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**The Social Cost of an Outdated Law:  
Article 16 of the Greek Constitution**

by

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### **Abstract**

Article 16 of the Greek Constitution stipulates that higher education is provided free in state institutions, and that private universities are prohibited. The paper digs into the historical origins of such provisions and discusses the reasons why, in spite of national outcry, the article has survived with no revision since it first appeared several decades ago. Closely linked to article 16, is the fact Greece has a world record of students studying abroad relative to its population. Standard economic analysis is used to assess the net social cost to the country of maintaining article 16. Links are made to the quality of university education provided by the state institutions, the foreign exchange drain to universities abroad, the lack of the benefits of competition by not allowing foreign universities to set up campuses in Greece, as well as the benefits of having foreign-educated graduates returning to Greece. The above efficiency arguments are complemented by distributional considerations on who has benefited, or lost, by the free state provision of university education.

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## I. Introduction

Unbelievable as it might be, the following are extracts from the present Greek Constitution that became law in **1975** and is still in effect today (paragraph numbers in parenthesis):

- *“Art and science, research and teaching shall be free and their development and promotion shall be an obligation of the State”*. (1)
- *“All Greeks are entitled to free education at all levels at State educational institutions”*. (4)
- *“Education at university level shall be provided exclusively by institutions which are ... public law legal persons ... under the supervision of the State”*. (5)
- *“Professors of university level institutions shall be public functionaries ... [and] ... shall not be dismissed ...”*. (6)
- *“The establishment of university level institutions by private persons is prohibited”* (8).

Official Translation, Hellenic Parliament (1995), pp 24-25.

Since the first Greek Constitution of 1864, with one exception, article 16 refers to education. The following are highlights of the contents of article 16, as they evolved in several revisions, or non-revisions, of the Constitution.

**1864** . Article 16 is very lean, consisting of only two sentences:

- *“Higher<sup>1</sup> education functions at the expense of the state, while in basic education the State contributes according to the needs of the municipalities.”*
- *“ Everyone has the right to establish educational institutions, conforming to the State laws”* (Svolos, 1998, p. 178).

**1911**. Article 16 now has three sentences:

- *“ Education, being under the supervision of the state, functions at the State’s expense”*.

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<sup>1</sup> “Anotera” in the original Greek text, probably meaning at the time post-basic education, rather than tertiary.

- *"Basic education is compulsory for all, and is offered free by the State".*
- *"Private and legal persons are allowed to establish private schools functioning according to the rules of the Constitution and State laws".* (Svolos, 1998, p. 191).

**1927.** The article referring to education changes to number 23. It essentially repeats the clauses of the 1911 Constitution, with a major difference in the first sentence, now adding the municipalities as financiers of education:

- *"Education is supervised by the State and functions at its expense or the municipalities."*
- *"Basic education is compulsory for all, and is offered free by the State."*
- *"Private and legal persons are allowed to establish private schools functioning according to the rules of the Constitution and State laws".* (Svolos, 1998, p. 215).

**1952.** The Constitution reverts to article 16 for education, where for the first time university education is mentioned:

- *"Education is supervised by the State and functions at its expense or the municipalities".*
- *"Basic education is compulsory for all and is offered free by the State."*
- *"Higher education institutions are self-governed under the supervision of the State, and their professors are civil servants".*
- *"It is allowed, after a permit from the authorities, for private persons not having been denied their civil rights or legal persons to establish private schools functioning according to the Constitution and the State laws." (Svolos, 1998, p. 255-256).*

There have also been constitutional revisions in **1996** and **2001**. In such revisions, article 16 was preserved intact as in the 1975 Constitution. Since the Constitution itself sets time limits regarding revisions, the stipulations of article 16, as outlined above, will remain in effect until at least 2008.

In the 1996 window for revision, the opposition party of New Democracy proposed several amendments to article 16:

- Only public higher education should be offered by institutions that are public legal persons.

- Individuals or legal persons are allowed to establish institutions of higher education for non-profit, under the supervision of the state
- Only university professors teaching at state universities are civil servants
- Deletion of the clause that the establishment of universities by individuals is prohibited. (Hellenic Parliament, 1996, p. 14).

Although none of the above passed, one may wonder what would be the incentive for someone to establish a non-for-profit institution, and what would be the quality of that institution if it were under the supervision of the state.

