# The Real Cause of Greek Debt 

## Taxation and Labour Market Distortions in Greece


#### Abstract

Greece has the lowest public receipts of all the eurozone members, and this contributes significantly to the annual budget deficits and the extremely high level of public debt. The source of this shortfall is personal income taxation. The following article analyses the distortions in the labour market and in the taxation system which have led to this situation and points out where changes should be made.


Since the mid-1990s, the Greek economy enjoyed an average growth rate of $4 \%$, which let the country converge, more or less, with the eurozone standards of living. But despite that, many structural weaknesses continued to prevail, and in many cases they even deteriorated. During the last 15 years, Greece substantially succeeded in improving the standard of living of individual citizens, but it continued to lag behind in the organisation of its society, the quality of its economic institutions and the ability to provide public goods to its citizens. So, when the global economic crisis hit, all the failings that had not been dealt with during the past decades surfaced in a forceful way at the same time that the growth performance of the past years petered out.

To identify a strategy that can deal effectively with these failings we need first to understand the basic shortcomings of the Greek economy - the distortions and the bad incentives that are built into its institutions. Then we need to identify the crucial links that could trigger a wave and a domino effect of progressive structural reforms. Such a wave would amount effectively to a relocation of the Greek economy and Greek society to a new, socially superior equilibrium, which would imply that Greece would become, in all respects, an equal member of the privileged club of developed countries.

In this context, this paper focuses on one particular, but crucial, aspect of the distortions in the Greek economy: the distortions in the labour market, the consequences these distortions have on taxation and the political economy implications of these particular distortions. The fiscal implication of these distortions is reflected in the fact that Greece is the country with the lowest public receipts among euro-

[^0]zone member states. ${ }^{1}$ European Commission data on the tax receipts of member countries allow us to identify the source of this shortfall as personal income taxation. With the following exposition we aim to demonstrate that the elimination of this revenue shortfall needs to be accompanied by a reform of the labour market together with a rationalisation of the tax rates, and that such reforms are directly linked both to the ability of the country to ultimately manage its sky-high public debt, since this contributes significantly to the yearly budget deficits that have created and that propagate this debt, and to its ability to ensure a level playing field in the labour market.

## Taxation and Labour Market Paradoxes: Facts of Personal Income Taxation

One of the most salient differences between Greece and the other OECD countries regarding taxation ${ }^{2}$ seems to be the impressive progressivity of average personal income taxation rates, excluding social security and payroll taxes, together with the high absolute value of the total wedge after social security contributions have been added, especially for the lower income brackets. Keeping in mind the OECD observation regarding the progressivity of the tax wedge, we proceed to look at data for June 2008 from the Greek Institution for Social Security (IKA), where all salaried employees are insured. This data shows (see Figure 1) how the distribution of wage-earners in the different income brackets corresponds to the wedge introduced by income tax and social security contributions. Here average income tax is computed as a percentage of earnings gross of tax and net of social security contributions for each income bracket. To this tax, as a percentage of these earnings, we

[^1]then add the social security contributions for the employer and the employee, as a percentage of the wage gross of taxes. In any case, regardless of how the wedge is computed, it is clear that a significant mass of wage-earners is located in a small band of monthly remunerations, for which the burden of the tax and social security contribution wedge is minimised as a result of the low income tax burden, given that social security payments in Greece are a constant percentage of salaries up to a certain high threshold. Furthermore, this concentration abruptly falls off at the level of the minimum wage, which strongly suggests the existence of a binding constraint as suggested by Neumark and Wascher. ${ }^{3}$ The existence of a significant population of dependent employees with remuneration below the minimum wage is explained by the proliferation of special programmes to hire young graduates as trainees, who are exempt from social security payments, for whom a lower minimum wage applies and who are mostly employed in the central and general government, as well as by individuals who work for less than the full month, for example construction workers.

