher executives in public</p>

	<p>Development and improvement of higher education, given its prime role in competitiveness. Improvement in the management of programmes of university education, in order to take into account more the current needs of market, promotion of short in size postgraduate modules oriented toward the market. Organization of postgraduate modules containing a research component, as well as development of libraries and development and improvement of infrastructure and equipment</p> <p>Linking all degrees of educational system more with real economic activity and improving the response capacity of the educational system and the educational system of initial professional training, to ease the access of youth in labor market and adjust studies in the needs of markets. Obstacles separating the educational system from economic activity</p>	<p>human resources of educational institutions and institutions of professional training, the requirements of professional training and the practices of advanced businesses in every industry, as well as experience in other member-states</p> <p>Development of mechanisms (including observatories) for accelerating industrial change, especially its effects upon employment and the organization of work as well as the performance of information systems (with the creation of information services in basic urban centers and information actions) for entrepreneurs and managers</p> <p>Provision of support to assess educational needs of enterprises (especially of the SMEs) from specified experts. Strong links</p>	<p>leads to actions such as training of trainers, provision of same reception opportunities, adjustment of infrastructure projects to offer more opportunities for education/professional training and employment to people in need</p> <p>Developing the service provision for combating exclusion from labor market and removing obstacles for economic and social inclusion and reinclusion. Funding of preliminary professional training, service provision, psychological support, provisional housing provision, upgrade of basic professional qualifications, help in job search process and support inside the job</p>	<p>Improvements of structural character, such as the creation of mechanisms for tracing educational needs, processing formation programmes adjusted in business operational needs, training of trainers, transfer of know-how and educational equipment, the creation and/or expansion educational infrastructure, depending on needs</p> <p>Institutionalization of a system of assessment that will secure that measures taken respond to real needs of formation</p>
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Table 3.15 (Continued)

Axis 1: Reduction of Peripheral Character of Country and Promotion of Internal Integration Through Development Of Large-Scale Infrastructure Networks				
	<p>should be removed and communication improved. This is achieved through the development of networks, the creation of job search offices, exchange between educational institutions and businesses, further development and improvement of the institution where students gain experience in businesses</p> <p>Public administration modernization and that of central and regional authorities of the Ministry of Education, with the purpose to investigate and support the reform and to upgrade the educational system. The importance of development and upgrade of educational design is critical in all educational degrees, as well as the assessment and revision of educational measures based on a systematic research, along with the development of mechanisms and processes for the implementation of the programme</p>	<p>among observatories, design services and educational centers</p> <p>Development of special actions for professional training for trainers of business personnel</p> <p>Guaranteeing necessary coordination with the actions undertaken by the Ministry of Education, to connect higher education the business activity</p> <p>Ex-post assessment that will become the basis for future adjustments</p> <p>B. Professional Training and efforts to</p>		<p>Identifying problems of legal and administrative character, defining solutions at the organizational level from a great administrative unit (including of regional and local level), implement measures that will provide such solutions, including experimental applications, structural interventions, assessment and diffusion of results</p>

		<p><i>guarantee employment to the unemployees</i></p> <p>The systems supporting employment have to be completed with a broader and consistent approach that comprises:</p> <p>Development of organizations of employment and job search occupied with professional training and with advice provision to unemployees in their efforts to find job and development of information and awareness mechanisms</p> <p>Special measures that include subsidies for start-ups and professional training with the aim to promote the creation of enterprises and self-employment</p> <p>Special emphasis in applying policies in equal opportunities between men and women, inclusion and reinclusion of women in labor markets, special priority in youth and long-term unemployed, combating exclusion from labor markets</p>		
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Table 3.15 (Continued)

Axis 1: Reduction of Peripheral Character of Country and Promotion of Internal Integration Through Development Of Large-Scale Infrastructure Networks	
Actions to be taken	
Axis 5: Reduction of Regional Inequalities and Removal of Isolation in Island Areas (Regional Operational Programmes)	
Principal institutions Involved	State and Regional authorities
Aims of institution	13 separate strategies at regional level, but with common elements, through exploiting special characteristics and limiting disadvantages at regional level
	<p>Each regional operational programme will contain:</p> <p>A subprogramme containing actions for local development, based on the directions of the Special Programme for Local Authorities ("EAIITA"). Special emphasis in sustainable actions (especially the creation of infrastructure) on behalf of local administration agencies and actions among local organization authorities</p> <p>A subprogramme containing actions for human potential that will comprise measures in the fields of education, training, as well as actions of continuous professional training and combating exclusion from labor markets that can be linked to actions of other thematic subprogrammes of the regional operational programme</p> <p>A low-budget subprogramme containing actions to complete unfinished actions of previous 1st CSF</p> <p>A subprogramme for agricultural development, including fisheries, in coherence and agreement with central planning in agriculture and the respective sectoral programme</p> <p>Apart from actions for "EAIITA" the rest of actions center around projects of large scale with real effect on the economy (more than 1 MEcus and for EAIITA more than 300.000 Ecus)</p>
Actions to be taken	Regional Operational Programmes, actions differ at regional level, for each region:
	ROP Eastern Macedonia and Thrace, ROP Central Macedonia, ROP Western Macedonia, ROP Epirus, ROP Thessaly, ROP Ionian Islands, ROP Western Greece, ROP Central Greece (Sterea Ellada), ROP Attica, ROP Peloponnesus, ROP Northern Aegean, ROP Southern Aegean, ROP Crete

Source: E(94)1716.

Table 3.16 National and regional economic and social programming, 2000–06

Axis 1: Development of Human Resources and Promotion of Employment					
Principal institution Involved	Ministry of Education, Ministry of Culture	Manpower Employment Organisation ("Όργανισμός Απασχόλησης Εργατικού Δυναμικού" or "Ο.Α.Ε.Δ.")	Public Employment Services (Δημόσιες Υπηρεσίες Απασχόλησης) including Centres for promotion of employment ("Κέντρα Προώθησης Απασχόλησης")	National Observatory for Employment ("Εθνικό Παρατηρητήριο Απασχόλησης") National Institute of Employment ("Εθνικό Ινστιτούτο Εργασίας")	Private Employment Services involvement
Aims of institution	<p>Improvement of competitiveness of Greek economy through development of its human resources</p> <p>Improvement and adjusting of employability of persons through enhancing systems of education and professional formation, of the upgrade of prototype, development of lifelong learning and support of continuous formation</p> <p>Concise adoption and implementation of energetic, precautionary and individualized approach in the battle against unemployment, especially youth and female unemployment, as well as long-term youth and adult unemployment</p> <p>Modernization and development of employment support public services</p> <p>Increase in the participation rate of employed, especially female employees, so as to reach EU averages</p> <p>More effective connecting of initial education and systems of formation to the system of continuous formation, as well as the needs of labor markets and country's economic development</p> <p>Human labor support in the research sector, its connection to the business area, and promotion of innovation of SMEs—modernization of labor market with the introduction of flexibility and adjusting capacity</p> <p>Promotion of entrepreneurship</p> <p>Support of efforts that aim to public sector modernization</p> <p>Development of a society of information in selected sectors of the Greek economy of great economic and social importance</p> <p>Promotion of equal opportunities for all, especially for nonprivileged groups threatened from social exclusion and improvement of their employability</p> <p>Promotion of equal opportunities between men and women</p> <p>Support of local initiatives and local employment agreements</p> <p>Support of implementation of concrete actions in programmes cofunded by other Structural Funds</p>				
Actions to be taken	Policy field 1:	Policy field 2:	Policy field 3:	Policy field 4:	Policy field 5:
	<ul style="list-style-type: none"> Precautionary approach actions, following Guidelines 1 & 2 of European Employment Strategy 	<ul style="list-style-type: none"> Favor job finding and repeated job finding for people in social exclusion Securing of better access in basic services, such 	<ul style="list-style-type: none"> Upgrading and expanding initial professional training, when levels are very low. Preparation of strategy for rationalization of system and improvement of its effectiveness Continuation and substantial improvement of education of the educators, centered around 	<ul style="list-style-type: none"> Improvement and adjustment of skills of employees in SMEs, Formation of public sector employees in significant issues, e.g., 	<ul style="list-style-type: none"> Development of special services- provision of consulting and individualized support, so as to ease accession and reaccession of

(Continued)

Table 3.16 (Continued)

	<ul style="list-style-type: none"> • Repressive approach actions • Improvement and increase of adjustment of Public Employment Services and other structures of labor markets comprising: <ul style="list-style-type: none"> A Master plan of the Manpower Employment Organization that includes new structures, equipment and operations <p>Actions for improving and effectively using existing structures (e.g., Centers for Promotion of Employment, National Observatory of Employment, National Institute of Employment) to study and analyze systematically new directions and needs in labor market, to prepare and assess integrated employment national strategies and policies, as well as monitoring and</p>	<p>as in education, formation, lifelong learning, professional orientation, consulting, employment promotion, introduction of required adjustments as to cover concrete needs of socially excluded people</p> <ul style="list-style-type: none"> • special measures that support people in need, • special measures to support people threatened by social exclusion, such as actions tackling illiteracy, foreign language learning, actions that improve basic skills, supportive actions (e.g., orientation, consulting, support in job search, support in first employment phase, psychological support etc.) • In case people with special needs: individualized approach that takes into account special conditions, type and seriousness of their needs, long-term approaches through integrated measures, 	<p>obtaining ICT and technological knowledge, rationalization and better organization of related actions</p> <ul style="list-style-type: none"> • Enhancing access to third-degree education in sectors related to labor markets • Creation of sustainable postgraduate degrees in sectors related to market needs • Concrete measures to easy transition from school to work • Better connecting educational system and initial formation to labor market needs through programmes • Connection of education and initial formation with continuous and lifelong formation (the creation of unified system of certification for structures, educators, as well as for programmes and professional qualifications) • Expansion of the use of ICT in all levels of educational system • Development and expansion of systemic intervention for human resources for environmental and cultural matters • Upgrading and modernization of school and educational infrastructure 	<p>issues for economic and social cohesion</p> <ul style="list-style-type: none"> • Promotion of entrepreneurship to ease creation of job opportunities (regulatory, taxing, reducing bureaucracy measures) • Adoption of flexibility actions in labor markets (partial, nonpermanent employment) • Development of human capital skills in research, technology and innovation, promotion of research in SMEs • Encouraging an approach based on partnership and the promotion of commitments on behalf of social partners in all appropriate level for improving modernization in the organization of labor 	<p>women in labor markets, including accession in job positions, and the promotion of female entrepreneurship, self-employment and the creation of their own enterprises</p> <ul style="list-style-type: none"> • Improving capacity and of the quality of services for care and support of children, elderly, people with special needs, at the municipal and community level, as well as in the professional field, to reconcile family to professional life. Funding of all-day schools to reduce school attrition in less-favored areas and to remove barriers in women occupation • Improvement of conditions of work and of prospects of career development, supporting higher participation rates of women in decision-
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	<p>cooperation of the National Action Plan for Employment, links to Information Society</p>	<p>family support of people with special needs</p> <ul style="list-style-type: none"> • Securing of better access of the nonprivileged in the society of information, promotion of the social economy, local economic development and employment • Combating direct and indirect discriminations that are faced by nonprivileged groups in labor markets through a coherent set of actions to resolve the problem, including legal measures • Actions centered in children in primary school age with cultural and linguistic difficulties, such as schools of Greek expatriates, immigrants, Muslim families, to integrate them in education system and the society 			<p>making, including in science</p> <ul style="list-style-type: none"> • Improving information and awareness of public opinion in equality of two sexes, promotion of networking in female organization, in rendering sensitive policies in private and public sector in gender matters
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Axis 2: Transport

Principal institution Involved	Ministry of Environment, Planning and Public Works (former “ΥΠΕΧΩΔΕ”)	Greek Railways “ΟΣΕ”	Organisation of Urban Transport in Attiki “ΟΑΣΑ”	Athens METRO
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(Continued)

Table 3.16 (Continued)

Aims of institution	<i>In roads:</i>	<i>In railways:</i>	<i>In airports:</i>	<i>In ports:</i>	<i>In urban infrastructure:</i>	<i>Horizontal aims:</i>
	<p>Secure the continuation and completion of basic infrastructure network cofunded in the previous C.S.F., which comprises the Axis Patras-Athens-Thessaloniki—Euzonoi (“ΠΑΘΕ”), Egnatia Road and vertical connections with the rest of Balkan countries. These axes are part of Trans-European Networks. It also includes the Western axis (Ionian Road, from Antirio to Ioannina)</p> <p>Improvement of accessibility of all regions in mainland Greece (especially those not served by “ΠΑΘΕ” & Egnatia Road), the Aegean and Ionian islands, and combating traffic problems in greater urban centers</p> <p>Improving the country’s connection to the rest of Europe, through building main road axes that have</p>	<p>To complete the Operational Plan of “ΟΣΕ”</p> <p>To improve connection to EU and the rest of Europe, especially in the node of Thessaloniki</p> <p>To complete infrastructure from previous C.S.F.</p>	<p>Secure continuation and completion of basic infrastructure network cofunded in the previous C. S.F., which comprises basic airports</p> <p>Effectively challenge the expected passenger and freight movement among great urban centers in Greece (Athens, Thessaloniki, Patras) through basic airports (SPATA and Thessaloniki)</p> <p>Modernization and automatization of air traffic system</p>	<p>Secure continuation and completion of basic infrastructure networks in ports, as cofunded in the previous C.S.F.</p> <p>Improving the country’s connection to the rest of Europe, through building main road axes connecting basic ports (Athens, Thessaloniki, Piraeus, Patra, Igoumenitsa, Alexandroupoli), main emphasis in the country’s gates to the rest of Europe</p> <p>Challenge effectively the expected passenger and freight movement</p>	<p><i>Athens METRO:</i></p> <p>Project implementation and completion</p> <p>Connectivity</p>	<p>Taking into account all environmental regulation, environmental impact assessment studies and the EU laws for the protection of environment, including the of NATURA areas</p>

	<p>been included in Trans-European networks and in Pan-European transport corridors, the development of systems of integrated transports in key nodal points of the Greek road network</p> <p>Challenge effectively the expected passenger and freight movement among great urban centers in Greece (Athens, Thessaloniki, Patras) mainly via completing ΠΑΘΕ, Egnatia and Ionian Road</p> <p>Managerial and administrative changes & improvements</p> <p>Improving road safety National pricing policy for tolls, to increase private sector participation and the rise of private contribution</p>	<p>To improve domestic connectivity, in nodes and with other means of transportation</p> <p>To increase the speed of railway</p> <p><i>In suburban railways:</i> Completion of operational programmes for “ΟΑΣΑ” (Athens)</p>	<p>Airport infrastructure development funding through special airport fees applied for this purpose, apart from Herakleion and Thessaloniki airport</p>	<p>among great urban centers in Greece (Athens, Thessaloniki, Patras) through connection to central ports (Patras, Thessaloniki, Piraeus, Igoumenitsa, Alexandroupoli)</p> <p>Promote integrated network of ports to support balanced development in islands, funded by ROPs</p>	<p><i>Thessaloniki METRO:</i></p> <p>Construction of Thessaloniki METRO, creation of stations for passengers transfers in buses and parking places, possibly through transferring the appropriation of property right</p>	
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(Continued)

Table 3.16 (Continued)

<p>Actions to be taken</p>	<p><i>In roads:</i> Axis Patras–Athens–Thessaloniki–Euzonoi (“IIAΘE”),</p> <p>Egnatia Road and vertical connections with the rest of Balkan countries</p> <p>Western axis (Ionian Road)</p> <p>Improvement of accessibility of all regions in mainland Greece (especially those not served by “IIAΘE” & Egnatia Road), the Aegean and Ionian islands,</p> <p>Transfer of management of vertical axes in Egnatia Road to Egnatia S.A.</p>	<p><i>In railways:</i> Operational Plan of “ΟΣΕ and its investments</p> <p>Improving railway connection to EU and the rest of Europe, through interventions in Greek parts of Trans-European and Pan-European railways and the creation of networks of integrated transports, especially in the node of Thessaloniki</p> <p>Completion of infrastructure that has started in the previous C.S.F. Put in operation of the new electrical line in “IIAΘE”</p> <p>Improving connection to other means of transportation, through improving integrated networks in ports, airports and other passenger and freight transportation nodes, especially in Athens and Thessaloniki</p> <p>Completion and operation of high speed trains along the Corinth, Athens and</p>	<p><i>In airports:</i> Infrastructure building, especially in Herakleion and Thessaloniki airport</p> <p>Modernization of the electronic system of air traffic across the country and application of an automatic airport control system</p> <p>Preparation of a Vessel Traffic System (VTIMS)</p>	<p><i>In ports:</i> Development of ports in Piraeus, Patras, Thessaloniki, Alexendroupoli</p> <p>Completion of port infrastructure in Igoumenitsa and Herakleion</p> <p>Funding of an integrated network of ports</p> <p>Emphasis in integrated freight centers in Piraeus (in «Θριάσιο Πεδίο») and in Thessaloniki</p>	<p><i>In urban infrastructure: Athens METRO:</i></p> <p>Completion of basic project of 18 km, as well as expansion of new lines (2&3) cofunded by C.S.F.</p> <p>Implementation of part of operational plan that refers to building stations with parking places, through transferring the appropriation of relevant rights</p> <p>Financing and completion of the connection of the METRO with new Athens Airport</p> <p>Thessaloniki METRO:</p>	
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	<p>Integration of management consultants in the implementation of “ΕΥΔΕ ΠΑΕ” and “ΕΥΔΕ ΜΕΔΕ”</p> <p>Creation and organization of companies for:</p> <ul style="list-style-type: none"> • the METRO Thessaloniki • the Athens Peripheral Ring (ΕΛΕΣΣΥ) • the Rio–Antirrio bridge (already signed) <p>Creation and support of ΕΥΔΕ (founding companies) for every big road project axis, such as in South Peloponnese and North Crete, as well as integration of management consultants</p> <p>Action plan for road safety to suggest interventions in specific spots and specific improvements</p>	<p>Thessaloniki axis, especially in important and difficult parts (e.g., in Domokos tunnel)</p> <p>Connecting the railway axis to “ΠΑΘΕ”</p>			<p>property right</p> <p>Creation of a company that will undertake all relevant procedures on behalf of public sector</p>	
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(Continued)

Table 3.16 (Continued)

Axis 3: Competitiveness				
See Table 3.6				
Axis 4: Rural Development and Fisheries				
Principal institution Involved	Ministry of Agriculture			
Aims of institution	<p>Aim no 1: Improvement of competitiveness of the Greek agriculture to face challenges in international competitive environment</p> <p>Improvement of product quality in primary production and in manufactured products, to achieve balance between demand and supply and increase in efficacy of production in markets, including exports</p> <p>Product diversification and production of products offering new market opportunities</p> <p>Improvement of technical support and technical knowledge and know-how of agencies in the agricultural sector, including the</p>	<p>Aim no 2: Sustainable and integrated development of agricultural areas, to increase competitiveness and attractiveness and to regain economic and social operation</p> <p>Renewal and boosting of active agricultural population in agricultural areas</p> <p>Creation of complementary or alternative activities in the framework of integrated integrated local development interventions</p> <p>Removal of isolation of agricultural areas and improvement of basic services for the economy and the agricultural population</p>	<p>Aim no 3: Sustaining and improving of environment, natural resources, and land of agricultural areas</p> <p>Protection, development and rational exploitation of natural resources and the environment, including woodland resources</p> <p>Preservation of cultural heritage and traditions of the agricultural world</p> <p>Prevention and upgrade of agricultural or woodland potential that has been harmed by fires or other natural disasters</p>	<p>Aim no 4: Fisheries</p> <p>Based on the IV and V multiannual programmes</p> <p>Avoid distortions</p> <p>Avoid aging of fishing fleet</p>

	<p>organization and provision of formation tools, information and raising awareness</p> <p>Creation of preconditions for the improvement of attractiveness of agricultural jobs toward young people, with the aim to accelerate the renewal and boosting of active agricultural population, especially in areas presenting an inverse pyramid structure</p> <p>Improvement and upgrade of inflows in agricultural production</p> <p>Mitigation of deficiencies of rural structures & holdings (size and chopping)</p>	<p>Improvement of operations of local economies in mountainous and island areas</p> <p>Promotion of the appearance of agricultural areas, their advantages, and their natural wealth</p>		<p>Improve technological progress in fishing fleet</p> <p>Encourage the use of selected tools and methods of fishing</p> <p>Improve quality of products fished and conserved in boats</p> <p>Improvement of conditions of work and security</p> <p>Actions of collective interest that favor interests in the whole fishery sector</p> <p>Combating of negative environmental externalities and improvement of the quality of products, even the disposal of surplus of some types of fishes</p> <p>Developing demand-based production in sea bass/ gilt-head brims</p>
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(Continued)

Table 3.16 (Continued)

<p>Actions to be taken</p>	<p>Integrated interventions at the level of agricultural holdings Interventions at the level of manufacturing and trade of agricultural and woodland products Improvement of age composition of active agricultural population Improvement of mechanisms of support and information Interventions at the level of agricultural product Protection and development of natural resources and the environment Integrated programmes of rural development At each regional operation programme, special actions for agriculture are clearly proclaimed in relation to exploitation of natural resources, rural structures (including land-redistribution), the local utilization of products with emphasis in quality and its special characteristics, differentiation in agricultural cultivations, development of traditional sectors and introduction of new activities, protection and development of forest and natural resources through precautionary and restitutions measures, integrated complementary development and development of alternative activity, provision of services and structures in agricultural populations, clustering of agricultural enterprises, preservation of natural environment, of land, and heritage of the agricultural land In fisheries Adjustment of fishing activity Renewal and modernization of fishing fleet Protection and development of water resources, aquaculture, equipment of fishing ports, manufacturing and trade, and fishing in domestic waters Other measures Technical support Measures funded by other Structural Funds within the framework of the Operational Programme</p>		
<p>Axis 5 Improved Quality of Life</p>	<p>Environment and Natural Heritage</p>	<p>Culture</p>	<p>Health</p>
<p>Principal institution Involved</p>	<p>Ministry of Public Works</p>	<p>Ministry of Culture, museums</p>	<p>Ministry of Health & hospitals</p>
<p>Aims of institution</p>	<p>Infrastructure creation and improvements Collection and processing of waste Promotion of biological wastewater treatment Harmonization of water policy with the EU Promotion of water policy that will encourage its sustainable use</p>	<p>Protection and exploitation of cultural heritage Development of contemporary civilization Development of sector of civilization in the framework of society of information Enhancing and specialization o human resources Balanced regional development, in supply and demand conditions for cultural goods and services, taking into account special characteristics and special needs</p>	<p>To promote all axes of the new strategy and reform in health, promoted by a new law Operation of all supportive mechanisms to promote the new strategy Introduction of new integrated systems of information and telemedicine Enhancing of further development of primary services in health care in urban centers Reduction of geographical inequalities in access of citizens in the Health system</p>

<p>Actions to be taken</p>	<p>Actions for raising awareness in environmental matters</p> <p>Units of industrial cleaning</p> <p>Use of appropriate technically and financially rational techniques</p> <p>Biological wastewater treatment units</p> <p>Actions/initiatives for harmonizing water pricing</p> <p>Merge of smaller businesses in water to encourage better management participation of private sector</p> <p>Water policy comprising management actions and plans (the setting of a national network for the monitoring of the quality of water)</p> <p>Adoption of Water Framework Directive</p> <p>Priority actions for de-hydrated areas across the Greek territory</p> <p>Actions for appropriate management of protected areas</p> <p>Special actions of air and sound pollution</p>	<p>Actions to improve infrastructure in museums, services provided by them, as well as exploitation of museums, and archeological sites</p> <p>In museums:</p> <p>Improvement of technological equipment, Construction of new ones, raising of their educational dimension</p> <p>Inclusion in ordinary civilization life in the country</p> <p>Improvement of their communication policy</p> <p>Promotion of a network of production and trade of high quality copies and objects of high quality</p> <p>In monuments and archeological sites:</p> <p>Protection and exploitation</p> <p>Creation of modern and well organized spaces of reception</p> <p>Promotion of wider cultural paths</p> <p>Organization of modern actions of civilization in some monuments</p> <p>Raising education dimension</p> <p>Use of new technologies for information of public and promotion of cultural goods at international level</p> <p>Enhancing institutions and networks of cooperation with European partners</p> <p>Promotion of great communication events</p>	<p>Improvement of efficiency and effectiveness of hospitals by reducing their burden</p> <p>Promotion of prevention</p> <p>Actions for functional integration National Center for Emergency (“EKAB”) and training</p> <p>Mental Health</p> <p>Actions to promote reform in mental health (based on EC 815/84)</p> <p>Enhancing of actions for deinstitutionalization of long-term patient in large mental health hospitals and for avoiding chronic hospitalization</p> <p>Development of an effective sectoral network of units of mental health, at local level, for precaution and immediate intervention, consulting and care, as well as of structures easing transition in socioeconomic inclusion (and reinclusion)</p> <p>Care</p> <p>Move away from traditional approach of protectionism toward an approach based on rights and equal opportunities</p> <p>Actions of description of extent and contribution of services of social care including qualitative and quantitative assessment of existing personnel</p> <p>Rationalization in organization, management, control of services of care, including their functional modernization and their connection to health and mental health services, to allow equal access of citizens, social inclusion, combat discriminations and reintegration in labor market, at local level (and potential creation of new structures serving these goals)</p>
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(Continued)