## II. Effects of the Law

Greece is characterized by an insatiable demand for education, and higher education in particular, that has been the subject of several studies. (Nasiakou 1981, Psacharopoulos and Soumelis 1979, Tsoukalas 1981). The dominant explanation of such phenomenon is that in a period of massive rural-urban migration, parents saw education as a means of escaping from the village and for social mobility. Of course such mechanism is in operation in every country in the World, although Greece is an outlier, as documented below.

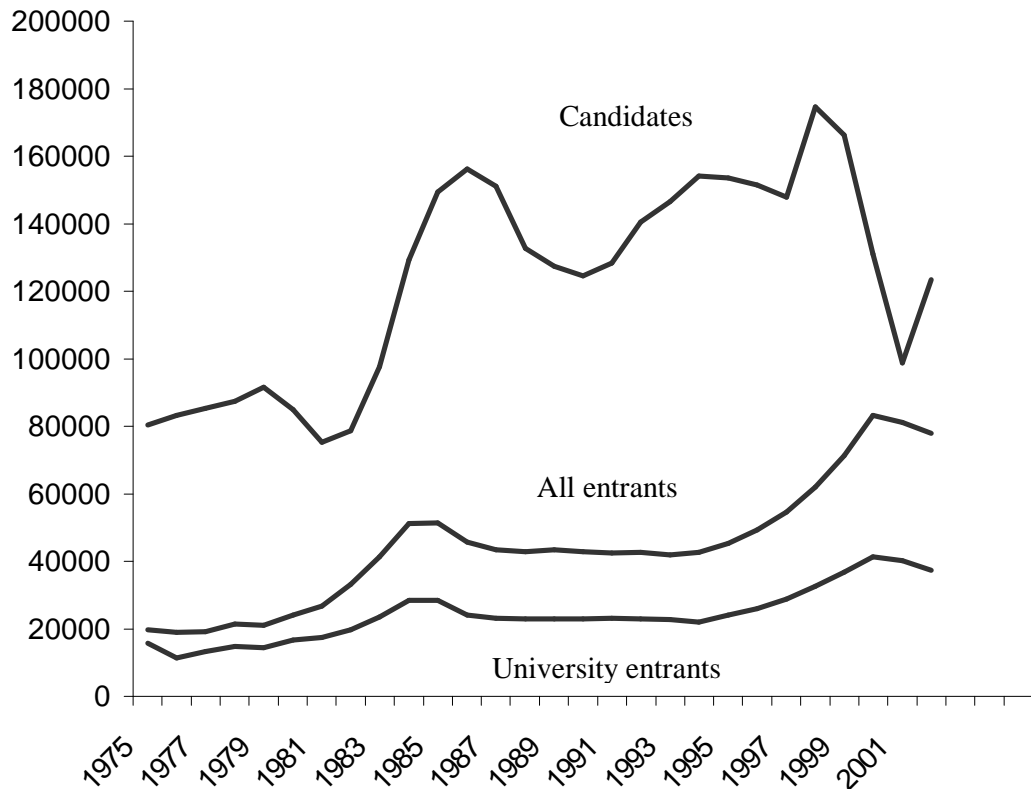
It is evident that laws of physics and basic arithmetic, if not economics, conflict with the stipulations of article 16 of the Constitution – it is not possible to provide free higher education to all those who want it. Something has to yield in the process. In the case of Greece this has been quantity rationing, quality degradation, graduate unemployment, massive student exodus abroad, brain drain, foreign exchange loss, resources misallocation, regressive social transfers, reduced human capital investment and social unrest.

**Quantity rationing.** Table A-1 in the Annex presents the number of candidates versus entrants to tertiary education over the last twenty five years. (See Psacharopoulos and Papas, 1987). Tertiary education in Greece is divided into (a) AEI, what one may label “proper” universities with a length of study of 4+ years, and (b) TEI, shorter cycle non-university Technological Institutes of 3+ years duration. (See Dragonas and Kostakis 1986; Kalamatianou, Karmas and Lianos 1988). The latter were instituted with the aid of a World Bank loan in the seventies, with the explicit purpose to "break the one-way street from the lyceum to the university and provide the middle level technical manpower that the country allegedly needed." (See World Bank 1970).

There is a sharp contrast between the early period and today. In 1975, the number of those seeking entry into tertiary education was less than the number of lyceum graduates, and only 19% of the candidates entered a proper university. About one quarter of the entrants to tertiary education had to study the short-cycle. By 1996 the number of candidates was nearly doubled. Only 16% entered university, while

about one half of the entrants to tertiary education were obliged to enroll in the low demand short technological cycle. (See Figure 1).