We can also see that for workers with a gross salary of about 2500 euros per month ${ }^{4}$ who were first insured before 1993, and with about twice that for those first insured after that date, pension rights and the related contributions are no longer increasing, and as a result the average wedge as a percentage of earnings starts declining. Not surprisingly, there seems to be a large number of earners of such high salaries who, however, form a gradually falling tail of the distribution if the income brackets of salaried incomes of over 2400 euros per month are fully extended. As a result, the finding of the OECD regarding the impressively high progressivity of income taxation seems to be complemented by the finding that a large concentration of employees is in the income bracket with the smallest average wedge that ranges from the minimum wage to the upper limit of a wage bracket that remains close to the minimum wage. Also, it seems that there is a relatively high concentration of earners at higher wages, where the wedge declines again as a percentage of total earnings. This is in line with the finding of the OECD that there is a rapid increase of the tax wedge between the low income earners and the earners that are at about $160 \%$ of the average wage, and this finding is very relevant to the reality faced by a very large number of wage-earners. It should be added that

[^2]Figure 1
Distribution of Monthly Wages and Corresponding Average Tax and Social Security Contributions Wedge of Bracket


Source: IKA (Institution of Social Security) for June 2008 und Ministry of Finance for income tax rates. Authors' analysis of this data.
in the autumn of 2008 the legislation regarding the tax treatment of stock options and bonuses for high income earners was made more stringent, and therefore it will be interesting to observe whether there are any changes in the distribution of the declared incomes of these high income earners in the future, especially since the tax rate for the bonuses of bank executives has now been set at $90 \%$. The fact remains, however, that until the year 2009 Greece had one of the most progressive personal income taxation laws among the European countries in our sample, as can be seen in Table 1. This follows not only because Greece has probably the highest level for tax-free income (with the exception of the much wealthier France and some wealthy Scandinavian countries which, however, have significant local taxes). It also follows because until 2009 it used to increase the tax rates for the next income brackets in a way broadly comparable with that of other countries, and in spite of the fact that it applies the top income bracket for relatively high incomes. This is about to change though, as according to the new tax law, personal income taxation is to become even more progressive, as shown by the column "Greece 2011" in Table 1. Regarding the relatively high level for tax-free income, it has to be noted that many other countries prefer the introduction of tax credits or deductions if certain prerequisites are met. This is a different approach from the unconditional one of tax-free income up to a certain level that is adopted in Greece, even if this condition is paired with the submission of receipts for consumption as is now planned, even though the effectiveness of this measure has still to be proven.

Table 1
Personal Income Tax Brackets in European Countries

| Income bracket from level till next bracket | $\begin{gathered} \text { Greece } \\ 2011 \end{gathered}$ | GR | AT | FR Tax free till €11 265 | IRL <br> Tax deductions | PT <br> Tax credits | ES | IT <br> Tax credits | $\begin{gathered} \text { DE + } \\ \text { solidarity } \\ \text { tax of } 5.5 \% \end{gathered}$ | UK | $\begin{aligned} & \text { FL + } \\ & \text { local } \\ & \text { taxes } \end{aligned}$ | SW + local taxes |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 |  | 0.00\% | 0.00\% | 0.00\% | 20.00\% | 10.50\% | 24.00\% | 23.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
| 4639 |  |  |  |  |  | 13.00\% |  |  |  |  |  |  |
| 5614 |  |  |  | 5.50\% |  |  |  |  |  |  |  |  |
| 6500 |  |  |  |  |  |  |  |  |  | 20.00\% |  |  |
| 7017 |  |  |  |  |  | 23.50\% |  |  |  |  |  |  |
| 8004 |  |  |  |  |  |  |  |  | 14.10\% |  |  |  |
| 10000 |  |  | 38.30\% |  |  |  |  |  |  |  |  |  |
| 11198 |  |  |  | 14.00\% |  |  |  |  |  |  |  |  |
| 12000 | 10\% | 25.00\% |  |  |  |  |  |  |  |  |  |  |
| 12600 |  |  |  |  |  |  |  |  |  |  | 8.50\% |  |
| 15000 |  |  |  |  |  |  |  | 27.00\% |  |  |  |  |
| 16000 | 24\% |  |  |  |  |  |  |  |  |  |  |  |
| 17000 |  |  |  |  |  |  | 28.00\% |  |  |  |  |  |
| 17401 |  |  |  |  |  | 34.00\% |  |  |  |  |  |  |
| 20800 |  |  |  |  |  |  |  |  |  |  | 19.00\% |  |
| 22000 | 26\% |  |  |  |  |  |  |  |  |  |  |  |
| 25000 |  |  | 43.50\% | 30.00\% |  |  |  |  |  |  |  |  |
| 26000 | 32\% |  |  |  |  |  |  |  |  |  |  |  |
| 28000 |  |  |  |  |  |  |  | 38.00\% |  |  |  |  |
| 30000 |  | 35.00\% |  |  |  |  |  |  |  |  |  |  |
| 32000 | 36\% |  |  |  |  |  |  |  |  |  |  |  |
| 33000 |  |  |  |  |  |  | 37.00\% |  |  |  |  |  |
| 34000 |  |  |  |  |  |  |  |  |  |  | 23.50\% |  |
| 35400 |  |  |  |  | 41.00\% |  |  |  |  | 40.00\% |  | 20.00\% |
| 40000 | 38\% |  |  |  |  |  |  |  |  |  |  |  |
| 40200 |  |  |  |  |  | 36.00\% |  |  |  |  |  |  |
| 51000 |  |  | 50.00\% |  |  |  |  |  |  |  |  |  |
| 52152 |  |  |  |  |  |  |  |  | 42.00\% |  |  |  |
| 53000 |  |  |  |  |  |  | 43.00\% |  |  |  |  | 25.00\% |
| 55000 |  |  |  |  |  |  |  | 41.00\% |  |  |  |  |
| 58000 |  |  |  |  |  | 40.00\% |  |  |  |  |  |  |
| 60000 | 40\% |  |  |  |  |  |  |  |  |  |  |  |
| 62000 |  |  |  |  |  |  |  |  |  |  | 31.50\% |  |
| 66674 |  |  |  | 40.00\% |  |  |  |  |  |  |  |  |
| 75000 |  | 40.00\% |  |  |  |  |  | 43.00\% |  |  |  |  |
| 100000 | 45\% |  |  |  |  |  |  |  |  |  |  |  |
| 250000 |  |  |  |  |  |  |  |  | 45.00\% |  |  |  |

