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Tax Morale in Greece

Aristidis Bitzenis* and Vasileios Vlachos**

This paper aims to explore the dimensions of tax morale in Greece, whose shadow economy is among the biggest in the eurozone. In the process of doing so it explores whether the tax burden per se is as equally important to the size of the shadow economy as tax morale is. A comparative analysis of tax burden data reveals that its effect per se is not as important as tax morale is on the size of the Greek shadow economy.

1. Introduction

Tax revenues provide governments with the necessary funds to finance productive investments and poverty relief programmes, deliver public services and build the infrastructure needed for long-term growth. Public opinion surveys explore what lies behind the motivation of citizens to pay their taxes other than their legal obligation to do so. The scientific term of the subject that they investigate is "tax morale". Both public opinion surveys, undertaken by intergovernmental organizations and the rising literature strand on the determinants of tax morale indicate its effect on tax compliance.

This paper aims to explore the dimensions of tax morale in Greece, a country that has one of the biggest shadow economies in high-income countries of the European Union (EU). Moreover, it aims to explore whether the tax burden per se is as equally important to the size of the shadow economy as tax morale is.

The paper is organized as follows. The next section discusses the causes and effects of tax morale. The theoretical dimensions of the concept and the findings of empirical explorations of its determining factors are discussed. Moreover, an overview of the impact of tax morale on economic aggregates is also given. The third section gives a background on the factors shaping tax morale in Greece. The discussion concerns the effect of clientelism and rent-seeking on two particular tax morale determinants, reciprocity and peer effects and social influences. Moreover, an overview of the tax burden in Greece is given. Section four presents the conclusions.

2. Tax Morale: Causes and Effects

This section discusses the determinants and impact of tax morale. Section 2.1 discusses the determinants of tax morale from both theoretical and empirical perspectives. Section 2.2 discusses how tax morale is related to other economic aggregates such as tax receipts.

2.1 The Determinants of Tax Morale

There several databases for the exploration of tax morale determinants, which are available on the internet. The World Values Survey (http://www.worldvaluessurvey.org/wvs.jsp) provides data on institutional and

*Dr. Aristidis Bitzenis, Department of International and European Studies, University of Macedonia, Greece. Email: bitzenis@yahoo.com
**Mr. Vasileios A. Vlachos, Department of International and European Studies, University of Macedonia, Greece. Email: vlachosuk@hotmail.com

socioeconomic factors associated with tax morale globally to help build a global picture of tax morale. Other databases with similar content, which are more useful to help capture a regional trend are the Afrobarometer (http://www.afrobarometer.org/), Asian Barometer (http://www.asianbarometer.org/), Latinobarómetro (http://www.latinobarometro.org/lat.jsp) and European Values Study (http://www.europeanvaluesstudy.eu/).

In their overview of the literature on tax morale, Daude et al. (2012: 12) comment on the fact that these survey measure tax morale in different ways. For example, the World Values Survey and Latinobarómetro ask "whether cheating or evading taxes can be justified", although the former adds "if you have the chance". Latinobarómetro complements it with a question whether "good citizens should pay taxes". Afrobarometer focuses on enforcement, asking whether "the tax administration has always the right to make people pay taxes or not". The latter approach could be affected by trust in the administration itself, blurring the relationship with public services in general. Moreover, Torgler (2004), who also discusses this issue and argues that the same tax morale questions may mean different things depending on the translation and the culture of the country.

Daude et al. (2012) also discuss the findings of the empirical explorations of tax morale:

- Religion is strongly associated with positive attitudes towards paying taxes.
- Older-age respondents justifying less tax evasion.
- There is no consensus on the effects of gender (almost half of the papers find a negative effect).
- Satisfaction of financial position is linked with tax evasion less frequently.
- Educational attainment impacts positively on tax morale indicators.
- Employment status is also relevant to explaining inter-personal differences (i.e. unemployment impacts negatively on financial position and moreover, self-employed exhibit lower tax morale).
- Trust and satisfaction with democracy, with the government, and specifically with provided health and education services increase tax morale.