**Figure 1. Candidates and Entrants to Tertiary Education**



Source: Table A-1

This impasse led to education reform Law 2525 in 1997, the essence of which was to toughen graduation from the lyceum so that eventually all lyceum graduates would find a tertiary education place. The law led to a quadruple of those failing to graduate from the lyceum in the next few years and counter reforms have been announced to deal with the situation.

**Quality degradation.** The constitutional provision of free higher education necessarily implies a compromise on quality. *"At the present state, one cannot talk*

about university institutions". So states a review of the Greek higher education system by the OECD, (1996, p. 65).<sup>2</sup>

Table 1 presents three quality proxies of Greek higher education. Overall, Greece spends about one half per university student relative to the average spent by other OECD countries in constant purchasing power prices.

**Table 1: Public expenditure per tertiary student, scientific publications, and government budget allocated to R&D**

Country	Per student expenditure (\$ US-PPS) (1)	Scientific publications per million population (2)	% R&D Government spending (3)
Sweden	13224	1431	1.40
Austria	11279	717	1.19
Netherlands	10757	963	3.25
England	9699	949	1.87
Denmark	9562	1214	1.37
Germany	9481	657	1.90
Ireland	8522	542	0.77
Finland	7327	1157	2.11
France	7226	652	4.95
Belgium	6508	810	1.36
Italy	6295	457	1.36
<b>Greece</b>	<b>4157</b>	<b>340</b>	<b>0.76</b>
Average	9063	613	1,99

**Source:** (1) OECD, *Education at a Glance*, 2001  
(2)-(3), European Commission, *Key Figures 2001: Indicators for Benchmarking of National Research Policies*.

In addition, the constitutional prohibition of private universities in Greece, and the civil servant status of professors have contributed to the deterioration of quality because of the lack of competition. It is well known that university professors have little incentive to publish after they are appointed with tenure for life.

And with good reason, since they have to work at the same time in a variety of parallel jobs to survive financially. At present, the salary of a university lecturer is about the same as the wage of an unskilled illegal immigrant.

Table 1 also shows the number of publications per million inhabitants. The number of citations per member of the teaching staff at the Ionian University is 0.01. (Eurostat 2001).

<sup>2</sup> For a documentation of the poor state of tertiary education in Greece, see Haniotis (1978), Pantelouris (1978, Gavroglou (1981), Grant (1986), ), Pasmazoglou (1992), Doder (1994), and Psacharopoulos (1988, 1990, 1995).

It should not be surprising Greece lags behind in academic output, since it spends less than half on R&D relative to the average for the European Union, and nearly seven times less than France. (Table 1, column 3).<sup>3</sup>

The policy towards expansion of the non-university tertiary education is also dictated by another reason. The short cycle costs €1,500 per student/year, which is about one third the cost of a student in a 4+ years university. Thus, expansion of the technological institutes accommodates more students with the fixed state budget -- a direct result of the "free" education.

**Graduate Unemployment.** One would expect that the tight state control and determination of the exact number of entrants to each individual school and institution of tertiary education might alleviate the feared risk of unemployment, relative to a more liberal situation.

This is far from the truth. Greece, of course for reasons not only related to education, has one of the highest overall unemployment rates of those aged under 25 in the European Union -- 29.5% versus 16.16% for the Union as a whole. Unemployment among tertiary education graduates aged under 24 stands at 28.8%, relative to 12.8% for the Union as a whole (Eurostat 2000).

A recent survey by the Federation of Greek Industries found that, in the midst of unemployment, two out of three enterprises find it difficult to fill their higher-level vacancies. One reason is the maintenance of outdated university departments and curricula that do not correspond to today's market needs. (See Glytsos 1990).

A related reason must be that students do not enroll in the courses they really want -- students must be more in tune with the demands of the market, rather than the Ministry of Education. For example, in 2001 there were 20,824 applications for courses in informatics and telecommunications, but the state offered only 125 places. By contrast, only 15% of those studying accounting in the Technological Institutes stated that this was the course of their first choice.

**Student Exodus abroad.** A parallel development has been that, over the years, the excess demand for higher education found an outlet abroad. Table A-2 in the Annex shows the distribution of Greek students between domestic and foreign institutions. Today, by the most conservative estimates, four out of ten Greek university students study in a foreign country. When the short non-university cycle is included, one out of five Greek tertiary education students are enrolled in foreign institutions.