Note: Tax rates increase linearly with income between the percentages listed.
Source: European Commission and Ministry of Finance for 2011 Greek tax law.

Figure 2
Minimum Wages in European Countries and the USA Euros per Month, 2007


Source: Eurostat.

It seems, therefore, that the minimum wage emerges as being very important in Greece, not so much because of its absolute level, which is about average when the minimum wages in other countries are taken into account, but because of its proximity to the main mass of the distribution of wage-earners (Figure 2). It has to be emphasised, of course, that since the other countries that have higher minimum wages than Greece are generally wealthier countries with a higher competitiveness ranking, Greece does not appear to have a low minimum wage once one adjusts for these factors. Also, a significant number of European Union member countries which are not included in Figure 2 do not have a national minimum wage at all but use other approaches to secure a minimum level of satisfactory pay for low-wage employees.

This observation, together with the aversion of the Greek economy to employing the young, which is documented by the very high rate of youth unemployment, could also be used to explain the number of workers earning the minimum wage. That way we can take into account both the aversion of the private sector to employing young and inexperienced workers at a wage that is close to the wage of more experienced workers and at the same time the adjusting for the fact that the proximity of the minimum wage to the main mass of the distribution of employees is expected to increase the number of those that receive it. The popularity of the "stage" programmes, i.e. training programmes for the young, even though the pay offered is significantly below the minimum national wage, seems to support this argument. Of course the hope of the numerous participants in these programmes, who are predominantly employed in the public sector where they often sim-

Figure 3
Salaried Employees to Self-employment in EU Countries


Source: Eurostat. Data for Q1 2008. Self-employed are not employers.
ply perform chores for the permanent public employees, that they may ultimately bypass the law and themselves be hired by the public sector, further contributes to the attractiveness of these programmes in spite of their low pay. It should be added that this particular structure of the tax wedge emerged in Greece during the early 1980s, a time that was associated with a fast rise in unemployment and very poor macroeconomic performance. This peculiarity of the distribution can also explain the proximity of the low minimum wage to the median wage and the high income inequality documented in Greece.