Table 3.16 (Continued)

Axis 6: Information Society				
Principal institution				
Involved				
Aims of institution	In Education and Culture	In public administration and quality of life 1st priority	Employment and social inclusion	Digital Economy
	Adjustment of the educational system in the requirements of digital age, to become characterized by an increased use of new technologies in networking in school, university and academic communities (including administrative services), from well trained teachers and students, development of digital educational material	The creation of open and effective public administration, with better services for citizens and enterprises, in an environment of transparency and increased accessibility in public information	Basic training in computers and informatics for broader groups of population that will bridge the gap between professional qualifications and needs in professions related to ICT	Use of ICT in SMEs and the three sectors of economy to increase productivity and competitiveness
	ICT to promote Greek spirit and civilization, through the documentation of cultural heritage and the protection of Greek language	Exploitation of ICT in domains such as in health, care, environment protection and transports, to improve quality of life of citizens	Special educational programmes and multimedia material in Greek language	Use applied electronic commerce, so that Greek firms adopt electronic
	Access in public spaces in less favored areas	Use ICT to improve service provided at national, local, and regional level	Adoption of flexible processes to exploit more appropriately libraries, municipal centers and other infrastructure. This action could combine with other concerning the reentry in the labor market	forms of entrepreneurial actions, in national and international level
	Train teachers individually or not, in the use of Internet and multimedia tools	Development on-line applications (including processes of public procurement)	Special action for the promotion of understanding and use of applications in CSF and Internet among women, elderly and socially disadvantaged groups of population	Creation of a legal framework that will ease the electronic implementation of

	<p>Turn by 2003 all graduates of compulsory education to digital literate</p>	<p>Use of ICT to simplify and redefine processes and communication in and among public administration, in all public sector, especially in fiscal and financial sector, social security, the justice sector, regional development and administration, as well as in emergency services</p> <p>Completion of actions from previous CSF</p> <p>Support in the reorganization of services of the labor market</p> <p>2nd priority</p> <p>Support in management of resources from Structural Funds and transition to Euro for every level of public administration</p> <p>3rd priority</p> <p>Exploitation of ICT for the support of a broader strategy of provision of improved services of health and care for all citizens and reorganization of public administration and budget in the health system</p> <p>Connection of scientific and administrative personnel in health with infrastructure in telemedicine in precaution, diagnoses, and treatment</p>	<p>Energetic support of actions in labor market through ICT</p>	<p>transactions in an environment that will secure the protection of private life and trust of consumers</p> <p>Enforcement of infrastructure necessary to operate electronic businesses</p> <p>Introduction of electronic processes for procurement</p> <p>Development of manufacturing with digital content</p> <p>Creation of high-technology SMEs</p> <p>Use of ICS applications in businesses for energy and environmental protection</p> <p>Systems of tele-work</p> <p>Applications for businesses in distant and island regions</p> <p>Collaborations among enterprises and with academic and research institutions for development and productive use of technologies and ICTs, digital learning environments, alternative</p>
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(Continued)

Table 3.16 (Continued)

<p>Actions to be taken</p>		<p>Connection of regional and local health centers (including centers in distant, island, or mountainous regions)</p> <p>4th priority Adoption of a system of subsidies for funding innovative pilot actions, where public administration services, local and regional, are involved</p> <p>5th priority Adoption and support of geographical and environmental information and managerial systems, linking central to regional and local administration</p> <p>6th priority “Smart transports” through adoption of telematic applications, in collaboration and coordination with management authority (effective use of ICT in road transports, development and support of electronic systems of circulation in air transports, as well as systems of management of urgent</p>		<p>organizational environments, knowledge-intense work, enterprise networking, and “smart cards”</p> <p>Upgrading high speed national research network and telematic services and ICT infrastructure in research centers</p> <p>Development and diffusion of content and information in digital platform for the research community, education and training of young researchers</p>
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Axis 7: Regional Development

Regional Development				
Principal institution Involved	Regional Authorities			
Aims of institution	<p>Regional Operational Programmes, actions differ at regional level, for each region: The Attiki ROP, the Central Macedonia ROP, the Eastern Macedonia and Thrace ROP, the Western Macedonia ROP, the Epirus ROP, the Crete ROP, the Northern Aegean ROP, the Southern Aegean ROP, the Central Greece ROP, the Western Greece ROP, the Thessaly ROP, the Peloponnese ROP, the Ionian Island ROP</p>			
Actions to be taken	<p><i>The key aims/objectives are as follows:</i></p> <ul style="list-style-type: none"> • Interventions which strengthen the international competitiveness of the regional economies, identify advantages and promote extroversion • Implementation of a strategy to disseminate innovation, equal opportunities in having access to research and technology, and upgrading of human resources • Interventions to relieve isolation • Interventions to protect and promote cultural and environmental resources in each Region <p><i>The programmes include the following types of actions:</i></p> <ul style="list-style-type: none"> • Development of the spirit of innovation in the Regions <ul style="list-style-type: none"> ◦ Development of urban programmes—Urban development ◦ Local development and rural development <p><i>Human resource actions include, among others:</i></p> <ul style="list-style-type: none"> • Local Employment Pacts and other initiatives to promote employment • Day care services for children and senior citizens, and promotion of equal opportunities <p>Local authorities are in charge of preparing the integrated urban programmes in small scale local zones Actions for rural development will focus on two basic types of rural areas:</p> <ul style="list-style-type: none"> • Areas that have been (or are expected to be) affected to a greater extent by the Common Agricultural Policy <p>Disadvantaged areas, and areas with specific development problems</p>			

Source: EC (2000).

In the 2007–13 period (Table 3.17 that follows), the strategy focused on (1) investments in the production sector; (3) the society of knowledge and innovation; (3) employment and social cohesion; (4) the institutional environment; and (5) the attractiveness of Greece and its regions as a place of investment, employment, and living.

Finally, in the 2014–20 period (Table 3.18), strategy is influenced by the “Europe 2020” strategy that focuses on smart, inclusive, and sustainable growth and centers around (1) competitiveness and entrepreneurship; (2) human resources; (3) environmental protection and the development of an environmental friendly economy; (4) modernization of transportation and energy infrastructure; and (5) institutional competence of the public Administration.

What the Tables cannot show is that whenever existing or new institutions, large-scale businesses (domestic or foreign, public, semipublic, or private), and stronger and mature interests are involved in the design and implementation of policies, then more funds are requested and finally allocated to these policies.

3.5 Regulation and competition

Greece witnessed a transition of its economic model during the study period. The general view held during the 1980s was that the state has to deliberately espouse the necessity of the public sector and put large enterprises under its authorship, by retaining the monopoly in most utilities and the provision of natural resources (such as energy, water, etc.). This view progressively changed during the 1990s, when the significance of regulation and that of strengthening competition was espoused (Vaitsos et al., 1994). A large part of the Greek society had to be convinced of this shift. Hence, academic debates were held toward this direction and the necessity of privatization (Vaitsos et al., 1994). In the meantime, significant amounts were transferred to state-owned enterprises and public-sector monopolies. The availability of Cohesion funds and the protectionist character of the Common Agricultural Policy has not helped to change this direction easily.

Throughout the 1990s and 2000s, following a number of EU policies, an effort was taken to introduce regulatory processes, far from the central authority and services and to launch a number of institutions less vulnerable to bureaucracy and state arbitrariness that would also produce competition in some industries. These were the Greek National Council for Radio and Television (NCRTV) (created in 1989), the Supreme Council for Civil Personnel Selection (in 1994), the Hellenic Competition Commission (in 1995), the Hellenic Telecommunications and Post Commission (in 1992 that undertook the surveillance and regulation of posts in 1998), the Greek Ombudsman (in 1997), the Hellenic Data Protection Authority (in 1997), the Regulatory Authority for Energy (in 1999), and the Hellenic Authority for Communication Security and Privacy (in 2003) (Papoulias, 2011; Kalogirou, 1994).

3.6 Critical issues: the use and absorption of funds and programming failures

The use of funds differs from their allocation. Despite limited amounts being directed to competitiveness, some of them were invested in public or semipublic

Table 3.17 (Continued)

Strategic aims	General target	Target specialization	Focus on (specific targets)
	Differentiation of touristic product	<p>Shift from needs-driven entrepreneurship to corporate</p> <p>Entrepreneurship of higher potential</p> <p>Supporting of innovative entrepreneurship in sectors with competitive advantage</p> <p>Promotion of entrepreneurial dimensions in protection and management of environment</p> <p>Enrichment of tourism and its product</p> <p>Promotion of touristic product</p>	<p>Reorientation of governmental subsidies to the benefit of qualitative and specialized entrepreneurship, development of communication plan and entrepreneurship education</p> <p>Improvement of coastal connection mainly for social purposes, promotion of sustainable and secured mobility, improvement of services provided in ports, in order to become factors that attract activities and investments</p> <p>Exploitation of natural and cultural deposit for expansion of touristic season</p> <p>Dynamic development of special and alternative forms of tourism via integrated and innovative acts that aim at modernizing tourism.</p> <p>Completing and upgrading infrastructure for developing traditional, special and alternative forms of tourism</p> <p>Exploitation of knowledge society's achievements and tools and modern information and communication technology</p>

(Continued)

Table 3.17 (Continued)

Strategic aims	General target	Target specialization	Focus on (specific targets)
<p>Society of Knowledge and Innovation</p>	<p>Improvement of quality and intensity of investments in human capital, to upgrade the educational system</p>	<p>Investment in future, promotion of reforms in educational system and improvement of access and level of basic skills for all</p> <p>Support of Lifelong Learning</p> <p>Facing early school leaving by fighting against school failure and drop out</p> <p>Improvement of quality and attractiveness of professional education and formation</p>	<p>Reshaping educational programmes/curricula, acceleration of introduction of new technologies in education and systematic measurement of progress achieved through (1) development of an evaluation system for primary, secondary education and early career formation, (2) development of national evaluation system that ensures the quality and documentation for HEI</p> <p>Improvement of conditions and levels of education for people with special needs and disabilities, and reinforcement of decentralization in administrative organization and function of an educational system</p> <p>Widening lifelong learning, with development of a system of appropriate motivation (especially for low-skilled people, elderly, school-leavers)</p> <p>Reforming the structure and connection of the specialization of educational programmes/curricula in the field of initial professional formation, defining professional rights and institutionalizing of systems that acknowledge formal educational certification, at the level of European framework of professional qualifications</p>

(Continued)

Table 3.17 (Continued)

Strategic aims	General target	Target specialization	Focus on (specific targets)
	<p>Support of Research, Technology and promotion of Innovation in all industries as basic factor of restructuring of the Greek economy and transition in the knowledge economy</p>	<p>Production of new knowledge in priority fields for the production tissue that serve applied policies</p> <p>Converting knowledge to innovative products, services and processes, aiding knowledge and technology transfer toward businesses and SMEs</p> <p>Promotion of export orientation through international cooperation in RTD</p>	<p>Creation of networked centers of excellence and their connection to partners from abroad.</p> <p>Improving competitiveness and exporting capacity of businesses and restructuring of the Greek economy through a shift toward the production of products and provision of high technology and added-value services, cooperation with other business and/or agencies of research and technological development (RTD), creation of national industrial poles of research and technology development in sectors of major significance, creation of centers of excellence and their connection to foreign</p> <p>Innovation programs, integrated strategic actions for innovation at regional level, support intermediate public and private agencies, creating spin-off, support of new, innovative and/or high technology SMEs and groups of SMEs (clusters)</p> <p>Support in participation of Community Programs and intergovernmental organizations, support of cooperation actions in the 7th Framework Programme in RTD and on Competitiveness and Innovation Framework Programme, support of activity cooperation in RTD, programmes and infrastructure in the context of European Programmes with third countries (Western Balkans, Black Sea) with European intergovernmental organizations in the context of creation of European Research Area</p>

(Continued)

Table 3.17 (Continued)

Strategic aims	General target	Target specialization	Focus on (specific targets)
	<p>Nation’s Digital Convergence with integration and systematic use of ICT in Sectors of Economic and Social activity</p>	<p>Horizontal actions for human capital in Research, technology and innovation</p> <p>Productivity improvement through the use of ICT</p> <p>Improving quality of life through the use of ICT</p>	<p>Reinforcement of human capital, mobility, through RTD and production agencies in national and international level and integration of highly educated personnel in businesses</p> <p>Research activities that improve human research potential</p> <p>Support for basic research in the context of reform and unification of the institutional framework that transcends the organization and operation of Master’s Degrees and Research</p> <p>Use of ICT and provision of digital services toward firms, support of the contribution of ICT industry in the Greek economy, promotion of entrepreneurship in sectors that exploit new technologies and promote further a modern environment of electronic and broadband infrastructure that will improve significantly Greece’s “network readiness,” as well as institutional interventions that will speed up the transition to digital broadcast</p> <p>Exploitation of new technologies in informatics and electronic communication in sectors that improve everyday life of citizens, supporting in parallel equal access to new technologies. Focus on development of digital services in serving citizens and promoting access of citizens in broadband and innovative services</p>

(Continued)

Table 3.17 (Continued)

Strategic aims	General target	Target specialization	Focus on (specific targets)
<p>Employment and Social Cohesion</p>	<p>Support adaptability of employees and businesses</p>	<p>Implementation of a National system linking Professional Education and Formation with Employment</p> <p>Improving labor quality and productivity</p>	<p>Ex ante tracing of needs and changes in employment market and development of an Integrated System of Research of Employment Needs</p> <p>Establishment of a common system of certification of supplied initial and continuous professional formation</p> <p>Defining standards of recognized initial learning of people</p> <p>Completion and application of institutional framework for the provision of programmes of continuous formation</p> <p>Reform of the system of employee formation</p> <p>Development of a system of provision of necessary motives for the participation of people in actions of lifelong learning</p> <p>Development of services of lifelong consulting and professional orientation and support of participation of self-employed in programmes for upgrading skills</p> <p>Introduction of new and innovative methods and forms of employment, with emphasis in policies that will seek the flexibility, in conditions of security for the employees</p> <p>Emphasis in the support of the role of social partners, the promotion of satisfying conditions of security and hygiene at work, encouragement of active participation of labor force of the elderly in facing collective losses of jobs</p>

(Continued)

Table 3.17 (Continued)

Strategic aims	General target	Target specialization	Focus on (specific targets)
	<p>Facilitating access in employment</p>	<p>Support adaptability of businesses (especially of the SMEs)</p> <p>Widening, restructuring and improvement of effectiveness of active policies in the labor market</p> <p>Support of female employment and promotion of equal access and development in the job market</p>	<p>Motives for investments in improving skills of employees and developing a learning culture</p> <p>Employee formation and promotion of new techniques for lifelong learning in businesses (including formation and diffusion of ICT, continuous formation of low-skilled employees and employees of high/technical specialization, women formation and elderly and support of relevant initiatives by social partners</p> <p>Promoting of Corporate Responsibility in businesses</p> <p>Promoting and rewarding of new structure and methods of organization of businesses and work in relation innovation integration, personalized actions for long life learning of the self-employed</p> <p>Double approach: facilitating self-employment and small business start-ups and growth enhancement of the SMEs</p> <p>Increase of financing efforts until 2013</p> <p>Continuation of investments aiming to women availability without obstacles for employment, in order to combine their career and family responsibilities</p>

(Continued)

Table 3.17 (Continued)

Strategic aims	General target	Target specialization	Focus on (specific targets)
		<p>Support of youth employment</p> <p>Activating at least 25% of long-term unemployed and reduction of long-term unemployment inflows</p> <p>Increase of sustainable, newly created businesses from self-employed, especially new unemployed</p> <p>Modernization and upgrading of the structure and systems of labor market that serve the citizen (including intervention of systemic character)</p>	<p>Measures reducing wage divergence, concentration and segmentation of labor market, related to gender discrimination</p> <p>Creation of measures of support of single-parented families</p> <p>Creation of opportunities for studying, working, and for complementary formation, acquisition of job experience or employment in every early school leaver that is unemployed.</p> <p>Reduction of transitory period between graduation and the active professional life</p> <p>Offering opportunities of participation to active employment policies, before the completion of 12 months of unemployment</p> <p>Continuous improvement, upgrading and converting the Center for Promotion of Employment of the (Greek) Manpower Agency of Greece into one-stop shops, offering individualized services that integrate three basic operations: information, career-orientation, job placement, in cooperation of the actions of the network with the Ministry of Employment and Social Protection</p> <p>Development of a framework for linking labor</p>

(Continued)

Table 3.17 (Continued)

Strategic aims	General target	Target specialization	Focus on (specific targets)
		<p>Fighting undeclared work and nonregistered unemployment</p> <p>Implementing of integrated policies for active ageing of the labor force</p> <p>Systematic registration and prediction of changes in the local labor markets due to the productive restructuring of economic activity</p> <p>Embodying principles of Community Initiative EQUAL in the development policy (including interventions of systemic character)</p>	<p>supply and demand with the participation of public and private sector agencies, local administration, tertiary education and social partners as well as development of an integrated network of an integrated service provision for employment with certified structures of public and private sector</p> <p>Redefinition and upgrade of the role and operation of an observatory for Employment and Computer Research.</p> <p>Upgrading of mechanisms of the job market surveillance, increasing the sensitivity of employers at local scale, the support of interventions of the Hellenic Labor Inspectorate, implementation of existing legislation for undeclared work and the regulation of (future) migration flows</p> <p>Increase of chances for employment and formation for the elderly that participate in labor force, combating age discrimination, improving labor market demand projections, withdraw motives for early retirement</p> <p>Upgrade of potential of existing structures (“ΣΕΠΕ,” “ΟΑΕΔ,” “ΠΑΕΠ,” “ΕΚΕΠΣ”) for early diagnosis of problems and development of quick reaction in changes</p>

(Continued)

Table 3.17 (Continued)

Strategic aims	General target	Target specialization	Focus on (specific targets)
	<p>Promotion of social integration, to secure equal access of all in labor market and prevention of marginalization and exclusion</p> <p>Institutionalization of an effective and financially sustainable health system that will offer qualitative and individualized services in citizens and focus on continuous upgrade of services of care and prevention</p> <p>Highlight economic, social and developmental character of gender equality issues, correlating them with main national policy priorities (Development- Employment- Social Cohesion)</p>	<p>Development of network of Primary Health Care and Public Health</p> <p>Improving responsiveness and secondary health care (hospitals) and the quality of provided services</p> <p>Promotion of Informatics Technology and e-services for health and social Solidarity - Completion of policy for the introduction of digital technology</p> <p>Reforms in the field of mental health and development of rehabilitation policies</p> <p>Promoting of specified targeted measures for female support</p> <p>More effective adjustment of gender dimension in sectorial and regional policies of all priorities of NSRF policies</p> <p>Support female employment and promotion of equal access and development in the labor market</p>	

(Continued)

Table 3.17 (Continued)

Strategic aims	General target	Target specialization	Focus on (specific targets)
<p>Institutional environment</p>	<p>Improving the quality of public policies and their effective implementation for upgrading the quality of life and facilitating entrepreneurial action</p>	<p>Reintegration in labor market after long term absence Support of women entrepreneurship Securing of accessible units for child care units and people in need Facing violence against women</p> <p>Improving the quality of the public policies and support open governance</p> <p>Modernization of institutional context of regulation of public action and the structures and operational procedures of public services</p>	<p>Improving the quality and mechanisms of design and implementation of public policies, by prioritizing policies in specific sectors of public activity, especially of horizontal character, in combination with modernization of structures and processes of operation in public services in respective fields and the education of personnel</p> <p>Support of transparency and accountability of the action of public principles, the promotion of active participation of the citizen and of social consensus and the securing of fair and equal treatment of citizens and the businesses</p> <p>Support of entrepreneurship with removal of bureaucratic obstacles imposed in the normative framework and out of organizational practices and operations in public services, minimization of public sector costs from the adjustment of enterprises in existing regulations, modernization of processes of procurement of goods and services by the public sector</p> <p>Reinforcing the efficiency and effectiveness of the operation of public administration and</p>

(Continued)

Table 3.17 (Continued)

Strategic aims	General target	Target specialization	Focus on (specific targets)
		<p>Development of human force in the public administration</p>	<p>improvement of the quality of the work and services produces in critical sectors of public action</p> <p>Orientation of labor organization and the practices of public services toward the needs of users of public goods and the development of simple and flexible infrastructure for public sector action</p> <p>Use of new technologies in support of the achievement of strategic goals public agencies, in the context of general entrepreneurial restructuring and empowerment. Special mechanisms will be created for this purpose, time scheduling of respective actions and synergy and complementary actions that will secure the successful integration of ICT in public services</p> <p>Modernization of the institutional framework of personnel management in the public sector, by emphasizing its rational utilization, through mobility, the development of modern public administration structures for the personnel of the public sector agencies, the empowerment of skills and technical knowledge, in association with participation motives for their training and certification</p> <p>Reinforcing responsibility of the personnel of the public administration, creation of more productive attitudes and behavior oriented toward the values of efficient, effective, open and fair public administration and the</p>

(Continued)

Table 3.17 (Continued)

Strategic aims	General target	Target specialization	Focus on (specific targets)
<p>Attractiveness of Greece and its regions as a place for investments, labor, & living</p>	<p>Development and modernization of natural infrastructure and their coherent services in transportation systems</p>	<p>Creation of mechanisms to support implementation</p> <p>Facing lack of continuity in Trans-European transportation networks</p> <p>Development combined transports and reinforcing intermodality of transport systems</p> <p>Connection of areas across the land with Trans-European transportation networks</p> <p>Developing and expanding urban transportation</p> <p>Upgrading the infrastructure</p>	<p>improvement of quality of the working life of the personnel</p> <p>Securing the necessary political and technical support for the successful implementation of actions and the systematic documentation, analysis and assessment of the state of the country, by exploiting the use of European and international experience.</p> <p>Completion of the country's road and railroad network, the country's Trans-European Road Network, with emphasis placed in the road network and the principal connections with neighboring countries, as well as completion of basic railroad network (PAtHE)</p> <p>Connection of infrastructure with the Trans-European transport networks</p> <p>Connection of urban centers, productive areas and main tourist destinations of the country with the Trans-European networks</p> <p>Support of infrastructure for Public Transportation Means in urban centers, to reduce circulation problems</p> <p>Modernization of road, railroads, ports and airports, to increase the quality of services and security of users</p>

(Continued)

Table 3.17 (Continued)

Strategic aims	General target	Target specialization	Focus on (specific targets)
		<p>Securing and maintaining the quality of atmosphere and hearing environment</p> <p>Facing climatic change</p> <p>Risk management</p>	<p>and to conform with national and European legislation, the provision of drinking water in adequate quantities and good quality and the maintenance and restitution of good quality of swimming waters (in implementing Directive 2000/60) for the provision of good condition of surface and under-surface waters and border cooperation for the good management of intraborder water catchment areas and the implementation of international conventions for the protection of sea environment</p> <p>Achieving and maintaining the quality level of the atmosphere and its environment, strategic reduction of gas emissions and other particles by the industry, fall of levels of noise in urban centers and sensitive in noise areas or areas of special uses and management of gas emissions</p> <p>Achieving the Kioto's Protocol Agreement for CO₂ levels and other gas emissions</p> <p>Integrated national network of civil protection and upgrade of all services for civil protection and the facing of physical and technological destruction, the coordination of restitution, infrastructure for civil protection, development and modernization of mechanisms, their tools</p>

(Continued)

Table 3.17 (Continued)

Strategic aims	General target	Target specialization	Focus on (specific targets)
	<p>Implementing of effective environmental policies</p>	<p>Sustainable management of natural environment</p> <p>Improving planning and the implementation of environmental policy</p> <p>Civil society for environmental protection issues</p>	<p>and the equipment for simultaneous use of synergies in interstate and interborder level</p> <p>Creation of a connected, organized and functional networks of protected areas of biodiversity, improvement of the state of maintenance of habitats and the populations of endangered species and areas of ecological interest, the maintenance and revealing of natural landscapes of high esthetic value, the integrated developmental and environmental design of protected areas and their incorporation in participatory processes in the design and management of protected areas</p> <p>Creating mechanisms and means and supporting agencies and institutions for control and exercise of environmental policies, by developing financial tools, promoting financial means of application of environmental policies, and the credible environmental information and evaluation of effects of programmes and projects</p> <p>Stimulating citizens, establishing democratic and participative forms of public consultation between the State and the Civil Society, in designing environmental policies and programmes, in developing skills of all employees in protection and management of environment and environmental education</p>

(Continued)

Table 3.17 (Continued)

Strategic aims	General target	Target specialization	Focus on (specific targets)
	<p>Revealing Culture as a critical factor for the country's economic development</p>	<p>Support of Cultural Infrastructure in the country</p> <p>Boosting demand for culture</p>	<p>Developing infrastructure of Modern Civilization in urban centers and rural areas</p> <p>Creating cultural infrastructure and services in islands, mountainous areas and across important road axes and seaways</p> <p>Developing quality services for cultural institutions of European and/or international scope</p>

Table 3.18 Strategic Vision of the 2014–2020 National Strategic Reference Framework

1. Competitiveness—Entrepreneurship		
<p>Basic Sectors:</p> <ul style="list-style-type: none"> • Energy • Agro-food industry & Blue Growth • ICT (Information & Communication technologies) • Environment • Pharmaceutical Products • Health • Transportation & Logistics • Culture & Tourism 	<p>Emphasis in:</p> <ul style="list-style-type: none"> • Creation of business-friendly environment which attracts investments • Smart Specialization, Innovation, Research & Technology • Regional Priorities & Strengths • Competitive advantage of country/region • Supportive Entrepreneurship Structures • Orientation toward exports • Access to finance • Development of entrepreneurship cooperative culture • Added-value domestic production • Expansion to new markets & enrichment of the offered touristic product • New generation of investment at ICT • Promotion & utilization of the cultural heritage, the creative industry, and of the modern cultural creation 	
2. Human Resources		
<p>Health</p> <ul style="list-style-type: none"> • Rearrangement of the existing model of the health provision services in order to improve the cost-efficiency • Access to high quality health infrastructure for all • Primary care • Focus on those threatened by exclusion 	<p>Social Inclusion</p> <ul style="list-style-type: none"> • Targeted intervention to combat the crises consequences • Strengthen of public prevention policy / combat poverty and social exclusion • Interventions for the traditional team-goals of the welfare politics, but also for the other teams threatened by exclusion from the labor market • Connection with civil society • Migration 	<p>Employment, Education & Resources</p> <ul style="list-style-type: none"> • Facilitate the entrance to the labor market and ensure the first occupation • Connection between education and employment-guided by the capability demand • Mobility-employment upgrade • Employment Subsidization • Actions for the integration of the youth and the long run unemployed people to the labor market

(Continued)

Table 3.18 (Continued)

		<ul style="list-style-type: none"> • High collaboration for the “guarantee for the youth” initiative • Utilization of the Social Economy • Redefinition of the Hellenic Manpower Employment Organization operational model and rearrangement of it • Combat undeclared work • Effectiveness improvement of the Greek educational system • Lifelong learning
<p>3. Environmental Protection—Environmentally-Friendly Economy</p>		
<ul style="list-style-type: none"> • Efficient use of resources and low carbon dioxide emissions • Effective waste management (“acquis communautaire”)—Recycling • Entrepreneurial opportunities in developing sectors • Energy Saving—Energy Efficiency • Renewable Energy Sources • Danger management and prevention from climate change • Protection and designation of biodiversity and natural landscape • Cultural Environment Protection • Complete urban development—Clean transportation 		
<p>4. Development—Modernization of the Transportation and Energy Infrastructure</p>		
<p>Transportation</p> <ul style="list-style-type: none"> • Completion of the national network (basic trans-European transport network) • Development of networks for the reinforcement of Entrepreneurship • Forward combined transportations/ Junctions logistics • Upgrade of ports 	<p>Energy</p> <ul style="list-style-type: none"> • Modernization and expansion of the transportation and distribution networks of electric energy and natural gas • Creation of competitive market’s requirements 	

(Continued)

Table 3.18 (Continued)

5. Institutional Competence of the Public Administration		
Management & Control System of the NSRF (National Strategic Reference Framework) <ul style="list-style-type: none"> • National Level • Regional Level • Local Level • Simplification of Management System • Support of the Beneficiaries 	Public Administration Horizontal Intervention <ul style="list-style-type: none"> • Simplification/Law • Codification • Human Resources Development • Educated and efficient human capital • E-Governance 	Public Administration Sectorial Intervention <ul style="list-style-type: none"> • Business Friendly Environment • Justice • Health • Fiscal/Taxation Reforms • Targeting projects of the support programme

Source: Ministry of Finance and Competitiveness (2014 :70).