Table 2 shows the number of foreign students in the top sending countries. Greece is number four regarding the absolute number of students studying abroad. But when one takes into account the size of the population, Greece is the undisputable World leader. (See Figure 2).

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<sup>3</sup> See also Eliou (1981).

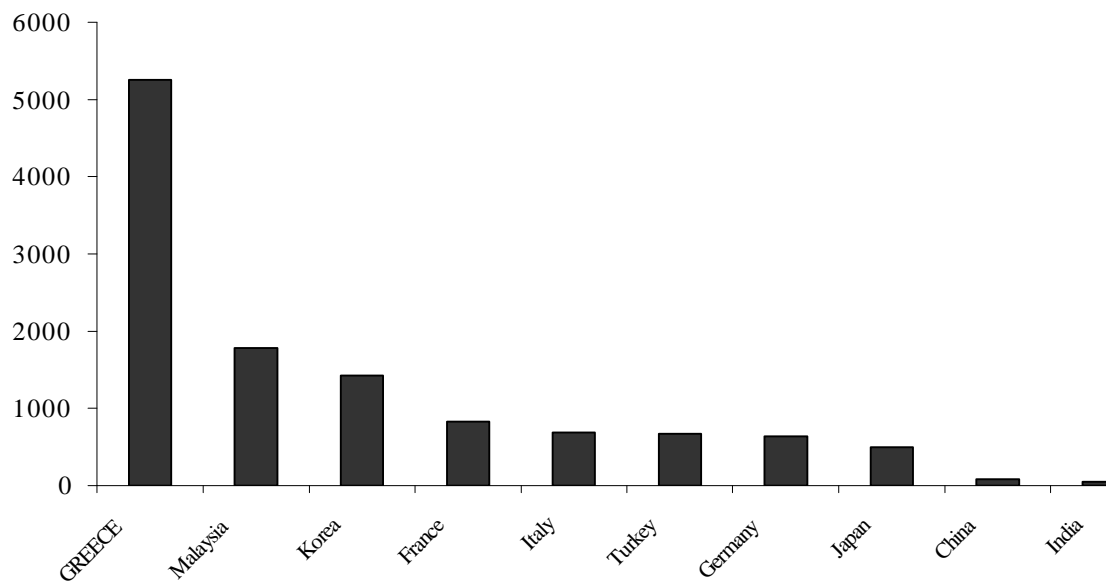


**Table 2. Tertiary Education Students in Foreign Countries per one Million Domestic Population**

Country	Foreign Students	Population(m)	Students Per m. population
<b>Greece</b>	<b>57825</b>	<b>11</b>	<b>5257</b>
Malaysia	40873	23	1777
Korea	69840	49	1425
France	48764	59	827
Italy	39847	58	687
Turkey	44009	66	667
Germany	52239	82	637
Japan	63340	127	499
China	98813	1273	78
India	48515	1033	47

Source: OECD, Center for Educational Research and Innovation (2002).

**Figure 2. Tertiary Education Students in Foreign Countries per one Million Domestic Population**



Source: Based on Table 2

Another effect of the rationing of tertiary education places, is that students do not study what they really want, even if they excelled at the entrance examinations. It is typical that at the 2001 university entry examinations, candidates with an average grade of 19 (out of a maximum of 20) did not enter the university school of their choice.

**Brain Drain.** It is common knowledge that many Greek students, after completing their studies abroad, do not return to their home country. (See Eliou 1988, Kouvertaris 1973). More importantly, there is high selectivity on who returns and who does not. Graduates of doubtful quality universities in Eastern European countries do return, simply because they cannot be absorbed in the international market. But the best graduates of Anglo-Saxon universities are offered academic or business jobs abroad and do not return. Or they may return near retirement. Faculties of the best universities in the world are full of first generation Greek names.

After all, why should a young Ph.D. from MIT seek a lecturer's appointment in a Greek university, given the state of university education described above?

**Foreign exchange loss.** Based on data on student fees and living expenses in the countries that receive Greek students, it is estimated that the average student spends €12,707 per year. (Table 3). Thus, in 1999, Greek students studying abroad spent €743m. This is about 10% of the foreign exchange Greece gets from tourism, or half percent of the gross domestic product.