All the above evidence provides an initial explanation as to why self-employment is so attractive in Greece. The unusual predominance of self-employment compared to other European countries (Figure 3) and as an absolute number within the country (Figure 4) needs to be explained by the existence of tangible incentives rather than by the often invoked "inherent tendency of Greeks to prefer self-employment". This point seems to be particularly relevant to the attractiveness of self-employment especially for skilled middle-class professionals, who seem actively to avoid salaried employment and the high wedge that is associated with salaried employment in higher income brackets, something that was also pointed out by Burtless ${ }^{5}$, whose observations regarding the Greek labour market seem to be verified by all the data and evidence we are able to collect.

The plausibility of the argument that the self-employment of higher-skill professionals is increased by their ability

[^3]Figure 4
Greek Workforce by Insurance Type ${ }^{1}$
(in thousands)

${ }^{1}$ Insured by IKA may include up to 200000 that work for public companies or entities controlled by the general and central government.

Source: ESYE labour force survey for Q4 2008.
to avoid the progressively increasing tax wedge to which higher-paid salaried employees are subjected can be investigated using data from the General Secretariat of Information Systems of the Ministry of Finance. We initially point out that the Ministry of Finance data show how tax revenue in the different income brackets seems to respond to the changes in the tax rates of each bracket (Figures 5 and 6). Note that in Figure 6 each tax return includes the

Figure 5
Income from Salaries and Pensions and from Selfemployment to Total Income per Bracket
Euros per Month, 2007


[^4]Source: Ministry of Finance.

Figure 6
Taxable Income and Personal Income Tax per Income Bracket, 2007


■ Taxable income. Data per tax return. Percentage of total income declared per bracket.
■Personal income tax. Data per tax return. Percentage of total tax paid per income bracket.
Source: Ministry of Finance.
income and tax of both household members if they both earn income.

One can clearly see how, for the fiscal year 2007, income from salary and pensions mainly contributed to the income of the lower income brackets and higher income brackets bear the main tax burden in spite of the rapid decline of the population of high income earners. It should be noted that the distributions in Figure 6 document family income, and therefore the form of the distributions is affected by the coincidence of data for households with one and two earners, explaining the double peak in the distribution of declared income that is observed around the tax-free annual income for one-earner and two-earner families.

The annual data issued by the General Secretariat for Information Systems of the Ministry of Finance presented in Table 2 give very detailed information regarding the distribution of the tax burden across income brackets for individuals. This data shows in many ways how a disproportionately large share of the population declares an income that effectively makes it exempt from income taxation. Of 5.5 million personal income tax declarations by heads of households for the fiscal year 2007, 3 million declared an annual income less than $€ 12000$ (for salaried employees this has to be divided by 14 to get the monthly salary measured by IKA, while for the self-employed the monthly income would be this number divided by 12). As a group they represent 54\% of the returns filed, declared $21 \%$ of the total income declared in personal income tax returns and paid $0.4 \%$ of the total personal income tax paid, which amounts to $0.18 \%$ of the total income declared for this group.

Table 2
Personal Income Declared and Tax Paid per Income Bracket
(Income figures in euros)

| Income bracket for family income | Number of returns | \% | Income | \% | Total tax paid | \% | Average income | Average tax |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Up to 12000 | 3008908 | 54.41 | 18434000882 | 21.34 | 33188539 | 0.4 | 6126 | 11 |
| 12000-30000 | 1830203 | 33.09 | 34202227796 | 39.59 | 2087015250 | 25.09 | 18688 | 1140 |
| 30000-75000 | 632352 | 11.43 | 27004877237 | 31.26 | 4202657012 | 50.52 | 42705 | 6646 |
| 75000 + | 58964 | 1.07 | 6755109652 | 7.82 | 1995470906 | 23.99 | 114563 | 33842 |
| Total | 5530427 | 100.00 | 86396215567 | 100.00 | 8318331707 | 100.00 | 15622 | 1504 |

Source: Data of the annual statistical bulletin of Tax Data, General Secretariat of Information systems, Ministry of Finance

The 1.8 million returns with a declared annual income of $€ 12000$ to $€ 30000$ represent $33.1 \%$ of all personal income tax returns filed, declared $39.59 \%$ of all personal income and paid $25.09 \%$ of all personal income tax for that year. The average tax burden of this group was $6.10 \%$.