Table 3.19 Indicative actual spending of Community Funds, 1st C.S.F. (1989–1994) in Greece

	Expenditure in training–restructuring			Investment expenditure				Total expenditure
	Public	Rest of institutions	Total	Public	Semipublic Enterprises (“ΔΕΚΟ”)	Private	Total	
Billion Euros	2.73	1.38	4.11	5.58	3.52	3.23	12.33	16.4
%	66	34	100	45	29	26	100	100

Source: Regional Development Plan, 1989–1993, p. 26.

companies that later became privatized. In the 1st C.S.F., less than a third of funds allocated to the competitiveness programme went to the private sector, while significant expenditure was directed to public enterprises (Table 3.19), and inelastic expenses, such as wages and salaries. At the time, the national telecommunication company obtained substantial funds which continued over the years, aiming at the sector’s restructuring, even though it was later purchased by another European telecommunication company. Thus, in retrospect, it is difficult to judge EU and Greek redistribution policies purely in funding allocation terms.⁶

Data from each operational programme should be read cautiously, taking into account the structure of each programme. For example, the 1989–93 competitiveness programme reveals an emphasis placed on training rather than on enterprises (Table 3.20). In this program, only 37% was devoted to enterprises support, of which the Community contributed 27%. Infrastructure support for competitiveness represented 17% of total funds originally planned, 60% of which were offered by the Community. At the same time, in proportional terms the Community has over-emphasized support for training than for other targets. One can see in Table 3.20 that the contribution of the private sector for enterprise support, training of employees and in total was scheduled to be more extended than that made by the Community.

Concerning the use of EU funds, a large part was directed to nonemployment intensive policies. This is the case of the environmental and green engineering policies promoted by the 2000–06 C.S.F., and of the capital-intensive policies of the 2004 Greek Development Law,⁷ advanced at a difficult time in the Greek economy.

⁶ A special research is required to find out what part of EU funding and value added finally remained in domestic economies or transferred elsewhere, to the macroeconomic and microeconomic benefit of other economies. It is the author’s view that the Greek economy would have ranked as one of the most harmed, in terms of capital invested by Government and the EU that leaked away, to the benefit of other neighboring economies. The other side of this negative outcome is a contribution of less developed countries, such as Albania (where significant amounts were transferred) and the diffusion of development efforts across the European space.

⁷ The Greek Private Investments Law is referred here as Development Law, its most popular name.

Table 3.20 1989–93: The limited contribution of Community to enterprise support

	Total		Type of expenditure		
	Amounts	%	Community %	National %	Private %
Enterprise support	254,168	37	27	9	64
Infrastructure support	114,071	17	60	37	3
Training of employees in private sector	259,680	38	37.5	12.5	50
Training of employees in public sector	61,044	9	75	25	—
Implementation	2000	0	—	—	—
Total	690,963		40.6	16.4	43

Source: CEE, 1992, in constant 1992 prices, millions ECUs.

Problems with the absorption of EU Cohesion Funds are also important. For instance during the 2000–06 period, no Operational Program absorbed more than half of its funds before September 2005 (Table 3.21). Five years elapsed to reach half of the financial absorption targets. The average per Operational Program absorption was at 13.2% in September 2003 and 31.2% in September 2005. Programs that were very critical for the future of the Greek economy, such as that on competitiveness, were at a remarkable low ranking position in absorption terms, as only 28.61% of funds were absorbed by September 2005. This was at a very significant time in modern economic history, only a few years before the global crisis erupted. This bad performance should account, at least partially, for the substantial loss in the competitiveness of the Greek economy in the first half of the last decade, exposing the economy even more to the crisis. Fund absorption is of course a matter of experienced managerial and political personnel, and of organisational preconditions, as rising absorption figures reveal after 2005.

One can extract some additional conclusions from Table 3.21. It is no coincidence that all island regions (South Aegean, Ionian islands, Northern Aegean), as well as the less advanced regions of Epirus have a difficulty in absorbing funds (and are placed at the bottom of the list for September 2005). These are the most geographically isolated Greek regions, suffering from long-term administration problems, and lacking the capacity to implement programmes, as well as lacking the required human resources for their implementation. Furthermore, one cannot see as a coincidence that the newest operational programme of “Information Society” (first time applied in Greece) lies at the very bottom of the list.

The 2003 interim report⁸ of the 2000–06 C.S.F. questioned its efficacy. It identified that few amongst the Operational Programs were significantly lagging behind in implementation terms. Principal problems for their relatively weak performance

⁸ Submitted in October 2003 and based on the interim reports in 24 operational programmes of C.S.F., the exploitation of data from the Greek Integrated Information System, and primary data collection.

Table 3.21 Absorption of EU funds for all programs in the 2000–06 period

Sectoral Operational Programs (S.O.P.) and Regional Operational Programs (R.O.P.)	% Absorption	
	September 2003	September 2005
Employment and Professional Formation	20.00	43.87
ROP Attica	21.78	42.59
Road and Marine Transport Infrastructure and Urban Development (“OAAAA”)	37.02	41.42
Education and Initial Formation (“EIEAEK”)	22.05	40.81
ROP Western Greece	19.24	38.36
ROP Crete	12.31	38.06
Culture	20.32	37.54
Fisheries	15.56	36.94
Agricultural development	19.23	32.04
Railways, Airports, Urban transports (“ΣΑΑΣ”)	12.43	31.36
ROP Western Macedonia	9.47	31.21
Health and Care	6.97	30.95
ROP Thessaly	7.04	30.05
ROP Central Macedonia	10.70	29.19
ROP Eastern Macedonia and Thrace	10.96	28.84
Competitiveness	7.95	28.61
Environment	12.39	27.48
ROP South Aegean	10.10	26.15
ROP Peloponnese	6.79	24.01
ROP Ionian Islands	9.17	23.17
ROP Central Greece	5.93	22.77
ROP Epirus	5.90	22.29
ROP Northern Aegean	5.36	21.13
Information Society	8.09	20.88
Average per Operational Program	13.2	31.24

Source: MoF (2003).

were found to be: (1) a large component of innovative or simply new actions; (2) a very wide and varied spectrum of actions; (3) aspects of planning and the readiness of projects; (4) failure to correctly anticipate demand, on behalf of prospective beneficiaries; (5) inadequacies in the performance of implementing authorities and final beneficiaries; and (6) unforeseen difficulties beyond the control of competent authorities (MoF, 2003: 17). It emphasized that conditions external to Greece’s economic environment, especially participation in the common currency zone, the EU enlargement, and the slowdown of growth rates in the EU and globally, appeared to have some effect upon the C.S.F. performance.

However, the report diagnosed that the acceleration of the private and public sector investments until that moment significantly contributed to the relatively high ratios of investments to GDP (MoF, 2003: 13). Thus, it is not strange that its

principal suggestion, to partially redistribute the pie of resources, failed to emphasize the specific need to enhance the amounts directed to the private sector and the supportive mechanisms needed.

Furthermore, in its compulsory ex-ante assessment (derived from article 41 of EC regulation 1260/99), the 2000–06 Regional Development Program indicated that, with respect to programming experience, the Greek state has faced significant difficulties in preparing, implementing, and monitoring programmes, which leads to partial application of programming (EC, 2000: 20).

One can identify several programming weaknesses. For instance, in the 2000–06 program on competitiveness, the SWOT analysis was implemented separately for each of the four sectors that originally composed the program, which were simply united to form the general SWOT analysis on competitiveness, without considering further aspects and a more general strategy (MoF, 2003: 3). Furthermore consecutive SWOT analyses had referred neither to previous SWOT analyses nor to any available scientific and research work and analyses. The latter were needed to strengthen not only the organizational and planning elements but also the strategic, long-term development choices and policies followed, at least for sectoral-level programs. The use of more robust analysis was not promoted (nor requested). For example, none of the EU-funded programs—and especially the Competitiveness program—had made use of econometric techniques for studying effects and impact, both ex-ante and ex-post.⁹ Applied in certain cases, econometrics would have helped to investigate which factors influence or associate more with a successful or unsuccessful outcome of projects and actions (such as the application of business support policies and funds).¹⁰ After the completion of the 2nd C.S.F., the scientific background of implemented policies was substantially weakened and not taken seriously into account. Choices were rather transferred from institutions specialized in economic planning and research and other relevant think tanks (such as the Greek Regional Development Institute and the Greek Center of Planning and Economic Research) to several poorly informed and inadequately equipped consultancies and their associated consultants of low scientific and academic credentials. At the time, the EU regulations requested the spread of knowledge in planning economic policies across the private sector, through the growing involvement of consultancies, since many newer member-states had not any prior experience in planning and needed support from international consultancies. Within this context, the Greek state was forced to give up and waste all the precious planning knowledge and experience, acquired by specific people and institutions throughout consecutive programming periods. It is not strange that after the

⁹ Models were used to study ex-ante the effects of the economy as a whole (e.g., by Christodoulakis and Kalyvitis (1993) *Likely Effects of C.S.F. 1994–1999 on the Greek Economy: An Ex-Ante Assessment using an Annual Four-Sector Macroeconometric Model*, KEPE, Discussion Papers, no 46, or the HERMIN model).

¹⁰ One can refer to many such studies that use econometrics to investigate small- and medium-sized enterprise policies, policies on competitiveness, and the operation of support to the private sector institutions. For example in the United Kingdom, one can refer to extended assessments conducted by Professors Bennett, R.J. and Robson, P.J.A. on Business Links.

1994–99 period, not a single preparatory study nor an operational program is signed by a University Professor or a team of Professors that would have undertaken the full responsibility for their suggestions.

The 2000–06 competitiveness program contained significant planning weaknesses and problems that impeded the programs efficiency and effectiveness. As discussed in the ongoing evaluation of the 3rd C.S.F., these comprised too general targets that allowed various interpretations and serious misjudgments in quantification terms, the use of inappropriate base values for these targets, or the preference or use of unofficial data. Other targets were not accurately related to effects, overlapped with each other, or were set beyond expectations for demand and related projections (MoF, 2003).

The interim evaluation of the 2000–06 C.S.F. emphasized the following planning design failures: (1) many delays in the specification of program; (2) legal entanglements with national and community laws; (3) multiplication and extension of selection processes for projects and subprojects; (4) extremely intensive monitoring work; (5) difficulty of final recipients to participate and to be included within the new and demanding procedures; (6) multiplication of dangers during controls; (7) difficulty to secure synergies; (8) saturation of potential final recipients from the extent of offered products; and (9) inability to accurately define and synthesize the effects and impact of the program (MoF, 2003: 105). Too many new and innovative actions were introduced, of “incomplete design” (MoF, 2003: 105).¹¹

Furthermore, the 3rd C.S.F. failed to incorporate dynamic elements related to the creation of the monetary zone, which are necessary to analyze a small open economy. The target of enhancing interindustry flows was not seen within the common currency area and the common market. Several targets were static and were not built around the country’s dynamic comparative advantage (MoF, 2003). Significant exogenous factors, such as inflation, the common currency’s exchange rate, collective bargaining, and the costs of production, were not taken into account in target setting for manufacturing (MoF, 2003). Nor were suitable competitiveness indexes (such as nominal unit labor costs, NULCs) employed to indicate the state’s competitiveness and to project trends (instead the exports to imports ratio was used).

Overall, the credibility of the 2000–06 Competitiveness Program was low (MoF, 2003a,b). The program was prepared at the sector level. It lacked a more general overview of the competitiveness across all industries. It failed to pinpoint clearly and concisely the internal and external causes of limitations in competitiveness, and lacked analytical power in the explanation of strengths, weaknesses, opportunities, and threats for the Greek economy, neglecting many aspects. For example, the common currency zone was not envisaged through the lenses of a potential threat for domestic production and small businesses. It made a rather superficial use of some indexes (a complete range of which was not used), and did not focus on the implications upon the trade balance deficit from joining the currency union. On the contrary, it emphasized an overwhelmingly positive

¹¹ It is no coincidence that three separate revisions of the whole 2000–06 C.S.F. took place.

expectation approach on the evolution of the international macroeconomic environment (which, only few years after, resulted in a global crisis), as well as a rather optimistic view (as a few years of positive results beforehand were enough to create positive expectations and neglect any reference to negative scenarios). Most likely it was trapped in index analyses, without looking at the deeper causes of the negative effects on the state's competitiveness after abandoning a currency and associated stability mechanisms, at least upon the Greek manufacturing. One can hardly argue that the program's strategy focused on resolving the real problems of the Greek economy. It had poorly defined the necessary development priorities for the new era of globalization and monetary zone. Rather it can be considered, as MoF (2003) has put it, as a sum of best practices, fixed targets, and of experimenting in the use of newer European tools. Besides, this is a period when most macroeconomic indexes improved, as Greece was preparing to join the Eurozone and infrastructure projects were implemented to prepare for the Olympic Games, which absorbed a great deal of policy concerns. On the contrary, the microeconomic level and the actual effects upon firms of various sizes were disregarded, or, at best, seen as part of a restructuring process.

However, even on the occasion that the programme had been fully successful, it remains questionable whether and how the path toward loosening competitiveness could have ever been changed. The interim report of the 2000–06 Competitiveness Program clearly stated that “the reduction in the relative significance of manufacturing is a ‘time bomb’ in the foundations of competitiveness” (MoF, 2003b: 27) and indicated the three main reasons for this: (1) the Greek economy's long-term dependence on exogenous factors; (2) the lack of fast adjustment capacity that is considered to lie beyond the capacity of the Greek economy to cope with such exogenous factors and successfully react to them; and (3) the continuous reproduction of a traditional model for the Greek economy that covers its trade deficit through invisible resources, ever since the 1950s (MoF, 2003b: 27).

The interim report of the Competitiveness 2000–06 programme was clearly and concisely explaining the problems of the operational program. It identified that the Program was limited in scope and that competitiveness was not really strategically prioritized in financial terms (MoF, 2003b: 34). This “strategic deficiency was reflected in the financial scheme¹² of the C.S.F.” (MoF, 2003b: 34). As explained in the text, “productive environment was absorbing 22% of total EU contribution in the total of C.S.F., as opposed to 30.5% in the respective Spanish C.S.F. and 48.5% in the Italian (for South Italy).” This contribution was “even lower if the share of agricultural sector was removed” (MoF, 2003b: 34). Furthermore, the C.S.F. comprised a lower share in human resources (19% in Greece, as opposed to 29.6% in East Germany and 27% in Ireland). As underlined in the text, “from the already low community contribution in the ‘productive environment,’ only 9.8% is attributed to the sectors of manufacturing, tourism, and research and technology (with only 2% attributed to infrastructure in energy that according to C.S.F. is introduced in the axis of

¹²The word “scheme” is used in this context to explain the underfunding of the Program in comparison to other Program. All translations by the MoF (2003b) document are made by the author.

competitiveness and integrated in the actions of the Competitiveness Program).”¹³ The report referred to the following data, from an EU Commission analysis, clearly indicating other priorities with respect to funds allocation and productive environment for the rest of regions under support and other for Greece (Table 3.22).

The interim report states that “the key to understand this ‘unclear strategy’ lies in the respective strategy that has been defined in the Regional Development Plan 2000–2006” (MoF, 2003b: 37), where a total strategy is missing and there is great distance between much ballyhooed, excessively grand targets and the actual effects of actions that ought to be expected (MoF, 2003b).

As opposed to the strategy followed by Ireland, the Greek Competitiveness Program had not organized specific interventions to attract Foreign Direct Investments (a problem stated also in its critique, in MoF, 2003b: 37). Nor has it investigated the prospect of attracting synergies between Greek and foreign enterprises (MoF, 2003b: 37). The role of a special institution (“Invest in Greece”), created in 1996 (through Law 2372/1996) in order to attract FDI, was not given special attention and, as a result, it was replaced during the crisis by “Enterprise Greece” (Law 3894/2010), a new institution that incorporated a much older institution for export promotion (the Hellenic Export Promotion Organization, created in 1977). Thus, it is no coincidence that the amounts of FDIs in Greece were kept in low levels in comparison to other states.

Furthermore, the interim report on the 2000–06 competitiveness program underlines that the targets originally set in C.S.F. had not paid attention to several points made in its SWOT analysis and that several important measures were neglected that should have been taken. These comprise measures with respect to manufacturing and other types of enterprises supported -that had not focused on the broader group of small and medium-sized firms-, the support of firm clustering and regional production and regional innovation systems, the raising of funding for basic research, and the multiplying effects of C.S.F. (MoF, 2003b: 35). All these were factors that impeded the strengthening of competitiveness of the Greek economy and were sufficient enough to harm it, at a very critical point in time, during its transition to the Eurozone. It is important to underline that the consultants spent time and efforts to organize matrices of relevance of measures and policy priorities and of synergies (which are of minor importance) but, at the same time, neglected the more central, in planning, question of how many funds will be proportionately allocated to which priorities.

It is difficult to provide a good reason why the “signal” sent by the Greek authorities was never taken into account. One should consider this to be as one of the most significant points. This “death rattle” concerning numerous failures in the competitiveness programme and their particular nature, which managed to absorb only 28.6% of initially allocated funds by September 2005, points out that specific institutions were necessary to implement the proposed actions. The responsibility for resolving these

¹³ A point of objection is raised here by the author of the document, whether energy should be considered as part of a Competitiveness Program. One should be aware that it is mostly in the long run, after the completion of energy projects and the provision of low-cost energy that one should consider a Programme on energy to contribute on the competitiveness of an economy.

Table 3.22 Community intervention/funds per priority (2000–06)

	Productive environment		Human resources		Basic infrastructure		Miscellaneous		Total
	Net	%	Net	%	Net	%	Net	%	
East Germany ^a	8583	41.7	6102	29.6	5553	27.0	364	1.8	20,602
Greece	4662	21.9	4100	19.2	11,837	55.5	722	3.4	21,321
Ireland	939	30.6	824	26.9	1288	42.0	15	0.5	3066
Mezzogiorno ^b	10,428	48.5	4137	19.2	6294	29.3	657	3.1	21,516
Portugal	6415	33.4	3894	20.3	8507	44.4	363	1.9	19,179
Spain	11,525	30.3	8867	23.3	17,442	45.8	209	0.5	38,043
Total	42,551	34.4	27,924	22.6	50,922	41.2	2330	1.9	123,726

Notes:

^aBrandenburg, Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt, Thuringia, East Berlin.

^bCampania, Apulia, Basilicata, Calabria, Sicily, Sardinia.

Source: EC, Directorate-General Regional Policies, Brussels 2002 (as it appears in Beutel, J. (2002) The Economic Impact of Objective 1 interventions for the period 2000–2006, Final Report to the DG for Regional Policies, May 2002).

problems (that appeared in later 2003) was not easy to undertake in the middle of a programming period and was not taken into account by the European Commission authorities, which had not drafted a single document highlighting such problems.

Furthermore, in planning terms, not only ex-post assessments are no longer a requirement but most of the 2007–13 Operational Programmes do not contain or contain very limited information on the previous results achieved at the Operational level, as well as previous programming experience, which is not considered a prerequisite in programming terms.

Only in the 2007–13 C.S.F. programme is it realized that threats for the Greek economy derive from: (1) enlargement and introduction of new member-states with low employment cost, high productivity, and competitiveness; (2) outflow of funds in other countries, shrinking of the manufacturing sector due to migration to countries of low costs; (3) high level of sensitivity for micro- and small- and medium-sized enterprises; (4) difficult environment for start-ups; (5) multiple laws, bureaucracy, and many functions; (6) acquisitions of Greek firms by foreign companies; (7) deficiencies in transport infrastructure; (8) increase of highly educated brain-drain; (9) rapid development of technologies that devaluates quickly infrastructure in R&D; (x) high competition in manufacturing from neighboring countries (who benefit more from Greek transport infrastructure); and (9) structures of oligopsony in the tourist sector with few tourist operators (MoF, 2007b: 48). A few of these problems were identified several years ago, in the ex-ante assessment of the Competitiveness Programme of the previous programming period (2000–06). Most of them appeared out of the blue.¹⁴ Similarly the ex-ante assessment of the 2007–13 Competitiveness Programme failed to diagnose the underfunding of competitiveness and the potential problem—if not threat—of the inadequacy of resources devoted to competitiveness that were not underlined in the specific section that existed in the assessment, a few years before one of the worst economic crises in history erupted (MoF, 2007b: 95–98).

While the Ministries were in charge of the programming, management, and implementation of programmes, the latter have also been conducted throughout the years by many different institutions that were continuously restructuring.

For instance, in the 2000–06 period, new mechanisms of management, control, and implementation were put in place. Concerning management, four new institutions were created from scratch: (1) a new Management Authority of the C.S.F.; (2) a new Payment Authority; (3) new Managerial Authorities, for each Operational Programme; and (4) a Fiscal Control Committee of the Ministry of Finance (Greek Law, 2860/00¹⁵). For each of the Programmes, numerous organizational and institutional changes had to be enforced by various administrative guidelines, delaying the implementation phase by 1 or 2 years (e.g., MTC, 2001¹⁶). During this period, the transition to the currency zone was achieved and implementation of operational

¹⁴The underfunding of competitiveness programs was also not diagnosed in the specific section for the strength of interventions.

¹⁵Greek Law 2860/00, Management, monitoring and control of the Community Support Framework, Official Government Gazette of the Hellenic Republic, Issue 251/A/14-11-00.

¹⁶Ministry of Transports and Communication (2001) Administrative Guideline, Framework of Management of the 3rd C.S.F., Athens, May 2001.

mechanisms was required to be carried out on time. Their delay coincides with a proportional fall in funds allocated in the productive environment (as one may see by comparing across [Tables 3.6–3.9](#)). This is also the period emphasizing construction of infrastructure projects for the Olympic Games.