**Table 3. Greek students abroad and annual cost (tuition fees and living expenses) per student, 1999 in Euros**

Students	Cost (€)
58.461	12.707

Source: Based on information provided by foreign universities, and Ministries of Education, internet sites, Embassies, and Eurydice, *Key Topics in Education, Vol.1: Financial Support for Students in Higher Education in Europe. Trends and Debates*, 1999.

**Misallocation of resources.** The competitiveness for university entry has given rise to a proliferation of cram schools called "frontisteria". Each year, over one billion Euros is spent on preparatory courses for succeeding at the university entrance examinations. This is more than what the state spends on secondary schools. Such resources could have been used for improving the quality of instruction, if the money flowed through private hands.

Another diversion of resources, also adding to the anxiety of students and their families, is the famous DIKATSA (Interuniversity Center for the Recognition of Foreign Academic Titles). The Center receives each year 25,000 applications of

graduates from foreign universities, the processing time of which may exceed one year. During that time, applicants remain unemployed.

**Reduced human capital investment.** These days, countries try by all means to encourage human capital investment, as all studies show that this is the most critical factor for economic growth. It has been amply documented that in Greece, investment in education is privately and socially profitable. (See Magoula and Psacharopoulos 1999). Although in Greece families are willing to pay for the education of their children, article 16 of the Constitution puts a break to such investment.

**Social agony.** Nowhere else in the world, with the possible exception of Japan, the annual tertiary education entry examinations immobilize the nation. The exams make newspaper headlines describing the agony students and their families go through until, and if, a university place is secured.

**Benefits.** Of course the student exodus is not only associated with costs. It must have also resulted in some benefits, namely having some students study in much better quality institutions relative to domestic universities. But all in all, the cost –benefit balance sheet is clearly in the red.

### III. The welfare cost

It is possible, at least in principle, using standard economic analysis to arrive at a gross estimate of the welfare cost incurred by Greece, as a result of article 16 of the Constitution.

The basic parameters are as follows:

- Applications for tertiary entry at zero price: 120,000
- Potential domestic students, if no rationing: 480,000  
(= 4 x 120,000)
- Greek students in domestic universities: 250,000
- Greek students abroad: 65,000
- Total number of students (domestic + abroad): 315,000
- Academic direct cost per domestic university student: \$4,000
- Direct cost of a student studying abroad: \$13,000

The problem is that we know only one point of the underlying demand for higher education (D), namely the intersection of it with the horizontal axis (480,000 students would be enrolled at any given point in time, at zero cost to them). Neither do we know its elasticity, or another point on it. It is true that 65,000 students are willing to pay \$13,000 per year to study abroad. But this point might lie on another demand curve reflecting higher quality. In addition, we do not know how many students would be willing to pay what price in order to study in Greece rather than going abroad -- probably a price below \$13,000. (See Figure 3).

There must also be an upward sloping supply curve for providing university services (S). Under no restrictions, the optimal price-quantity combination would be at point M. If this supply curve represents the true resource cost of education, the state subsidy shifts the supply curve downwards, to S', by \$4,000.

This is the classic case of the welfare loss of a subsidy, split into the following components:

- A consumer surplus gain equal to the area FMCE
- A producer surplus gain equal to the area ABMF
- Such gains were obtained at a cost equal to the area ABCE
- Hence there is a net welfare loss equal to the triangle BMC.

Perhaps more important than the triangle, however, are the rectangle transfers involved:

- \$ 845m go to pay services abroad (65,000 foreign students x \$13,000)
- \$ 2.3b go to subsidize those who attend universities (250,000 x \$9,000).<sup>4</sup>

We know that the last transfer, representing nearly 2% of the GDP, is regressive. Tsakloglou and Antonitis (1999) have documented for Greece what applies to nearly all countries in the world, namely that in kind higher education subsidies (as the one in Greece), benefits mostly the richer segments of the population.<sup>5</sup>