The 632352 returns with a declared income from $€ 30000$ to $€ 75000$, which represent $11.43 \%$ of all returns filed, declared $31.26 \%$ of all the personal income and paid 50.52\% of the total personal income tax collected by the state. The tax paid by this group amounted to $15.56 \%$ of their declared income. Those declaring above €75000 income paid $29.5 \%$ of their income in taxes. And even though they amount to $1.07 \%$ of all income tax returns filed, they declared $7.82 \%$ of all personal income and paid $23.99 \%$ of all income tax collected by the state in that year.

To compare these facts with the realities observed in other countries, we can draw on available data from Germany and France. According to the Federal German Ministry of Finance, in 2006 the $25 \%$ of the population that belonged to the top income bracket paid $76.3 \%$ of all personal income taxes, the $25 \%$ belonging to the next income bracket paid $17.4 \%$ of this tax and the bottom $50 \%$ paid $6.3 \%$ of the total income tax. In France, according to data from the Direction Générale des Impôts (DGI) for the financial year 2005, the wealthiest $20 \%$ of households paid $75 \%$ of the personal income tax while the poorest $48 \%$ of households paid $4.5 \%$ of the personal income tax, with the middle $32 \%$ of households paying $20.5 \%$ of the personal income tax. In Greece, the $25 \%$ of the population with the highest income paid 92\% of the personal income tax. The next $25 \%$ paid $7.9 \%$ of the total personal income tax collected by the government and the $50 \%$ that declared the lowest income paid only $0.028 \%$ of all personal income tax. The bottom and middle part of the income distribution in Greece therefore contribute relatively little to personal income tax, at least compared to France and Germany.

It is also impressive to note how in Figure 6 the distribution of income declared, and tax paid, seems to fall off to
the left of the levels that coincide with the end of tax-free income for one-earner and two-earner families. Similarly, using the same database, one can see how the number of individuals, not families this time, declaring income over that which is associated with the tax-free limit starts falling off quite rapidly. Please note that Figure 6, which documents declared income from all sources in annual income brackets, does not contradict Figure 1, which documents the number of salaried employees per bracket of monthly wages registered by IKA, as the latter may not cover all the income of an individual, for example rents, dividends or other income.

To further comment on the distribution of declared income, one would need to have access to additional information than the already exhaustive data published by the General Secretariat of Information Systems, Ministry of Finance and Economy. In particular, we would need to know not only the income of each member of the twoearner households, but also the tax that corresponds to salaried labour, rather than only the tax that corresponds to total family income. With access to such data we could better examine the relationship between the structure of income taxes and the income declared per earner of salaried income by separating exactly the amount of income tax that is generated by salaried labour. Also, the separation of income from salaries and from pensions would help us to improve the comparison of income declared from salaried labour to the income declared from non-salaried labour. Still, Figure 5 shows quite clearly how the aggregate income from salaried labour and pensions falls off after a yearly income of about 20000 euros (about 1500 euros per month), while at the same time the proportion of declared income from self-employment for each successive income bracket starts to increase. Please note that other income is not included in Figure 5, for example data regarding income from agriculture, which is predominantly located below the personal tax-free level. Therefore the question posed should not be why the self-employed declare low incomes, as clearly a significant number of self-employed declare high incomes. It should rather be
whether the income declared by the self-employed is high enough. It seems puzzling that while the self-employed tend to match more closely the income declared by salaried employees at higher income brackets, the thinning of the population of salaried employees at these higher brackets along with the large number of self-employed, and their relatively low social security contributions when compared to salaried labour, are not matched by higher revenues than the ones declared by the salaried employees.

## Implications of the Taxation and Labour Market Paradoxes

Matching this information with the high occurrence of self-employment in Greece, as shown in Figures 3 and 4 , suggests not only that the tax revenue should be fairly elastic with respect to the total wedge on wage income, as a reduction in the progressivity of the tax burden for middle and upper-middle incomes will probably remove a strong and binding disincentive for salaried employment in these income brackets and encourage a migration of salaried labour from lower income brackets to higher income brackets. It also most probably would encourage self-employment to migrate to salaried employment to the extent that the choice of self-employment implies a fixed cost. Such a cost includes the need to open special books with the tax authorities and the implied obligation to have these books subjected to audits. It also includes the occasional requests to pay administratively set fines for tax evasion in which the administration assumes the self-employed to have engaged, even if the books have not been audited. Finally, the broadly fixed social security contributions, which are set at similar levels regardless of the size of declared and undeclared income, means that they are more advantageous for high-income earners.

