2012 Update Report to the Study to quantify and analyse the VAT Gap in the EU-27 Member States

TAXUD/2013/DE/321

FWC No. TAXUD/2010/CC/104

Client: European Commission, TAXUD

CASE – Center for Social and Economic Research (Project leader)
CPB – Consortium Leader

In consortium with:

CAPP	CEPII	ETLA
IFO	IFS	IHS

Warsaw, September 2014

Acknowledgements

This report was written by a team of experts from CASE (Center for Social and Economic Research, Warsaw), directed by Luca Barbone, and composed of Mikhail Bonch-Osmolovskiy and Grzegorz Poniatowski. Research assistance was provided by Katarzyna Wąsik and Michał Sobolewski. The Project was coordinated by Iryna Shuvaieva (CASE).
We also acknowledge discussions with several officials of tax and statistical offices of the Member States, who offered valuable comments and suggestions. All responsibility for the estimates and the interpretation in this report remain with the authors.

CPB Netherlands Bureau for Economic Policy Analysis

Van Stolkweg 14

P.O. Box 80510

2508 GM The Hague, the Netherlands

Telephone	+31 70 338 33 80
Telefax	+31 70 338 33 50
Internet	www.cpb.nl

TAXUD/2013/DE/321

Contents

Contents ... 3

List of Figures ... 4

List of Tables ... 4

List of Boxes ... 5

List of Acronyms and Abbreviations ... 6

Executive Summary ... 7

Chapter 1. Introduction and Context ... 8

Chapter 2. Growth and Policy Context in 2012 ... 10
- 2.1. Economic Conditions in the EU during 2012 ... 10
- 2.2. VAT Rate Changes ... 12

Chapter 3. Overall results in 2012 ... 14
- 3.1. VAT Gap ... 14
- 3.2. Policy Gap ... 19

Chapter 4. Individual Country Results ... 21

Appendix A – Methodological Notes ... 51
- Use Tables and National Accounts ... 51
- Forecasting Use Tables ... 51
- Data Confidentiality Restrictions ... 53
- Propex Sources ... 53
- VAT Rates Sources ... 53
- Revenues ... 53
- Comparison of Results ... 53

Appendix B – Statistical Appendix ... 57

References ... 65

List of Figures

Figure 2.1 GDP growth in the EU, 2011-2012 10
Figure 3.1. VAT Gap in the EU-26 countries, 2011-2012 15
Figure 3.2 VAT Gap in the EU-26 countries, 2009-2012 17
Figure 3.3 Policy Gap and VAT Gap in the EU-26 countries, 2009-2012 20
Figure A.1 Differences in Gap Estimates, 2009-2011 56

List of Tables

Table 2.1 - Real and Nominal Growth in the EU-26 in 2012 11
Table 2.2 – VAT Rate Structure as of 31 December 2012, and Changes During 2012 13
Table 3.1 VAT Gap estimates, 2011-2012 16
Table 4.1 Austria: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million) 22
Table 4.2 Belgium: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million) 23
Table 4.3 Bulgaria: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million) 24
Table 4.4 Czech Republic: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million) 25
Table 4.5 Denmark: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million) 26
Table 4.6 Estonia: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million) 27
Table 4.7 Finland: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million) 28
Table 4.8 France: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million) 29
Table 4.9 Germany: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million) 30
Table 4.10 Greece: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million) 31
Table 4.11 Hungary: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million) 32
Table 4.12 Ireland: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million) 33
Table 4.13 Italy: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million) 34
Table 4.13.1 Italy: Adjustment for Changes in VAT Credit Stocks 35
Table 4.14 Latvia: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million) 36
Table 4.15 Lithuania: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million) 37
Table 4.16 Luxembourg: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million) 38
Table 4.17 Malta: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million) 39
Table 4.18 Netherlands: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million) 40
Table 4.19 Poland: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million) 41
Table 4.19.1 - Poland - Alternative Gap calculations 42
Table 4.20 Portugal: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million) 43
Table 4.21 Romania: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million) 44
Table 4.22 Slovakia: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million) 45
Table 4.23 Slovenia: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million) 46
Table 4.24 Spain: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million) 47
Table 4.24.1 - Spain - Alternative Gap calculations 48
Table 4.25 Sweden: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million) 49
Table 4.26 United Kingdom: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (Euro million) 50
Table A.1: Available and forecasted use tables 52
Table A.2 Comparison of Results 55
Table B.1 – VTTL (Euro millions) 57

Table B.2 - Household VAT Liability (Euro millions) 58
Table B.3 – Intermediate Consumption VAT Liability (Euro millions) 59
Table B.4 – GFCF VAT Liability (Euro millions) 60
Table B.5 – VAT Revenues (Euro millions) 61
Table B.6 – VAT Gap (Euro millions) 62
Table B.7 – VAT Gap (percent of VTTL) 63
Table B.8 – VRR, Policy Gap and VAT Gap (average 2009-2012) 64

List of Boxes

Box 3.1 – VAT Gap Terminology 14
Box 3.2 – Composition of the VTTL, 2012 18
Box 3.3 - VAT Revenue Ratio, Policy Gap and VAT Gap 19

List of Acronyms and Abbreviations

CASE	Center for Social and Economic Research
CPA	Statistical Classification of Products by Activity in accordance with Regulation (EC) No 451/2008 of the European Parliament and of the Council of 23 April 2008 establishing a new statistical classification of products by activity
CPB	Netherlands Bureau for Economic Policy Analysis (Central Planning Bureau)
ESA 95	European System of Accounts 1995 in accordance with Council Regulation (EC) No 2223/96 of 25 June 1996 on the European system of national and regional accounts in the Community
EU	European Union
EU-26	Current Member States of the European Union except for Croatia and Cyprus
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
HMRC	Her Majesty's Revenue and Customs
MS	Member States
NACE Rev. 2	Statistical Classification of Economic Activities in the European Community in accordance with Regulation (EC) No 1893/2006 of the European Parliament and of the Council of 20 December 2006 establishing the statistical classification of economic activities NACE Revision 2 (also referred to as NACE-2 or NACE2)
NPISH	Non-Profit Institutions Serving Households
OECD	Organisation for Economic Cooperation and Development
o/w	Of which
TAXUD	Taxation and Customs Union Directorate-General of the European Commission
UK	United Kingdom
VAT	Value Added Tax
vs.	Versus
VTTL	VAT Total Tax Liability
VTL	VAT Tax Liability
VRR	VAT Revenue Ratio

Executive Summary

This report provides estimates of the VAT Gap for 26 EU Member States for 2012, as well as revised estimates for the period 2009-2011. It is a follow-up to the report "*Study to quantify and analyse the VAT Gap in the EU-27 Member States*"[1], published in September 2013. This update incorporates the NACE Rev. 2 classification of economic activities into the calculation of the theoretical liability.