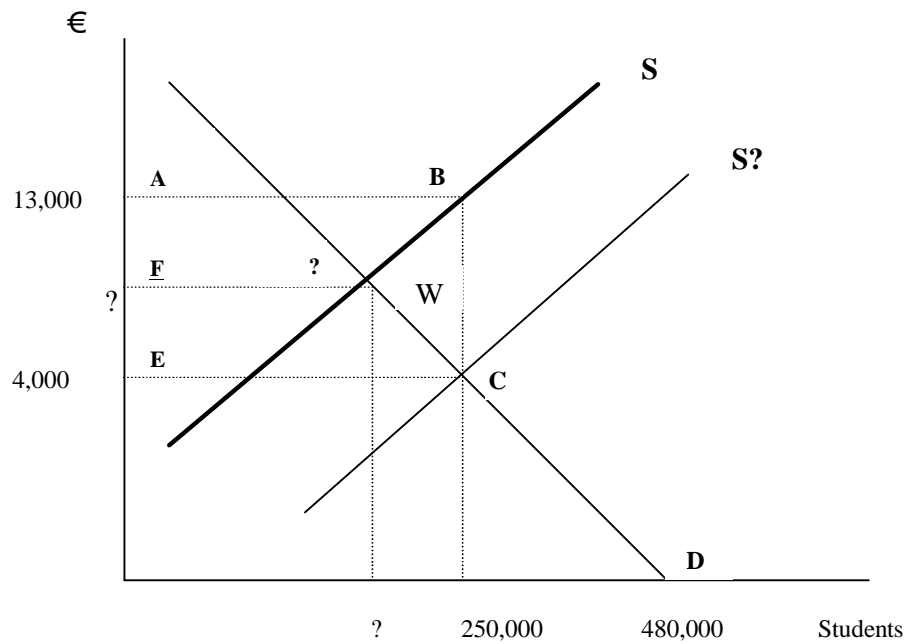
The transfer abroad raises the issue why this money, or part of it, could not have been used to set up a private university in Greece to accommodate, for pay, those who are rejected by the state.

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<sup>4</sup> Assuming that the \$13,000 cost of studying abroad represents the shadow price of higher education, minus the \$4,000 internal transfer paid by taxpayers.

<sup>5</sup> See also Patrinos (1991, 1992), and Kanellopoulos and Psacharopoulos (1997).

**Figure 3. Supply and demand for higher education**



#### **IV. The Platonian University**

Dimarogonas (1989) conducted a feasibility study of a hypothetical “Platonian University” in Greece with an enrollment of 15,000 aiming to capture part of student exodus. (See also Dimarogonas, 1995). Based on his parameters regarding the faculty composition and technical specifications, Table 4 presents the operating account of a potential private university in Greece today enrolling 30,000 students, i.e. less than half of those now abroad.

**Table 4 . Annual Cost, Revenue and Profit of a 30,000 Student Private University in Greece**

Item	Total (€m)	Per student (€)
Cost		
Capital	26.6	886
Operational	65.3	2176
Total	91.9	3062
Revenue		
Tuition	175.0	5834
Services	13.7	456
Total	188.7	6290
Profit	96.8	

*Source: Based on Dimarogonas (1989), ESYE (2002)*

In round figures, the €3,000 cost per student is less than what the state now spends per student because the composition of the Platonian University does not have expensive faculties such as medicine. In addition, whatever is spent per student in a private university will be spent more efficiently relative to what is happening at present in state universities.

The tuition of €5,800 is less than half of what Greek students now spend abroad, hence they would be willing to pay it in order to stay at home and not incur the significant living expenses in a foreign country. Given a modest consultancy and services revenue, the €100m operating profit is a reality.

Assuming 20 years for the depreciation of buildings and 5-10 years for other capital equipment, the initial investment to set up a private university in Greece is less than €500m. This is a very modest sum, relative to the projected profit.

Of course the word "profit", especially regarding education, is an anathema in Greece. Remember that the opposition party when proposing an amendment to article 16 of the Constitution, called for non-profit private universities. Since public opinion is so opposed to the notion of profit, there is a wide margin for using the operating surplus to provide fellowships to needy students.

## V. Conclusion

Beyond any reasonable doubt, article 16 of the Greek Constitution is an economically inefficient and socially inequitable law costing the country billions of Euros in tangible terms, and an unknown amount of other social costs that are not easy to quantify. But the actuarial value of the cost should be huge, given the fact article 16 undermines the nation's human capital formation.

Alas, public opinion in Greece is against private universities.<sup>6</sup> Andreas Papandreou, during the discussion of article 16 in the plenary session of Parliament in 1975, said:

*“We do not agree that the schools of higher education should be subject to property, or that they might be governed privately, by Greeks or foreigners, especially foreigners. ...those teaching in private schools should be equated<sup>7</sup> to civil servants. (Hellenic Parliament, 1975b, p. 496).*

Even those who dare to propose private universities, specify that they should be non-profit. Clearly, Schumpeter has not been read in Greece.

