

## MEMORANDUM

### on a proposal for an Environmental Fiscal Reform in Greece

1. The author was Minister of Coordination (National Economy) during 1977-81 and handed over a public debt equal to 32 % of gdp and a budget deficit of 2.7% of gdp in October 1981 to the new Government. When he took over in the spring of 1990 as Minister of Finance, he faced a public debt of 76.4% and a budget deficit of 17.6% of gdp, which he turned into a 2.7% primary surplus in 1992, before he left for Brussels to assume the post of European Commissioner for the Environment and Fisheries. Detailed data are given in Table 1 in Appendix 2.
2. While in Brussels he presented to the College of Commissioners, in 1993, his ideas on a new development model and was instructed by President Delors to develop them as Chapter 10 of the Commission's White Paper on: *Growth, Competitiveness and Employment* adopted in the Summit of December 1993. One of the basic premises was a shift of the tax burden from labour to the overuse of natural resources, with the twin aim of increasing employment and protecting the environment. This is how environmental fiscal reform (EFR) started.
3. After the end of his term with the Commission (Jan. 1995), he was elected visiting fellow of Brasenose College, Oxford, where he taught environmental economics and developed further the idea of a new development model. He was instrumental in the launch of the EFR campaign of the European Environment Bureau, in 2002 and later became a member of the Steering Committee of Green Budget Europe. At the same time he organised the Athens Conference *Making Taxes work for the Environment*, with the participation of Prof. Ulrich von Weizsäcker, Stefan Speck and others in which he presented for the first time a proposal for an Environmental Fiscal Reform in Greece. Excerpts from the last version, based on 2011 budget figures, are given as Appendix 1.
4. Successive versions of this proposal have been submitted to all Ministers of National Economy and/or Finance in the last 10 years, without any response. The reasons for this are not known. Most probably it is a combination of the usual fear of Greek politicians of anything that might displease the media and the electorate, with their inability to grasp the idea.
5. I firmly believe that the implementation of such a reform, combined with several other measures to fight tax evasion and improve tax collection, with which I could help on the basis of my successful past experience, would consolidate primary surpluses and provide great leverage for continuous reforms. In case there is a firm interest in this direction, I could easily update and improve the proposal, in view of the fact that present budget figures and the general circumstances differ considerably from 2011. I have developed a comprehensive computer model for this, which would help us perform the updating operation within 10 working days. This excludes time for prior consultation with the appropriate political and tax authorities, which depends on their preparation and speed.

Yannis Palaiokrassas

29 January 2014

## APPENDIX 1

### Excerpts from a proposal for a COMPREHENSIVE ENVIRONMENTAL FISCAL REFORM

*As a tool of Competitiveness, Employment and Budget Consolidation*

ATHENS – JULY 2011

#### A. INTRODUCTION

Environmental taxes were first proposed – as a means of internalizing environmental externalities – by Pigou, more than one hundred years ago. In the European context, they were first used as an instrument of environmental policy in Scandinavian countries and the Netherlands in the 1980's, to supplement environmental legislation and administrative instruments. For, it was soon discovered that, in the absence of market-based instruments, the strong forces of the market cancel – at least in part – the effectiveness of regulation.

At the European level, the idea of a tax shift from labour to environmental taxes was first developed, by the author of this Proposal, in the European Commission's White Paper on *Growth, Competitiveness and Employment*, at its 10<sup>th</sup> Chapter under the title "*towards a new development Model*". In the mid 1990's more European states, such as Britain, Germany, Austria and others joined the pioneers of environmental fiscal reform (EFR), which involves both sides of the budget, taxes on one hand and transfers or subsidies on the other. The usual transfer is to national insurance organisations, on the express condition that they effect a proportionate cut in social insurance contributions.

In Greece, the implementation of the present proposal<sup>1</sup> would not only have an immediate, drastic impact on fiscal consolidation, but would also produce a substantial increase in competitiveness and employment. In the present circumstances of fiscal emergency, it is proposed that extra revenues generated by the tax reform should only partially (starting with 60%) be channelled to social insurance institutions. However, this is sufficient to produce an immediate cut of 2% in the cost of labour, despite a 1% rise in remuneration foreseen for 2015, which is the first projection date of the Proposal.