The year 2012 saw overall unfavourable economic developments, as the GDP of the European Union shrank by 0.4 percent. These developments contributed to a slowdown of nominal final consumption and of other economic activities that form the basis of the Value Added Tax.

A few countries applied changes to standard or reduced rates, but on the whole the structure of VAT rates was relatively stable compared to the numerous changes in the wake of the onset of the Great Recession in 2008-2009.

For the EU-26 as a whole, VAT revenues grew by slightly over 2 percent, from Euro 904 billion in 2011 to Euro 922 billion in 2012; and the theoretical VAT liability (VTTL) also grew by a similar percentage. The overall VAT Gap, as estimated according to the refined methodology, for the EU-26 saw a slight increase in absolute numbers (of about Euro 6 billion) between 2011 and 2012, to reach Euro 177 billion, but remained essentially stable as a percentage of the overall VTTL, at 16 percent. The estimates for 2009-2011 have been revised because of the switch to NACE-2 classification and refinements in the methodology, and are slightly lower compared to those discussed in the 2013 VAT Gap report.[2]

In 2012, Member States' estimated VAT Gaps ranged from the low of 5 percent in the Netherlands and Finland, to the high of 44 percent in Romania. The median absolute change in the VAT Gap of the individual Member States from 2011 to 2012 was 1.1 percent, with a number of countries registering considerably higher changes. Overall, 11 Member States decreased their VAT Gap, with the largest improvements noted in Greece, despite the depth of its recession, and Bulgaria. However, 15 Member States saw an increase in the VAT Gap, ranging from virtually nil (e.g., Slovenia) to a substantial deterioration (e.g., Slovakia, Poland).

This report also provides estimates of the Policy Gap for the EU-26. This is an indicator of the additional VAT revenue that a Member State could theoretically collect if it applied uniform taxation to all consumption. Estimates of the Policy Gap confirm the finding that in most countries the loss of revenue compared to an "ideal" system with no reduced rates and no exemptions, is due to a greater extent to policy decisions than to non-compliance and weak enforcement.

---

[1] http://ec.europa.eu/taxation_customs/resources/documents/common/publications/studies/vat-gap.pdf

[2] For 2011, the VAT Gap in absolute terms is estimated at Euro 171 billion against Euro 192 billion in the 2013 VAT Gap report, and in percentage terms, at 16 percent in contrast to 17.6 percent (rounded up to 18 percent). The background and the reasons for the differences in the estimates are explained in this report.

Chapter 1. Introduction and Context

This report is an update to the report "Study to quantify and analyse the VAT Gap in the EU-27 Member States", which was published in September 2013 (hereafter: the 2013 VAT Gap report). It includes estimates of the VAT Gap[3] and the Policy Gap for the year 2012, and revised estimates for the years 2009-2011. While it was hoped that the update would cover also Cyprus and Croatia, this has not been possible in view of the as-yet unfinished revision to the national accounts for Cyprus and the compilation of the use tables for Croatia. Both tasks are expected to be accomplished later this year, so that by the time of the update for 2013 all EU Member States should be covered.

The methodology employed in this report is based on a top-down approach and is described in detail in the 2013 VAT Gap report. However, the estimates contained in this report have been produced through a different database than the one employed in the 2013 VAT Gap report. Since the completion of that report, revenue and national accounts data have become available for the year 2012 and Member States have almost completed the transition to NACE Rev. 2 and CPA 2008 classifications in their input-output framework, as mandated by ESA 95. This report therefore has adapted the estimates of the Gaps to the availability of the new database.

The 2013 VAT Gap report used the WIOD (World Input Output Project) database, which contained estimates of use tables for the period 2000 to 2009 for 36 industries and 59 products. It had the advantage of providing a uniform treatment for Member States, however at the cost of the potential biases introduced by estimation and extrapolation of national accounts magnitudes (Timmer 2012). The estimates of the present report are based on the NACE-2 database, which provides a 65-industry by 65-product classification (Eurostat 2008). The greater number of products and industries has allowed a finer degree of precision in producing estimates of VAT rates applicable to NACE-2 categories. In order to permit comparability of the estimates, this report also includes revised estimates for the years 2009-2011.

In addition to the use of the NACE-2 classification, the present study has benefited from further access to communications from national authorities with regard to key parameters concerning the proportions of VAT exemptions by economic sectors, and other relevant information.

Overall, the VAT Gap estimates in this report compared to those in the 2013 VAT Gap report, for the EU-26 taken as a single unit are, in percentage terms, virtually identical for 2009, and show a somewhat lower value for 2010 and 2011. Accordingly, for 2011, the VAT Gap in this report is estimated at 16 percent in contrast to 17.59 percent (rounded up to 18 percent) in the 2013 VAT Gap report, a reduction of -1.6 percentage points. In absolute terms, the VAT Gap is estimated at Euro 171 billion in contrast to Euro 192 billion in the 2013 VAT Gap report, which represents a deviation of 11

[3] The VAT Gap is also referred to as the Compliance Gap in the VAT literature and in the 2013 VAT Gap report.

percent. For more details on the modification in the employed methodology and the comparison of the results, see Appendix A.

The results in this report and the underlying data were presented to Member States in advance to the completion of the report and discussed on several occasions with the representatives of Member States. Deviating approaches or views of Member States are indicated in the relevant country section in Chapter 4, to the extent these are considered to be relevant. The authors are grateful for the constructive cooperation and helpful input of Member States, and acknowledge in particular communications received from Austria, Belgium, Czech Republic, Denmark, Spain, Finland, France, Hungary, Ireland, Italy, Luxembourg, Malta, the Netherlands, Poland, Portugal, Slovenia and the United Kingdom.