Over the years, many institutions were created not only for organizing and implementing the planned policies but also for regulatory purposes and application of authority, for extending their scope, preparing their long-term embedding, supporting relevant actions, and introducing new instruments and schemes. For example this was the case with financial institutions such as the “Enterprise Greece”, the New Economy Development Fund (“TANEO”), the guarantee fund for SMEs (“TEMIIME”), the incubator-cluster “Corallia,” human capital institutions such as the “National Observatory for Employment,” the “National Institute for Employment,” the “Center for Promotion of Employment,” national Health institutions such as the “National Center of First Aid,” and institutions for agriculture, such as the “Payment and Control Agency for Guidance and Guarantee Community Aid.”

Several of these were built for a single programming period and incorporated in the rest of ministerial functions or merged with other institutions within Ministries, for instance the Competitiveness Council. EU funds were used to finance their building, elastic and inelastic expenses. Many existing and new institutions have made use of the financial sources available, such as the Manpower Employment Organization or the National Tourist Organization. Finally, a range of institutions may have been required to implement policies, e.g., a broader range of business support institutions.

3.7 Output produced

Several of the results and outputs of the application of the programmes have already been discussed. In the present section, a few of the rare officially documented outputs, as collected from available sources, are provided. [Table 3.23](#) refers to all outputs gained in the 1994–99 C.S.F. and problems identified in this programming phase.¹⁷ For each of the interventions assessed, the Table presents also the problems discussed in the original document (EEO, 2003). Similarly, [Table 3.24](#) refers to the 2007–13 programming period and provides the results on core indicator values of its ex-post assessment.

3.8 Greece’s Balance with the EU: A country progressively assuming its responsibilities

Until 2013, approximately 95% of Greece’s funding via the Community’s budget was obtained from Cohesion and Common Agriculture Policy (ELIAMEP, 2014: 38).

¹⁷ It is unique of its kind, as no other such **Table** has been produced after the 1994–1999 period in ex-ante or other assessments.

Table 3.23 Output per sector, problems and obstacles, 1994–99 C.S.F.

	Education & training
Output	<p>Secondary education (General and technical)</p> <ul style="list-style-type: none"> - Reform of the curricula with the production of 234 new books (with 13 CD-ROMs for specific courses) - Innovative school activities with the participation of 600 schools, 6500 teachers and 70,000 students - Pilot introduction of IT technologies in school. In particular 14 schools were networked, 13 educational software packages were developed and teachers from 60 schools gained basic ICT skills - Formation of 6 Centres of European Languages - Pilot and general implementation of remedial training for 10,300 students from 102 schools - Introduction of professional guidance with the development of 68 Professional Guidance Centres and training of 600 teachers and executives - Introduction of environmental education with the formation of 10 Environmental Education Centres - Introduction of new courses such as Health Education and Consumers Education - Education of people with special needs (training of 3,500 teachers for students with special needs) - Innovative actions like the second chance schools and the all day kindergarten <ul style="list-style-type: none"> - Training of 200,000 teachers - Development or upgrading of 450 school libraries and 41 mobile libraries - Laboratories (IT and physics) for students in almost all school units <p>Vocational Training</p> <ul style="list-style-type: none"> - Support of 136 Institutes of Vocational Training with 40,000 students - Other secondary vocational education - Other secondary vocational training establishments <p>Tertiary Education</p> <ul style="list-style-type: none"> - Reform of the curricula for 131 undergraduate courses - Establishment of a network for all 32 tertiary level establishments in the country along with the support of their libraries - Development and support of 124 postgraduate studies in 17 Universities - Enhancement of scholarships and research - Formation and support of 33 career offices

(Continued)

Table 3.23 (Continued)

	Education & training
Problems & obstacles	<ul style="list-style-type: none"> - Infrastructure support (new buildings, expansions etc.) in 13 Universities and in Technical Education Institutes - Open University - Distance learning <p>Effectiveness and efficiency were influenced by delays in the beginning of OP, which suppressed actual implementation time and urged on the procedures. Overall effectiveness approximately 90%</p>
Output	<p>Employment and Continuous Training</p> <p>The total number of beneficiaries 648,000 people:</p> <ul style="list-style-type: none"> - 165,000 unemployed attended a continuous training course (49,000 unemployed trained by relevant activities of ROPs) - 260,000 employees trained (21,000 trained in telecommunications through the relevant OP) - 192,000 unemployed placed in jobs under employment subsidization programmes - 25,000 benefited by activities of OP “Combating Exclusion from the Labor Market” - Creation and Operation of National Accreditation Center, which certified approximately 400 Centers for Vocational Training and became eligible to implement training funded by ESF
Problems & obstacles	<p>The National Accreditation Center was established in 1995 but faced a series of problems that caused a suspension of all training activities for 2 years. In 1998 it was reestablished with a better organizational structure and presented important work in the continuous training activities. All supporting mechanisms (Programme Manager Evaluator, M.O.U., etc.) were introduced at a late stage and results appeared after 1998</p>
Output	<p>Transport</p> <p>Road Axes</p> <ul style="list-style-type: none"> - 55% achieved of a total network of 919 km of road axes, all considered part of Trans European Networks (TEN): - PATHE highway (Patras, Athens, Thessaloniki, Euzonoi) - Egnatia highway, part of which has been implemented in order to link eastern and western Greece with the northern part - Rio–Antirrio bridge linking southern and northern part of Western Greece - Northwest Road Axis of Crete <p>Ports</p> <ul style="list-style-type: none"> - Improvements a series of ports, except for the Port of Patras and Thessaloniki

(Continued)

Table 3.23 (Continued)

	Education & training
Problems & obstacles	<ul style="list-style-type: none"> - Few projects related to airports, particularly infrastructure for the new Athens airport at Spata (the airport was not funded by the C.S.F.) and 4 terminal radars <p>Railways</p> <ul style="list-style-type: none"> - 75% of a double line in the Athens-Thessaloniki-Idomeni axis, without its electrification (only a part of 77 km from Thessaloniki to Idomeni was already electrified) <p>Urban Development</p> <ul style="list-style-type: none"> - Completion of first phase of the Athens metro (except a small part due to archeological inhibitions in city center) - Telematic project of trolley buses network - Purchase of 300 environmental friendly buses <p>Operational Programme in Road Axes achieved 55% of its objectives. Basic implementation obstacles:</p> <ul style="list-style-type: none"> - Problems related to studies (detective, inappropriate, scattered, geotechnical and environmental problems) - Expropriation problems - Problems relevant to the archeological sites protection (excavation rates) - Problems with the subsoil - Legal difficulties, exorbitant discounts of the construction firms due to high competition <p>Delays in Thessaloniki Metro, which though initially planned has not started, due to negotiation difficulties and highly dispersed and misinterpreted auction procedures.</p>
Output	<p>Environment</p> <p>Natural environment-Protection of forest ecosystems</p> <ul style="list-style-type: none"> - Implementation of Special Environmental Surveys for 20 ecosystems, 13 biosystems along with infrastructure interventions in 15 biosystems and 20 ecosystems. - Completion of 5 National Action Plans for species under threat - Awareness programs - Collaboration of central administration with local authorities and of the environmental organizations with local enterprises - Equipment purchase for the Fire Brigades in order to combat forest fires <p>Atmosphere-Noise-Global problems</p> <ul style="list-style-type: none"> - Formation of an Operational Center to monitor atmosphere pollution in the city of Athens - Development of a national network for the monitoring of atmosphere pollutants and emissions from central heating systems

(Continued)

Table 3.23 (Continued)

	Education & training
	<ul style="list-style-type: none"> - Implementation of the Attica-SOS programme focused on the reduction of fuel contribution in the atmospheric pollution - Mapping of the traffic noise in 23 urban areas - Construction of noise barriers in 6 municipalities (effectiveness 60%) - Installation of 8 noise measuring cells <p>Water environment</p> <ul style="list-style-type: none"> - National management plans for water resources and monitoring of the plans for 14 hydrological basins - Formation of a national network for monitoring of surface and underground waters, swimming waters, tracing toxic substances in surface waters and quality in the cross border rivers <p>Soil-subsoil-solid and dangerous waste disposals</p> <ul style="list-style-type: none"> - Construction of places for the sanitary burial of waste disposals, with a capacity to host 45% of the total disposals countrywide - Recycling of house disposals resulting in recycling almost 9% of rubbish - Upgrade of tourist seashores (436 km of the total 1200 km thus 36% of the needs with 100% effectiveness) <p>Laws-mechanisms-administration</p> <ul style="list-style-type: none"> - Formation of the autonomous National Center for the Environment and Sustainable Development - Legislation framework with specific requirements required for environmental impact studies - Creation of the National Information Network for the Environment, linking 8 prefectures with the central terminal in the Ministry of Environment - Enhancement of programs for the eco-certification (EMAS) <p>Urban planning</p> <ul style="list-style-type: none"> - Completion of 24 urban plans and of 82 urban reformation projects <p>Land registration</p> <ul style="list-style-type: none"> - 30% of initial target to map and register 35,000 m² of land in 700 local authorities <p>Land registration project was found to have mismanagement problems (30% effectiveness by end of 1998) and was interrupted</p> <p>Two centers for thermal treatment of hospital disposals (in Athens & Thessaloniki) have been transferred to the next CSF</p> <p>Culture</p> <ul style="list-style-type: none"> - Unification of the ancient sites in the city of Athens. This intervention included 14 projects (restoration of traditional buildings around Acropolis, conversion of the main road into a pedestrian pathway, etc.)
Problems & obstacles	
Output	

(Continued)

Table 3.23 (Continued)

	Education & training
Problems & obstacles	<ul style="list-style-type: none"> - National Cultural Network of Cities, which consisted of four projects that focused on interferences and restorations of buildings (mostly theaters and Cultural Centres) - Expansion and upgrading of museums with 10 projects - Restoration and distinction of monuments with 26 completed projects - Construction of the Cultural Convention Centres in the cities of Athens and Thessaloniki <p>The Acropolis Museum was not completed, as it required unusually extended initial time phase and the Land Registry & Monument Files remained inactive</p>
Output	<p>Health and Care</p> <ul style="list-style-type: none"> - Large-scale investment in biomedical technology by equipping all the hospitals, which have been built or renovated by the R.O.P.s - Development of Centres for Vocational Training in the field of health & care - Development of integrated management information systems for all the hospitals - Formation and/or support of new structures in the field of public health (e.g., National School of Public Health, Central Laboratory of Public Health, National Research Centre for Health) - Construction of buildings for the National Centre of Emergencies (in Athens and 5 other cities) - New building for the National Blood Donation Centre - Formation of the National Network of Social Support for people with special needs - Development of Physical & Social and Rehabilitation Centres for under aged and chronically ill <p>Regional Operational Programmes Measures relevant to Health & Care:</p> <p>Construction of 15 new regional and prefecture hospitals Improvements, arrangements and expansions of building capacity in 26 existing hospitals</p> <p>Short-scale investments in high tech biomedicine equipment</p>
Problems and obstacles	<p>Exceptional delays in project implementation, revealing internal problems in planning and applying reform interventions. Deficient preparatory work along with underestimation of both resources and time resulted also at the noneffective implementation of interventions. Major part of planned infrastructure in health & care would become functional during the first 2 years of following programming period. Expected to accomplish partially the intermediate target of health system decentralization (EEO, 2003: 149–150)</p>

(Continued)

Table 3.23 (Continued)

	Education & training
Output	<p>Tourism</p> <ul style="list-style-type: none"> - Interventions emanating from OP “Tourism & Culture” & relevant measures in ROPs <p>Marine tourism</p> <ul style="list-style-type: none"> - Construction of 1 yacht marine (effectiveness 25%) <p>Mountain, ecological, cultural, and therapeutic tourism</p> <ul style="list-style-type: none"> - 1 hydro-sanatorium (effectiveness approximately 30%) <p>Upgrading existing hotels</p> <ul style="list-style-type: none"> - 125 investment projects for 11,100 hotel beds and 324 traditional guest houses (effectiveness 43%) <p>Formation of special tourist infrastructure</p> <ul style="list-style-type: none"> - 2 thalassotherapy spa centers, 2 golf courses and 10 conference centers (effectiveness ranged between 0% and 95%) <p>Training in the tourist sector</p> <ul style="list-style-type: none"> - 12 continuous training courses (effectiveness 20%)
Problems & obstacles	<p>Remarkably low effectiveness (40%). Hasty initial planning in marine tourism, inefficient planning and the weak evaluation of submitted projects in mountain, ecological, cultural, and therapeutic tourism, low effectiveness mainly attributed to legislative framework (development law) in upgrading existing hotels</p>
Output	<p>Research and technology</p> <ul style="list-style-type: none"> - 16 research joint ventures in the field of environment - 32 research projects on the environment from equivalent number of enterprises - 39 research joint ventures and 24 enterprises implemented research projects on the biosciences - 40 research joint ventures and 46 enterprises implemented research projects in the field of new and advanced materials - 25 joint ventures for research activities in the fields of culture, society and technology - 419 completed projects of industrial research - 269 research projects from the collaboration of Universities, Research Centers and Enterprises - 27 buildings for research activities (developed or upgraded), 32 equipment supply projects for R&T actions, 10 scientific libraries for Research Centers - 410 completed conferences, 36 scientific publications and 25 information bulletins
Problems & obstacles	<p>Explicit delays in project implementation mainly attributed to prolonged planning phase</p> <p>Insufficient monitoring of the physical outputs of the projects</p> <p>Industry</p> <ul style="list-style-type: none"> - Development laws 1892/90 and 2601/98

(Continued)

Table 3.23 (Continued)

	Education & training
Problems & obstacles	Implementation delays mainly attributed to nonsuitable legislative framework and the underestimation of the needed time to inform potential investors (EEO, 2003: 152)
Output	<p>Fisheries</p> <ul style="list-style-type: none"> - 1610 approved plans for adaptation of fishery activities (more than 90% effectiveness) - 1095 approved investment plans in renewal and modernization of fishing fleet (more than 90% effectiveness), a small portion of the Hellenic fishing fleet (70% of remaining fishing boats older than 15 years old) - 225 investment plans of aquaculture (effectiveness of 92% for shells, 100% for new sea species and 70% for the cultivation of trout). 58 existing units modernized (effectiveness more than 90%) - 113 investment plans in manufacture and commerce, which increased manufacturing capacity by – 14,000 tonnes annually (80% effectiveness). 32 new fishing commercial enterprises (87% effectiveness)
Output	<p>Public administration</p> <ul style="list-style-type: none"> - Administration modernization - Development of integrated information systems (I.I.S.) - Training of civil servants
Problems & obstacles	Prolonged initial planning phase, absence of strategic studies identifying policy recommendations and erroneous time planning for implementation period. Limited effectiveness regarding large-scale Information Systems, while the small-scale ones have been completed, having though only limited effects
Output	<p>Energy</p> <ul style="list-style-type: none"> - 3 large units of electricity production (100% effectiveness) - 333 investment plans promoting energy save, electricity coproduction and use of renewable energy sources - Most targets for natural gas accomplished, particularly the high pressure transfer pipes from Greek-Bulgarian borders, the basic transfer branches to consumer centers, storing installation of liquid natural gas and 1000 km of low pressure distribution networks in three regions
Problems & obstacles	The 333 projects exhibited great delays, mostly caused by nonsuitable legislative framework, extended time required for informing investors and adapting licensing procedures. Demand for cofinancing of energy investment plans was unexpectedly high and initial targets overestimated

(Continued)

Table 3.23 (Continued)

	Education & training
Output	<p>Agriculture</p> <ul style="list-style-type: none"> - 33,457 improvement plans (67% effectiveness of initial targets, 112% effectiveness of updated). - 20,313 new farmers financed (145% effectiveness) - 205,325 received leveler compensation (82% effectiveness) - Capacity modernization (2,033,005 tons/year, effectiveness 91%) - New products capacity (281,470 tons/year, effectiveness 83%) - 718 agriculture enterprises have been benefited in order to improve their manufacturing and packaging (effectiveness 103%) - 4 arboriculture stations have been improved (effectiveness 100%) - 3 viticulture young plants have been upgraded (effectiveness 75%) - 9 public foundations have been funded

Source: EEO, 2003.

This funding came mostly from Cohesion Funds¹⁸ and from the Agricultural funds. The European Regional Development Fund (ERDF) and the European Agricultural Guarantee Fund (in particular its guarantee section) were the major contributors of EU funds in Greece. The European Social Fund (ESF) is the third most important in amounts Fund, and its contribution has increased since 1997 (Fig. 3.9). The importance of the Cohesion Fund in funding terms (which has been created to promote cohesion and resolve cohesion problems) is limited, if it is compared against the three previous Funds. The importance in funding terms of the guidance section of the FEOGA, the Mediterranean Integrated Programmes, and of the Financial Instrument for Fisheries Guidance was also limited.

The proportional allocation of structural actions has increased at the expense of agricultural actions undertaken by FEOGA-Guarantee (Table 3.25).

Greece's contribution to EU revenues (as % GDP) has continuously been rising over the years (Fig. 3.10A). Progressively, the country was turned into a contributor into the EU budget. A peak was reached in 2007, followed by a fall and a subsequent rise.

On the contrary, Greece's contribution to the EU public expenditure (receipts from EU budget) as % GDP has risen, up to 1993 (Fig. 3.10B). Then, it started to fluctuate. It fell from 1993 to 1995, then it reached a peak in 1998, after which it fell again to reach 3.12% in 2003. The pattern reversed only from 2004 to 2007, reaching peaks in 2007 and 2008, like those in 1998.

Measured as a percentage of GDP, Greece's contribution to EU's net revenues (revenues minus total expenditure in the EU budget) follows a similar pattern with the one previously described. It has increased, reaching a peak in 1993 (Fig. 3.11). It has then fallen but rose again, to reach another, similar peak in 1998. Then it started to fall again until 2002, a year after which it started to rise progressively.

¹⁸ Also known as European Structural and Investment Funds.

Table 3.24 Core Indicator Value (measurement unit), 2007–13—National Strategic Reference Framework, end-2014

	Greece	EU	Greece/EU
Aggregated Jobs (no.)	21,006	940,000 ^a	2.2%
RTD projects (no.)	561	95,000	0.6%
Cooperation projects between enterprises and research institutions (no.)	30	33,600	0.1%
Research jobs created (no.)	1422	41,600	3.4%
SMEs supported (no.)	25,347	400,000 ^b	6.3%
Start-ups supported (no.)	2611	121,400	2.2%
Jobs created in SME (gross, full time equivalent)	21,006	—	—
Additional population covered by broadband	771,851	8,200,000	9.4%
Km of new roads (no.)	144	4900	2.9%
Km of new TEN roads (no.)	144	2400	6.0%
Km of reconstructed roads (no.)	2646	28,600	9.3%
Km of new railway (no.)		1050	0.0%
Km of TEN railway (no.)	11	2600	0.4%
Km of reconstructed railway (no.)	60	3900	1.5%
Additional capacity of renewable energy production (MW)	108	3900	2.8%
Additional population served by water projects	1,455,459	5,900,000	24.7%
Additional population served by waste water projects	370,841	6,900,000	5.4%
Area rehabilitated (km ²)	57	1100	5.2%
Jobs created in tourism (no.)	13,000	16,200 ^b	0.1%

Notes from EC (2016b):

Note for Greece: The figures in the table (for Greece) are those reported by MAs in Annual Implementation Reports (of Greece). Core indicators for which no data were reported by the Member State are not included. The aggregate jobs indicator is based on an examination by the Commission of all gross job creation reported for each priority axis and is regarded as the most accurate figure for the total number of gross jobs directly created as a result of funding. It tends to be higher than the sum of the figures reported by MAs for the core indicators relating to jobs created because in many cases MAs fail to report anything for these indicators. Source: Annual Implementation Reports, 2014 and DG Regional Policy postprocessing of these, August 2016.

Notes from EC (2016a):

^aNow casting suggests that this was over 1 million by end-2015.

^b** Estimate based on WP2. Source: DG Regional and Urban Policy, derived from 2014 AIRs.

Source: EC (2016a), EC (2016b)

Hence, with the exception of the last years of the 1st C.S.F., the 2nd period, and the early part of the last programming period, Greece's contribution to net revenues has not been high enough to be considered as a state benefiting substantially from the allocation of funds at the EU-level. In the second programming period in particular, when the Greek economy reached average annual GDP growth at approximately 3%–4%, its respective contribution reached and even exceeded these levels. Overall however, one has to mention that Greece had the greatest public benefit from the operation of common EU budget, proportional to its population (ELIAMEP, 2014: 38).

The balance (payments minus receipts from EU) was limited if one considers Greece's increasing annual contributions to the EU budget (Fig. 3.12). It has always

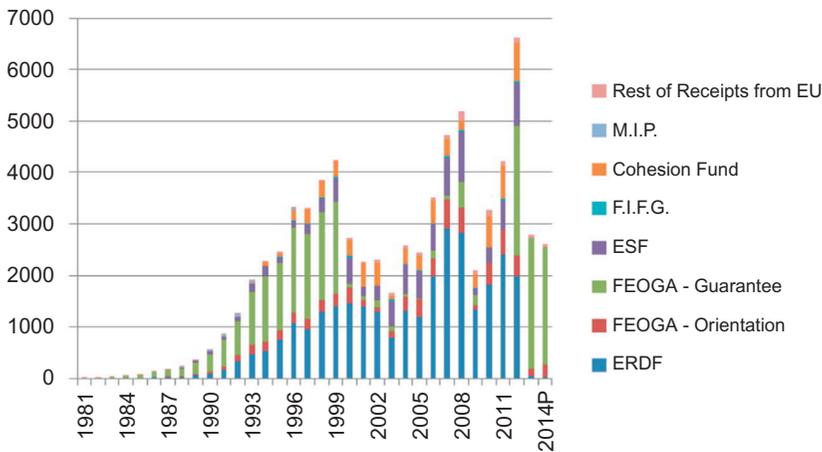


Figure 3.9 Greece's receipts from various EU Funds, 1981–2012.

Source: Ministry of Finance, Public finance relations with the EU and International Organizations, obtained in 2014, author's work. *Note:* (1) Data are estimates for 2013, and projections for 2014. (2) Data were deflated using a macroeconomic series for the Greek general CPI, as provided by EL.STAT (2009 base year).

been positive, increased and fell during the early years of the crisis, then increased again after 2010.

As GDP percent, Greece's balance with the EU has increased up to 1994 but then started to fall significantly, reaching a low value during the crisis, in 2009. The rise of balance has only taken place for the first programming period and since then started to deteriorate. Despite the fact that it is positive, Greece does not have a high balance for an extended part of the studied period, and progressively loses out from the integration and enlargement process. The curvilinear pattern shows clearly the change from a pure benefactor from EU Cohesion policies to a state assuming more of its responsibilities. Had the crisis not erupted, Greece might have become a net contributor, as a potential projection of this trend reveals.

An increasingly significant part of Greek payments to the EU is derived from its GNI contributions (Fig. 3.13). The next significant category is VAT contributions, followed by customs and antidumping duties. These all emphasize Greece's net losses out of the integration and enlargement processes, a larger part of which, as discussed elsewhere, is directed to its EU and Eurozone partners, and held for common EU purposes.

3.9 Long-term effects and implications from the imbalanced allocation of funds

3.9.1 Effects upon manufacturing and industrial restructuring

The numbers of small, medium, and large (SML) Greek manufacturing firms fell substantially and progressively over the years (Fig. 3.14). One-third of them ceased

Table 3.25 Average per year receipts, for Agriculture (FEOGA-Guarantee) and Structural Actions

	Total receipt	FEOGA-Guarantee	% Contribution in total receipts	Structural actions	% Contribution in total receipts	Rest	% Contribution in total receipts
Average per year 1981–89	1566.54	1082.06	66.7	430.17	26.9	54.3	6.4
Average per year 1990–99	4724.48	2491.34	53.6	2066.60	42.8	166.5	3.6
Average per year 2000–08	6245.79	2659.71	44.9	3218.39	50.0	386.1	5.4

Note: Data in payment form. 1981–98 data in ECUs. Some deviations are found from data as they appear in the Balance of Payment of the Bank of Greece Structural Actions: FEOGA-Orientation, ERDF, ESF, FIFG and Cohesion Fund.

Source: Oikonomou et al. (2010), data extracted from Bank of Greece, based on various volumes of Annual Reports of the Court of Audit of EC, various volumes of EC’s “Allocation of EU Expenditure by Member-states,” various volumes of “EU Budget Financial Report.”