With data from the World Values Survey the authors perform a microeconometric analysis of the above indicators at a global level and a regional analysis of perceptions. Their findings on the former (Daude et al., 2012: 23) indicate that perception on the functioning of democracy, transparency and fairness are relevant to understand tax morale, while the socioeconomic issues of religiousness, gender, employment status, educational attainment and age composition of the population relate to the stigma associated with evading taxes. With regard to the latter (Daude et al., 2012: 33), the authors indicate that good perception of public officials and satisfaction with public service delivery explain tax morale.

Moving away from empirical research, a discussion about the theoretical dimensions of tax morale should be made with reference to Luttmer and Singhal (2014). The authors argue that tax morale is an important component of tax compliance decisions (is some cases as much as enforcement, which is the primary driver of compliance according to the authors) and present it as something that is a lot different from the benchmark economic model of tax evasion of Allingham and Sandmo (1972).

The authors describe tax morale as a set of motivations for tax compliance that can be summarized into:

- intrinsic motivation, which is the additional term in the utility function that increases in the amount of taxes that the individual decides to pay;
- reciprocity, in which an additional utility term for paying taxes depends on the individual's relationship to the state (perceptions about the fairness of the tax system and quality of public services);
- peer effects and social influences, in which the additional utility term for paying taxes depends on views or behaviours of other individuals;
- long-run cultural factors that may affect the willingness to pay taxes;
- information imperfections and deviations from utility maximization (i.e. cases where individuals misperceive the probability of being detected in evading taxes or may exhibit loss aversion).

The possibility of tax-morale-driven compliance has broader implications for optimal tax policy. Since tax morale exists as a determinant of compliance and can be affected by government decisions, conditional on a given enforcement environment, changes in the level of tax morale improve compliance.

2.2. The Impact of Tax Morale on Economic Aggregates

The discussion in the previous section indicates that tax morale causally affects compliance behaviour and reflects the level of trust to public institutions and perceived fairness of the tax system. Martinez-Vazquez and Torgler (2009) argue within this context that the success of tax reforms and tax administration modernizations (in Spain) has a lot to do with improvements in tax morale.

The link between tax morale and compliance indicates the effect of the former on tax revenues. The importance of tax revenue for economic growth and development can be summarized as follows:

- Tax revenue provides a sustainable basis for development and reduces dependency on external financing.
- Stable and predictable tax systems provide a key platform for trade and investment.

A tax system has to be fair, transparent and credible and moreover, encourage governments to be more accountable to their citizens.

Along with the aforementioned, tax morale is also an important determinant of the shadow economy and has therefore an impact on tax evasion (for example, see Torgler, 2011). In particular, the non-direct approaches to the shadow economy that do not explore the influence of institutional variables beyond bureaucracy and regulations (for example, see Ruge, 2010), indicate that the size of the shadow economy is determined by the level of development, bureaucracy, the size of taxes and social security payments and the extent of labour market regulations. The non-direct approaches that explore a greater set of institutional determinants (for example, see Feld and Schneider, 2010) indicate the importance of tax morale and the quality of public sector services and state institutions.

When the quality (performance) of state institutions and public sector services is regarded to be a part of a contractual relationship between the cost of public goods/services and the access to them, it is linked to the notion of tax morale (Feld and Frey, 2007). Numerous non-direct studies (for example, see Dreher et al., 2009; Torgler and Schneider, 2009; Dreher and Schneider, 2010; Schneider, 2010) emphasize on the quality of public institutions that

impacts on key factors responsible for the development of the shadow economy, such as tax morale.
The influence of tax morale on the shadow economy implies that the phenomenon impacts on these factors affected by the shadow economy, such as unemployment and the size of the official economy.

3. Tax Morale in Greece

This section gives a background on the factors shaping tax morale in Greece. The discussion concerns the effect of the two main forms of public sector corruption discussed in relevant literature (termed as clientelism and rent-seeking) on two tax morale determinants. The discussion also includes a depiction of several indicators of the tax burden in Greece in order to evaluate its impact on tax morale vis avis that of reciprocity.