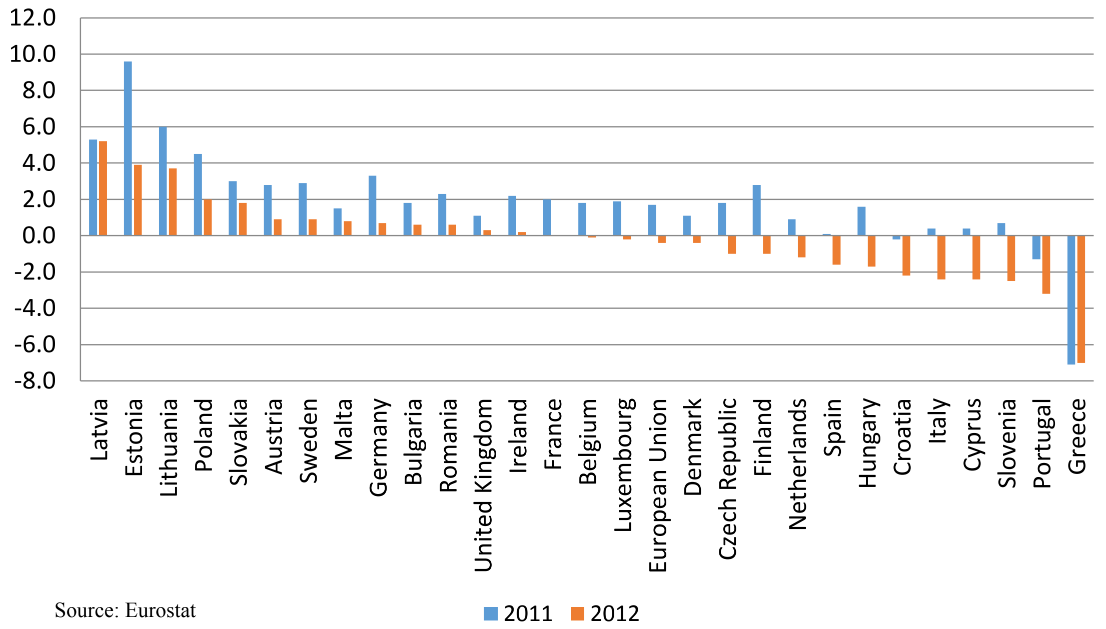
In Chapter 2 of this report the main policy and overall economic factors that have affected Member States during the course of 2012 are briefly summarized. Then, in Chapter 3, the overall results are presented with some analytical insights. In Chapter 4, the results of each individual Member State are presented. Appendix A contains a more detailed description of the methodological changes underlying this report. Appendix B provides a number of comparative tables, as well as data on the estimated Policy Gap.

Chapter 2. Growth and Policy Context in 2012

2.1. Economic Conditions in the EU during 2012

During 2012, the European Union experienced a mild economic contraction overall (with EU-28 GDP declining by 0.4 percent over 2011), albeit with a much differentiated performance across countries (see Figure 2.1).

Figure 2.1 GDP growth in the EU, 2011-2012



Source: Eurostat

Fifteen Member States saw a negative growth rate of GDP, while the rest saw a sometimes sharply reduced rate of growth. Notable at the opposite ends of the scale were Latvia (with a virtually unchanged robust performance) and Greece (which, while registering a sharp 7 percent GDP decline, improved marginally over the negative performance of 2011).

Overall, *nominal* EU28 GDP rose by 2 percent, while *nominal* household consumption rose by a modest 2.5 percent. Table 2.1 shows the real and nominal growth of GDP by country, and includes the nominal growth rate for key economic aggregates such as household consumption, gross fixed capital formation, general government consumption and intermediate consumption. Five Member States among the EU-26 reviewed in this report saw a *decline* in both nominal GDP and nominal household consumption (Greece, Italy, Portugal, Slovenia and Spain).

As was pointed out in the 2013 VAT Gap report, the change in the VTTL is highly correlated with increases in nominal consumption and other nominal components of GDP, in addition to rate increases. The VAT Gap tends to be negatively correlated with the economic cycle (as bankruptcies tend to increase and economic agents otherwise prioritize payments). Accordingly, a reduction in growth as registered in 2012 compared to 2011, could be expected to correlate (other factors being constant) with an increase in the VAT Gap.

Table 2.1 - Real and Nominal Growth in the EU-26 in 2012

	Real GDP Growth	Nominal Growth				
		GDP	Household Consumption	General Government	GFCF (Total)	Intermediate Consumption
Austria	0.9	2.6	3.0	2.8	3.7	2.0
Belgium	-0.1	1.8	2.2	4.2	0.0	-0.8
Bulgaria	0.6	3.7	9.3	2.4	2.9	0.1
Croatia	-2.2	-0.5	0.1	0.1	-3.9	-2.7
Cyprus	-2.4	-0.9	0.6	-4.9	-17.0	10.5
Czech Republic	-1.0	0.6	0.4	-0.5	-3.8	-0.2
Denmark	-0.4	1.9	2.7	2.2	2.1	3.6
Estonia	4.5	7.8	8.8	7.5	19.7	8.7
Finland	-1.0	1.9	3.3	4.7	3.2	1.7
France	0.0	1.5	1.4	2.6	0.5	0.9
Germany	0.7	2.2	2.3	3.0	-0.6	1.3
Greece	-7.0	-7.3	-8.5	-6.7	-19.4	-6.9
Hungary	-1.7	1.5	4.3	-1.6	-1.4	7.5
Ireland	0.2	0.8	0.2	-1.5	1.4	-1.0
Italy	-2.4	-0.8	-1.4	-2.6	-6.5	-2.7
Latvia	5.2	8.7	8.8	1.5	16.2	3.7
Lithuania	3.7	6.4	7.2	0.3	-1.7	4.9
Luxembourg	-0.2	2.8	3.3	7.5	6.9	1.5
Malta	1.1	3.3	2.1	7.6	3.6	1.7
Netherlands	-1.2	0.0	0.5	2.0	-4.5	4.3
Poland	2.0	4.5	5.0	3.5	-0.7	5.3
Portugal	-3.2	-3.5	-3.9	-11.6	-14.0	5.6
Romania	0.6	5.3	5.0	6.1	6.3	-3.0
Slovakia	1.8	3.1	3.3	0.8	-10.4	2.0
Slovenia	-2.5	-2.3	-3.2	-2.7	-6.6	3.8
Spain	-1.6	-1.7	-0.4	-6.5	-8.8	-4.0
Sweden	0.9	2.0	2.8	3.4	3.6	2.2
United Kingdom	0.3	1.4	3.4	1.0	2.1	1.3
EU28	-0.4	2.0	2.5	1.8	-1.1	0.2

Source: Eurostat. For Ireland, Greece, Poland, Finland, Sweden and UK, the growth of Intermediate Consumption is estimated through the growth in gross value added

2.2. VAT Rate Changes

The year 2012 was one of relative calm in the spectrum of VAT rate changes, after the activism that marked the crisis years following the onset of the Great Recession in 2008. In all, five of the 27 Member States increased their standard rates (Cyprus, Hungary, Ireland, Netherlands and Spain) and two (Czech Republic and Spain) increased the reduced rate (see Table 2.2) or introduced a higher one (France, at 7 percent). Additionally, Latvia reduced its standard rate from 22 to 21 on July 1, 2012.

A few countries introduced changes to the list of goods and services under either standard or reduced rates, notably Belgium, Latvia, Luxembourg, Portugal, Poland and Spain, which all increased the scope of the standard rate, and Sweden, which moved restaurants and catering to the reduced rates on job creation grounds (TAXUD 2013).