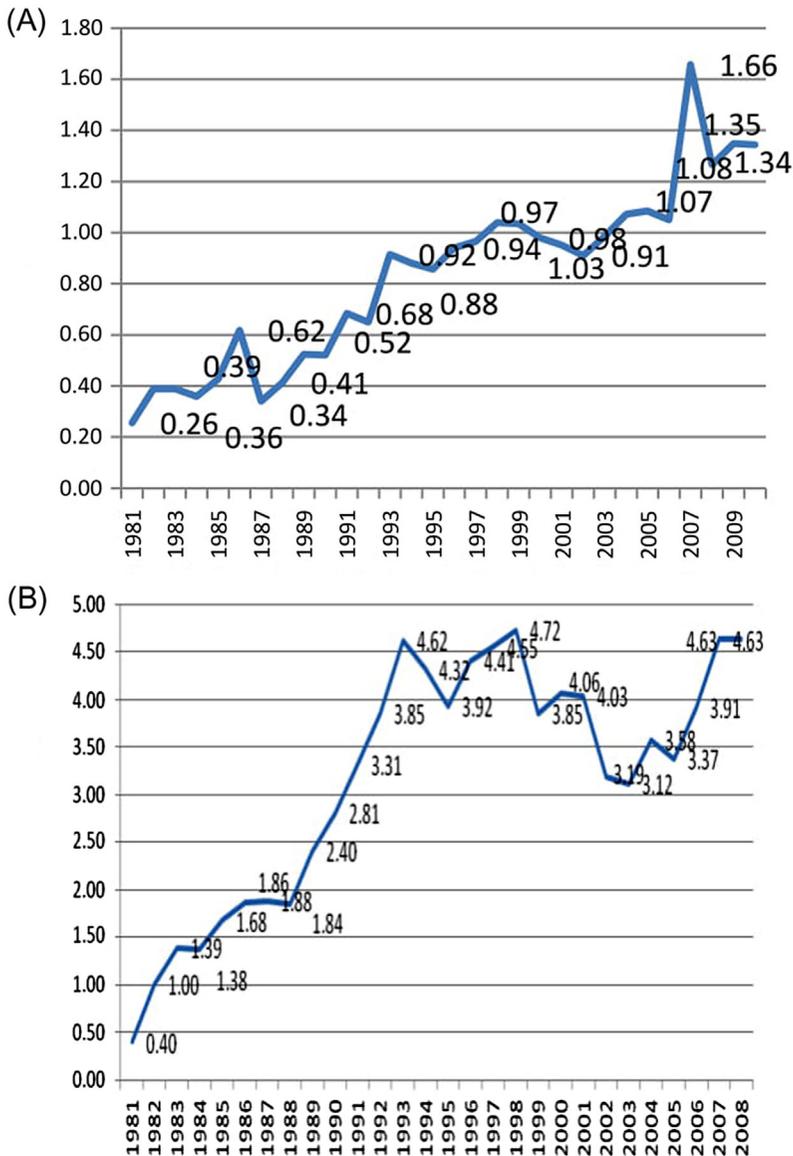


Figure 3.10 (A) Greece's contribution to EU total budget revenues, as % GDP, 1981–2010. (B) Greece's contribution in EU budget public expenditure, as % GDP, 1981–08. *Source:* ELIAMEP (2013: 80).

operations from 1993 to 2009. Throughout this period, the application of two consecutive C.S.F.s targeting manufacturing support has not managed to reverse this “snowball effect” and a significant part of the competitive and productive capacity of the Greek manufacturing sector was lost. This is a trend that has been taking

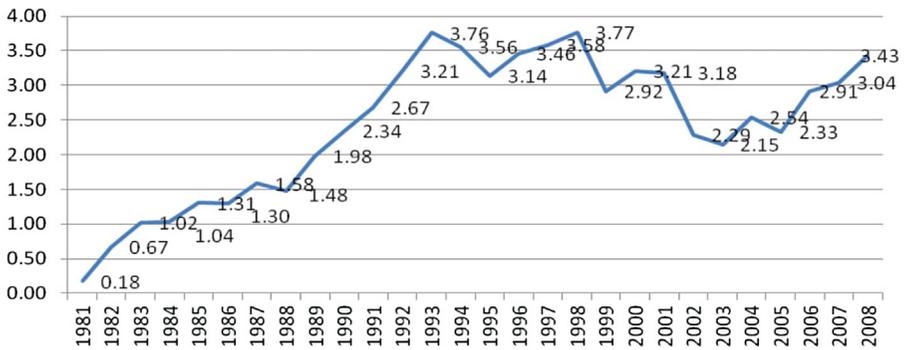


Figure 3.11 Greece’s contribution in EU net revenues, as % of GDP, 1981–2008.
 Source: ELIAMEP (2013: 81).

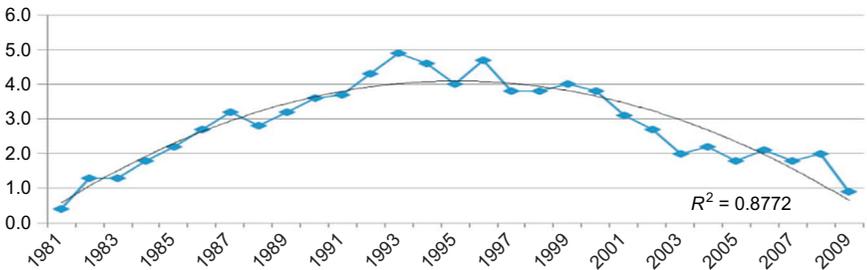


Figure 3.12 Greece’s Balance with the EU (receipts minus payments at the EU budget), current prices as % current GDP, 1981–2009.
 Source: Ministry of Finance, Public finance relations with the European Union and International Organisations, author’s work.

place ever since Greece became a member of the customs union, the common market, and more recently of the Economic and Monetary Union. From 2001 to 2002, when the majority of protection barriers were removed and adjustments for the common currency culminated, 1720 manufacturing SML disappeared from PRODCOM records. In 2009, this pattern appears to reverse provisionally but it remains evident again, after 2012.

However, the value and quantity of SML sales increases during the same period (Fig. 3.15).

If such values are included, the line of the quantity of sales would have been above the one presented here. The trend of the line can be considered to be representative.

Turnover per enterprise firms has increased during the same period for SML manufacturing, both as a value and as a quantity. Most likely this indicates an increase in business sizes and market concentration processes in operation (Figs. 3.16A and 3.16B). An obvious implication of market concentration is price rising—especially if imperfect forms of competition are sustained—leading to price

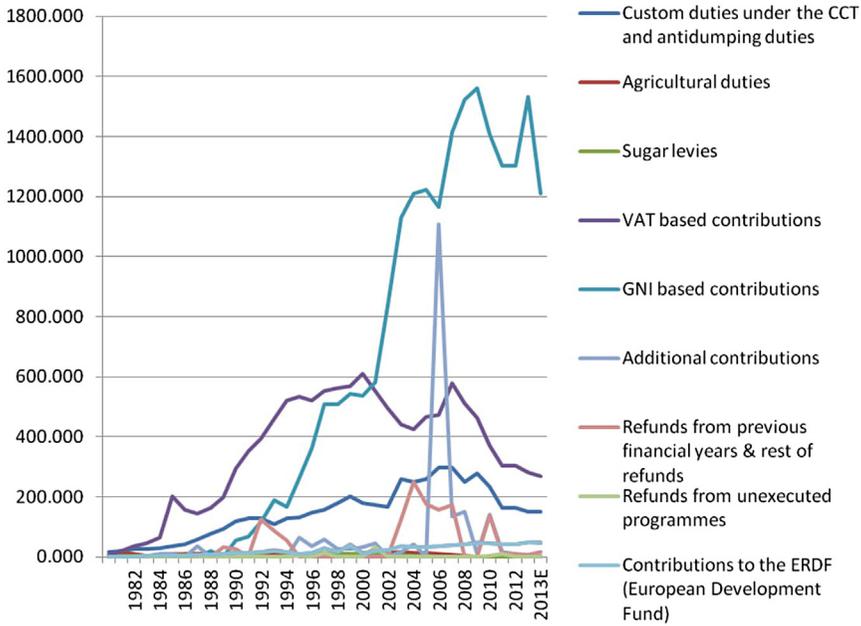


Figure 3.13 Breakdown of Greek payments to the EU budget.

Source: Ministry of Finance, Public finance relations with the European Union and International Organisations, author’s work. *Note:* Data for 2013 are estimated and for 2014 projected.

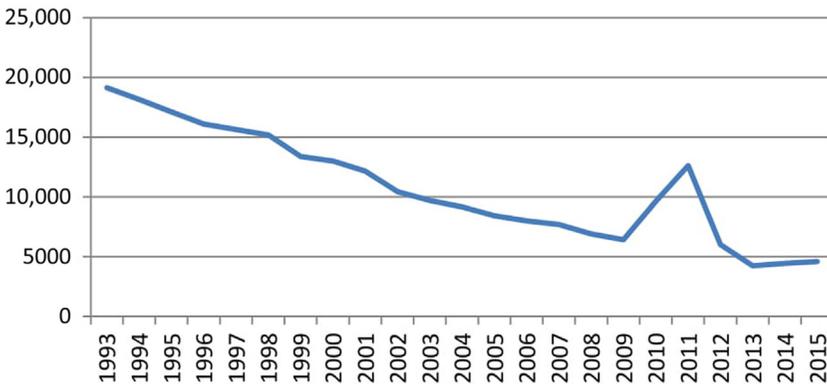


Figure 3.14 Number of small, medium, and large (SML) manufacturing firms, 1993–2015.

Source: Hellenic Statistical Services, PRODCOM, author’s work.

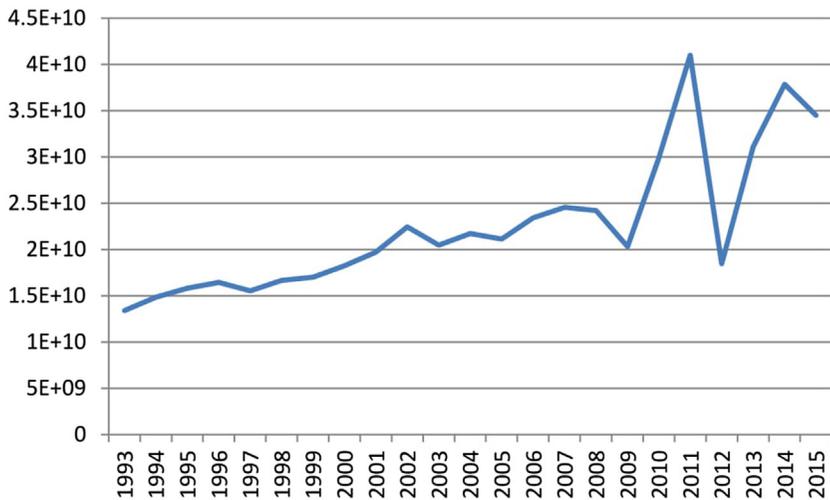


Figure 3.15 Value of Sales in small, medium, and large manufacturing firms, 1993–2015. *Source:* Hellenic Statistical Services, PRODCOM, author’s work. *Note:* Greek drachmas turned to Euros, current prices.

stickiness and limited price adjustments that can become a very serious problem in times of crisis. The rise of sales per enterprise is very obvious after 2012 but in this case it is likely to be due to the continuous removal of SML firms out of the Greek market and the transfer to other countries.

This evidence unveils a process of economic restructuring, which was set in place in the Greek production long before the economy joined the Eurozone. As seen in [Tables 3.26 and 3.27](#) (in combination), in terms of value, agricultural production, represented almost a sixth of its production in 1970, has fallen since then and reached in the early 2010s one-third of the initial 1970 levels. The secondary sector had also started shrinking its share in value terms since the 1970s, a process attributed mostly to manufacturing and only partially to construction over the course of three decades ([Table 3.26](#)).¹⁹ After the year 2000 ([Table 3.27](#)), manufacturing reduces much less proportionately but construction is more significantly affected and shrunk. Within 14 years, only one-third remains out of the vibrant Greek construction industry, the vast part of which is lost during the years of the crisis. As one can see during the same period, notably after 2007, the real estate activities follow an exactly opposite pattern and benefit out of the crisis.

In value terms, services have expanded from more than half of Greek production (54.2%) to more than a third (72.3%), indicating a restructuring and development process favoring services across all industries, in trade, financial intermediation, real estate, public administration and security, health, and education. This is a period when new industries were created from scratch, such as ICT and software.

¹⁹This evidence explains the afore-mentioned process of significant fall in the number of manufacturing SMEs and large firms.

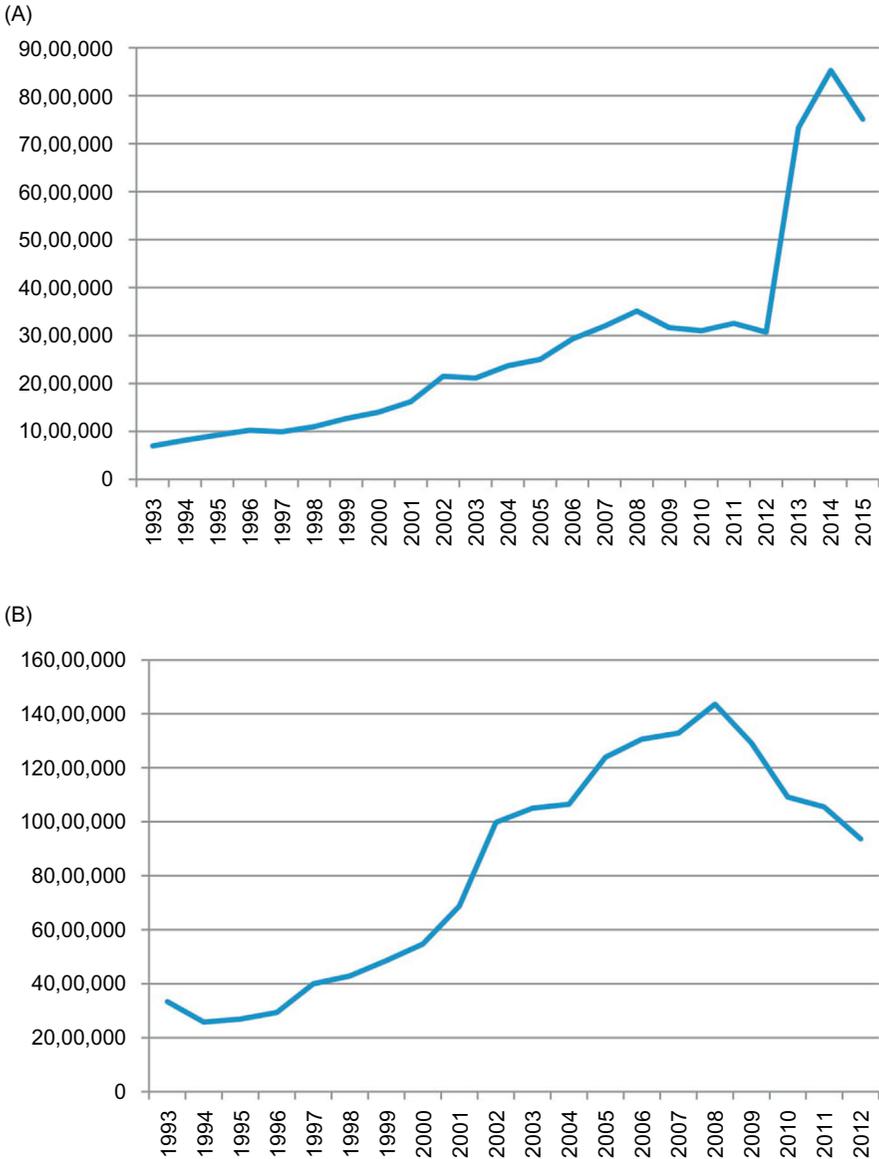


Figure 3.16A and B Value and Quantity of Sales per enterprise in small, medium, and large manufacturing firms, current prices, 1993–2015.
Source: Hellenic Statistical Services, PRODCOM, author’s work. *Note:* Quantity of sales are estimates, since confidential data values are not included.

Table 3.26 The structure of value in Greek production, current prices

	1970	1975	1980	1985	1990	1995	2000	% Change
1st sector—	15.8	13.9	15.1	11.8	10.6	9.9	7.3	− 53.8
Agriculture								
2nd sector—	30.0	29.0	29.6	28.3	26.3	22.4	20.4	− 32.0
Manufacturing								
Mining	0.7	0.7	0.8	1.5	0.8	0.6	0.6	− 14.3
Manufacturing	17.6	18.5	17.9	17	15.2	13	11.1	− 36.9
Electricity-Gas-Water	1.9	1.5	1.5	2.5	2.6	2.4	1.8	− 5.3
Construction	9.8	8.2	9.4	7.4	8	6.4	6.9	− 29.6
3rd sector—	54.2	57.1	55.3	59.8	62.8	67.7	72.3	33.4
Services								
Transport-Communication	5.9	6.7	6.1	5.8	5.4	6.7	8.5	44.1
Trade	13.7	16.3	14.6	15.3	14.8	13.6	14.5	5.8
Financial Intermediation	2.9	3.6	3.2	3.2	3.4	4.2	5.5	89.7
Real estate management & related activities	13.1	11.7	10.8	10.3	11.7	17	17	29.8
Public administration & Security	4	4.7	5.3	7.3	7.7	7.2	7	75.0
Health and Education	5.9	6.4	6.7	7.8	9.2	9.7	9.9	67.8
Other economic activities	8.7	7.7	8.6	10.1	10.6	9.3	10	14.9

Source: Bryant et al. (2001), data collected from the Ministry of Finance.

The fall in transport–communication in the 1980s is regained in the 1990s. [Table 3.27](#) reveals that the Greek crisis brings an industrial restructuring to the economy, with some industries being more hardly hit (construction, agriculture, trade) than others (real estate, tourism, accommodation and food services, and education).

3.9.2 *Effects on competitiveness, exports, and the balance of payment: Greece's suffocating problem*

As explained earlier, in the theoretical section, the concept of competitiveness has different meanings and connotations at the macroeconomic and at the microeconomic-firm level. The aforementioned evidence on industrial restructuring and on the substantial reduction in the numbers of SMEs and large manufacturing firms indicates a possible loss of competitiveness at the firm level.

Table 3.27 Production structure across industrial groupings, 2000–14, current prices turned to percentages

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	%
Agriculture, forestry, and fishing	6.1	5.8	5.6	5.6	4.7	4.8	3.6	3.4	3.2	3.1	3.3	3.4	3.7	3.6	3.7	- 39
Mining and quarrying— Manufacturing— Electricity, gas, steam and air conditioning supply	12.7	13.2	13.3	12.5	11.9	11.9	11.6	11.6	11.1	10.6	10.1	10.9	11.4	12.1	11.9	- 6
Water supply, sewerage, waste management and remediation activities	1.3	1.4	1.4	1.4	1.5	1.6	1.6	1.5	1.6	1.6	1.1	1.2	1.4	1.5	1.5	15
Construction	7.0	7.1	7.1	8.9	9.2	6.4	9.4	7.3	5.0	5.0	4.5	3.5	3.4	2.9	2.5	- 64
Wholesale and retail trade, repair of motor vehicles and motorcycles	16.3	15.3	14.8	14.5	13.7	12.8	12.1	12.4	12.9	12.5	12.7	12.6	10.6	10.1	10.7	- 34
Transportation and storage	6.7	5.8	5.6	6.5	7.1	7.7	7.4	8.0	8.2	7.0	7.1	7.1	6.8	6.7	7.2	7
Accommodation and food service activities	4.6	5.5	4.6	4.7	4.6	5.3	5.1	4.9	5.5	4.7	4.9	4.7	4.9	5.9	6.0	30
Information and communication	3.9	4.0	4.1	3.8	3.8	3.9	4.0	4.0	3.8	4.0	3.8	3.5	3.3	3.6	3.3	- 15
Financial and insurance services	4.6	3.9	4.0	4.2	4.8	4.7	4.7	4.5	4.4	4.6	4.8	4.8	5.0	5.2	4.9	7
Real estate activities	11.0	11.0	11.5	10.6	10.3	11.6	10.4	11.8	13.2	13.9	16.8	17.2	19.1	18.9	18.3	66
Professional, scientific, and technical activities	3.0	3.1	3.4	3.4	3.6	3.6	4.2	4.3	3.8	3.9	3.7	3.7	3.7	3.4	3.4	13
Administrative and support service activities	1.8	1.8	1.8	2.1	2.1	2.1	2.1	2.2	2.6	2.4	1.6	1.6	1.5	1.4	1.4	- 22
Public administration and defence—Compulsory social security	8.1	8.1	8.0	8.0	8.4	8.4	8.5	8.6	9.0	10.3	10.0	10.1	10.4	10.1	10.1	25

Education	4.5	4.6	5.3	5.1	5.4	5.6	5.2	5.3	5.6	5.8	5.8	6.3	6.3	6.0	6.2	38
Human health and social work activities	4.5	5.4	5.2	5.0	5.0	5.5	5.8	5.8	6.0	5.9	5.8	5.8	4.6	4.4	4.6	2
Arts, entertainment, and recreation—Other service activities—Activities of households as employers; undifferentiated goods and services producing activities of households for own use	3.9	4.0	4.1	3.8	3.9	4.2	4.3	4.3	4.1	4.6	3.9	3.7	4.1	4.2	4.1	5

Source: Hellenic Statistical Services, 17/11/2017, regional dataset, extracted from dataset Value Added per industry, 2000–12, 2013, & 2014.

The most recent 2014–2020 N.S.R.F. policy document refers to a low competitiveness of the Greek firms that it attributes to the following reasons: (1) the remarkably high level of very small, small, and medium-sized enterprises, mostly of family character that operate with reduced productivity; (2) the specialization in activities of low added-value and reduced absorption of innovation; (3) institutional barriers; (4) the lack of vertical integration across the same or similar industries; (5) the deindustrialization of the Greek economy and transfer of the Greek production in neighboring countries; (6) the lack of culture of entrepreneurial cooperation among basic partners of the production systems; (7) bureaucracy and the unfriendly environment for the entrepreneur; (8) the lack of labor mobility; (9) the ineffective legal framework; (10) the lack of finance; and (11) the high energy costs (Ministry of Finance and Competitiveness, 2014: 7).

However, competitiveness at the national level should be studied more carefully across various indexes and illustrated by their use.

Starting from the study of Nominal Unit Labour Costs (NULCs), they have remarkably deteriorated during the decade of the 2000s (Fig. 3.17). Greece's position was better in comparison to Ireland's in the early 2000s. In 2006 and 2007, the Greek NULC was not very much different from that of Ireland's. It continued worsening until the crisis erupted, and started improving since 2009 and the application of IMF policies. In the year 2016, it aligns with the Eurozone and EU-28 average (Fig. 3.17).

A more careful inspection on NULCs requires studying also labor productivity. Measured in per hour worked, Greece's labor productivity levels have remained relatively low, though not as low as in Portugal or Malta (Figs. 3.18A and B). This is even more evident if compared to Ireland's labor productivity (Figs. 3.18B). It is the combination of the two different indexes, NULCs and labor productivity per hour worked, that illustrates a rather blooming picture.

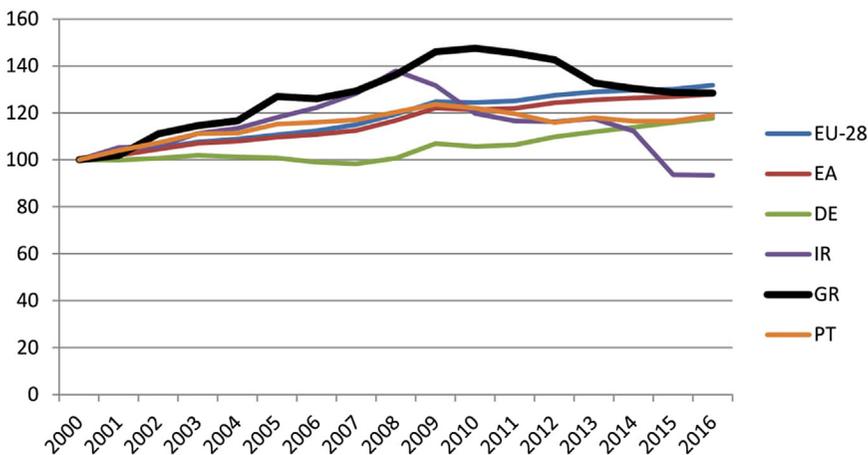


Figure 3.17 NULCs for Ireland, Greece, Portugal, Germany, EU-27, EA-17, 2000–17.

Source: AMECO series, Eurostat, author's work.

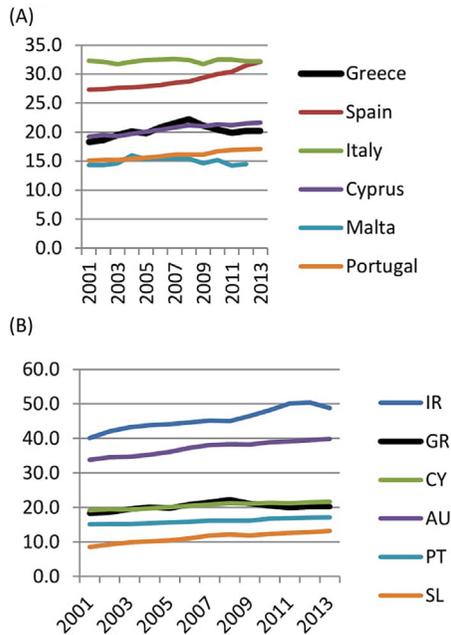


Figure 3.18 (A) Labor productivity per hour worked, Southern Eurozone's Periphery. (B) Labor productivity per hour worked, selected Eurozone states ranked top five in the years 2001 and 2011 in NULC terms.

Source: Eurostat, author's work, Eurostat, Real labor productivity per hour work (Euro per hour worked), Index, 2010 = 100, author's work, extracted 28.11.2017.