3.1 Clientelism and Rent-Seeking

Tax morale in Greece has been explored either through studies on tax evasion or papers that focus on the shortcomings of the country's officials institutions and highlight the reciprocity dimension of tax morale. An early study concerning the determinants of tax evasion in Greece concludes that widespread tax evasion is largely due to the historical mistrust between the Greek state and its citizens (Ballas and Tsoukas, 1998). Over a decade later and despite the positive externalities era of the euro experience (prior depression), low tax morale (influenced by distrust, both in the government or state institutions and in other taxpayers) remains a major cause for the inability of fiscal authorities to meet projected tax receipts goals (Kaplanoglou and Rapanos, 2013). This form of distrust impacts on two particular tax morale determinants: reciprocity and peer effects and social influences (see discussion in the previous section).
The reciprocity dimension of tax morale in Greece has been affected greatly by the phenomena of clientelism and rent-seeking, which represent corruption in the public sector. Government decisions are not depicted only in the size of fiscal deficits that increase the tax burden (like in the case of Greece), but also set the overall stage on which the economy performs, through regulations that shape labour and product markets and impact on the quality of official public institutions and administration (Enste, 2010). All of these have been considered as determinants of the shadow economy and moreover, as contributing factors to the level of tax morale, which is also considered as a (key) determinant of the shadow economy. Therefore, the major challenge for every government is to have public institutions that work efficiently and act as a constraint for selfish politicians (Schneider, 2010).
In an attempt to classify the capitalist model of the Greek economy, Featherstone (2008) concludes that it has many of the characteristics of a neo-corporatist regime (where the government negotiates sustainable bargains with unions and employers) along with some unique features, such as the "parentela" of interest mediation. The representation of unions' and employers' federations is skewed towards certain groups that over-play their interests. On the one hand employees of the public sector enjoy disproportionate benefits and on the other, certain employers (from the private sector) benefit from market regulations, barriers to entry and stable product demand. In brief, Featherstone (2008) indicates that the problems of clientelism and rent-seeking result in high levels of perceived corruption and tax evasion, which undermine competition and the effective delivery of public

services and functions and as a result, generates a welfare system that is expensive, wasteful and socially exclusive.

In an assessment of the Greek political practice, Lyrintzis (2011) argues that the political elite utilizes state channels and recourses in order to control a great aspect if not all aspects of public life (such as organized interests, the civil service, local and regional authorities and the universities) and that it forces the private sector to develop and maintain close links with the parties for the exchange of assistance from state mechanisms to secure loans, business licences, etc. Moreover, the norm of regarding government expenditure (public sector) as a “free” good that does not bear any costs strengthens the role of interest groups that defend the status quo and seek to gain rents through political channels (Mitsopoulos and Pelagidis, 2009a). These rents are obtained and sustained due to extreme bureaucracy and lack of transparency (Mitsopoulos and Pelagidis, 2007).

Rent-seeking and clientelism (thus, the competitive advantage over political rivals), which have fostered a loop of inefficient allocation of public funds, tax evasion, and deterioration in the quality of public goods, are the primary causes responsible for the inefficiencies of the public sector that have contributed to the climax of the Greek political and economic crisis (Katsimi and Moutos, 2010; Lyrintzis, 2011). More specifically, the Greek paradox of rapid economic growth in the 2000s (until the eruption of the crisis) has been greatly affected by public sector expansion (through clientelism) and the control and distortion of product and labour markets by rent-seeking groups, which led Greece to match the prosperity of advanced countries at the same time as the quality of governance and social coherence is closer to that of a developing country (Mitsopoulos and Pelagidis, 2009b). Moreover, clientelism highlights the role of local elites in the uneven economic growth across Greek regions (Liddle, 2009).

Altogether, clientelism and rent-seeking are an example of “systemic corruption that is endogenously ingrained in institutions, behaviors, and the habits of elites against the common good” (O’ Hara, 2014: 304). A clear cut example of these phenomena is put forward by an empirical study (Angelopoulos et al., 2010), which indicates that rent-seeking competition in the public sector for higher subsidies and transfers, lower taxes, etc., leads to fiscal privileges at the expense of the general public interest. These fiscal privileges are the outcome of both legal and illegal activities and amount to an important fraction of GDP that is transferred to the shadow economy. In another example, it is indicated that the misgovernance that occurs during the periods of Greek elections results in significant increases in wildfires and tax evasion (Skouras and Christodoulakis, 2011). The former is the outcome of granting building permits and the latter is the outcome of looser auditing. Both examples signify the role of poor institutional quality and reveal that even a slight improvement in institutional quality can lead to substantial social welfare gains.