Yet more relevant to the political economy analysis is the fact that one can reasonably expect that in a society where half the households pay no personal income tax at all, any self-employed probably do not feel like outliers when they pay no taxes or anything higher than some token personal income tax, according to a mechanism similar to the one that encourages petty crime in areas with broken windows, as is argued by Keizer et al. ${ }^{6}$ and Kelling and Coles. ${ }^{7}$ We can rationally assume that a high-income self-employed person would pose him- or herself serious questions if he/she declared enough income to place him- or herself among the small group of individuals that

6 K. Keizer, L. Lindenberg, L. Steg: The Spreading of Disorder, in: Science, No. 322, 2008, pp. 1681-1685.
7 G.L. Kelling, C.M. Coles: Fixing Broken Windows: Restoring Order And Reducing Crime In Our Communities, New York 1997, Touchstone.
contribute most of the personal income taxes. According to the data of the General Secretariat of Information Systems, for the fiscal year 2007 the average individual (of 8.2 million individuals) declared an income of $€ 10057$ and the average household income declared on the 5.5 million household tax returns was $€ 15551$. At the same time, the Household Income and Living Conditions Survey of the Greek National Statistical Service estimated for the year 2007 an average personal income of $€ 12130$ and an average household income of $€ 21150$. This discrepancy suggests that indeed tax evasion may be a problem among the 8.2 million individuals that have a tax number and the 5.5 million households that file tax returns. These data also suggest that the extent of undeclared income is probably in excess of $20 \%$, but it is also reasonable that unlike aggregate income, most of this undeclared income would imply the obligation to pay at least some tax - that is every euro of the undeclared income would be taxable if declared properly, as it makes little sense not to declare income as long as one remains below the threshold for tax-free income.

European Commission data show that while the total direct taxes paid by corporations declined in 2006 towards the eurozone average from the high levels of the previous years following the recent reduction in corporate tax rates, the direct taxes paid by individuals remain, at 8.1\% of GDP, much lower than in the other eurozone countries, where they amount to $12.7 \%$ of GDP. As a matter of fact, as already mentioned, the low contribution of personal income taxes is largely responsible for the low level of tax revenue as a percentage of GDP in Greece compared to the other European countries. ${ }^{8}$ This observation appears to link the above-mentioned attributes of the Greek personal income tax legislation and reality with the weak performance of the Greek government finances both during the past years and during the current economic situation, especially when it is also taken into account that according to the same European Commission data, the relatively numerous self-employed seem to contribute the same social security payments as the self-employed of the eurozone as a whole, who are on average a much smaller part of the total workforce. The fact that the selfemployed in Greece pay social security contributions that are not computed according to their income but according to other factors such as the years they have worked and the economic transactions in which they participate (real estate transactions, for example, where according to Greek law a lawyer must be present and part of his fee

[^5]must be paid to the two related social security funds) contributes to this reality.

To the extent that administrative barriers to entry to selfemployment make it unattractive to choose it unless one has a sufficiently high income to pay this cost and to take advantage of the potential benefit of tax evasion as well as the savings from the social security payments which effectively increase for higher incomes, this setup could also work as a barrier to increasing aggregate employment, and not only as a motive to substitute self-employment for salaried employment or part-time employment. This is probably true especially for the less skilled or for the younger entrants to the labour market who are less able to face the process of opening the special tax books that are required for the self-employed and which may sooner or later lead to the need to deal with corrupt tax officials or the request of the government that a fine for administratively estimated supposed tax evasion is paid. Also, they may be less willing to accept the almost flatrate social security contributions of the self-employed that are very advantageous for high incomes but may be, proportionally, much more onerous for self-employed with small incomes. Similarly, the underdevelopment of a market for temporary or part-time employment may drive groups away from the job market that usually voluntarily choose such work arrangements, like working parents and especially mothers ${ }^{9}$, and that are neither highly skilled nor able to reach the income needed to justify the fixed cost needed to pursue self-employment.

