

# **IOBE/FEIR** Notes on Economic Facts

# VAT: Structure, rates and implementation

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# Main features of Value Added Tax (VAT)

In light of the potential change in the policy regarding VAT rates in Greece, the objective of this memo is to compare Greece with other European Union (EU) Member-States with respect to the way in which VAT is levied (rates, exemptions) as well as the effectiveness of this tax.

The VAT is a broad-based indirect tax that is levied by all EU Member-States. VAT was introduced in Greece in 1987, later than most other Member-States. It replaced more than 10 taxes, most notably, the turnover tax and the stamp duty on invoices.

Since 1992, VAT in the EU has been implemented according to the "destination principle". This implies that VAT solely taxes final consumption. It is imposed at the rate prevailing in the country where the good or service is consumed rather than at the rate of the country where the good or service is produced. Thus, VAT solely taxes final consumption and excludes exports and investments (capital goods).

As opposed to the turnover tax and the stamp duty on invoices, VAT is not a cascade tax as it is not applied to the wholesale value at every stage of the value chain. Rather, the tax paid at earlier stages of the productive and distributive chain is deducted in subsequent stages. VAT is thus collected in chunks from each stage of the value chain. Every physical or legal entity subject to VAT deducts the amount of VAT paid in previous stages for commercially used goods and services. Imported goods are taxed identically to the corresponding goods produced domestically.

Compared with other indirect taxes, it becomes evident that VAT:

- Does not incentivise vertical integration in production, as it is neutral in terms of the organisation of production (the term neutral implies that VAT is a mechanism that does not discriminate with respect to the number of transactions that take place)
- Does not affect international transactions
- Depends on the efficiency and the effectiveness of the control mechanism applied in the last stage of the value chain, namely, retail sales. If effective monitoring of retail transactions is conducted, then VAT is more effective than other indirect taxes in combatting tax evasion. Yet, tax monitoring is a difficult feat and is therefore imperfect. The extent of tax evasion thus appears to depend on, inter alia, the level of VAT rates and on unemployment.
- Generates fewer distortions in the economy when compared to other taxes, such as the income tax.

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# Structure and rates of VAT

Two main VAT rates are currently being implemented in Greece: the "standard" (23%) and the "reduced" (13%). A third "super reduced rate" of 6.5% has also been put to effect. As captured in Table 1, the standard and the reduced rates are situated in the upper echelon of the VAT rates currently implemented in the EU. However, the average tax burden of VAT for Greek households is situated in the lower echelon of the EU member States, possibly because food products are taxed at the reduced VAT rate.

Country	Standard	Reduced			Zero	Number of changes in the VAI rates (2000-2011)	Average VAT tax burden for the households <sup>2</sup>	Share of the total output of VAT-exempt sectors
Luxembourg	15	12	6	3	No	0	7.8	53.6
Spain	18	8	4		No	2	7.9	12.6
Netherlands	19	6			No	1	8.4	21.4
UK	20	5			Yes	3	8.9	22.3
Ireland	21	13.5	9	4.8	Yes	10	9.2	14.8
Malta	18	5	7		Yes	2	9.2	13.2
Germany	19	7			No	1	9.5	16.9
Greece	23	13	6.5		No	11	9.6	16.8
Poland	23	8	5		No	4	10.1	12.0
Portugal	23	13	6		No	7	10.1	16.9
Belgium	21	12	6		Yes	0	10.3	14.4
France	19.6	5.5	2.1		No	1	10.3	13.1
Italy	21	10	4		Yes	1	10.6	9.5
Austria	20	10			No	0	11.4	16.2
Czech Republic	20	10			No	4	11.5	10.8
Finland	23	13	9		Yes	4	11.5	15.6
Slovenia	20	8.5			No	2	11.7	10.6
Sweden	25	12	6		Yes	0	12.2	20.0
Latvia	22	12			No	5	12.3	16.1
Estonia	20	9			No	2	13.6	9.2
Slovakia	20	10			No	8	13.8	8.6
Bulgaria	20	9			No	2	14.2	12.0
Romania	24	9	5		No	3	14.5	11.3
Hungary	25	18	5		No	6	15.0	10.5
Lithuania	21	9	5		No	4	15.1	10.3
Denmark	25				Yes	0	15.4	21.0

### Table 1: VAT structure, 2000-111

<sup>1</sup> Countries are arranged in accordance with the average VAT burden per household

<sup>2</sup> Weighted VAT rates by the average share of expenses per household and good.

Source: European Commission (2013), Study to quantify and analyse the VAT Gap in the EU-27 Member States

According to the latest assessment by the European Commission, VAT liability for Greek households was primarily on housing-water-electricity-gas, food-non-alcoholic beverages, and transportation (each of these three sectors accounted for 15% of total VAT liabilities). In addition, restaurants accounted for 9% of VAT liabilities, while clothing-footwear and furniture each accounted for 8% of VAT liabilities.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Institute for Advanced Studies & CPB Netherlands Bureau for Economic Policy Analysis (2013), "A study on the economic effects of the current VAT rates structure", for DG TAXUD, European Commission



With the exception of Denmark, reduced VAT rates on specific goods and services and in particular geographic regions are implemented across all EU member states. The justification behind these reduced rates is three-fold: primarily, to avoid distortions in markets with goods and services that can easily be substituted with household production; secondly, to promote social equity through the redistributive effects of the reduced tax; and thirdly, to promote positive externalities by incentivising the consumption of certain goods and services. Despite the aforementioned benefits associated with reduced VAT rates, a commonly accepted notion is that a unified VAT scheme eases the administrative burden and leads to higher tax compliance levels.