3.2 Tax Burden and Tax Morale in Greece

Bitzenis et al. (forthcoming) who review the literature on the Greek shadow economy and explore empirically its interaction to the official economy and the impact of corruption emphasize on the significant roles (among other things) of self-employment, economic crisis and tax morale in terms discussed above in the size of the shadow economy. The authors derive their findings through estimations of macro-level data and arrive at their conclusions by evaluating them through the findings of previous studies. Any reference to the size of the shadow economy in Greece and other economies in this section is taken from their estimations, which indicate that only Estonia, Cyprus and Malta have bigger shadow economies than Greece in the eurozone.

Through data presented and discussed in this section it is deducted that the effect of the tax burden on the shadow economy and the reciprocity motive of tax morale cannot be justified only from the comparison to respective burdens in other European economies. As such, its effect is represented through the economic crisis, i.e. the tax burden increases as the financial position deteriorates.

Annex Table 1 indicates the average income tax rate in certain Eurozone countries and the United Kingdom (UK). The Table indicates that the average income tax rate of single persons and married couples with no children in Greece is well below the respective OECD average rate and that of other eurozone economies suffering from the economic crisis. The average income tax rates of single persons and married couples with children is not above the respective OECD average rate (except for the case of married couples with one earner) but in several cases, it is above eurozone's core and peripheral economies such as Germany and Portugal. The tax burden in terms of the average income tax rate has increased in Greece from 2009 to 2014 for all cases depicted and in particular for those with children. Nonetheless, the effect of the tax burden on the shadow economy cannot be reflected through wage earners who cannot conceal part of their income.

Annex Table 2 indicates the average personal income tax and social security contribution rates on gross labour income in 2014. The tax wedges depicted can act as a proxy for the motive of undeclared work. It is depicted that total tax wedges in Greece are lower from the respective wedges of eurozone core and peripheral economies included in the Table. Only the respective wedges in the UK are lower. From a comparative perspective, wedge rates in Greece indicate that neither employers nor employees are motivated to evade social security contributions and other wedges because their tax burden is higher. As such, the size of tax wedges per se does not justify the size of the shadow economy in Greece vis a vis the countries in Annex Table 2.

Annex Table 3 indicates the value added tax (VAT) rates across the OECD. In 2014, the standard VAT rate in Greece is not only above the OECD average respective rate but also above all standard VAT rates across the OECD except from Finland and Hungary. Both the size of the standard VAT rate in 2014 and its increase during the economic crisis can be as a motive for Greek taxpayers to engage in VAT evasion.

Annex Table 4 indicates the total tax rate as a percentage of commercial profits. The particular indicator measures the amount of taxes and mandatory contributions payable by businesses after accounting for allowable deductions and exemptions as a share of commercial profits. The particular business tax rate in Greece is higher than the EU average. However, from a comparative perspective, the picture is mixed. Both, countries with bigger shadow economies, such as Bulgaria and Cyprus, and countries with smaller shadow economies, such as Portugal, have considerably lower total tax rates as a percentage of commercial profits. This indicator hints that the business tax burden per se is also not correlated to the size of the shadow economy.

Another indicator related to the tax burden is the efficiency of tax collection. When the cost of tax collection or audits is rising, the opportunity cost of uncollected taxes decreases. Tax collection efficiency including detection of tax evasion practices, are factors that deter individuals from engaging in activities of the shadow economy. The OECD Tax Administration Database (http://www.oecd.org/site/ctpfta/taxadministrationdatabase.htm) provides

information about cost collection ratios. Unfortunately, no data is available for Greece (see Table 5.3 available at http://www.oecd.org/site/ctpfta/Table-5-3-updated.xlsx). A somewhat similar indicator not in its methodology but in the sense that it gives an idea about the efficiency in paying taxes is the distance to frontier paying taxes score and rank of the World Bank. The particular indicator benchmarks economies with respect to a measure of regulatory best practice, showing the gap between each economy's performance and the best performance on each indicator of total tax rate, time to comply and number of payments (World Bank and PwC, 2014: 129-130). According to the particular indicator, Greece ranks in the 59th position among over than 200 countries.
Finally, the presence of preferential tax treatments that jeopardize the fairness of the tax system is also an indicator that affects negatively on the reciprocity motive of tax morale. Such preferential tax treatments exist for shipping companies. However, this is not an exemption as this practice is common to other EU countries. The negative effect of the particular treatment on the tax morale of Greek taxpayers may have emerged after the emergence of the economic crisis.