This is due to the fact that social insurance contributions, fall from an estimated level of 36,7 billion euros – in the business-as-usual scenario – to only 25,7 billion, in the case of EFR, whereas their weighted average<sup>2</sup> on remuneration is reduced from about 37% to 17%. The positive impact, not only on competitiveness, but also on reducing the incentive for insurance evasion, is very obvious.

The European Commission revisited the idea of a shift from labour to environmental taxation, about 10 years after Chapter 10 of the White Paper on *Growth, Competitiveness and Employment* was written. In June 2006 the European Environment Agency, the OECD and the European Environment Bureau (represented by John Hontelez and the Author of this proposal) made a full presentation of the case for a structured EFR, to the Members of the European Commission responsible for Taxation and the Environment, Messrs. Kovacs and Dimas, respectively. The Commissioners' response was very positive reception and led, among other things, in 2007, to the publication of the Commission's Green Paper on Market Based Instruments and the organisation of the International Tax Forum, which has become an annual event.

It follows that the presentation of the present detailed Proposal for a comprehensive Environmental Fiscal Reform is very timely, not only, in the present circumstances of the Greek debt crisis, but in the context of the more general European fiscal problems. As I had the opportunity to develop to the International Symposium of the Belgian Presidency on "*Growth and green tax shifting in an era of fiscal consolidation*" (Brussels 15-16 December 2010) green taxes:

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<sup>1</sup> Earlier, less developed, versions of this EFR proposal prepared by the author, were submitted on behalf of the Hellenic Society for Environment and Culture, to the Ministers of Finance in 2002, 2007 and 2009, with no response.

<sup>2</sup> Weighted average of 45%, which is the aggregate rate for IKA (the main Social Insurance Institution) and the much lower rates applied by other state insurance funds.

- Are collected at source, with extremely low administrative cost and hardly admit any tax evasion.
- Their recessionary impact on the tax base is minimal compared to across-the-board cuts of salaries and pensions.
- Increase productivity and competitiveness, create new industries and services and therefore boost employment.
- Are socially more acceptable, both on account of their above positive impacts and their benefit on the environment.
- Reduce not only budget, but also social insurance and public transport deficits.

On the basis of the above principles and European experience with EFR, a radical environmental fiscal reform is proposed for Greece involving the following specific taxes, charges and tariffs, per category of tax base:

#### PROPOSED ENVIRONMENTAL TAXES (AND RELIEFS)

Tax base	Proposed taxes, charges, or tariffs.
<b><u>Energy:</u></b>	Increase in the <b>energy tax on electricity and extension to natural gas</b> , with a view to limiting overuse, especially during the summer peak, which is provided for at an excessive investment and operation cost.
<b><u>Transport:</u></b>	Increase of <b>car registration and circulation taxes</b> , as well as their restructuring on the basis of emissions (in line with EU proposal). <b>Introduction of urban tolls</b> for the use of congested road networks, following the model of London, Stockholm, Oslo and other cities.
<b><u>Pollution:</u></b>	Introduction of new special consumption taxes on: <ul style="list-style-type: none"> <li><b>a. Plastic packaging items</b> (bags, bottles etc) specially aimed at curbing countryside littering.</li> <li><b>b. Chemical fertilizers and agro-drugs</b>, to curb soil and water poisoning.</li> <li><b>c. Lignite</b>, to cover emissions that do not come under the European Trading System (ETS) or other pollution taxes.</li> <li><b>d. CO<sub>2</sub> emissions</b> (other than ETS), <b>sulphur and nitrate oxides</b> for obvious reasons.</li> <li><b>e. Solid waste and demolition material</b> to encourage volume reduction, recycling, recovery and other reuse.</li> </ul>
<b><u>Natural Resources:</u></b>	Introduction of <b>realistic tariffs for water use</b> at least covering full costs for both irrigation and other uses, in line with the relative EU Water Directive. Introduction of <b>new special consumption taxes and charges on:</b> <ul style="list-style-type: none"> <li><b>a. Domestic water over-consumption</b> (e.g. for swimming pools or similar uses).</li> <li><b>b. Construction Aggregates</b>, to reduce loss of amenity from quarries and encourage construction materials recycling.</li> <li><b>c. Construction Licences</b>, to limit urban sprawl and landscape degradation in the countryside.</li> </ul>
<b><u>Reduction in labour taxation</u></b>	A substantial amount of extra green tax revenues (60% in 2015, rising to 70% from 2018 and 80% from 2021) should be channelled to the various State Social Insurance Funds, on the specific condition that it is used <b>exclusively</b> for the <b>reduction of social insurance rates</b> . As shown in Table 5 below, this will permit a reduction from the weighted 2011 level of 37,9 percent of all tax revenues, to 24,7 percent in 2015 (the first projection date), and to 16,3 percent in 2021 (last projection date) with obvious beneficial impact on the labour market, employment and competitiveness.