Table 2.2 – VAT Rate Structure as of 31 December 2012, and Changes During 2012					
EU Member State	**Standard Rate (SR)**	**Reduced Rate(s) (RR)**	**Super Reduced Rate**	**Parking Rate**	**Changes in 2012**
Austria	20	10	-	12	..
Belgium	21	6 / 12	-	12	..
Bulgaria	20	9	-	-	..
Cyprus	17	5 / 8	-	-	SR 15 to 17
Czech Republic	20	14	-	-	RR 10 to 14
Denmark	25	-	-	-	..
Estonia	20	9	-	-	..
Finland	23	9 / 13	-	-	..
France	19.6	5.5 / 7	2.1	-	Introduced 3rd RR 7
Germany	19	7	-	-	..
Greece	23	6.5 / 13	-	-	..
Hungary	27	5 / 18	-	-	SR 25 to 27
Ireland	23	9 / 13.5	4.8	13.5	SR 21 to 23
Italy	21	10	4	-	..
Latvia	20	12	-	-	SR 21 to 20
Lithuania	21	5 / 9	-	-	..
Luxembourg	15	6 / 12	3	12	..
Malta	18	5 / 7	-	-	..
Netherlands	21	6	-	-	SR 19 to 21
Poland	23	5 / 8	-	-	..
Portugal	23	6 / 13	-	13	..
Romania	24	5 / 9	-	-	..
Slovakia	20	10	-	-	..
Slovenia	20	8,5	-	-	..
Spain	21	10	4	-	SR 18 to 21; RR 8 to 10
Sweden	25	6 / 12	-	-	..
United Kingdom	20	5	-	-	..
Source: TAXUD 2014					

Chapter 3. Overall results in 2012

3.1. VAT Gap

The VAT Gap can be defined as the difference between the amount of VAT actually collected and the VAT Total Tax Liability (VTTL), in absolute or percentage terms. The VTTL is an estimated amount of VAT that is theoretically collectable based on the VAT legislation. Accordingly, it takes into account reduced rates and exemptions, and is calculated by using data available on final and intermediate consumption, as well as gross fixed capital formation, from national accounts and use tables (see Box 3.1. for a short explanation of the methodology).

Box 3.1 – VAT Gap Terminology

The following concepts (adapted from the 2013 VAT Gap report) will be used throughout this and the following chapters.

The **VAT Gap** is the difference, in any given year, between the **VAT Collections** (as recorded by Eurostat) and the amount theoretically due, i.e. **VTTL** (VAT Total Tax Liability). The latter is the total amount of estimated VAT payments on the basis of national accounts aggregates and the existing structure of rates and exemptions. It is composed, in our analysis, of three separate components (individual VAT Tax Liabilities, VTLs), plus some adjustments:

- **Household Consumption Liability:** the amount of VAT that is due on account of household consumption, and calculated as the product of the appropriate VAT rates times the amount of consumption of individual products or services.
- **Unrecoverable VAT on Intermediate Consumption of exempt industries and government/NPISHs**: the amount of VAT paid on inputs by industries and by government and NPISHs (Non-Profit Institutions Serving Households) that cannot claim a credit because their outputs are exempt from VAT.
- **Unrecoverable VAT on inputs to Gross Fixed Capital Formation (GFCF):** the amount of VAT paid on inputs to GFCF activities of industries that cannot claim a credit because their sales are exempt from VAT.
- **Adjustments:** Because of common provisions in all VAT legislation in Member States, a few Adjustments are performed across-the-board, namely (a) an estimate of the VAT not recovered by Small Businesses that can and choose not to register in the formal VAT system (there are different thresholds in different Member States, with some of them not allowing any non-registration); (b) limits to exemptions to VAT recovery on certain business expenditures, namely car purchases, purchases of fuel and entertainment expenses.

Finally, in order to estimate the share of intermediate consumption on which VAT cannot be reclaimed, a ***propex*** per industry needs to be determined. ***Propex*** is defined as the percentage of output in a given sector that is exempt from VAT. If the propex for sector "i" equals 1, for instance, all the output of that sector is exempt from VAT, and consequently the sector is unable to recover the VAT paid on its inputs.

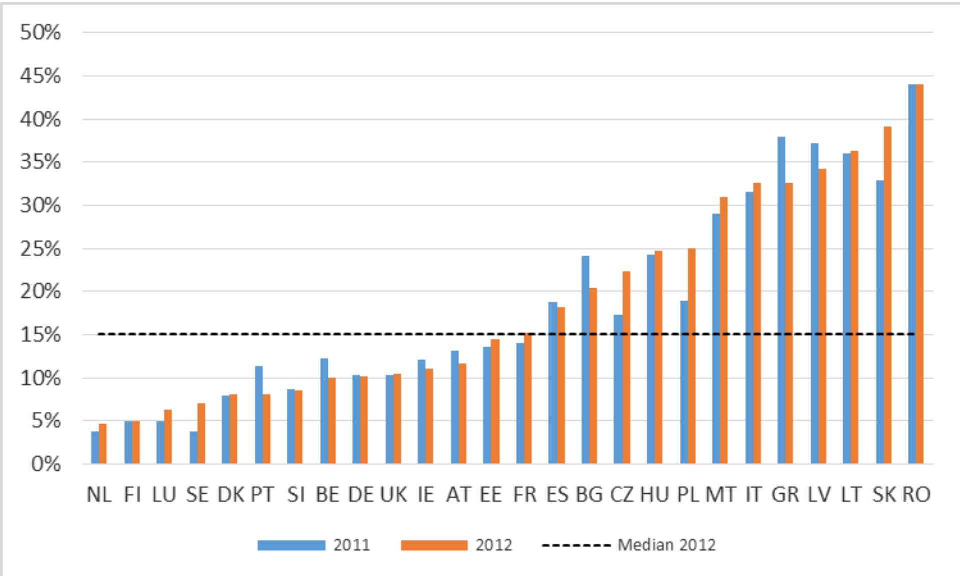
The VAT Gap can be seen as an indicator of the effectiveness of VAT enforcement and compliance measures as it arises as a consequence of revenue loss through cases of fraud and evasion, tax avoidance, bankruptcies, financial insolvencies as well as miscalculations. It should be stressed, though, that as the VAT Gap in this report is based on a top-down approach, it does not readily lend itself to be decomposed according to industrial sectors or other dimensions (territorial, professional)[4].

In 2012, the overall VAT Total Tax Liability (VTTL) for the EU-26 grew by about 2.2 percent, while collected VAT revenues grew just shy of 2 percent. As a result, the overall VAT Gap saw a slight increase in absolute numbers (about Euro 6 billion, to reach Euro 177 billion) in the EU-26, but remained essentially stable as a percentage of the overall VTTL, at 16 percent[5].