Finally, the available evidence suggests that changes in the wedge on salaried labour, as well as changes in the employment protection legislation for salaried labour, will have a relatively limited impact compared to other European economies as long as self-employment is so widespread. The unusual progressivity of personal income taxation will be relevant to relatively few high-income salaried employees as long as such a large number of selfemployed people manage to avoid declaring their income, and labour laws for salaried employment do not apply to over one-third of the private sector workforce as long as self-employment remains so widespread. Reducing these incentives for self-employment in Greece is not only a matter of fairness, as it is unreasonable to require salaried employees to pay such a progressive tax and social security wedge when a substantial population of the selfemployed is, effectively, not subject to the same wedge. It is also a matter of resolving the core of the fiscal challenges faced by Greece. Simple back-of-the-envelope calculations that shift the distribution of declared income to the right so that the average declared income matches

[^6]the average income according to the household income and living standards survey, according to the tax law that applied in 2007 and the respective average tax rate for each income bracket, leads to an increased personal income tax revenue for the government of about $€ 5$ billion - or over $2 \%$ of GDP in 2007. If one also adds proportional social security payments, which are not computed for the self-employed in the same way that they are computed for salaried employment since the underreporting of their income would lead to very low payments to the related funds, this number would increase even more.

Yet these facts also underscore a political economy reality: currently more than half of Greek households are exempt from any personal income tax and pay relatively low social security contributions. In other words, a significant majority of the voter population and about half of the heads of households treat public money as "other people's money". Abusing it, therefore, is not something that concerns them directly. Furthermore, increasing taxes on the "rich", given that they are relatively few, and avoiding displeasing the large number of voters who effectively do not pay income taxes and substantial social security contributions, is a strategy that earns easy votes at the ballot box. With similar reasoning, it can be argued that the opposite strategy that would, one way or another, displease a large pool of voters that has become accustomed to pay no income tax would most likely lead to certain defeat at the ballot box.

## A Summary of the Facts on Personal Income Taxation

First, in Greece a disproportionally large percentage of personal income tax returns declare incomes low enough so as to ensure that about half the households that file tax returns essentially do not pay any income tax. At the same time, Greece has a very large number of selfemployed, who face lower social security payments per capita and have more opportunities to evade taxes, in particular when they have real incomes that are higher than the average income. As a result, it seems very probable that both the popularity of self-employment and the large number of tax returns that declare such low income are related to the ability of the self-employed to effectively avoid taxes, especially at middle and higher middle incomes. While trying to support earners of low salaries, it seems that the progressive wedge on salaried labour encourages self-employment in particular at (undeclared) higher incomes and in addition provides a possible place for other undeclared income to hide - say through the purchase of services from the self-employed. If this is true, then salaried labour faces stiff and unfair competition from self-employment, which could explain the un-
willingness of the economy to expand the use of salaried labour as an input and to rely disproportionally on the self-employed together with a relatively small contingent of salaried labour that is located predominantly in those income brackets in which salaried labour faces the lowest wedge compared to the alternative of self-employment. This analysis shows that the case here is not so much a case of reducing the absolute wedge on average wage income, which is a little higher than the OECD average, but that it is mainly a case of equalising the effective wedge on salaried employment and self-employment. A marginal reduction in the wedge on salaried labour will have little effect as long as an alternative with a much lower wedge persists, especially for higher income brackets.

Second, the tax wedge is currently too progressive, especially at middle incomes. This progressiveness of the tax wedge on salaried labour makes things worse for the Greek labour market because of the fact that this wedge starts to increase at a level that is too close to the minimum wage. The result is that a disproportionally large number of the salaried employees are squeezed between a narrow income range that spans from the minimum wage to the point where the wedge starts to increase. Below this narrow range the minimum wage rules out legal salaried employment and above this narrow range self-employment is encouraged over salaried employment. Changes in the tax wedge and in the minimum wage therefore affect the core of the distribution of employees and as a result have the potential to cause much more damage than in other countries where the minimum wage is further distanced from the main mass of this distribution. Reducing the minimum wage, especially for the young and inexperienced as suggested by the OECD ${ }^{10}$ and authors like Neumark and Washer ${ }^{11}$, is one part of the solution. But the documented increase in the progressivity of the tax wedge for incomes up to $€ 30000$ should also be drastically reduced in order to encourage a migration of the mass of the distribution of salaried workers to higher income brackets that are more distant from the minimum wage. Such a measure could lead to an increase in the average declared wage to the extent that indeed a significant mass of salaried employees migrates to these higher income brackets, and it is probable that the net receipts from income tax would also increase even if tax rates were reduced, as long as they apply to the increased salary of an increased population of middle income earners that declare most of their income. At the same time, the documented income inequality would decrease and both salaries and employment would increase. This would follow as the distance between the median and the minimum