Some sectors of the economy, such as financial services, are fully exempt from VAT. In Greece, such sectors represent 17% of the country's total output. In addition to financial services, special VAT arrangements have also been devised for the agricultural sector as well as smaller-sized firms. As portrayed in Table 1, Greece has one of the highest rates in the EU of total output exempt from VAT.

VAT rates in Greece have been revised on several occasions. As demonstrated in Table 1, Greece undertook more changes than any other EU Member-States with respect to its VAT rates between 2000 and 2011. In addition, further changes of VAT rates have taken place in Greece since 2011. For instance, in 2012, VAT on food services increased from 13% to 23%, only to be reduced back to 13% in 2013.

# VAT revenues

In Greece, VAT generates more revenue than any other tax. In 2014, VAT revenue was  $\in$ 13.6 billion (compared to  $\in$ 16.5 billion in 2009). This accounted for 7.1% of GDP and 15.5% of the General Government revenue. As illustrated in figures 1 and 2, these rates are similar to those observed in other EU-member states.



# Figure 1. VAT revenues as %GDP

Source: Eurostat

As a percentage of the General Government revenue in Greece, income from VAT ranged from 16.5% to 17.5% and averaged 17% between 2006 and 2011, thereby exceeding the EU average of 15.3% and the Euro area average of 14.8%. However, the contribution of VAT to the General Government revenue has declined since 2012. The reduction in the share of revenue that VAT occupies can be attributed to the introduction of the extraordinary levy on



buildings with electricity connections. This extraordinary levy was subsequently substituted by another property tax. Both the extraordinary levy and the property tax dramatically increased the contribution of property tax to the General Government revenue.

Although the share of VAT in General Government revenues decreased in 2014, it was still close to the EU average and higher than the EA average for the past year. The higher share of VAT in tax revenues compared to the EU average is largely attributed to the dramatic income tax evasion and to the large share of self-employed professionals. Greece has a significantly higher share of self-employed professionals compared to the EA (31.3% against 15.0% in 2014). Even though these professionals are liable for VAT, it is unclear whether they declare and pay the entire amount.



# Figure 2. VAT revenues as % of General Government revenues

#### Source: Eurostat

VAT receipts have systematically displayed a significant divergence from their expected levels. Expected VAT revenues in 2011, which were calculated by employing VAT rates and the volume of transactions in the Greek economy, were €24.8 billion. Yet, only €15 billion in revenue was actually collected. This 39.3% divergence ("VAT gap") between the actual and expected VAT revenue corresponds to 4.7% of GDP.<sup>2</sup>

The VAT gap in Greece between 2000 and 2011 was the third highest among the EU Member-States (Figure 3). Romania and Lithuania were the only two EU Member-States that surpassed Greece, with a VAT gap of 42% and 35% respectively. The average VAT gap in the EU is estimated to be 18%.<sup>3</sup> The VAT gap in 2011 in Greece was higher than the average for 2000-11 (the average for this period was 30%). An increase in the size of the VAT gap was recorded in almost all EU Member-States, indicating that the efficiency of VAT collection weakened during the first years of the fiscal crisis, possibly because of an increase in the standard VAT

<sup>&</sup>lt;sup>2</sup> VAT gap is calculated as the difference between potential VAT revenues, calculated based on the application of VAT rates mainly to revenues and income from the National Accounts, under certain assumptions, on the one hand and the actual collected VAT revenues. This difference is then divided by the potential VAT revenues.

<sup>&</sup>lt;sup>3</sup> DG TAXUD, European Commission (2013), "Study to quantify and analyse the VAT Gap in the EU-27 Member States"



rate as well as higher unemployment.<sup>4</sup> The VAT gap can be attributed to a lack of compliance with tax obligations and to the employment of complex methods of tax-evasion. It is significant to note that Spain, Portugal, Latvia, and Greece, all of which faced higher VAT gaps compared to their 2000-2011 average, increased their respective VAT rates during the period when higher VAT gaps were observed.





**Source:** DG TAXUD, European Commission (2013), "Study to quantify and analyse the VAT Gap in the EU-27 Member States"

# Is VAT a regressive tax?

According to a recently published report,<sup>5</sup> VAT in Greece does not appear to be regressive. Individuals belonging to the highest income decile pay a higher fraction of their income in VAT, compared to those belonging to the lowest income decile. This is mainly due to the fact that the wealthier spend a higher proportion of their income on goods subjected to higher VAT rates.

# Conclusion

The high VAT gap highlights the potential for a more effective VAT collecting system that will generate higher tax revenues. Improvements in the efficiency and effectiveness of tax administration should not be limited to VAT, as they should be extended to other taxes, such as the income tax. Properly designed incentives to increase the use of electronic means of payment (i.e. discounts on income tax or VAT refunds) could contribute to the fight against tax fraud and evasion.

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<sup>&</sup>lt;sup>5</sup> Figari, F. and A. Paulus (2012), "The redistributive impact of indirect taxes and imputed rent on inequality: a comparison with cash transfers and direct taxes in five EU countries", GINI Discussion Paper N°28.