These overall developments were in line with general economic conditions. As mentioned in Chapter 2, the EU economy contracted by 0.4 percent in 2012, while nominal GDP rose modestly by 2 percent and nominal household consumption rose by 2.4 percent. In the absence of policy changes, revenues and VTTL tend to follow the nominal growth of the economic base, although revenues reflect a greater sensitivity to the business cycle (real GDP growth), as discussed in the 2013 VAT Gap report.

In 2012, the Gap in individual Member States ranged from the low of 5 percent of Finland and the Netherlands, to the high of 44 percent in Romania. The median VAT Gap is about 15 percent. Fig. 3.1 and Table 3.1 provide an overview of the results of the VAT Gap estimates for 2011 and 2012. Box 3.2 provides information on the overall composition of the VTTL in 2012.

Figure 3.1. – VAT Gap in the EU-26 countries, 2011-2012



[4] For a thorough discussion of the interpretation of the VAT Gap, see Chapter 2 of the 2013 VAT Gaps report.

[5] It should be borne in mind that the estimates for 2009-2011 in this report are revised compared to those in the 2013 VAT Gap report. For 2011, the VAT Gap in absolute figures for the EU-26 Member States is estimated to be about Euro 21 billion lower, as discussed in Appendix A.

Table 3.1 VAT Gap estimates, 2011-2012								
	2011				2012			
Country	**Revenues**	**VTTL**	**VAT Gap**	**VAT Gap %**	**Revenues**	**VTTL**	**VAT Gap**	**VAT Gap %**
AT	23,447	27,009	3,563	13%	24,563	27,807	3,244	12%
BE	26,019	29,669	3,650	12%	26,896	29,887	2,991	10%
BG	3,362	4,434	1,073	24%	3,739	4,697	957	20%
CZ	11,246	13,602	2,356	17%	11,377	14,644	3,267	22%
DE	189,920	211,834	21,914	10%	194,040	215,997	21,957	10%
DK	23,870	25,916	2,047	8%	24,422	26,563	2,141	8%
EE	1,363	1,577	214	14%	1,508	1,763	255	14%
ES	56,009	68,913	12,904	19%	56,125	68,537	12,412	18%
FI	17,020	17,913	893	5%	17,640	18,545	905	5%
FR	140,558	163,417	22,859	14%	142,499	168,082	25,583	15%
GR	15,028	24,213	9,185	38%	13,713	20,364	6,651	33%
HU	8,516	11,252	2,736	24%	9,084	12,055	2,971	25%
IE	9,755	11,093	1,338	12%	10,219	11,482	1,263	11%
IT	98,456	143,916	45,460	32%	95,473	141,507	46,034	33%
LT	2,444	3,820	1,377	36%	2,521	3,957	1,436	36%
LU	2,792	2,937	145	5%	3,064	3,268	204	6%
LV	1,374	2,186	812	37%	1,570	2,389	818	34%
MT	520	733	213	29%	536	777	241	31%
NL	41,610	43,255	1,645	4%	41,699	43,699	2,000	5%
PL	29,843	36,798	6,955	19%	27,881	37,198	9,317	25%
PT	14,265	16,083	1,819	11%	13,995	15,223	1,228	8%
RO	11,412	20,382	8,970	44%	11,212	20,053	8,841	44%
SE	36,631	38,043	1,412	4%	37,861	40,748	2,886	7%
SI	2,996	3,277	282	9%	2,889	3,160	270	9%
SK	4,711	7,015	2,304	33%	4,328	7,114	2,787	39%
UK	130,683	145,724	15,041	10%	142,943	159,501	16,557	10%
Total (EU-26)	903,848	1,075,015	171,167	16%	921,798	1,099,018	177,220	16%

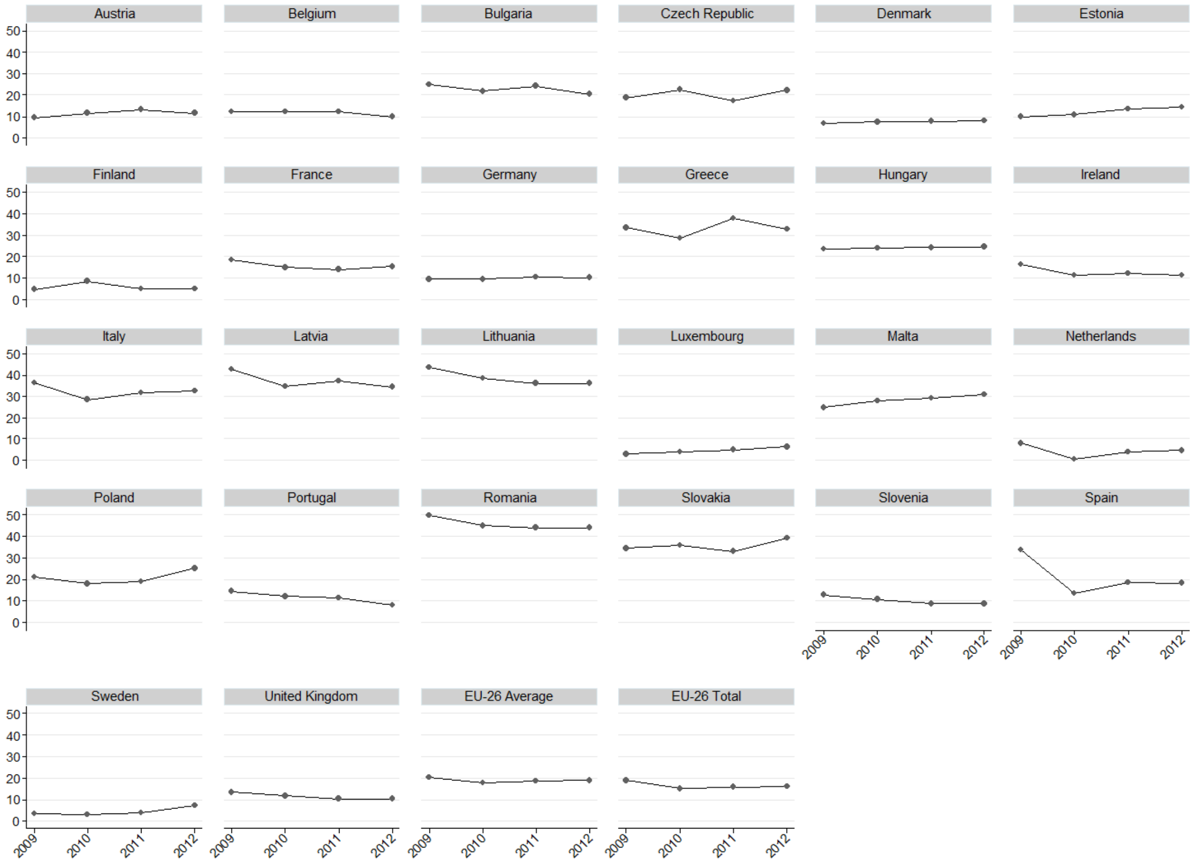
Sources: Eurostat (revenues); Own calculations. Figures in million Euros unless otherwise indicated. National currency figures for countries not using the Euro converted at the average Euro exchange rate (source: Eurostat).