[^7]wage increases, thus encouraging the hiring of those that enter the job market close to the minimum wage and also adding to the increase of the share of wage income. It should be noted that while decreasing the wedge for middle incomes would be one way to proceed, the same effect could also be achieved by raising the wedge on lower incomes. This alternative approach to reducing the progressivity of the income tax legislation would better align the Greek tax legislation with the tax legislation that exists in other European countries. This would amount to asking a vast majority of Greeks who currently pay no income tax at all to pay at least some token contribution, as is done in countries like France and Germany for example. Also, it would be in conformity with the fact that even though the OECD finds that the progressiveness of the tax wedge is extremely high in Greece, the average level of this wedge is simply a little above the average for upper middle incomes. Such an alternative approach was effectively suggested by a proposed law that intended to abolish the zero tax rate up to $€ 12000$ of annual income of many selfemployed. This law was never adopted following pressure from the unions of the self-employed on the government that proposed the measure. New tax laws proposed by the current government aim to make taxpayers collect receipts from the services of self-employed and professions that so far either seem to evade taxes or are exempt from declaring their true income by law, like taxi drivers and petrol station owners for example. Even though these measures may indeed help to reduce the inequalities of a tax system which so far puts the personal income tax burden disproportionally on a small number of average to high income salaried employees who predominantly declare all their income, these measures will not reduce the excessive progressivity of the income tax system and therefore will not remove the motive to employ salaried labour only in the narrow income bracket between the minimum wage and the level of the tax-free income.

Finally, the issues relating to personal income taxation seem to be directly related to the state of the public finances of the country, as the revenue shortfall in personal income tax as a percentage of GDP is approximately of a size that is comparable with the structural deficit of the general government budget deficit during the period that preceded the current crisis. As such, the equalisation of the contribution in income taxes and social security contributions of salaried labour and self-employment, the reduction of tax evasion and marginal improvements in the personal income tax legislation, along with the increase in employment and consequently taxable personal income as a result of an improved regulatory setting that increases the competitiveness of the economy, are all directly and crucially related to the unwinding of the current grave situation of Greek public finances.


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[^1]:    1 See P. Arestis, T. Pelagidis: Hypocritical to Suggest Greece Be Ejected from Eurozone, in: The Financial Times, 28 January 2010; P. Arestis, T. Pelagidis: Greece's Economic Problems and Euro Threats are Exaggerated, in: The Guardian, 1 February 2010.
    2 OECD Tax Database "Taxing Wages - Graphics".

[^2]:    3 D. Neumark, W. Wascher: Minimum Wages, Cambridge Massachusetts 2008, MIT Press.
    4 In Greece the annual earnings in the private sector are the monthly earnings times 14 , while the size of the additional two cash handouts have recently been reduced for the public sector. Given that the salary forms a smaller part of total remuneration in the public sector, where various cash payments are numerous and widespread, this reduction has had a rather limited effect.

[^3]:    5 G. Burtless: The Greek Labour Market, in: R.C. Bryant, N. Garganas, G. Tavlas (eds.): Greek's Economic Performance and Prospects, 2001, Bank of Greece and The Brookings Institution.

[^4]:    -Total income per bracket from salaries and pensions, as a percentage of total personal income declared for FY 2007.
    -Total income per bracket from self-employment as a percentage of total personal income declared for FY 2007. Data per individual, and not per family tax return.

[^5]:    8 See Table 3 in M. Mitsopoulos, T. Pelagidis: Economic and Social Turbulence in Greece. The Product Markets are a No-Brainer, the Labour Market is Not, in: Intereconomics, Vol. 44, No. 4, 2009, pp. 246-254.

[^6]:    9 D. Neumark, W. Wascher, op. cit.

[^7]:    10 OECD: Economic Survey of Greece, Paris 2007, OECD.
    11 D. Neumark, W. Wascher, op. cit.