Since the Greek is not a capital-intensive economy, the particularly low levels of labor productivity per hour worked should be seen as a principal problem that takes time to be adjusted and necessitates pursuing a broad range of policies. Higher levels of labor productivity are achieved through improvements in management, organization, better forms of regulation and administration, the elimination of red-tape and bureaucracy, as well as by such aspects as industrious work, avoiding slackers, assuming working duties and responsibilities, and a socially accepted model of a hard-working ethos that fosters entrepreneurship. More organized and disciplined forms of administration and innovative forms and processes in production are required, which could overcome various problems that appear when money becomes more expensive and investments more costly than ever (with the adoption of the Euro).

Beginning in the mid-1990s and during a period that lasts almost 20 years, Greece had one of the worst export performances, compared to other European and Eurozone states (Fig. 3.19). Over an extended period, Greece's export performance resembles that of Japan and the United States, two self-sufficient and monetary independent states that have not participated in common spaces of advanced integration such as the EMU, and two European economies only, larger in size, the

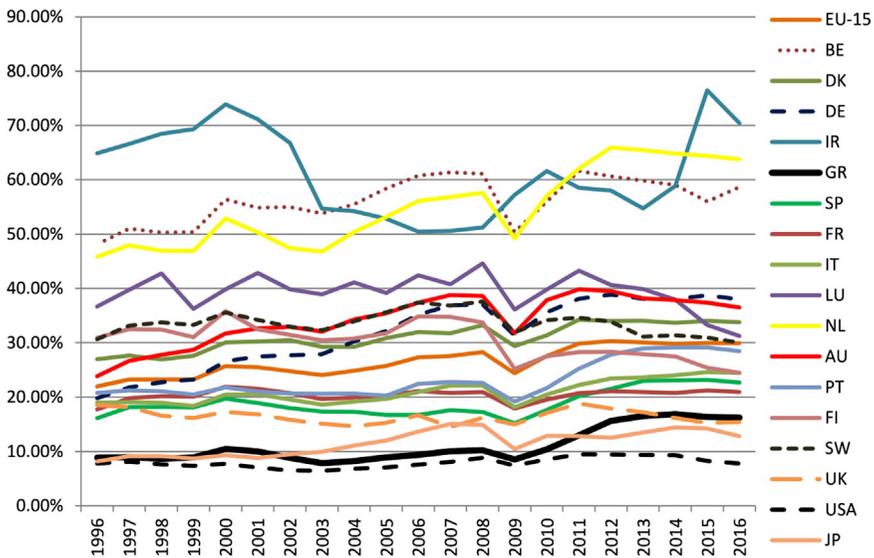


Figure 3.19 Export performance of the Greek economy, 1996–2016

Source: AMECO, using UVGD and UXGN (national accounts), author's work. *Note:* Export performance – X/Y , where X are exports of goods and Y is GDP, in Mrd Euros, current prices.

United Kingdom and Spain (Fig. 3.19). At the opposite end lie the Benelux economies (Netherlands, Belgium, and Luxembourg) and the Irish. The picture for Greece changes after 2009 and the application of IMF policies, exceeding even that of the United Kingdom, by 2016.

Greece's low export performance occurs despite the fact that its exports rose over the decade (Fig. 3.20). The rise of exports is not significant, if compared against that of other EU partners, such as Ireland or Belgium (a country of similar population size) that offer a much better example of exporting economies (Fig. 3.21).

Greece's import penetration on the other hand exceeds that of France, Italy, United Kingdom, and Spain (Fig. 3.22) but does not significantly change over the years. Greece is one of the few cases of states where import penetration ranks the country at higher positions from export penetration, throughout the entire period studied.

Similarly, Greece's openness in international markets is the lowest amongst all EU partners (Fig. 3.23). This behavior resembles that of the United States and Japan, two monetary independent states, not integrated into a larger family of states.

The Balassa indexes (for 1994, 2002, and 2006) offer a picture of Greece rather different from the rest of EU Cohesion-4 states (Fig. 3.24). Greece appears to have a more serious problem in the case of products of medium and high technology, and a negative Balassa index for almost all products, irrespective of technological degree. The Balassa indexes improve for high and medium technology products but

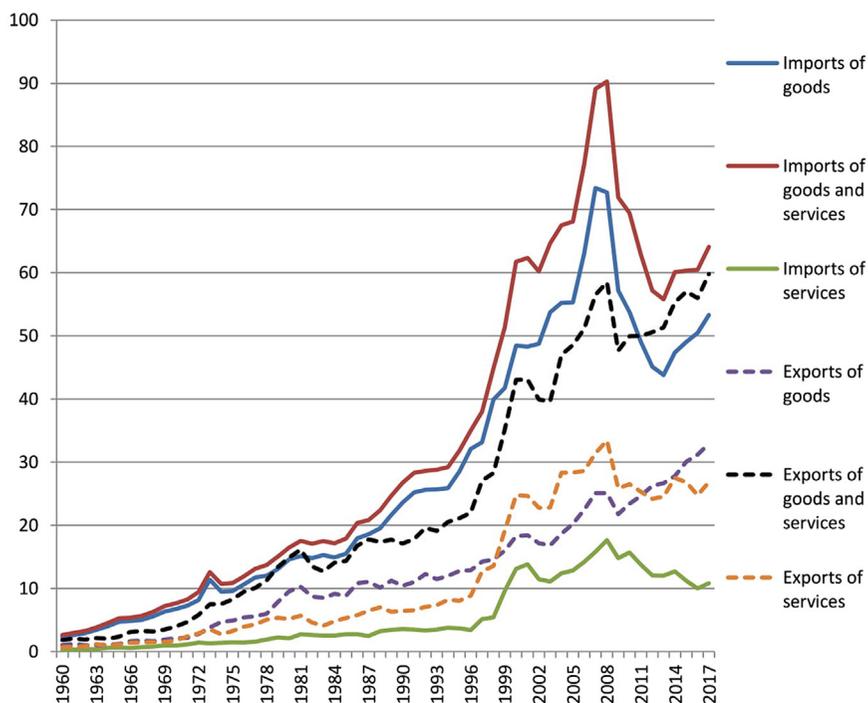


Figure 3.20 Imports and exports, goods, services, goods and services, 1960–2017.

Source: AMECO, variables used are: Imports of goods at 2010 prices (OMGN), Imports of goods and services at 2010 prices (OMGS), Imports of services at 2010 prices (OMSN), Exports of goods at 2010 prices (OXGN), Exports of goods and services at 2010 prices (OXGS), Exports of services at 2010 prices (OXSN). *Note:* Data for 2017 are estimates, variables are constant 2010 prices.

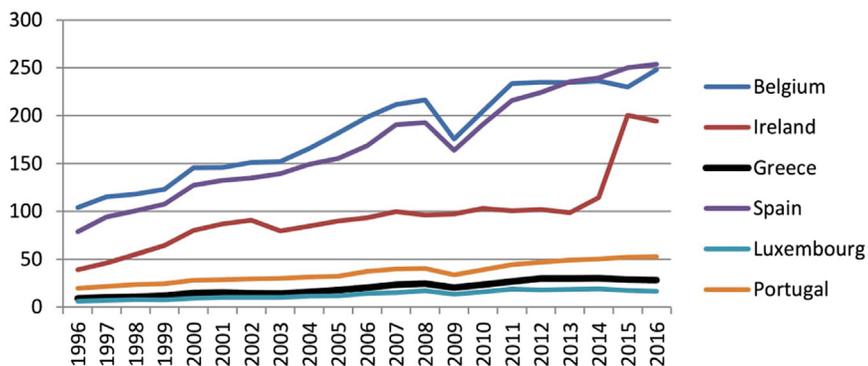


Figure 3.21 Exports of goods, current prices, selected Eurozone countries, 1996–2016.

Source: Eurostat, UXGN.

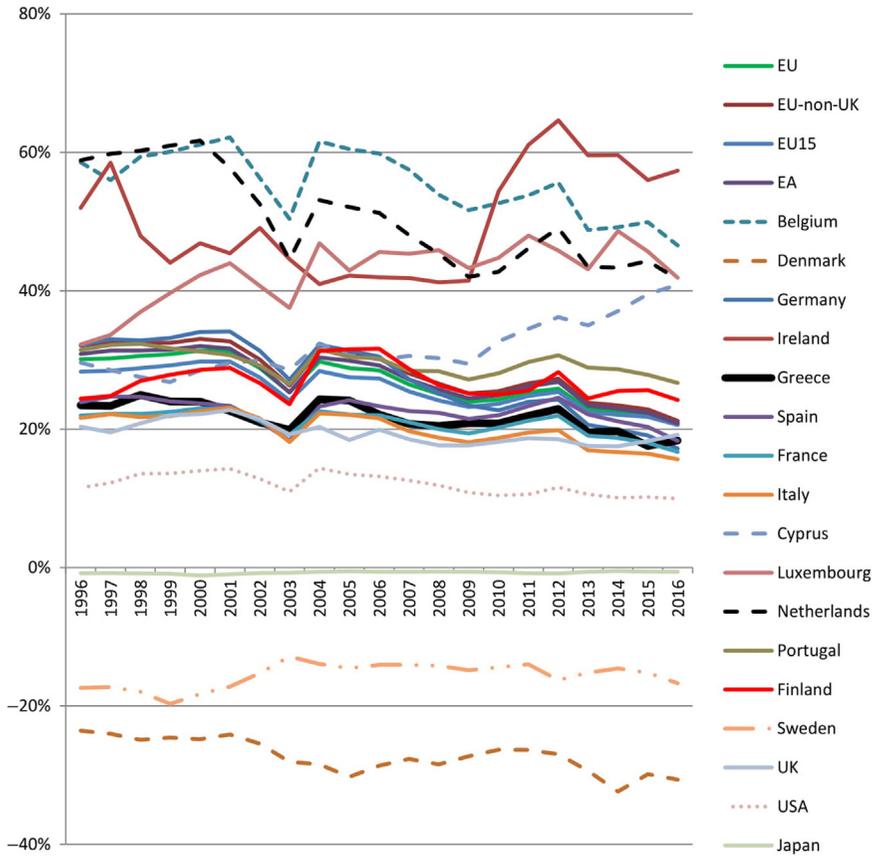


Figure 3.22 Import penetration, 1996–2016.

Source: AMECO, UMGN (imports of goods, current prices), UXGN (exports of goods, current prices), UVGD (GDP, current prices), author's work. *Note:* Import penetration: M/DD , where $DD = Y + M - X$ is the domestic demand and X , M and Y are the exports of goods, imports of goods and GDP respectively, in Mrd Euros, current prices.

remain negative, as opposed to states like Ireland, where almost all values are positive and get higher values (Fig. 3.24).

Similarly, in the structure of Greek exports for the years 2000, 2008, and 2016 (the year before entering the Eurozone, the year before the advent of the crisis, and the most recent year of crisis, respectively), in proportional terms, most exports of the Greek state derive from primary products (Fig. 3.25). The difference between exports of primary products and exports of products of more advanced levels of technology integration is significant, much more extended than in the case of other Cohesion-4 countries. The application of IMF policies appears to benefit exports of primary goods rather than of goods of enhanced forms of technology. As such, the structure of the Greek exports is rather deteriorating in terms of degrees of

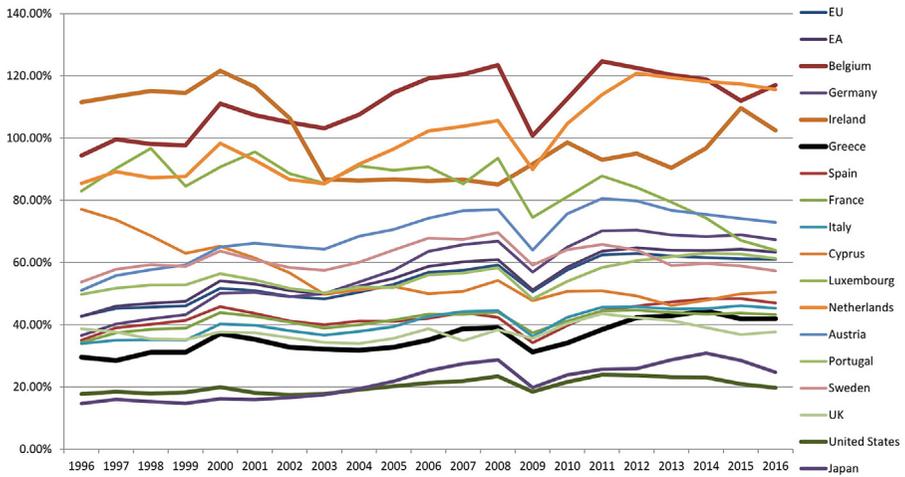


Figure 3.23 Openness in international markets of the Greek economy, 1996–2016. *Source:* AMECO data, author’s work. *Note:* Openness: $(X + M)/Y$, where X , M and Y are exports of goods, imports of goods and GDP respectively, in Mrd Euros, current prices.

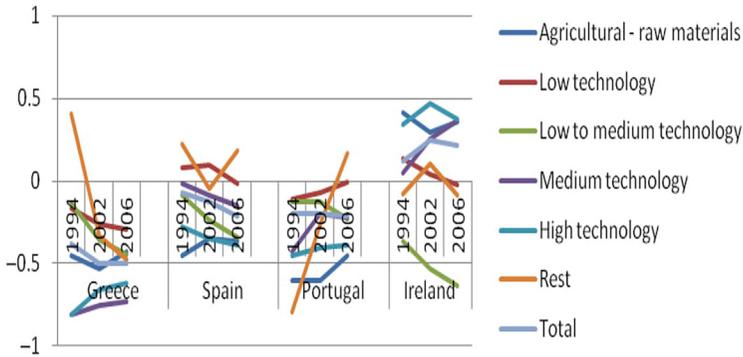


Figure 3.24 Balassa Indexes, Cohesion-4 states, 1994, 2002, and 2006, for various types of products. *Source:* Data (calculated indexes) extracted from Giannitsis (2008), p. 391, author’s work.

technology. It is indicative that in 2016, Greece’s exports of primary products exceed by far those of all other types of products of various degrees of integrated technology. Again, this practically indicates the loss in competitiveness. The comparison with Italy, Ireland, Spain, as well as Portugal, where medium technology goods are at similar levels with primary goods reveals the problem in the Greek exports (Fig. 3.25).

By looking at Fig. 3.26, the picture for imports of goods for the three different years selected (2000, 2008, and 2016) shows that Greece’s imports of primary

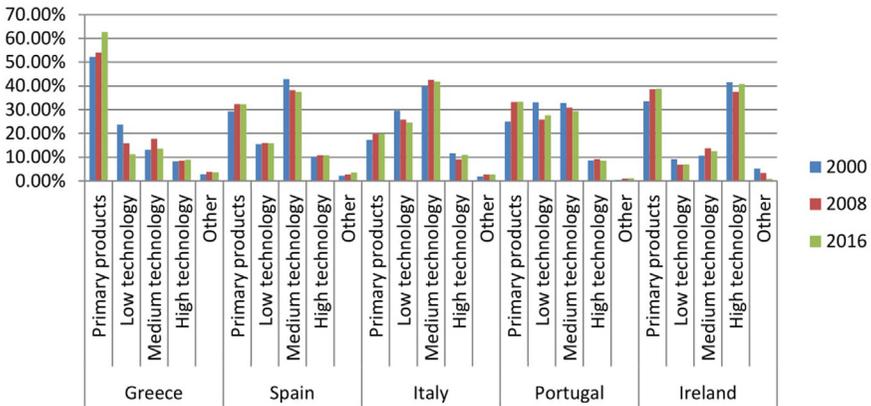


Figure 3.25 Exports of goods, Greece, Spain, Italy, and Portugal, by degree of technology integrated, 2000, 2008, and 2016.

Source: Eurostat (EU trade since 1988 by SITC), using the Standard International Trade Classification-SITC, Revision 3 (collected from UNCTAD classification, available at <http://unctadstat.unctad.org/EN/Classifications.html>).

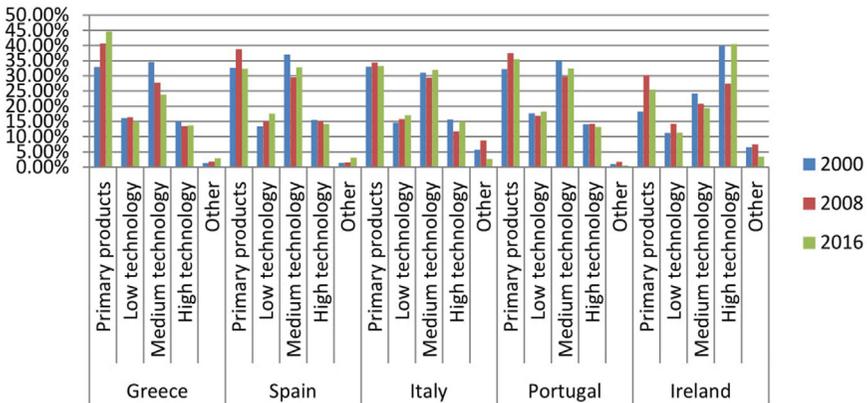


Figure 3.26 Imports of goods, Greece, Spain, Italy and Portugal, by degree of technology integrated, 2000, 2008, and 2016.

Source: Eurostat (EU trade since 1988 by SITC), using the Standard International Trade Classification -SITC, Revision 3 (collected from UNCTAD classification, available at <http://unctadstat.unctad.org/EN/Classifications.html>).

products have increased almost one-third from 2000 to 2016. The imports of goods of medium technology were high in the year 2000 but fell, while those of low and high technology remained at almost similar levels in the three indicative years selected. It is obvious that the years of the crisis bring a larger trade of goods in primary products, both in terms of imports and exports.

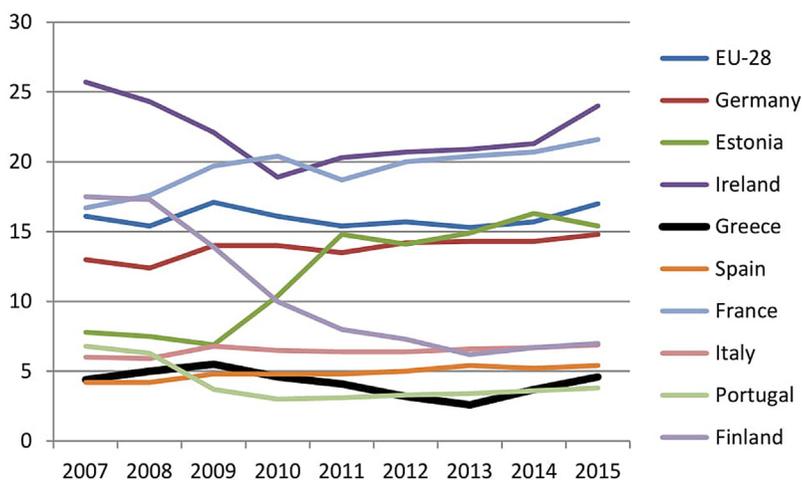


Figure 3.27 High tech exports, as % of exports.

Source: Eurostat, Code: tin00140, extracted 17.11.2017.

If Fig. 3.25 and Fig. 3.26 seen in combination, the structure of Greek imports and exports reveals the lack of technology integration in products produced in Greece. In particular Greece's high tech exports as a percentage of its total exports place the country in one of the worst positions in relation to other EU partners and the EU-28 (Fig. 3.27). Clearly the country's businesses have failed to take advantage of the years of the crisis to become an exporter of high tech products.

In Fig. 3.28, employment in high technology and medium to high technology manufacturing, as well as in knowledge-intensive services is much below the EU-28, and the levels found in Germany, Finland, Estonia, and other Southern EU states.

Similarly, in Fig. 3.29, the number of people employed in ICT as a percentage of total employment is one of the lowest in Greece and remained the same during the crisis. With fewer people working in the ICT sector, as a percentage of the total, it is natural to expect that the Greek products do not incorporate higher levels of technology and do not manage to compete with the products produced by other countries in the European and international markets.

Finally, the problem of underinvestment of activities that relate to higher technology can be traced in the limited contribution of venture capital investments, as a percentage of GDP, an index where Greece's performance is far above other European states (Fig. 3.30).

As % of GDP, Greece's balance of goods has continuously been negative (Fig. 3.31). It is the balance of services that has been positive, from an economy that progressively enhanced its service-oriented character, as explained before. The balance of goods and services though was also negative, as was the balance of current transactions and the balance of fuel (revealing the dependence of Greek production from energy imports). After the crisis, the picture is slightly changing, with

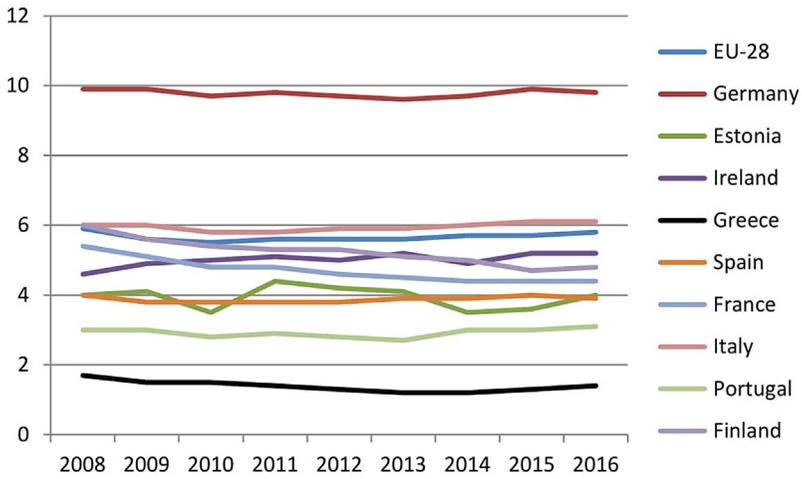


Figure 3.28 Employment in high- and medium-high-technology manufacturing and knowledge-intensive services, as % of total employment.
 Source: Eurostat, code: tsc00011, extracted 17.11.2017.

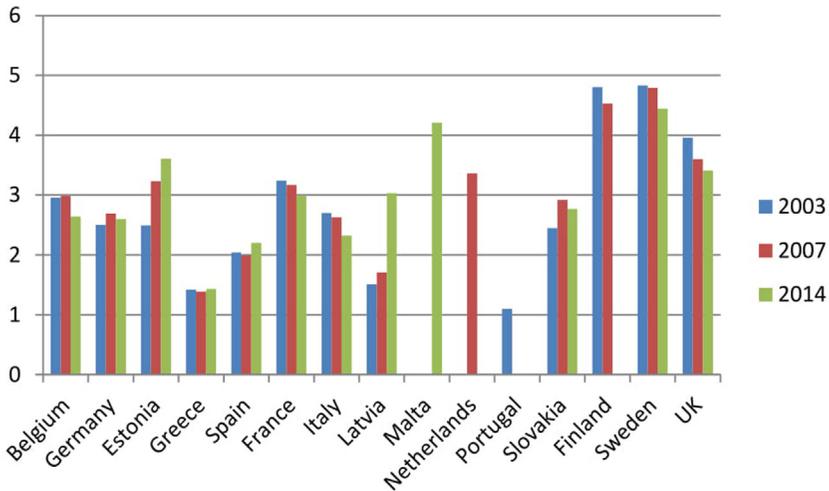


Figure 3.29 Number of people employed in ICT sector, as % of total employment.
 Source: Eurostat. Note: Nonavailable data were either confidential or missing. The rest of values for the country can be considered as indicative of their percentage levels. For 2014 in particular, data for Greece, Spain, and France are provisional.

improvements made in the balance of goods, of current transactions, of goods and services, of services and the current account. All these changes show an improvement in the international position of the economy, although, as explained, most of

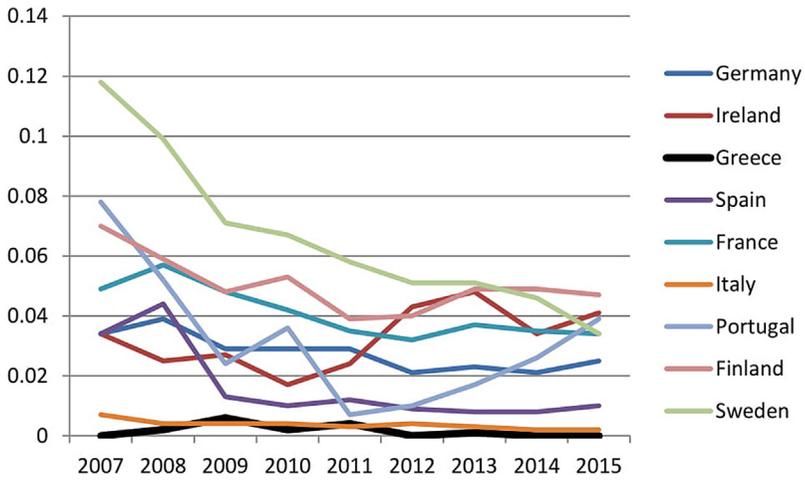


Figure 3.30 Venture capital investments, as % of GDP.

Source: Eurostat, Total Venture Capital (code: VENTURE, tin00141), extracted 11.12.2017.