The median absolute change in the VAT Gap of the individual Member States from 2011 to 2012 was 1.1 percent, with a number of countries registering considerably higher values. Overall, 11 Member States decreased their VAT Gap, with the largest improvements noted in Greece, despite the depth of its recession, and Bulgaria. However, 15 Member States saw an increase in the VAT Gap, ranging from virtually nil (e.g., Slovenia) to a substantial deterioration (e.g., Slovakia, Poland).

The trend of the VAT Gap over the period 2009-2012 is shown in Fig. 3.2. Member States have tended to slightly reduce their gap compared to the beginning of the period (at the depth of the Great

Recession). For the EU-26 as a whole, the Gap declined by three percentage points, from 19 to 16 percent. Figure 3.2 shows the behaviour of the VAT Gap in the EU-26 countries over this period, and more detailed information is to be found in Chapter 4, where the individual country sections are presented.

Figure 3.2 – VAT Gap in the EU-26 countries, 2009-2012



As was noted in the 2013 VAT Gap report, VAT rate increases are often correlated, in the short-term, with larger gaps (perhaps as higher rates may increase the incentives for non-compliance). Of the 6 countries in the EU-26 that increased their standard and/or reduced rates during 2012 (i.e. Czech Republic, France, Hungary, Ireland, the Netherlands and Spain), only Ireland and Spain registered a decline in the VAT Gap.

Box 3.2 – Composition of the VTTL, 2012

The composition of the VTTL for 2012 is very similar to that analyzed in the 2013 VAT Gap report (fig B1).

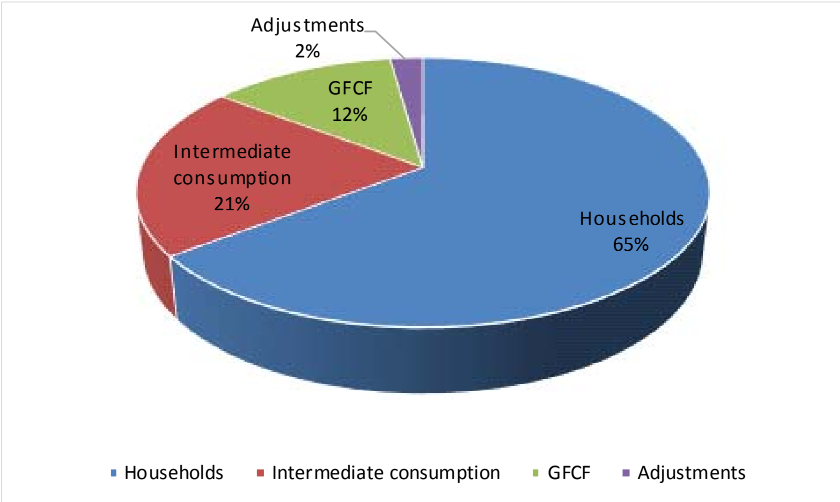


Fig. B1 - Composition of VTTL EU-26, 2012

Roughly two-thirds of the VTTL is levied on final household consumption, whereas the remainder is attributable to unrecoverable VAT on intermediate consumption and GFCF in exempt industries (adjustments account for a modest 2 percent of liability). As was the case in the 2013 VAT Gap report, there is considerable variability across countries with respect to these components, as the proportion of household consumption in VTTL ranges from the low of 35 percent in Luxembourg to the high of 81 percent in Lithuania (see Chapter 4 for individual country description, and Chapter 3.2 of the 2013 VAT Gap report for a more in-depth explanation).

3.2. Policy Gap

The concept of the Policy Gap tries to capture the effects of discretionary decisions regarding multiple rates and exemptions on the revenue that could be "produced" by a given VAT system. It is defined as the ratio between the VTTL and the "ideal" VAT Revenue. The "ideal" VAT Revenue is estimated by applying the standard rate of VAT to aggregate consumption (thereby eliminating the effects of reduced rates and exemptions). Accordingly, the Policy Gap is an indicator of the additional VAT revenue that a Member State could theoretically collect if it applied uniform taxation to all consumption. The VAT Revenue Ratio (VRR) can be defined as the ratio between the VAT actually collected and the "ideal" VAT Revenue. The VRR may be further decomposed into the VAT Gap and the Policy Gap (see Box 3.3 for a short explanation of the methodology).

Box 3.3 - VAT Revenue Ratio, Policy Gap and VAT Gap

As discussed in the 2013 VAT Gap report, the VAT Gap is related to a more general measure of VAT efficiency, the VAT revenue ratio (VRR), which represents the "ideal" revenue that could be generated by a VAT system applied to consumption as measured in National Accounts, without exemptions or reduced/zero rates and with perfect enforcement (or zero VAT Gap). The VRR is a summary measure of the shortfall in VAT revenue collections, compared to a benchmark of uniform taxation of all consumption and full compliance by taxpayers. As such, the VRR is a measure that comprises both the effects of policy and of taxpayer compliance on VAT revenues. VAT non-compliance (the VAT Gap) reduces actual VAT revenues and so contributes to the total gap. But departures from uniform taxation applied to consumption in the design of Member States' VATs, including reduced rates and VAT exemptions, (the Policy Gap) also contribute to the total gap. For this reason, the VRR measures both the imperfections of VAT policy and non-compliance by taxpayers.

More specifically, we recall the definition of the VAT Revenue Ratio:

VRR = 1 – (Actual Revenue) / (Notional Ideal Revenue)

where the Notional Ideal Revenue is defined as the standard rate of VAT times the aggregate consumption of the household, non-profit, and government sectors, as recorded in the national accounts.