**CHAPTER B** contains an account of the arguments for and against EFR intended to answer the usual criticisms of EFR.

It is omitted for the purpose of brevity. The same applies to the analysis of the detailed Tables of Chapter D

#### C. BASIC STRUCTURE OF THE PROPOSAL

Although increases in some existing green taxes and the introduction of some new ones, may take place as early as 2012, the period 2011-12 is generally devoted to the design and preparation of the EFR. Consequently, 2011 is the base year (as the 2011 Budget is the basis for the Proposal), 2012 is still a preparatory year and the implementation of the Proposal spreads through three triennial terms, with 2015, 2018 and 2021 as projection years.

Projections of environmental tax revenues in the EFR scenario are based on the target that they will grow from the present 8.1% of total tax revenues to 15%, 16% and 17%, by 2015,

2018 and 2021 respectively. This target has been checked against estimates of external environmental cost contained in two studies relating to **road transport<sup>3</sup> and energy<sup>4</sup>**. The first is estimated for 2002 at 5.4 billion euros or 3.8% of current gdp, while the corresponding external cost of the sector of energy (excluding energy for transport) was estimated, again for 2002 at 17.3 billion or 11.5% of gdp. Therefore, we have a total external environmental cost, relating to these two sectors alone, of 22.7 billion euros, equal to 15.3% of gdp. Studies referring to other countries indicate a level of environmental externalities of other sectors of the order of 7% of gdp. Assuming that this applies also to Greece, we arrive at an estimate of the external environmental cost of the entire economy of about 22% of gdp.

Against this estimate, the present Proposal envisages for 2015, targeted green taxes of only 18 billion euros, which correspond to 7% of gdp, as the latter is estimated in Table 2 at 252 billion euros for the same year. It follows that the Proposal anticipates for this first stage absorption of only  $\frac{1}{3}$  of the external environmental cost, by green taxes. In 2018 and 2021, the percentage rises to 8.3 and 9.6 respectively, which is still well below environmental externalities. This is due to the application of the principle of gradual introduction, in pre-announced stages.

Finally, there is a general hypothesis that underlies individual green tax projections. Tax revenues decrease over time, under the impact of the tax or charge on the specific activity concerned, such as consumption of goods and services or investment in housing etc. The rate of the impact is estimated on the basis of local or other European experience in the field.