4. Conclusion

The growing literature strand on the determinants of tax morale is due to the rising body of evidence concerning its effect on tax compliance behaviour. Tax morale determinants can be grouped into intrinsic, where the taxpayer's increases with compliance (i.e. due to moral reasons), long-run cultural factors, information imperfections, those relating to reciprocity and those concerning peer effects and social influences.
Along with the effect of the tax burden, tax morale is also considered important to the size of a country's shadow economy. From a comparative perspective, both in terms of annual progression and vis a vis other countries, the Greek tax burden per seems to justify engaging into the shadow economy only through the standard VAT rate and the average income tax rate for families with children. Moreover, if the poor ranking due to the distance to frontier paying taxes score of the World Bank represents tax collection efficiency in terms of tax collection and audits cost, then taxpayers would have the motive to engage in the shadow economy because the probability to be detected is small.
In contrast to what the data on the tax burden reveal about its effect per se on the size of the shadow economy, the literature on clientelism and rent-seeking, which has developed particularly after the eruption of the economic crisis highlights the reciprocity motive as being responsible for low tax morale in Greece. By the time these phenomena have been linked with the deterioration of the financial position of Greek taxpayers, their reciprocity have been so tremendously affected that tax resistance has taken the form of activism.

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6. Annex

Annex Table 1 – Average Income Tax Rate

Countries/family type/percentage of average earnings/year	**Single person, no child**						**Single person, no child**						**Single person, no child**						**Single person, with two children**					
	67% of average earnings						**100% of average earnings**						**167% of average earnings**						**67% of average earnings**					
	2009	2010	2011	2012	2013	2014	2009	2010	2011	2012	2013	2014	2009	2010	2011	2012	2013	2014	2009	2010	2011	2012	2013	2014
Greece	2.81	1.77	6.6	6.07	3.28	2.94	8.81	7.24	10.8	10.1	9.09	8.91	14.8	14.4	17.7	17	18.9	18.5	1.71	0	5.13	4.52	5.48	5.19
Spain	8.44	11.2	11.5	12.1	12.1	12.2	13.5	15.4	15.7	16.5	16.6	16.6	19.2	20.6	21	22.5	22.5	22.5	0.69	1.74	2.6	3.13	3.28	3.43
Portugal	4.67	5.11	5.18	5.61	8.78	8.51	10.5	11.2	12.3	11.8	16.4	16.3	17.5	18.5	20.5	19.2	24.2	24	0.15	0.61	0.58	1.24	3.88	3.59
Italy	15.9	16.6	17.2	17.5	17.7	14.4	20.2	20.7	21.3	21.5	21.6	22.1	27.1	27.7	28.3	28.5	28.8	29.4	8.45	9.35	10.2	10.6	9.85	6.64
France	12.2	12.3	12.4	12.6	12.6	12.7	14.2	14.2	14.2	14.4	14.5	14.7	20.3	20.3	20.5	20.8	20.8	20.9	7.45	7.45	7.46	7.56	7.57	7.57
Germany	14.8	13.8	13.9	14.1	14.1	14.2	20.6	18.7	18.9	19.1	19	19.1	28.6	27.1	27.5	27.6	27.5	27.6	-2.6	-4	-3.2	-2.7	-2.6	-2.1
United Kingdom	14.2	14.4	13.5	13.1	12	11.6	16.1	16.2	15.6	15.4	14.6	14.4	21.9	22.4	22.5	22.6	22.6	22.6	-0.7	-0	-2.3	-2.6	-3.7	-3.6
OECD average	10.4	10.3	11.1	11.3	11.4	11.4	14.7	14.5	15.4	15.4	15.6	15.6	20.9	20.8	21.4	21.4	21.6	21.7	5.41	5.38	5.78	6.03	6.26	6.19