This is shown in the following identity:

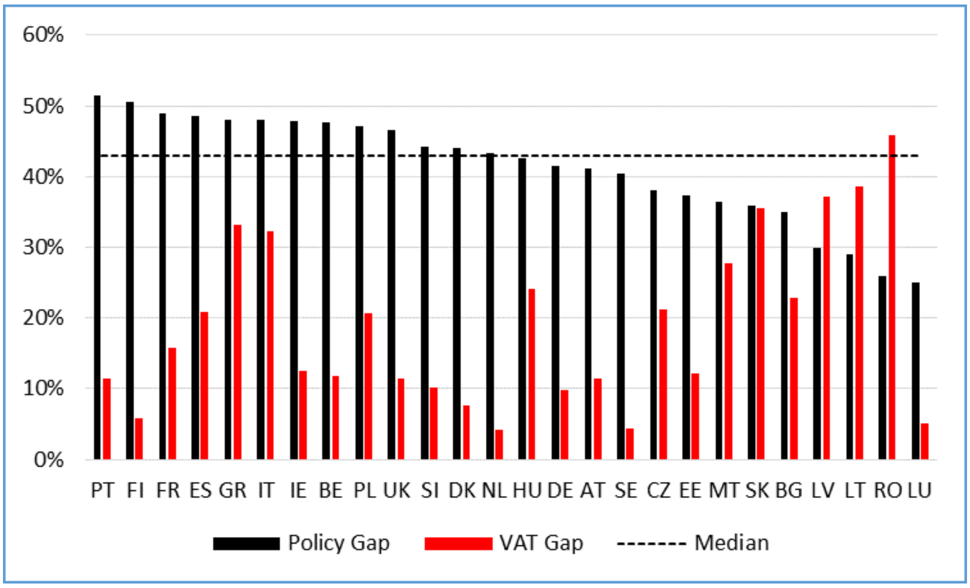
VRR = 1 – [(Actual Revenues)/VTTL](VTTL/Notional Ideal Revenue)*
= 1 – [1-VAT Gap][1-Policy Gap]*

where the Policy Gap is defined as the ratio of the "legal" tax liability (the VTTL) to an ideal tax liability without reduced rates or exemptions. The Policy Gap can then be obtained with the following formula:

Policy Gap = [VRR – VAT Gap]/[1 – VAT Gap].

Figure 3.3 displays the breakdown of the VAT Revenue Ratio between VAT Gap and Policy Gap, averaged over 2009-2012. The graph clearly shows that in most Member States the Policy Gap is (much) higher than the VAT Gap. This confirms the findings common in the literature as well as in the 2013 VAT Gap report, namely that in most countries the VAT revenue forgone compared to an "ideal system" without exemption and with a single rate (set at the prevailing standard rate) is due to policy choices rather than non-compliance and weak enforcement[6].

Figure 3.3 – Policy Gap and VAT Gap in the EU-26 countries, 2009-2012



The median Policy Gap is about 43 percent. Member States with a Policy Gap lower than the median have an average VAT Gap of 23 percent, against an average 15 percent for the Member States with a Policy Gap above the median. Indeed, four of the countries with a lower Policy Gap than the median have a higher VAT Gap than their Policy Gap (Latvia, Lithuania, Romania and the Slovak Republic). This might also point to the hypothesis that more "ideal" systems might also be more difficult to administer when institutions are weak. However, these observations do not establish causality, but are a reminder of the difficulties in implementing ideal fiscal structures in the presence of less-than-ideal institutions connected to enforcement of tax laws, as argued to be the case in several countries with a higher VAT Gap.

[6] It should be stressed that exemptions in key areas such as financial services and certain activities in the public interest, are provided by the VAT Directive, in particular the exemptions covered by Articles 132 and 135.

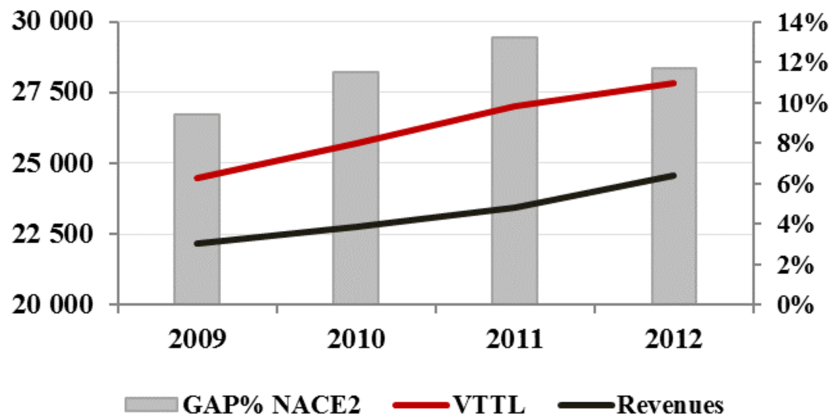
Chapter 4. Individual Country Results

This chapter reviews in detail the results for each EU-26 Member State for which this study has produced updates of the VAT Gap for 2012. For the general country features the reader is referred to the 2013 VAT Gap report. For information purposes, the data of the years 2000 and 2005 are also included in the tables as reference values. These data are reproduced from the 2013 VAT Gap report, which was based on a different NACE classification of national accounts and a somewhat different methodology, as explained in Chapter 1 and Appendix A.

Country	Page
Austria	22
Belgium	23
Bulgaria	24
Czech Republic	25
Denmark	26
Estonia	27
Finland	28
France	29
Germany	30
Greece	31
Hungary	32
Ireland	33
Italy	34
Latvia	36
Lithuania	37
Luxembourg	38
Malta	39
Netherlands	40
Poland	41
Portugal	43
Romania	44
Slovakia	45
Slovenia	46
Spain	47
Sweden	49
United Kingdom	50

Table 4.1 Austria: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million)

Austria	2000	2005	2009	2010	2011	2012
VTTL	18 466	21 907	24 456	25 690	27 009	27 807
o/w Liability on Household Cons.	*12 191*	*13 946*	*16 280*	*17 230*	*17 980*	*18 524*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*3 480*	*4 552*	*4 751*	*4 795*	*4 900*	*5 067*
o/w Unrecoverable input liability on GFCF of exempt industries	*2 251*	*2 482*	*2 191*	*23 87*	*2 635*	*2 733*
o/w Net Adjustments	*544*	*927*	*1 233*	*1 278*	*1 493*	*1 483*
VAT Revenues (Eurostat)	16 840	19 414	22 158	22 735	23 447	24 563
VAT Gap	**1 626**	**2 493**	**2 298**	**2 954**	**3 563**	**3 244**
VAT Gap as % of liability	**9%**	**11%**	**9%**	**11%**	**13%**	**12%**



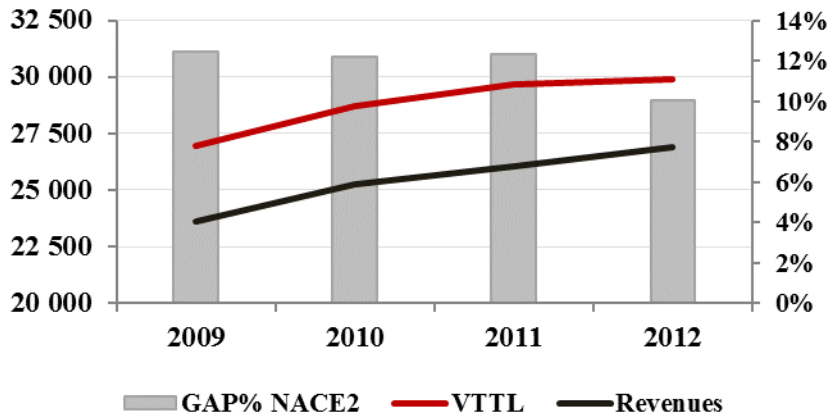
Highlights for 2012

The VAT Gap for Austria declined slightly from 2011 to 2012, to a level of 12 percent of the VTTL, after increases in 2010 and 2011. Strong revenue growth (+4.8 percent), despite the slow-down in overall economic activity growth between 2011 and 2012, outpaced the growth of total liability (+3 percent). Austria's Gap is below the median for the EU-26 reviewed in this update.