**TABLE 1  
ANALYSIS OF BASIC FISCAL AGGREGATES**

	<i>million euros</i>				<i>percent of total tax revenues</i>			
	2006	2009	2010	2011	2006	2009	2010	2011
<b>1. Environmental taxes</b>	<b>4.653</b>	<b>6.312</b>	<b>7.940</b>	<b>7.627</b>	<b>5,8%</b>	<b>6,7%</b>	<b>8,5%</b>	<b>8,1%</b>
1.1 Taxes on energy	2.620	4.374	5.900	5.240	3,3%	4,7%	6,3%	5,6%
1.2 Taxes on transport	1.992	1.877	2.001	1.946	2,5%	2,0%	2,1%	2,1%
1.3 Taxes on pollution	41	61	39	441	0,1%	0,1%	0,0%	0,5%
<b>2. Taxes on human effort</b>	<b>60.741</b>	<b>74.058</b>	<b>70.954</b>	<b>70.241</b>	<b>76,0%</b>	<b>78,9%</b>	<b>76,0%</b>	<b>74,4%</b>
2.1 VAT	15.855	16.582	17.680	18.030	19,8%	17,7%	18,9%	19,1%
2.2 Other labour taxes	1.370	1.870	2.630	2.450	1,7%	2,0%	2,8%	2,6%
2.3. Personal income etc.	12.200	15.222	13.875	14.720	15,3%	16,2%	14,9%	15,6%
2.4 Social Insurance contributions	31.316	40.384	36.769	35.041	39,2%	43,0%	39,4%	37,1%
<b>3. Other consumption taxes</b>	<b>2.923</b>	<b>3.318</b>	<b>4.018</b>	<b>4.454</b>	<b>3,7%</b>	<b>3,5%</b>	<b>4,3%</b>	<b>4,7%</b>
<b>4. Real estate taxes</b>	<b>1.175</b>	<b>985</b>	<b>1.010</b>	<b>1.342</b>	<b>1,5%</b>	<b>1,0%</b>	<b>1,1%</b>	<b>1,4%</b>
<b>5. Capital taxes</b>	<b>5.635</b>	<b>4.646</b>	<b>4.055</b>	<b>3.628</b>	<b>7,1%</b>	<b>4,9%</b>	<b>4,3%</b>	<b>3,8%</b>
6. Other taxes	1.009	789	705	610	1,3%	0,8%	0,8%	0,6%
7. Other current revenues	3.780	3.773	4.622	6.500	4,7%	4,0%	5,0%	6,9%
<b>8. Total current revenues</b>	<b>79.916</b>	<b>93.881</b>	<b>93.303</b>	<b>94.401</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>
<b>GDP at current prices</b>	<b>211.300</b>	<b>235.000</b>	<b>231.900</b>	<b>225.400</b>				
<i>Percentage of total current revenues on gdp</i>	<i>37,8%</i>	<i>39,9%</i>	<i>40,2%</i>	<i>41,9%</i>				
<b>Current revenues less social insurance contributions</b>	<b>48.600</b>	<b>53.497</b>	<b>56.534</b>	<b>59.360</b>				
<i>Percentage on gdp</i>	<i>23,0%</i>	<i>22,8%</i>	<i>24,4%</i>	<i>26,3%</i>				

Sources: State Budgets, Social Budgets of Ministry of Labour and Social Insurance.

<sup>3</sup> A Policy for sustainable mobility in the Athens urban complex. George Yannis, Assistant Professor at National Technical University, Athens 2003.

<sup>4</sup> A study of the environmental impact of energy production in Greece. AMBIO Ltd. Athens 2004.

**TABLE 2  
PROPOSED ENVIRONMENTAL FISCAL REFORM**

Category of tax	tax revenues in million euros				percent of total tax revenues			
	2011	2015	2018	2021	2011	2015	2018	2021
1. Environmental taxes	7.627	18.061	23.601	31.151	8,1%	15,0%	16,0%	17,0%
2. Taxes on human effort of which social insurance contributions	70.241	88.678	110.164	138.775	74,4%	69,5%	69,0%	68,5%
	35.041	32.046	33.256	33.823	37,1%	25,1%	20,8%	16,7%
3. Other consumption taxes	4.454	5.623	6.986	8.800	4,7%	4,4%	4,4%	4,3%
4. Real estate taxes	1.342	1.694	2.105	2.651	1,4%	1,3%	1,3%	1,3%
5. Capital taxes	3.628	4.580	5.690	7.168	3,8%	3,6%	3,6%	3,5%
6. Other taxes	610	769	956	1.204	0,6%	0,6%	0,6%	0,6%
7. Other current revenues	6.500	8.206	10.194	12.842	6,9%	6,4%	6,4%	6,3%
<b>8. Total current revenues</b>	<b>94.401</b>	<b>127.612</b>	<b>159.695</b>	<b>202.591</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>
Rate of gdp change	-3,5%	2,8%	4,0%	4,5%				
Rate of tax revenue change	2,3%	6,0%	7,5%	8,0%				
Gdp at current prices	225.400	251.901	283.355	323.355				

Notes:

Environmental tax revenues are calculated on the basis of the percentage targets set out in the last three columns of the Table.