Annex Table 1 – Average Income Tax Rate (Continued)

Countries/family type/percentage of average earnings/year	One-earner married couple, with two children						Two-earner married couple, with two children						Two-earner married couple, with two children						Two-earner married couple, no children					
	100% of average earnings						100% of average earnings						one at 100% of average earnings and the other at 67 %						one at 100% of average earnings and the other at 33 %					
	2009	2010	2011	2012	2013	2014	2009	2010	2011	2012	2013	2014	2009	2010	2011	2012	2013	2014	2009	2010	2011	2012	2013	2014
Greece	9.15	7.7	12	11.4	12.8	12.7	6.88	5.79	9.77	9.22	9.64	9.57	7.83	6.25	10.5	9.9	10.3	10.2	7.46	6.35	10.1	9.56	7.86	7.75
Spain	5.84	7.88	8.31	8.87	8.96	9.06	8.66	10.2	10.4	11	11.1	11.1	9.13	11.5	11.8	12.5	12.6	12.6	10.1	11.6	11.8	12.4	12.5	12.5
Portugal	2.76	3.31	3.38	3.9	6.28	6.18	2.87	3.32	3.35	3.87	6.53	6.27	6.51	7.28	7.68	7.93	11	10.8	4.6	5.05	5.11	5.54	8.6	8.33
Italy	13.2	14	14.7	15	14.6	15.2	12.4	13.2	13.9	14.2	14	13.1	15.7	16.3	17	17.3	17.1	16.1	15.8	16.4	17.1	17.3	17.6	16.6
France	8.27	8.3	8.41	8.5	7.86	7.86	7.67	7.77	7.95	8.28	8.34	6.74	11.1	11.1	11.2	11.5	11.5	11.6	12.2	12.2	12.3	12.5	12.6	12.6
Germany	0.23	-0.6	0.13	0.56	0.58	0.9	6.69	5.43	5.9	6.26	6.27	6.56	11.6	9.91	10.3	10.6	10.6	10.9	14.7	13.7	13.9	14	14	14.1
United Kingdom	14.5	14.6	14	15.4	14.6	14.4	12.9	13.1	13.4	13	11.9	11.6	15.1	15.4	14.8	14.4	13.6	13.3	14.2	14.3	13.4	13	11.9	11.6
OECD average	9.2	9.08	9.82	10	10.2	10.3	9.68	9.56	10.3	10.5	10.7	10.6	11.6	11.4	12.1	12.3	12.5	12.5	11.4	11.3	12.1	12.3	12.4	12.4

Source: OECD stat extracts available at http://stats.oecd.org/.

Annex Table 2 - Average Personal Income Tax and Social Security Contribution Rates on Gross Labour Income in 2014

Countries/tax wedge/percentage of average wage		**67% of average wage**	**100% of average wage**	**133% of average wage**	**167% of average wage**
United Kingdom	Total tax wedge	26.396	31.094	34.458	37.474
	Employer SSC	9.201	10.719	11.483	11.955
	Employee SSC	8.001	9.321	8.819	7.431
Greece	Total tax wedge	35.671	40.407	44.604	47.992
	Employer SSC	26.01	26.01	26.01	26.01
	Employee SSC	16	16	16	16
Spain	Total tax wedge	37.268	40.706	42.897	44.986
	Employer SSC	29.9	29.9	29.9	29.54
	Employee SSC	6.35	6.35	6.35	6.274
Portugal	Total tax wedge	34.953	41.219	44.375	47.505
	Employer SSC	23.75	23.75	23.75	23.75
	Employee SSC	11	11	11	11
Italy	Total tax wedge	42.367	48.219	51.609	53.807
	Employer SSC	32.08	32.08	32.08	32.08
	Employee SSC	9.49	9.49	9.49	9.585
France	Total tax wedge	45.165	48.444	52.898	54.325
	Employer SSC	33.677	38.3	44.091	43.961
	Employee SSC	14.05	14.05	13.632	13.371
Germany	Total tax wedge	45.144	49.311	50.883	51.346
	Employer SSC	19.275	19.275	17.57	15.46
	Employee SSC	20.425	20.425	18.485	16.189

Source: OECD stat extracts available at http://stats.oecd.org/.
Note: SSC is social security contribution.