D. Nianias, speaker for the ruling New Democracy party at the Committee discussing the revision of article 16 of the Constitution in 1975, expressed what seemed to be, and still is, the dominant popular opinion in Greece:

*“Higher education should be state only, for the fear of business”. (Hellenic Parliament 1975, p. 439).*

Let us close with another citation from Andreas Papandreou, then leader of the PASOK opposition party, from his 1975 speech on the revision of the Constitution:

*“... if in the Constitution we create a Procrustean bed, we will pay a high price for it for a long time” (Hellenic Parliament, 1975b, p. 496).*

Whatever he meant, it is ironic, if not comico-tragic, that he turned out to be so right.

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<sup>6</sup> This is in sharp contrast relative to the fact education in Greece in times past was mainly private, (Patrinos 1995).

<sup>7</sup> “Na exomoiothoun” in the original Greek.

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**Table A-1. Secondary School Graduates, Tertiary Candidates and Entrants**

Year	Secondary		Tertiary		
	Graduates	Candidates	Entrants		
			Total	AEI	TEI
1975	81417	80417	19691	15642	4049
1976	93042	83317	18925	11410	7515
1977	93343	85220	19162	13270	5892
1978	92638	87417	21375	14825	6550
1979	99693	91580	21075	14475	6600
1980	86317	84911	24122	16680	7442
1981	83811	75206	26754	17480	9264
1982	71490	78708	33235	19775	13460
1983	76748	97553	41326	23530	17663
1984	96265	129374	51114	28343	22170
1985	99984	149269	51308	28393	22300
1986	103858	156289	45725	23955	21200
1987	108310	151129	43394	23065	19560
1988	109377	132727	42795	23020	19150
1989	116039	127430	43354	23020	19390
1990	112442	124658	42867	22940	19140
1991	113126	128295	42384	23070	19407
1992	120050	140515	42614	22964	19223
1993	127995	146475	41938	22826	19298
1994	133682	154116	42700	22000	19000
1995	122970	153547	45356	24076	21590
1996	145742	151500	49394	26016	23622
1997	139272	147876	54640	28769	26019
1998	139787	174511	62028	32627	29522
1999	110601	166288	71198	36727	34538
2000	107902	131000	83235	41315	41920
2001	m	98765	81120	40080	41040
2002	m	98400	77960	37240	40720

Source: *Statistical Yearbooks (ESYE), State Budgets and Statistical Department of the Ministry of Education*

Notes: AEI: 4+ years university  
 TEI: Short cycle Technological Institute or equivalent  
 m: missing

**Table A-2: Greek students in Domestic Institutions and Abroad**

Year	Students in Greece		Students Abroad	Total
	AEI	TEI (1)		
1961	28164	23111	8659	60384
1962	30617	20128	7964	58709
1963	35432	19309	7421	62162
1964	43409	20325	6652	70386
1965	53305	23950	6285	83540
1966	58000	25758	6577	90335
1967	64591	25436	7888	97915
1968	73438	26162	7346	106946
1969	74962	30039	8147	113148
1970	76181	28913	9985	115079
1971	76198	40319	12819	129336
1972	74348	49534	17490	141372
1973	80314	57016	22358	159688
1974	84603	12528	25628	122759
1975	97759	13682	29480	140921
1976	99793	17453	30436	147682
1977	95017	24229	36999	156245
1978	96650	26716	35928	159294
1979	95899	30403	37001	163303
1980	84519	33900	39786	158205
1981	85718	35300	41086	162104
1982	87476	37053	44465	168994
1983	94867	45352	44046	184265
1984	100254	34103	40324	174681
1985	111446	39741	28754	179941
1986	110867	53689	27085	191641
1987	115700	73150	29665	218515
1988	117193	64990	m	182183
1989	114933	69430	m	184363
1990	117260	74292	32068	223620
1991	116938	75679	28542	221159
1992	115464	52694	27052	195210
1993	111911	50442	27791	190144
1994	107968	51736	28131	187835
1995	105314	52996	39316	197626
1996	104045	55095	55436	214576
1997	106304	57440	62871	226615
1998	110621	64457	64983	240061
1999	119580	65566	58461	243607
2000	130651	72472	m	203123
2001	148772	87797	63000	299569

*Source: Greek National Statistical Service (1961-2001), Bank of Greece (1961-1990) and our Embassy interviews. Mary.dunne@cec.eu.int.*

*Notes: AEI: 4+ years university. TEI: Short cycle Technological Institute or equivalent m: missing*