Taxes on human effort, (including VAT, personal income tax and others), are calculated on the basis of rates of change of gdp increased by about 3 percentage points, reflecting the extension of the tax base and the reduction of tax evasion.

Social insurance contributions are taken from the projections of Scenario A of Table 5, after deducting the percentages of environmental taxes shown in the Table below, which are channeled to State Insurance Funds to enable them to effect the corresponding reductions in Social Insurance contributions.

2015	2018	2021
60,0%	70,0%	80,0%
10.837	16.520	24.921

**TABLE 3  
PROJECTION ON THE BASIS OF PRESENT TRENDS**

Category of tax	tax revenues in million euros				percent of total tax revenues			
	2011	2015	2018	2021	2011	2015	2018	2021
1. Environmental taxes	7.627	9.628	11.795	14.653	8,0%	8,0%	8,0%	8,0%
2. Taxes on human effort of which social insurance contributions	70.241	88.678	108.634	134.955	73,6%	73,6%	73,6%	73,6%
	35.041	42.883	49.777	58.745	36,7%	35,6%	33,7%	32,1%
3. Other consumption taxes	5.426	6.850	8.392	10.425	5,7%	5,7%	5,7%	5,7%
4. Real estate taxes	1.342	1.694	2.076	2.578	1,4%	1,4%	1,4%	1,4%
5. Capital taxes	3.628	4.580	5.611	6.971	3,8%	3,8%	3,8%	3,8%
6. Other taxes	610	770	943	1.172	0,6%	0,6%	0,6%	0,6%
7. Other current revenues	6.500	8.206	10.053	12.489	6,8%	6,8%	6,8%	6,8%
<b>8. Total current revenues</b>	<b>95.373</b>	<b>120.407</b>	<b>147.503</b>	<b>183.243</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>	<b>100,0%</b>
Rate of gdp change	-3,5%	2,8%	3,5%	4,0%				
Rate of tax revenue change	2,3%	6,0%	7,0%	7,5%				

Note:

The figures of Table 3 are the result of projections of the relevant magnitudes of the 2011 State Budget, based on the rates of tax revenue change given in the last row. The latter are related to gdp rates, with a steady "plus" difference, reflecting the extension of the tax base and the reduction of tax-evasion.

**TABLE 4**  
**REVENUES FROM THE PROPOSED GREEN TAXES**

*million euros*

Category of tax	2011	2015	2018	2021
1. Special Consumption Tax (SCT) on plastic packaging		68	69	70
2. SCT on chemical fertilisers and agro-drugs		56	56	57
3. SCT on construction aggregates and marbles		102	103	105
4. SCT on lignite consumption		1.015	1.052	1.069
5. Energy tax on electricity and final consumption of natural gas		471	656	889
6. Urban tolls in congested areas		4.963	6.292	6.145
7. Realistic tariffs for water use, SCT on domestic water overuse		268	271	273
8. Extra tax revenues on petroleum products		935	1.048	1.179
9. Special Construction Licence charges		1.006	1.426	1.963
10. Special charges on solid and liquid waste, demolition materials		2.490	2.858	3.124
11. Special tax on gas emissions		586	623	641
<b>Sum A (new green taxes)</b>		<b>11.960</b>	<b>14.453</b>	<b>15.517</b>
<b>Sum B (existing green taxes)</b>	7.627	9.628	11.795	14.653
<b>Sum C (A+B)</b>	<b>7.627</b>	<b>21.588</b>	<b>26.248</b>	<b>30.169</b>