Annex Table 3 – VAT Rates

	Implemented	Standard rate[1]															Reduced rates[2]	Specific regional rates
		1976	1980	1988	1992	1996	2000	2002	2004	2006	2008	2010	2011	2012	2013	2014		
Australia	2000	-	-	-	-	-	-	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0	10,0	0,0	-
Austria	1973	18.0	18.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	10.0/12.0	19,00
Belgium	1971	18.0	16.0	19.0	19.5	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	21.0	0.0/6.0/12.0	-
Canada	1991	-	-	-	7.0	7.0	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0	0,0	13.0/14.0/15.0
Chile	1975	20.0	20.0	16.0	18.0	18.0	18.0	18.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	-	-
Czech Republic	1993	-	-	-	-	22.0	22.0	22.0	22.0	19.0	19.0	20.0	20.0	20.0	21.0	21.0	15,0	-
Denmark	1967	15.0	22.0	22.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	0,0	-
Estonia	1991	-	-	-	10.0	18.0	18.0	18.0	18.0	18.0	18.0	20.0	20.0	20.0	20.0	20.0	9,0	-
Finland	1994	-	-	-	-	22.0	22.0	22.0	22.0	22.0	22.0	22.0	23.0	23.0	24.0	24.0	0.0/10.0/14.0	-
France	1968	20.0	17.6	18.6	18.6	20.6	20.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	20.0	2.1/5.5/10.0	0.9/2.1/10.0/13.0 & 1.05/1.75/2.1/8.5
Germany	1968	11.0	13.0	14.0	14.0	15.0	16.0	16.0	16.0	16.0	19.0	19.0	19.0	19.0	19.0	19.0	7,0	-
Greece	1987	-	-	16.0	18.0	18.0	18.0	18.0	18.0	19.0	19.0	19.0	23.0	23.0	23.0	23.0	6.5/13.0	5.0/ 9.0/16.0
Hungary	1988	-	-	25.0	25.0	25.0	25.0	25.0	25.0	20.0	20.0	25.0	25.0	27.0	27.0	27.0	5.0/18.0	-
Iceland	1990	-	-	-	24.5	24.5	24.5	24.5	24.5	24.5	24.5	25.5	25.5	25.5	25.5	25.5	7,0	-
Ireland	1972	20.0	25.0	25.0	21.0	21.0	21.0	22.0	21.0	21.0	21.0	21.0	21.0	23.0	23.0	23.0	0.0/4.8/9.0/13.5	-
Israel	1976	8.0	12.0	15.0	18.0	17.0	17.0	17.0	18.0	16.5	15.5	16.0	16.0	16.0	16.0	18.0	0,0	-
Italy	1973	12.0	15.0	18.0	19.0	19.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	21.0	22.0	22.0	4.0/10.0	-
Japan	1989	-	-	-	3.0	3.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	-	-
Korea	1977	-	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	0	-
Luxembourg	1970	10.0	10.0	12.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	3.0/6.0/12.0	-
Mexico	1980	-	10.0	15.0	10.0	15.0	15.0	15.0	15.0	15.0	15.0	16.0	16.0	16.0	16.0	16.0	0,0	-
Netherlands	1969	18.0	18.0	20.0	18	17.5	17.5	19.0	19.0	19.0	19.0	19.0	19.0	19.0	21.0	21.0	6,0	-
New Zealand	1986	-	-	10.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	15.0	15.0	15.0	15.0	0	-
Norway	1970	20.0	20.0	20.0	20.0	23.0	23.0	24.0	24.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	0.0/8.0/15.0	-