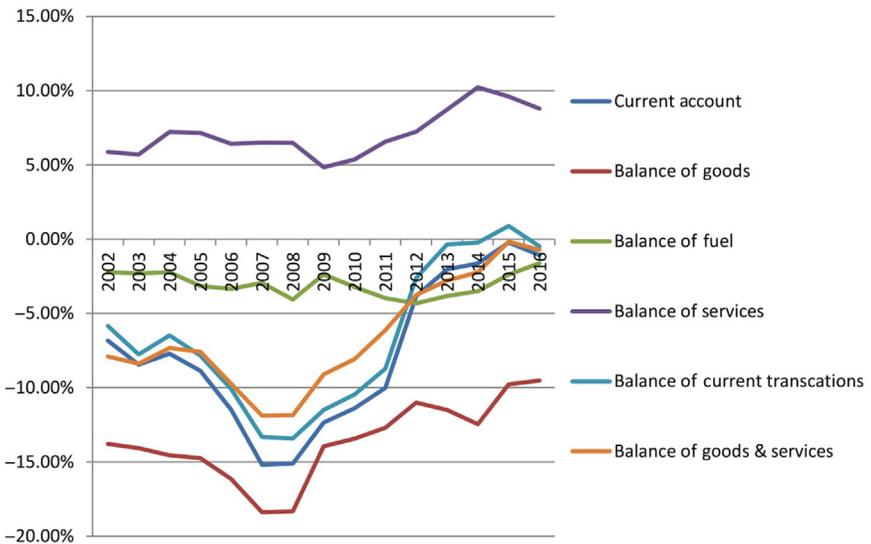


Figure 3.31 Current account Balance, Balance of Goods, balance of fuel, Balance of services, Balance of current transactions, Balance of goods and services, as % of GDP, 2002–16.

Source: Bank of Greece and Hellenic Statistical Services.

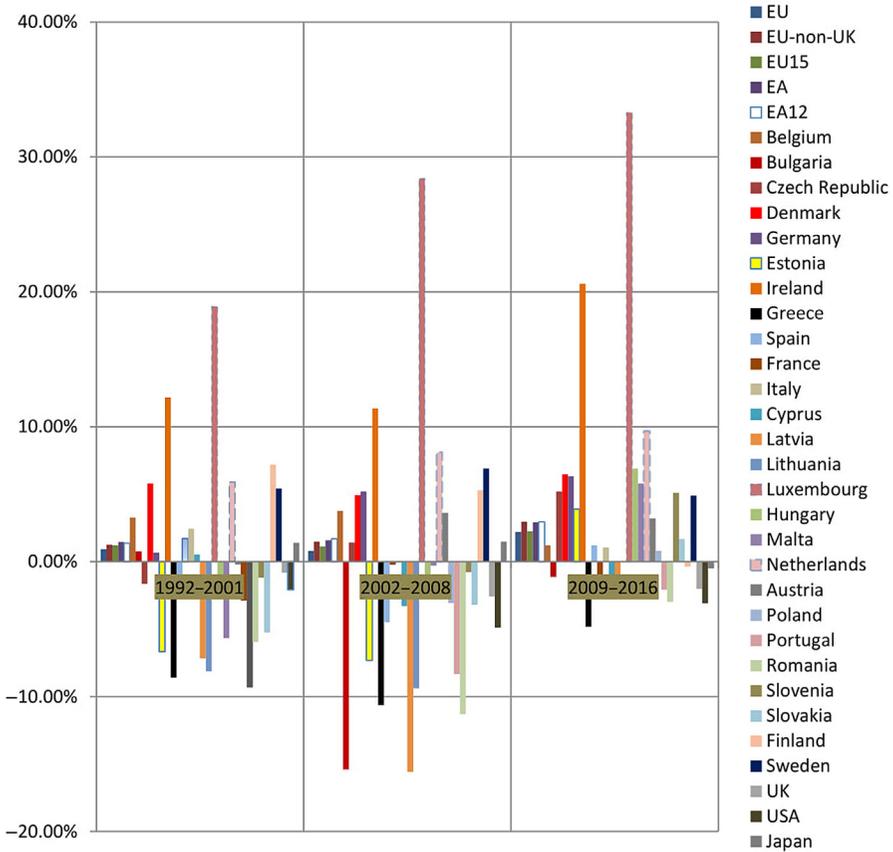


Figure 3.32 Trade Balance, as % of GDP, in EU states, United States and Japan, 1992–2001, 2002–08, 2009–16.

Source: AMECO series Gross domestic product at current prices (UVGD). *Note:* For EU, EU without United Kingdom (EU-non-UK), EA-19, Estonia and Slovakia data were available since 1993, instead of 1992. The sequence of states per period is the same with that appearing in the legend.

the exports of goods derive from primary products, of low technological integration.

In comparison to the other EU states, especially Luxembourg, Ireland, and the Netherlands, the Greek economy should be grouped into those economies having negative trade balance as a percentage of their GDP (Fig. 3.32). Greece forms part of a group mostly composed of the less advanced EU states, such as Bulgaria, Estonia, Latvia, Lithuania, Romania, as well as Portugal (the United States and United Kingdom are also negative). As illustrated in Fig. 3.32, most of these states (even Bulgaria and Latvia) improve substantially their position in the postcrisis

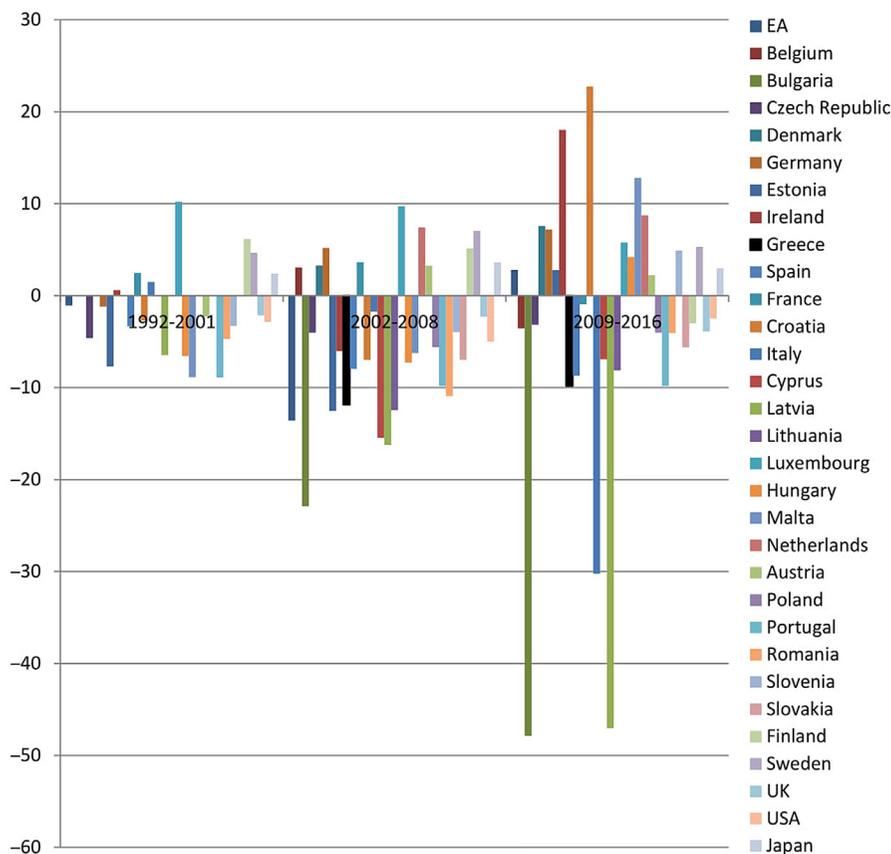


Figure 3.33 Current Account Balance in EU countries and other states, 1992–2001, 2002–08, 2009–16.

Source: AMECO series (BPM6), weighted average for the study periods, using the formula: $(\sum_{i=1}^n w_i x_i) / (\sum_{i=1}^n w_i)$, where w_i : CA in current prices and x_i : CA as % GDP. *Note:* Data for Greece were available since 2002. Data were available since 1992 only for Germany, Sweden, and United States. They started in 1993 for Czech Republic and Estonia, in 1994 for Spain, in 1995 for Italy, Luxembourg, Malta, Hungary, Austria, Finland, and Slovenia, in 1996 for Portugal and Japan, in 1997 for the United Kingdom, in 1998 for Ireland, in 1999 for EA, France, and Romania, in 2000 for Latvia and Croatia, in 2002 for Greece, in 2003 for Belgium, in 2004 for Lithuania, Netherlands, Poland, and Slovakia, in 2005 for Denmark, in 2007 for Bulgaria, in 2008 for Cyprus.

period (2009–16), while Greece, even if it has improved (as previously diagnosed), remains at the highest negative trade balance as a proportion of its GDP.

Similarly, Greece's current account balance as a percentage of its GDP has been deteriorating more than any other EU partner. It was exceeded only by Bulgaria, Latvia, and Italy and other former C.E.E. countries, especially in the 2009–16 period. Figure 3.33 illustrates a divergence between European states, with Greece being part of the group of countries that remain at a negative position.

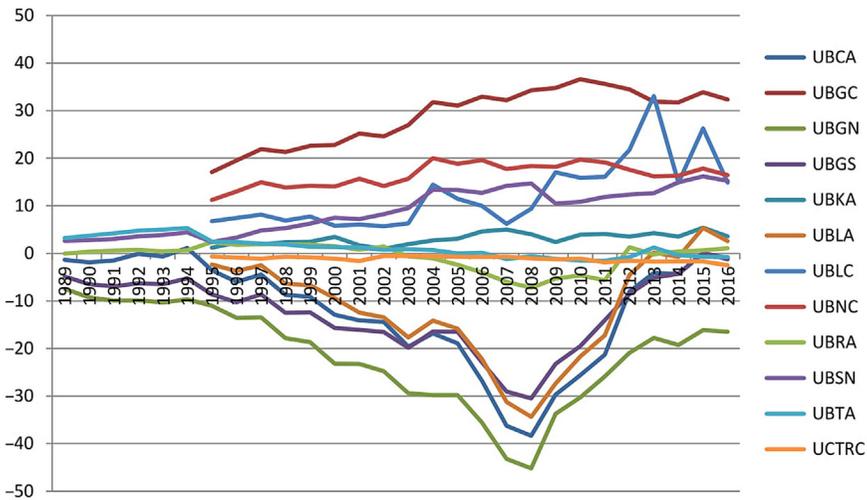


Figure 3.34 Balance of Payment variables, Greece, 1989–2016.

Source: AMECO series, Mrd EURO/EUR (2010 = 100). *Note:* UBKA: Balance on current transactions with the rest of the world (National accounts). UBGC: Gross balance of primary income, corporations. UBGN: Net exports of goods at current prices (National accounts). UBGS: Net exports of goods and services at current prices (National accounts). UBKA: Net capital transactions with the rest of the world (National accounts). UBLA: Net lending (+) or net borrowing (-): total economy. UBLC: Net lending (+) or net borrowing (-): corporations. UBNC: Net balance of primary income, corporations. UBRA: Net primary income from the rest of the world (National accounts). UBSN: Net exports of services at current prices (National accounts). UBTA: Net current transfers from the rest of the world (National accounts). UCTRC: Net current transfers received: corporations. For some variables data in AMECO series are not available for Greece for some years.

In Fig. 3.34, Greece is moving away from the horizontal axis in almost all international trade variables. The balance of current transactions with the rest of the world, gross balance of primary income (for corporations), net exports of goods, and net borrowing for the full economy, respectively, have fallen significantly after 1995 (UBCA, UBGN, UBLA, and UBGS). This illustrates Greece's problem in exports that were boosted by the increase in domestic demand (that occurs through the rise of GDP, both for consumption and investment purposes), as well as an indebtedness problem, primarily for the public sector that increases its borrowing.

3.10 Tracing the prospect of convergence; wishful thinking and reality

Convergence ought to be considered across several angles. National convergence to other state's economies differs from regional convergence among European regions or regional convergence among Greek regions only. Regional convergence has been assessed in the case of Greece at the level of 13 regions and that of 54 prefectures, which are no longer in operation as administrative units.

The crisis has hit the economy to such an extent that one observes a dichotomy of convergence processes and efforts made and advanced before and after its starting year. As national malaise spreads across the regions, at any regional levels (NUTS 1, NUTS2, or NUTS3), the effects of the crisis naturally bring divergence with other European regions, a process similar to that taking place at the national level. Thus, somehow the crisis brings a reversal of the whole academic debate on regional convergence, since the crisis period, and the associated recession and austerity, have brought the Greek regions to a similar position with that recorded much earlier in modern Greek history; as if the regional policies pursued were all conducted in vain. Fig. 3.35 illustrates the shrinking process of Greek regional GDP per capita, which in practice is a process of divergence if compared against other European regions. The geographical level selected (NUTS I) is indicative.

Fig. 3.35 shows that within a time period of two programming periods, and despite all efforts and policies implemented for the regions, the Greek macroregions have finally returned to levels similar to those found at the beginning of the 2000–07 period, i.e., their starting point when Greece joined the Eurozone. Thus, it is worth asking if policies at the geographical level have actually managed to promote and sustain regional convergence with the rest of European regions, especially at a common currency environment, or whether they are just a wishful thinking, far from the reality.

One also observes in Fig. 3.35 a few more points: While the Greek macroregions (NUTS 1) follow a trajectory of rising growth over 2000–08 similar to each other, they also all fall together, with a similar decreasing growth trajectory after 2008. It is obvious that Attiki is the wealthier region in GDP per capita terms and that a great part of the Greek territory comprising Central and Northern Greece (“Kentriki Ellada” and “Voreia Ellada”) is lagging significantly behind. The two macroregions appear to converge in their shrinking pattern. What is more, GDP per capita in

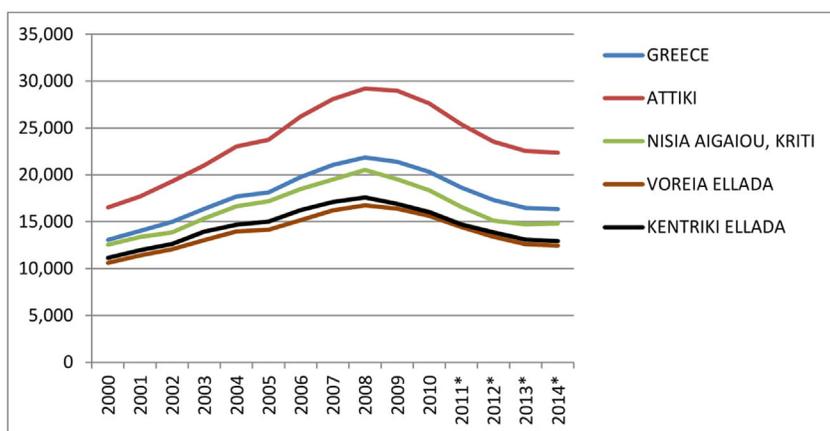


Figure 3.35 Regional GDP per capita, in Euros, current prices, macroregions (NUTS I). *Source:* Hellenic Statistical Services, 17/11/2017, regional dataset. *Note:* estimates in asterisks (regional datasets produced with significant time delays).

Aegean islands and Crete (“Nisia Aigaiou, Kriti”) appear to shrink faster and diverge more than the Greek average, toward the levels of Central and Northern Greece.²⁰ The crisis does not alter significantly the pattern of regional divide between Attiki and the other three macroregions.

Some studies on regional convergence view the period before and after the start of the crisis as one and reach conclusions for the state of regional convergence in the Greek regions by considering a part of a postcrisis period (e.g., in Petrakos and Psycharis, 2014). Even the most recent policy documentation suggests that despite more than 30 years of application of EU Cohesion policies, Greece’s distance from the European centers of economic activity and the specific geographical features of the Greek land act as market failures (Ministry of Finance and Competitiveness, 2014).

For Greek regions and prefectures that were lagging behind ever since Greece joined the EEC in 1981, a recent review of relevant literature offers a rather conclusive evidence for β -convergence but is inconclusive for σ -convergence, for different parts of the studied period (Exarchou and Chionis, 2016).²¹ Benos and Karagiannis (2008) suggested β -convergence only for the Greek prefectures and not the Greek regions and no evidence of σ -convergence at both levels for the 1971–2003 period. Recent evidence for β -convergence²² and weak σ -convergence was also provided at EU level (Petrakos and Psycharis, 2014).²³

In terms of regional production structure, as illustrated in [Table 3.28](#), the vast majority of production still takes place in the region of Attiki (at NUTS 2 level). With the exception of agriculture, production in Attiki ranges from one-third of total Greek production to more than two-thirds in some services, such as ICT or financial and insurance services. Attiki benefited from a higher proportional allocation for some particular services during the crisis, e.g., for professional, scientific, and technical activities and increased its proportional allocation in agriculture, forestry, and fishing. With the notable exception of agriculture, half or more than half of the Greek production is located in two regions, Attiki and Kentriki Makedonia. A core–periphery divide remains present in production terms and has not been amended by the long-term application of EU Cohesion Policies.

Based on evidence provided through [Figs. 3.36–3.38](#), one can hardly suggest the convergence of the Greek to the EU economy, as a whole. Ever since Greece lost its twofold capacity to apply a monetary policy and use the automatic currency

²⁰ Keep in mind data are estimates after 2011 (see Note in [Fig. 3.36](#)).

²¹ See also a short review and analysis in Exarchou and Chionis (2016) *The Regional Problem and Regional Disparities after the end of the 3rd CSF*, 111–117 in *Regional Effects of the Recession of the Greek economy and its consequences*, 19th Scientific Conference of the Greek Society of Regional Scientists, 12–13 May 2016, Lamia. Also see in Lolos (2009) for 1990–2005 and Benos and Karagiannis (2007) for 1971–2003.

²² β -Convergence relates to the neoclassical model.

²³ See in Petrakos and Psycharis (2016) The authors, after examining data for the 1995–2010 period, have suggested that more than 40 years are needed to reduce half of the development gap between more and less advanced EU regions.

Table 3.28 Production structure across regions, 2001/2007/2014, current prices turned to percentages

		Attiki	Voreio Aigaio	Notio Aigaio	Kriti	Anatoliki Makedonia, Thraki	Kentriki Makedonia	Dytiki Makedonia	Ipeiros	Thessalia	Ionia Nisia	Dytiki Ellada	Sterea Ellada	Peloponnisos
Agriculture, forestry and fishing	2001	3.8	2.5	1.9	8.3	8.6	20.4	3.6	4.7	12.3	1.7	11.6	10.9	9.6
	2007	5.6	1.8	2.4	9.7	8.1	20.4	3.8	4.2	11.5	1.8	11.5	9.6	9.6
	2014	5.2	1.9	2.3	7.9	7.4	19.9	4.1	4.8	14.1	1.6	11.3	9.7	9.8
Mining and quarrying— Manufacturing— Electricity, gas, steam and air conditioning supply	2001	35.0	0.4	1.4	2.6	4.7	16.7	6.1	1.5	5.4	0.4	4.0	14.7	7.1
	2007	35.6	0.6	1.3	2.7	4.5	16.2	6.6	1.6	6.3	0.5	5.2	11.8	7.0
	2014	35.2	0.7	1.5	3.3	4.4	15.1	9.3	1.8	5.8	0.4	3.9	11.6	6.9
Water supply, sewerage, waste management and remediation activities	2001	50.1	0.5	3.2	3.7	4.6	17.8	1.8	3.4	4.0	1.7	3.0	4.1	2.3
	2007	50.8	1.0	3.4	3.9	4.9	15.4	1.8	3.5	4.1	1.8	3.4	3.5	2.6
	2014	46.9	1.1	3.8	4.8	4.5	14.2	2.5	2.5	6.8	1.9	3.8	3.8	3.3
Construction	2001	41.0	1.3	4.2	5.5	5.2	12.0	3.1	3.6	5.4	1.8	6.4	5.8	4.8
	2007	43.3	1.4	4.2	6.0	4.0	12.1	3.1	3.6	5.0	1.7	5.7	5.5	4.5
	2014	37.0	2.0	5.2	5.6	4.6	13.2	2.5	4.7	6.5	2.0	5.8	4.7	6.1
Wholesale and retail trade, repair of motor vehicles and motorcycles	2001	45.0	1.5	3.0	5.4	3.9	17.6	1.6	2.3	5.2	1.8	4.7	3.6	4.3
	2007	45.0	1.5	3.0	5.4	3.9	17.6	1.6	2.3	5.2	1.8	4.7	3.6	4.3
	2014	50.0	1.1	2.5	4.7	3.4	16.8	1.4	2.2	4.3	1.6	4.2	3.5	4.2
Transportation and storage	2001	51.3	1.6	8.0	5.1	3.4	7.3	0.6	1.8	3.9	3.7	6.3	4.4	2.5
	2007	51.0	1.6	7.6	5.2	3.4	8.0	0.7	1.8	3.9	3.5	6.2	4.4	2.7
	2014	54.8	1.4	6.5	4.8	3.4	8.4	0.6	1.9	3.3	3.1	5.4	4.0	2.4
Accommodation and food service activities	2001	22.5	2.9	16.4	12.1	4.5	12.4	1.4	2.8	4.3	9.1	3.2	3.6	4.8
	2007	24.4	2.6	13.0	13.3	3.8	13.8	1.3	2.7	4.9	9.0	3.6	3.4	4.3
	2014	29.4	2.1	15.2	14.0	3.2	12.2	1.1	2.3	4.0	6.6	3.1	2.9	4.0
Information and communication	2001	74.5	0.8	1.1	2.4	2.0	7.5	0.8	1.0	2.0	0.7	2.9	1.7	2.4
	2007	74.5	0.8	1.1	2.4	2.0	7.5	0.8	1.0	2.0	0.7	2.9	1.7	2.4
	2014	74.0	0.8	1.0	2.7	1.8	8.8	0.7	1.0	1.7	0.6	3.4	1.5	2.1
Financial and insurance services	2001	68.2	0.9	1.6	3.2	2.5	10.1	1.1	1.4	2.9	0.9	2.9	2.0	2.4
	2007	68.7	0.9	1.6	3.2	2.4	10.1	1.0	1.3	2.7	0.8	2.9	2.0	2.4
	2014	69.6	0.9	1.4	3.6	2.1	10.1	1.0	1.3	2.5	0.9	2.5	1.7	2.3
Real estate activities	2001	59.9	1.3	2.3	3.5	2.4	10.4	1.3	1.9	4.0	1.5	4.2	3.1	4.1
	2007	59.8	1.3	2.3	3.5	2.6	10.3	1.3	1.9	4.0	1.5	4.2	3.1	4.1
	2014	58.9	1.3	2.5	3.6	2.7	10.8	1.2	1.9	3.9	1.6	4.2	3.2	4.2

(Continued)

Table 3.28 (Continued)

		Attiki	Voreio Aigaio	Notio Aigaio	Kriti	Anatoliki Makedonia, Thraki	Kentriki Makedonia	Dytiki Makedonia	Ipeiros	Thessalia	Ionia Nisia	Dytiki Ellada	Stereia Ellada	Peloponnisos
Professional, scientific and technical activities	2001	62.3	0.7	1.5	3.8	2.9	13.4	1.1	1.4	3.9	0.9	2.8	2.4	2.8
	2007	62.6	0.7	1.5	3.8	2.9	13.0	1.2	1.4	3.9	1.0	2.8	2.3	2.8
	2014	71.4	1.6	1.3	3.0	1.5	9.4	1.2	1.2	2.0	0.9	3.3	1.6	1.7
Administrative and support service activities	2001	69.8	0.9	1.9	3.2	2.1	10.4	1.1	1.3	2.5	1.2	2.3	1.6	1.8
	2007	69.3	0.9	2.0	3.3	2.1	10.4	1.1	1.3	2.6	1.2	2.3	1.7	1.8
	2014	67.5	0.6	2.9	5.6	2.1	11.0	0.5	1.0	2.0	1.7	1.8	1.9	1.5
Public administration and defence—	2001	46.6	1.8	2.7	5.1	4.5	12.4	2.1	3.0	6.3	1.7	5.3	4.0	4.4
Compulsory social security	2007	48.6	1.7	2.7	5.1	4.4	11.7	2.1	3.0	6.0	1.6	4.7	4.0	4.3
	2014	45.6	2.9	2.8	4.0	6.4	13.5	2.1	2.4	6.5	1.2	5.0	4.0	3.8
Education	2001	42.4	1.5	2.6	4.8	6.9	16.0	2.1	2.8	6.0	1.5	6.2	3.4	3.8
	2007	40.4	1.3	2.5	4.9	7.1	17.3	2.0	2.9	6.4	1.5	6.1	3.4	4.1
	2014	40.8	1.5	2.1	4.9	6.0	18.4	2.4	3.3	6.7	1.3	5.7	3.1	3.8
Human health and social work activities	2001	48.1	1.4	2.1	3.8	4.1	17.0	1.3	3.7	6.0	1.4	4.1	3.8	3.1
	2007	49.5	1.3	1.9	3.2	4.3	15.9	1.1	4.1	5.4	1.3	4.6	3.6	3.9
	2014	47.4	1.5	1.8	4.8	4.3	14.6	1.5	2.9	7.4	1.3	5.5	2.4	4.5
Arts, entertainment and recreation—Other service activities-	2001	45.8	1.2	2.4	4.7	3.8	17.4	2.1	2.4	5.9	2.1	4.7	3.2	4.3
Activities of households as employers; undifferentiated goods and services producing activities of households for own use	2007	51.5	0.7	2.7	4.7	3.2	15.2	1.8	1.8	4.7	1.5	4.8	3.1	4.1
	2014	45.6	1.1	2.7	6.2	3.2	17.0	1.2	1.9	5.3	1.9	6.3	2.6	4.8
Activities of extraterritorial organizations and bodies	2001	45.4	1.3	3.4	4.9	4.2	14.0	2.3	2.4	5.3	1.9	4.9	5.5	4.5
	2007	45.3	1.3	3.3	5.0	4.1	14.1	2.3	2.4	5.3	1.9	4.9	5.4	4.5
	2014	48.3	1.4	3.4	4.9	3.9	13.3	2.4	2.2	5.1	1.7	4.6	4.4	4.3

Source: Hellenic Statistical Services, 17/11/2017, regional dataset.