*Notes:*

1. **Sum A represents** total revenue from new green taxes. Item 8 refers only to extra revenues from the equalisation of tax on car and heating diesel, as well as the new tax on "luxury" cars. (see Table 19).  
**Sum B** is a transfer from Table 3.  
**Sum C** is the sum of A and B. This is different from the amounts of environmental taxes of Table 2, which as already stated are the result of the application of targeted percentages of 15%, 16% και 17% on total tax revenues for the years 2015, 2018 and 2021 respectively.
2. A comparison between the projected green tax revenues of Tables 2 and 4 indicates that the proposed specific new green taxes and charges, together with existing ones, generate substantially higher revenues in 2015 and 2018, than those resulting from the targets of Table 2 and only slightly lower in 2021. The latter is due to the stated hypothesis that green taxes lead to lower rates of consumption of the commodities and services taxed. However, as the mix and extent of green taxes is continuously adapted, in practice even in 2021, the revenues of Table 4 will exceed those of Table 2.
3. The imposition of the proposed green taxes (apart from the electricity tax, which is already in force) is both possible and necessary for 2012, in view of the shortfall in revenues. Only the urban tolls are proposed for 2013, as they require extensive technical preparation, and the special Construction Licence Charge should be pre-announced for 2014, so that its recessionary impact is felt after the current fall in construction activity has been checked.

**TABLE 5  
LABOUR MARKET DATA**

*million euros*

Category of data	actual figures		estimates		projections		
	2006	2009	2010	2011	2015	2018	2021
<b>A. On the basis of present trends</b>							
1. Remuneration of the labour force	67.891	104.732	99.108	94.450	95.703	107.653	123.911
Change ratio n/(n-1)		1,543	0,946	0,953	1,013	1,125	1,151
Annual rate during the period		15,6%	-5,9%	-4,7%	0,3%	4,0%	4,8%
2. Social insurance contributions	31.316	40.384	36.769	35.041	35.506	39.939	45.971
As percentage of labour force		37,1%	37,1%	37,1%	37,1%	37,1%	37,1%
3. Employers' contributions	8.683	10.944	9.964	9.496	9.622	10.824	12.458
As percentage of contributions		27,1%	27,1%	27,1%	27,1%	27,1%	27,1%
4. Total labour cost	76.378	115.676	109.072	103.946	105.325	118.476	136.369
Change ratio n/(n-1)		1,515	0,943	0,953	1,013	1,125	1,151
Annual rate during the period		8,9%	-5,9%	-4,7%	0,3%	4,0%	4,8%
5. GDP at current prices	211.300	235.000	230.200	225.400	251.900	279.286	314.159
annual rate during the period		3,9%	-4,5%	-3,5%	2,8%	3,5%	4,0%
<b>B. With Environmental Fiscal Reform</b>							
1. Remuneration of the labour force	67.891	104.732	99.108	94.450	95.703	109.841	127.883
Annual rate during the period		15,6%	-5,9%	-4,7%	0,3%	4,7%	5,2%
2. Social insurance contributions	31.316	40.384	36.769	35.041	24.669	23.419	21.050
As percentage of labour force		37,1%	37,1%	37,1%	25,8%	21,3%	16,5%
3. Employers' contributions	8.487	10.944	9.964	9.496	6.685	6.346	5.704
As percentage of labour force		10,4%	10,1%	10,1%	7,0%	5,8%	4,5%
4. Total labour cost	76.378	115.676	109.072	103.946	102.388	116.188	133.587
Change ratio n/(n-1)		1,515	0,943	0,953	0,985	1,135	1,150
Annual rate during the period		8,9%	-5,2%	-3,8%	-0,9%	4,1%	4,8%
As percentage of gdp		49,2%	47,4%	46,1%	40,6%	41,0%	41,3%
5. GDP at current prices	211.300	235.000	230.200	225.400	251.900	283.353	323.353
Annual during the period		3,9%	-4,5%	-3,5%	2,8%	4,0%	4,5%

Sources:

1. Macro-economic aggregates come from the Medium-term Framework for Fiscal Policy 2012-15 of the Ministry of Finance. After 2015, projections follow the trends established in the above document.
2. Aggregates for social insurance contributions and resources come from the Social Budgets of the Ministry of Labour and Social Insurance (MLSI). Labour force remuneration has been calculated on the basis of the above data and the rate of social insurance contributions and resources on remuneration, i.e. 37,1%, which is derived from Social Budget historical data for 2006 and 2009. This represents a weighted average between the rate of 45% of IKA (Social Insurance Foundation) and the rate of 12%, which is the average for the various other State Funds.
3. Total labour cost represents the sum of remuneration and employers' contributions, which stand at 27.1% of social insurance contributions.