Poland	1993	-	-	-	-	22.0	22.0	22.0	22.0	22.0	22.0	22.0	23.0	23.0	23.0	23.0	5.0/8.0	-
Portugal	1986	-	-	16.0	16.0	17.0	17.0	17.0	19.0	21.0	21.0	20.0	23.0	23.0	23.0	23.0	6.0/13.0	5.0/10.0/18.0 & 5,0/12,0/22,0
Slovak Republic	1993	-	-	-	-	23.0	23.0	23.0	19.0	19.0	19.0	19.0	20.0	20.0	20.0	20.0	10	-
Slovenia	1999	-	-	-	-	-	19.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	22.0	9,5	-
Spain	1986	-	-	12.0	12.0	16.0	16.0	16.0	16.0	16.0	16.0	16.0	18.0	18.0	21.0	21.0	4.0/10.0	2.0/5.0/9.0/13.0 & 4.0/5.0
Sweden	1969	###	###	###	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	0.0/6.0/12.0	-
Switzerland	1995	-	-	-	-	6.5	7.5	7.6	7.6	7.6	7.6	7.6	8.0	8.0	8.0	8.0	0.0/2.5/3.8	-
Turkey	1985	-	-	10.0	12.0	15.0	17.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	1.0/8.0	-
United Kingdom	1973	8.0	15.0	15.0	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	20.0	20.0	20.0	20.0	0.0/5.0	-
Unweighted average		15.4	17	17	16	17.8	18.0	17.9	17.9	17.7	17.7	18.0	18.5	18.7	18.9	19.1		

Source: OECD national delegates - position as at 1 January 2014

Notes

1 Yearly data: the rates shown in the table are rates applicable on 1 January of each year. Reduced rates and specific rates applicable in specific regions are those applicable as at 1 January 2014.

2 Reduced rates: reduced rates include zero-rates applicable to domestic supplies (i.e. an exemption with right to deduct input tax). This does not include zero-rated exports.

Country notes

Austria: A standard rate of 19% applies in Jungholz and Mittelberg.

Canada: The following provinces have harmonised their provincial sales taxes with the federal Goods and Services Tax and therefore levy a rate of GST/HST of: New Brunswick, Newfoundland and Labrador, Ontario: 13%; Prince Edward Island: 14%; Nova Scotia 15%. Québec applies GST at a rate of 5% and Québec Sales Tax at a rate of 9.975% (applied on the same tax base as the GST). Other Canadian provinces, with the exception of Alberta, apply a provincial sales tax to certain goods and services.

France: Rates of 0.9%; 2.1%; 10.0%; 13.0%; 20.0% apply in Corsica; rates of 1.05%; 1.75%; 2.1%; 8.5% apply to overseas departments (DOM) excluding French Guyana and Mayotte.

Greece: Rates of 5.0%; 9.0% and 16.0% apply in the regions Lesbos, Chios, Samos, Dodecanese, Cyclades, Thassos, Northern Sporades, Samothrace and Skiros.

Israel: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Annex Table 4 - Total Tax Rate as a Percentage of Commercial Profits

Country/year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
FYROM	17.8	17.8	17.8	15.4	13	8.1	7.5	7.4	7.4	7.4
Cyprus	n.a.	n.a.	n.a.	20.6	20.6	22.3	22	22.2	22.5	23.2
Bulgaria	45.2	41.6	35.8	33.9	30.4	28	27.2	27.7	27	27
Turkey	52.8	52.4	44.3	44.3	43.3	43.3	40	40	39.7	40.1
European Union	48.3	45.8	45.2	43.5	42.8	42.6	41.7	41.9	41.7	41.9
Portugal	43.8	43.8	42.9	42.5	42.3	42.6	42.8	42	42.3	42.4
Germany	47.7	47.4	49	49.4	43.9	47	45.6	45.9	49.1	48.8
Greece	54	49.5	48.9	46.7	46.7	46.7	45.9	44.1	44	49.9
Spain	60.2	60.3	60.4	58.6	55.6	55.3	37.6	37.7	56.8	58.2
Italy	76.8	75.4	75.4	72.5	67.7	67.7	67.7	67.7	65.8	65.4
France	66	66.6	66.6	66.1	65.8	65.8	65.7	66.5	66.6	66.6

Source: World Bank, Doing Business project, data available at http://data.worldbank.org/indicator/IC.TAX.TOTL.CP.ZS?order=wbapi_data_value_2014+wbapi_data_value+wbapi_data_value-last&sort=asc.
Note: n.a is not available.

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