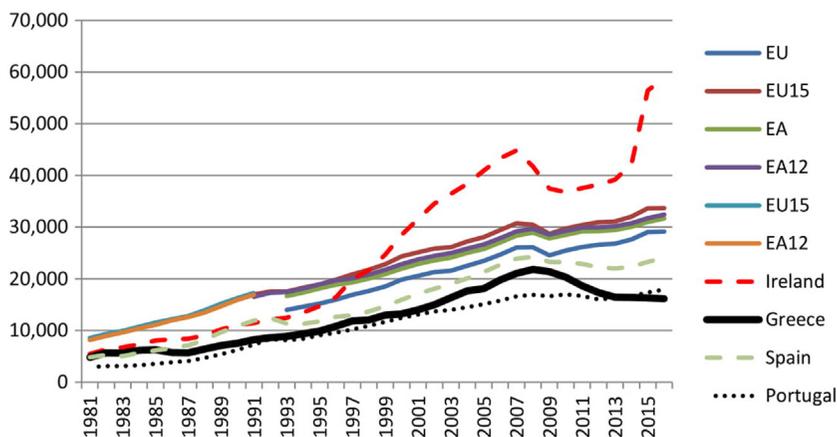


Figure 3.36 GDP per head, current prices, EU, Eurozone, Greece, and selected partners (Cohesion-4), 1981–2014 (in thousands of Euros).

Source: AMECO series, variable HVGDP. *Note:* GDP levels not adjusted for inflation, EU stands for the European Union, EA for Euro Area and EA(&L) for Euro Area plus Lithuania. EA&L are the Eurozone states including Lithuania that have recently joined.

exchange mechanism, its GDP growth rates have started to fluctuate, in the 2003–05 period, and then to fall (Fig. 3.38).

Clearly, Greece's GDP per head has risen since 1981 (Fig. 3.36). This increasing trend does not differ much from a similar trend observed both at the EU and Eurozone level. Ireland has benefited from a much stronger rise in GDP per capita. Policies implemented by the Irish state over the years. The growth model that Ireland has followed was based on private sector activity, FDI attraction and entrepreneurship and has managed to bring a distinct converging outcome. The rise of Irish GDP per capita has reached a peak in 2007, at €44,700, while Greece's peak in 2008 is at €21,600 only. This highlights a process of divergence,²⁴ at least between these two economies. In comparison to the Irish, the Greek economy has accelerated at a much slower pace.

The picture for GDP levels (illustrated in Fig. 3.38) is different. In all Cohesion-4 economies, GDP levels have multiplied by four times in market prices from 1981 to 2010. This emphasizes the success of EU cofunded policies to enhance GDP growth levels. However, while in the case of Spain the acceleration has been very high and abrupt, in Greece (along with Portugal) the acceleration has been more progressive until 2009. After 2009, a downward trend has appeared, where the accelerator has been dormant.

Greece's GDP growth rates have not sufficiently exceeded those of the rest of the EU (EU28 or EU27), or EU15, or those of Eurozone (EA18 or EA12) (Fig. 3.37). The picture for Greece is rather unstable and fluctuating. GDP growth

²⁴That should naturally be reflected also in wages and salaries.

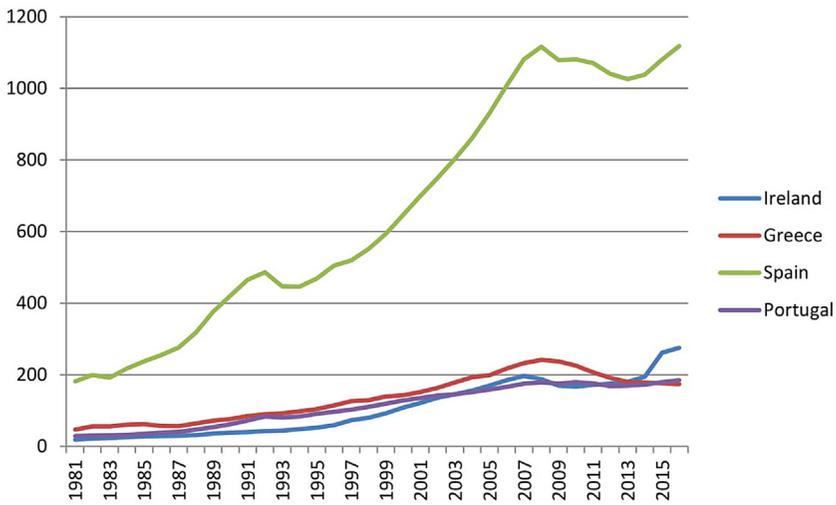


Figure 3.37 GDP at current market prices, EU, Eurozone, Greece and selected partners (Cohesion-4), 1981–2016 (in millions of €).

Source: AMECO series, variable UVGD.

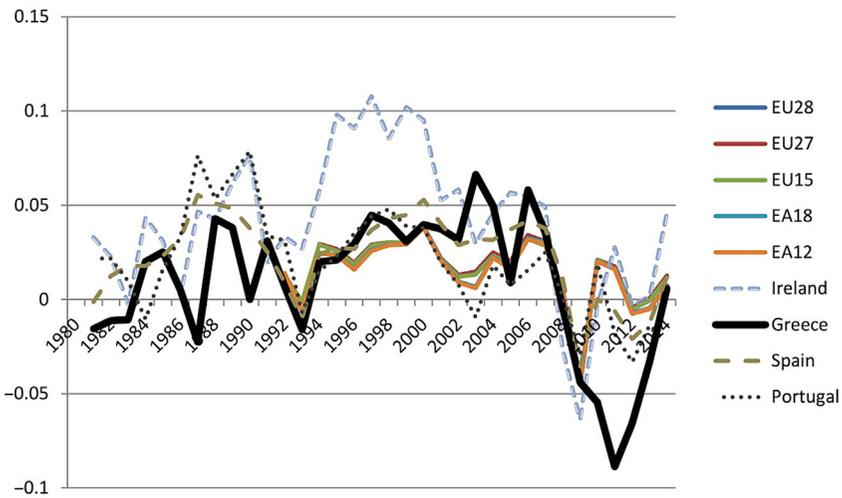


Figure 3.38 GDP growth rates, EU, Eurozone, Greece and selected partners (Cohesion-4), 1981–2014.

Source: AMECO series, variable OVGD (GDP at 2010 market prices), author’s calculations.

rates were low before 1988, started to rise from 1989 to 1993, have fallen between the 1st and 2nd programming period, and the country reached a steady growth rate from 1994 to 2002. Then, they reached two separate peaks, one in 2003 (6.6%, the highest growth record in the period studied) and one in 2006 (5.8%). Growth rates

have dramatically fallen after 2007 and the advent of the crisis significantly reduced the growth levels already accomplished. It is only Ireland that has achieved higher growth rates than Greece during the study period, while the rest of the Cohesion-4 countries have remained at similar levels of GDP growth rates.

In [Table 3.29](#), the OECD national accounts database is used to compare Greece against other OECD countries over the same period. Greece has underachieved more than any other state in terms of aggregate growth rate from 1981 to 2016 ([Table 3.29](#)). During this period, its GDP has risen only by 34%. In the rest of the Cohesion-4 countries, growth rates during the study period have been higher: in Portugal 88%, in Spain 124%, and in Ireland 451%. Even large economies, such as the United Kingdom, have managed to more than double their 1981 size by the year 2016. In comparison to states having similar to Greece's initial GDP sizes in 1981, such as Austria or even Belgium, Greece's rate of GDP growth has lagged significantly behind. In comparison to other non-EU OECD countries, such as Korea, Greece has followed a very moderate trajectory, even though it started from similar levels of GDP in 1981. In comparison to Norway or Switzerland (two countries with higher levels of GDP per capita), Greece has benefited less throughout the 1980s and the 1990s, the early periods of Greece's EU membership. [Table 3.29](#) also reveals that it is the only country that has not managed to recover after the crisis and that its high growth pace during the 2000s reached a peak in 2008.

Overall, from the comparative analysis of [Table 3.29](#), Greece's trajectory during its EU membership (for a small, open and peripheral economy choosing the path of integration deepening), appears to bring limited benefits in comparison to other states, precisely in a period when the opposite was expected to take place, and which coincided with the transfer of many EU funds to the Greek economy.

Concerning employment, total unemployment has risen since 1981 and significantly deteriorated after the crisis erupted ([Fig. 3.39](#)). It reached a peak of 1.33 million in 2013, more than nine times higher than 1981. From 1981 to 2009, employment has significantly risen and unemployment too but at relatively lower levels in comparison to employment.

Self-employment has remained a significant part of the total employment over the years. It has followed a rather stable pattern, and has substantially fallen only after 2009. But importantly, self-employment has been reduced in comparison to total employment, since the latter rises significantly during the same period.

Thus, the growth and development model followed over the years by Greece has fueled employment, has kept self-employment relatively stable but at high levels, and has brought a rise in unemployment in net terms, although not that significant.

Stable high self-employment levels are due to the overspecialization in various jobs, across many industries and in particular in services, the pressure of the middle-class to become self-employed, as they associate professional independence solely to their own business (e.g., for doctors, lawyers, mechanical, or other engineers), a special industrial structure in employment-intensive industries like tourism or trade that is mostly composed of self-employed, the rather limited social acceptance of a good entrepreneurial model and of managerial skills, various impediments to organize firms of larger scale, various market niches opened for micro,

Table 3.29 GDP (expenditure approach), constant prices (2010), PPPs and % rate of, selected years and periods

Countries	1981	1991	2001	2011	2015	2016	% 1981 –1991	% 1991 –2001	% 2001 –2011	% 2011 –2016	% 1981 –2016
Australia	375	490.8	719.3	972.7	1077.5	1103.8*	30.88	46.56	35.23	10.77	194
Austria	187.1*	242.1*	307.2	361.9	370.9	376.4	29.40	26.89	17.81	2.49	101
Belgium	244.3	304.4	376	445.1	459.4	464.9	24.60	23.52	18.38	3.21	90
Canada	682.2	837.3	1152.8	1403.9	1515.4	1537.7	22.74	37.68	21.78	7.94	125
Chile	–	116.3*	213.1	331	378	384	–	83.23	55.33	14.20	–
Czech Republic	–	178.8*	218.7	295.5	315.6	323.8	–	22.32	35.12	6.80	–
Denmark	137.4	172.4	223.2	242.2	253.1	257.4	25.47	29.47	8.51	4.50	87
Estonia	–	–	22.2	31	34.5	35.2	–	–	39.64	11.29	–
Finland	104.3	132	180.4	213.5	207.5	211.5	26.56	36.67	18.35	– 2.81	103
France	1334.9	1705.7	2117.5	2391.5	2458.4**	2487.6**	27.78	24.14	12.94	2.80	86
Germany	1927.5*	2536.9	2985.1	3328.3	3485.7	3553.4	31.62	17.67	11.50	4.73	84
Greece	190.4*	213.5*	274.4	285	256**	256**	12.13	28.52	3.86	– 10.18	34
Hungary	–	150.7*	182.3	218.4	235.5	240.1	–	20.97	19.80	7.83	–
Iceland	5.8*	7.3*	9.9	12	14	15	25.86	35.62	21.21	16.67	159
Ireland	53.7*	75.6*	154	203.5	281.5	296	40.78	103.70	32.14	38.33	451
Israel	65.2*	96.5*	160.8	231.1	261.2	271*	48.01	66.63	43.72	13.02	316
Italy	1361.4*	1737.8*	2051.5	2091.2	2019.3	2038.8	27.65	18.05	1.94	– 3.44	50
Japan	2438.3*	3804.5*	4222.9	4476.8	4706.9	4753.9	56.03	11.00	6.01	5.14	95
Korea	207.9	550.8	1,020.7	1560.7	1745	1794.3**	–	–	–	11.81	–
Latvia	–	–	27.1	39.2	43.9	44.8	–	–	44.65	11.99	–
Luxembourg	12.1*	21.4*	34.2	44.6	50.8	52.9	76.86	59.81	30.41	13.90	337
Mexico	926.1	1,061.2	1,432.1	1798	1990.2**	2036.1	–	–	–	10.69	–
Netherlands	374*	481.4*	664.6	753.1	771.4	788.4**	28.72	38.06	13.32	2.43	111
New Zealand	68.0	75.5	107.7	139.7	155.3**	161.5*	–	–	–	11.17	–
Norway	133.3	174.4	247.9	286.7	309.5	312.8	30.83	42.14	15.65	7.95	135
Poland	–	352.8*	552.8	842.5	930.9	955.9	–	56.69	52.41	10.49	–
Portugal	149.2*	211.1*	274	284	276.2*	280.1*	41.49	29.80	3.65	– 2.75	88
Slovak Republic	–	–	86.4	138.6	152.3	157.3	–	–	60.42	9.88	–

Slovenia	—	33.3*	45.1	57.3	58.1	59.9	—	35.44	27.05	1.40	—
Spain	679.5*	931.8*	1244	1474.9	1475.7**	1524**	37.13	33.51	18.56	0.05	124
Sweden	207.7*	254*	322.2	401.2	434.3	448.7	22.29	26.85	24.52	8.25	116
Switzerland	251.2	305.1	351.7	423.1	451.4	457.6	21.46	15.27	20.30	6.69	82
Turkey	375.7*	600.9*	801.4	1403.1	1779.7	1836.4	59.94	33.37	75.08	26.84	389
United Kingdom	1124.4	1496.3	1969	2277.2	2476.5	2521.3	33.08	31.59	15.65	8.75	124
United States	6,698.6	9,057.7	12,837.1	15,204	16,672.7	16,920.3	—	—	—	9.66	—
EA19	—	—	10,957.7	12,255.6	12,525.6	12,750.2	—	—	11.84	2.20	—

Note: In B\$ US, estimates used for some years only, denoted by asterisks.

Source: OECD, (VPVOB).

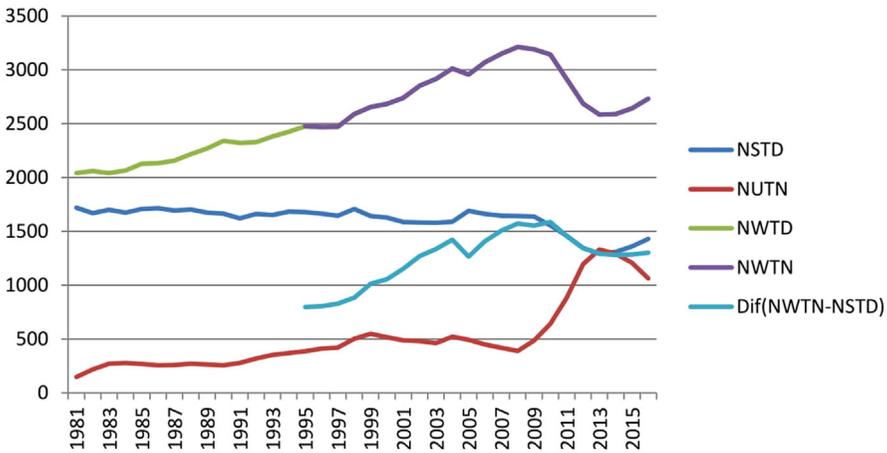


Figure 3.39 Employment and unemployment variables, Greece, 1981–2015.

Source: AMECO series, 1000 persons. Note: NSTD: Number of self-employed; total economy; NUTN: Total unemployment; NWTN: Employees, persons: all domestic industries; NWTN: Employees, persons: total economy Dif(NWTN-NSTD): Difference between NWTN and NSTD.

self-employment firms, the more general working conditions, job insecurity, and the lack of job insurance provisions by many employees.

The difference between unemployment and self-employment, which was at its highest when Greece has joined the EU, was only but slowly reduced over the years but violently changed after 2008, when a reversing pattern was placed in operation. Within only a few years of crisis, self-employment has fallen and reached a size similar to that of total unemployment, approximately 1.3 million in 2013 and 2014.

The numbers of employees rose significantly in 2009–10, both in all industries and in total. This should relate either to an increase in average business sizes or to average employment increases in the public sector. However, the difference between total employees and self-employees (Dif(NWTN-NSTD)) has increased from 1996 to 2010, showing a reversing pattern to the benefit of employees (rather than to that of self-employees and self-employment).

3.11 Public sector expenses

Table 3.30 provides information on the annual budget and its various components that represent main public sector expenses. The Programme of Public Investments in particular comprises funds received from EU sources and concerns the state's main development priorities. Total Public Expenses in pale blue the Table 3.30 are the sum of the Regular Budget and of the Programme of Public Expenses. From 2000 to 2009, the amounts devoted to development priorities through the Programme of Public Investments appear to follow a rather increasing pattern in net terms, though falling proportionately to Total Public Expenses (Table 3.30). Except for the year

Table 3.30 GDP and the expenses of total annual budget, per category (and for the Programm of Public Investments), Greece, in M€, 2000–08 and 2011–16

Year	GDP	Wages	Pensions	Hospital—private care	Insurance & social protection	Financing of agencies & institutions	Consumption expenses	Interests, loans, & other expenses	Regular budget	Programme of public investments	Total of public expenses
2000	137,930	7202 (17.2%)	2910 (7.0%)	1781 (4.3%)	3669 (8.8%)	1788 (4.3%)	2108 (5.0%)	9914 (23.7%)	34,377	7421 (17.8%)	41,798
2001	146,428	7811 (17.9%)	3110 (7.1)	2054 (4.7%)	4365 (10.0%)	1640 (3.8%)	2083 (4.8%)	9711 (22.3%)	35,788	7842 (18.0%)	43,630
2002	156,615	8642 (22.5%)	3332 (8.7%)	2257 (5.9%)	4747 (12.3%)	1685 (4.4%)	2329 (6.1%)	9134 (23.8%)	37,431	8014 (20.8%)	45,445
2003	172,431	9360 (19.0%)	3523 (7.2%)	2446 (5.0%)	5993 (12.2%)	1792 (3.6%)	2316 (4.7%)	9416 (19.1%)	40,735	8435 (17.2%)	49,170
2004	185,266	10,337 (18.8%)	4065 (7.4%)	2746 (5.0%)	7236 (13.2%)	2415 (4.4%)	2291 (4.2%)	9464 (17.2%)	45,490	9522 (17.3%)	55,012
2005	195,366	10,931 (19.4%)	4211 (7.5%)	2854 (5.1%)	9073 (16.1%)	2026 (3.6%)	2351 (4.2%)	9774 (17.4%)	48,686	7524 (13.4%)	56,210
2006	211,314	11,493 (19.7%)	4576 (7.8%)	3063 (5.3%)	9381 (16.1%)	2141 (3.7%)	2396 (4.1%)	9589 (16.4%)	50,116	8184 (14.0%)	58,300
2007	227,134	12,125 (18.8%)	5052 (7.8%)	3131 (4.9%)	10,875 (16.9%)	2372 (3.7%)	3395 (5.3%)	9769 (15.1%)	55,706	8809 (13.7%)	64,515
2008	236,936	13,933 (19.6%)	5904 (8.3%)	3354 (4.7%)	13,447 (18.9%)	2606 (3.7%)	2702 (3.8%)	11,207 (15.7%)	61,642	9624 (13.5%)	71,266
2011	207,029	15,251 (19.9%)	6572 (8.6%)	1214 (1.6%)	16,502 (21.5%)	2042 (2.7%)	9981 (13.0%)	18,585 (24.2%)	70,145	6559 (8.6%)	76,705

(Continued)

Table 3.30 (Continued)

Year	GDP	Wages	Pensions	Hospital— private care	Insurance & social protection	Financing of agencies & institutions	Consumption expenses	Interests, loans, & other expenses	Regular budget	Programme of public investments	Total of public expenses
2012	191,204	13,947 (19.9%)	6564 (9.4%)	1070 (1.5%)	15,672 (22.3%)	1882 (2.7%)	8002 (11.4%)	20,476 (29.2%)	61,499	6114 (8.7%)	70,145
2013	180,654	12,572 (21.5%)	5850 (10.0%)	1721 (2.9%)	14,201 (24.3%)	1936 (3.3%)	8479 (14.5%)	7050 (12.1%)	51,809	6650 (11.4%)	58,459
2014	178,656	12,385 (22.5%)	6093 (11.1%)	1508 (2.7%)	12,913 (23.5%)	1666 (3.0%)	7707 (14.0%)	6198 (11.3%)	48,472	6592 (12.0%)	55,063
2015	176,312	12,011 (21.9%)	6348 (11.6%)	1671 (3.0%)	16,193 (29.5%)	1563 (2.8%)	7227 (13.2%)	6681 (12.2%)	48,545	6406 (11.7%)	54,951
2016	174,199	11,750 (21.3%)	6315 (11.4%)	1672 (3.0%)	12,964 (23.5%)	1442 (2.6%)	7699 (14.0%)	6054 (11.0%)	48,891	6288 (11.4%)	55,179

Note: Data corrected for 2007 in Regular Budget and Total of Public Expenses. In parentheses % of Total of Public Expenses, for each category.

Source: Data extracted from Greek government's annual report. From the 2000–08 period data were collected by Drettakis (2011: 158) from the Greek government report, as they appeal (corrected).

2002, expenses in the Programme for Public Investments have exceeded the level of 17% of Total of Public Expenses, until the year of the Olympic Games (2004). After 2004, they have risen in net terms but fell proportionally to Total of Public Expenses. This is the period when several public investments and infrastructure were implemented. In 2011 and after 2011, the levels of Programme of Public Investments appear to remain the same, both in net and proportional terms.

As illustrated in Table 3.30, the levels of the Programme of Public Investments attained in early 2000s were similar to the levels of wages, representing the second highest amount of expenses by the Greek state, for the years 2000 and 2001 (second only after the category of payments toward “interests, loans, and other expenses”). Institutional building has had an expanding cost in net terms over the years but has not changed much as proportion of Total of the Public Expenses.

What is clear from Table 3.30 is that all expenses of the Greek government have been growing from 2000 to 2008, some of them, like wages and pensions, even until 2011.

In the years of the crisis, the most significant expenses, as a proportion of Total Public Expenses are those on “insurance and social protection” and the next most significant are “wages.” “Interests, loans, and other expenses” are significant in the early period, up to 2012 but the IMF-EU policies have helped to reduce their actual burden on public expenses.

3.12 The turning of an economy to consumption-based

Fig. 3.40 illustrates the consumption-based pattern developed in the Greek economy over the years. Final consumption expenditure rose from €82,400 million in 1996

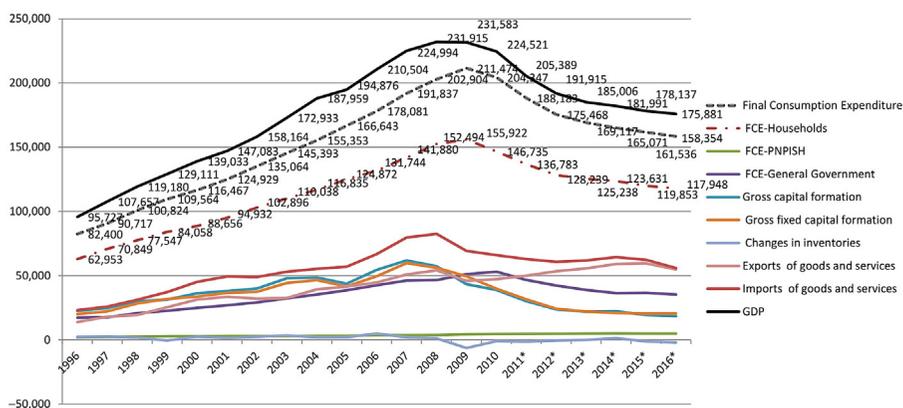


Figure 3.40 GDP and its components (expenditure approach).

Source: Hellenic Statistical Services, available on-line since 17/10/2017. Note: The GDP is calculated by adding Final Consumption Expenditure (FCE), Gross Capital Formation and the difference between Exports of Goods and Services and Imports of Goods and Services. GDP measured in market prices. Data have been reviewed using as a base year 2010, according to EC regulation 549/2013 (ESA 2010). Data after 2011 (in asterisks) are estimates but on several occasions such data have been calculated and provided elsewhere in the present text.

to €202,904 million in 2008, a year when GDP has reached its peak at €231,915 million. It then reached its peak a year after, in 2009, at €211,474 million.

In the consumption expenditure approach used in GDP calculations, GDP is the sum of Final Consumption Expenditure (FCE), Gross Capital Formation (GCF), and Net Exports of Goods and Services (Exports of Goods and Services minus Imports of Goods and Services). FCE is a substantial proportion of the Greek GDP. It has represented more than 80% of the GDP since 1996, fell to 82.7% in 2004 and rose again to reach levels above 90% after 2009. Three-fourths of consumption is due to household consumption.