#### D. AN ANALYSIS OF THE PROPOSED GREEN TAXES

The pages that follow contain analytical data of the green taxes proposed relating to:

- i. the tax base on which the proposed tax is imposed and the unit of measurement (quantity or value).
- ii. the tax rate evolution over the period under consideration.
- iii. the evolution of the volume of the tax base over the period under consideration.

As one can see from the particular analytical data, projections of the volume of the tax base are not linear, but take into consideration the evolution of the relevant macro-economic data (GDP, labour remuneration, consumption, total tax revenues), as well as the impact of each proposed tax on the volume of consumption of the taxed good or service. In most cases projections are based on the hypothesis of a tapering-off consumption, but in some others (where substitutes are available), even an absolute fall is anticipated.

## APPENDIX 2

### 1. The main thrust of fiscal policy in 1990-93

As indicated by the aggregates in the Table the main effort was directed at the revenue side, combined with an effective restrictive policy on expenditures. Wage and salary indexing was abolished and in 1991 an incomes policy of zero nominal growth was enforced.

The impressive growth in revenues was the result of a packet of drastic, as much as daring, measures heavily weighted towards arresting tax-evasion. There were 5 main pillars:

- i. Computerisation of the tax system in two stages: immediate instalment of local area networks in the principal tax offices and design, construction and operation of the total system (*Taxis*) over a 5-year period.
- ii. Fighting tax evasion: cross-checks of income tax returns, with other official data including credit card transactions, introduction of income assessment and tax control formulas, increase of penalties for tax evasion, bonuses for customs and tax officials tracking down large offences, declaration of origin of funds, founding of SDOE.
- iii. Increase of the tax base: introduction of new withholding tax on deposit interest, ad hoc levy on private buildings, increase in car registration and circulation taxes (vignette).
- iv. Tax Simplification: abolition of a great number of tax vouchers and procedures, reduction of income tax brackets from 9 to 4 and of tax rates from 25-52% to 15-45%, replacement of distributed profits tax with a standard withholding tax of 35% levied at source.
- v. Motivation of tax officials: setting of quarterly tax revenue targets with rewards (promotion) or penalties (demotion) for heads of Tax Offices, quick fraud checks for officials (over 2.500 transferred in the first 6 months), intensive training seminars, monthly review meetings of heads of Tax Offices and Customs Houses with the Minister, Junior Ministers and Directors General, open door policy of political leadership for all personnel.
- vi. Development and exploitation of public real estate: initiation of a programme for development and sale of disused military land (*only one army camp brought in close to 2 billion drs*) – another for long-term leasing of 38 islands – sale of old state-owned hotels.

Appropriate monetary and incomes policies curtailed inflation, from a high of 22.7 in 1991 (due mainly to a doubling of international oil prices) to 13.0 in 1993.

The deficit of public enterprises and organisations was slashed by more than two thirds between 1989 and 1991. A great reform in social insurance saved the system for the next 15 years. 81 nationalised industries and enterprises were sold back to the private sector or dissolved and 9,000 of their surplus personnel were dismissed. Number of civil servants dropped by 26,000. Working hours, utilities, banking, were liberalised.

At the same time and in order to avoid recession, the public investment budget was quadrupled between 1989 and 1992. Consequently, the overall impact of the above drastic measures on growth was minimised, with only a fall of 0.3 percent of gdp in 1990 and resumption of appreciable growth rates in the other years.



## 2. Results and conclusions

The basic characteristics of the effort carried out by the Mitsotakis Government for fiscal consolidation were: its comprehensive scope, systematic targeting, well-designed structure, mutual measure support, as well as its social sensitivity and above all the great attention paid to market forces.

The impressive results of this effort are summarised in the main Budget Aggregates given in the Table 1 below. They are analysed in two periods 1989-92 and 1992-93 to reflect the speed with which the Budget was consolidated in the first two-year period.

**Revenues** increased 2.16 times in the first two years and 2.4 in the three-year period, while **expenditure** was restrained to 1.65 and 2.04 respectively. This led to a sharp reduction in the Budget deficit from 17.6 percent of gdp in 1989 to 8.8 in 1992 and a **primary surplus** of 1.7 percent of gdp in the same year.

There are several lessons that can be drawn from the success story of 1990-93.

**First**, for fast fiscal consolidation, the economy must not be driven into a prolonged and deep recession.

**Second**, success in the fight against tax evasion depends **simultaneously** on three factors: (a) full use of the (now) computerised system, (b) lower income and social tax rates, (c) political leadership and full motivation and equipment of tax officials with the right tools.

**Third**, the struggle for a smaller public sector and exploitation of state property to produce revenues must be undertaken by the Ministry of Finance, which is the direct or indirect owner of all of it and has power over all the other players involved.

**Fourth**, the absorption of the Ministry of Finance by that of National Economy and not the other way round is always a cardinal mistake. Under present circumstances, a good move would be either to reinstate a separate Ministry of Finance or to keep things as they are, but move the physical seat of the Minister to the old building of the Ministry of Finance.

The success of the Mitsotakis Government in fiscal consolidation and reform had received a wide acclaim at the time. The Greek example was put forward in the Ecofin Council as a model by Commissioner Christian Scrivener. Greece figured as the best example by far of fast structural improvement in fiscal stance, in the OECD Outlook, as shown in the diagram on page 5.

**TABLE 1**  
**MAIN BUDGET AGGREGATES**

*In billion dracmas*

	1989	1990	1991	1992	1993	1989-92		1989-93	
						Δ	rate	Δ	rate
<b>REVENUE</b>	<b>2.470</b>	<b>3.344</b>	<b>4.267</b>	<b>5.329</b>	<b>5.970</b>	2,16	29,2%	2,42	24,7%
Current Budget	2.126	2.878	3.661	4.588	4.971	2,16	29,2%	2,34	23,7%
Agricultural Subsidies Account	287	374	477	529	709	1,84	22,5%	2,47	25,4%
Investment Budget	57	92	129	212	290	3,74	55,3%	5,11	50,4%
<b>EXPENDITURE</b>	<b>4.013</b>	<b>5.138</b>	<b>5.954</b>	<b>6.629</b>	<b>8.295</b>	1,65	18,2%	2,07	20,0%
Current Budget <sup>(1)</sup>	3.297	4.299	4.875	5.374	6.857	1,63	17,7%	2,08	20,1%
Agricultural Subsidies Account	287	374	477	529	709	1,84	22,5%	2,47	25,4%
Investment Budget	429	465	603	726	728	1,69	19,1%	1,70	14,2%
<b>DEFICIT (borrowing requirements)</b>	<b>-1.543</b>	<b>-1.794</b>	<b>-1.687</b>	<b>-1.300</b>	<b>-2.325</b>	0,84	-5,8%	1,51	10,8%
Current Budget	1.171	1.421	1.213	786	1.886	0,67	-12,5%	1,61	12,7%
Agricultural Subsidies Account	0	0	0	0	0				
Investment Budget	-372	-373	-474	-514	-439	1,38	11,3%	1,18	4,3%
Debt amortisation	215	359	1.009	2.241	1.708	10,41	118,4%	7,93	67,8%
Gross Deficit	-1.758	-2.153	-2.696	-3.541	-4.033	2,01	26,1%	2,29	23,0%
Interest	731	1.271	1.497	1.559	2.334	2,13	28,6%	3,19	33,6%
Primary expenditure	2.995	3.493	3.981	4.541	5.252	1,52	15,0%	1,75	15,0%
Primary deficit or surplus	-812	-523	-191	259	9	-1,32	-9,7%	-1,01	-0,2%
<b>GDP</b>	8.767	10.430	12.802	14.847	16.779				
<b>Deficit as percent of GDP</b>	17,6%	17,2%	13,2%	8,8%	13,9%				
<b>Primary deficit or surplus on GDP</b>	-9,3%	-5,0%	-1,5%	1,7%	0,05%				
<b>Annual change in GDP (percent)</b>		19,0%	22,7%	16,0%	13,0%				
<b>GDP deflator</b>	12,7%	19,3%	18,4%	14,7%	11,0%				

(1) excluding debt amortisation

Sources:

1991 Budget Report for 1989 and 1990 data

1993 Budget Report for 1991 data

1994 Budget Report for 1992 and 1993 data

Except for GDP deflator, which comes from OECD Economic Outlook