The VAT rates were left unchanged in the course of the year.

Table 4.2 Belgium: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million)

Belgium	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	19 944	24 488	26 948	28 733	29 669	29 887
o/w Liability on Household Cons.	*12 661*	*14 368*	*15 801*	*16 663*	*17 228*	*17 278*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*3 710*	*5 672*	*5 775*	*6 343*	*6 627*	*6 703*
o/w Unrecoverable input liability on GFCF of exempt industries	*2 430*	*3 168*	*4 039*	*4 126*	*4 278*	*4 293*
o/w Net Adjustments	*1 142*	*1 279*	*1 332*	*1 601*	*1 535*	*1 613*
VAT Revenues (Eurostat)	18 129	21 362	23 600	25 229	26 019	26 896
VAT Gap	**1 814**	**3 126**	**3 348**	**3 503**	**3 650**	**2 991**
VAT Gap as % of liability	**9%**	**13%**	**12%**	**12%**	**12%**	**10%**



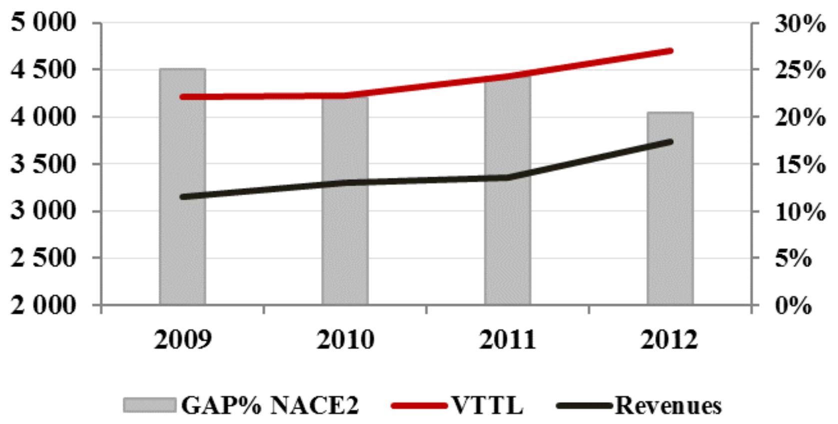
Highlights for 2012

Belgium's VAT Gap is estimated to have declined moderately between 2011 and 2012, from 12 to 10 percent of the VTTL. While the overall economy experienced a mild recession, revenue growth was positive (+3.4 percent). This result contrasted a very mild increase of the VTTL (0.7 percent), thus the decrease in the gap. Belgium's VAT Gap placed the country among the lowest in the EU-26 reviewed in this update.

No changes were made to VAT rates during 2012.

Table 4.3 Bulgaria: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million)

Bulgaria	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	1 526	2 631	4 208	4 229	4 434	4 697
o/w Liability on Household Cons.	*1 132*	*1 830*	*3 016*	*3 177*	*3 351*	*3 664*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*289*	*525*	*652*	*579*	*613*	*575*
o/w Unrecoverable input liability on GFCF of exempt industries	*81*	*220*	*459*	*422*	*400*	*397*
o/w Net Adjustments	*24*	*56*	*80*	*51*	*70*	*61*
VAT Revenues (Eurostat)	1 169	2 378	3 156	3 299	3 362	3 739
VAT Gap	**357**	**253**	**1 052**	**930**	**1 073**	**957**
VAT Gap as % of liability	**23%**	**10%**	**25%**	**22%**	**24%**	**20%**



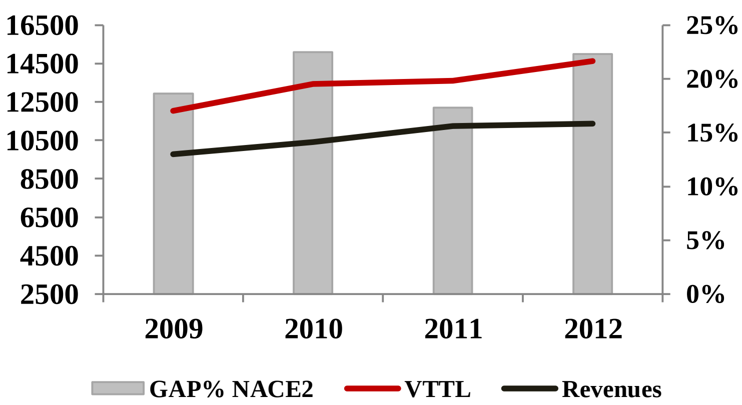
Highlights for 2012

While remaining high at 20 percent of the VTTL, and thus above the median for the EU-26 countries reviewed in this update, the VAT Gap is estimated to have dropped by four percentage points between 2011 and 2012. This is the result of strong revenue growth (+11.2 percent), despite the very mild overall economic growth registered in that year, while the VTTL rose more in line with nominal growth in the economy (+5.9 percent).

No changes were made to the VAT rates during 2012.

Table 4.4 Czech Republic: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million)

Czech Republic	2000	2005	2009	2010	2011	2012
VTTL	5 632	8 028	12 029	13 450	13 602	14 644
o/w Liability on Household Cons.	*3 584*	*4 884*	*7 300*	*8 187*	*8 429*	*9 037*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*1 690*	*2 558*	*3 170*	*3 593*	*3 707*	*3 729*
o/w Unrecoverable input liability on GFCF of exempt industries	*268*	*391*	*1 654*	*1 793*	*1 666*	*1 653*
o/w Net Adjustments	*92*	*195*	*262*	*293*	*230*	*226*
VAT Revenues (Eurostat)	3 970	7 223	9 784	10 420	11 246	11 377
VAT Gap	**1 662**	**804**	**2 245**	**3 030**	**2 356**	**3 267**
VAT Gap as % of liability	**30%**	**10%**	**19%**	**23%**	**17%**	**22%**



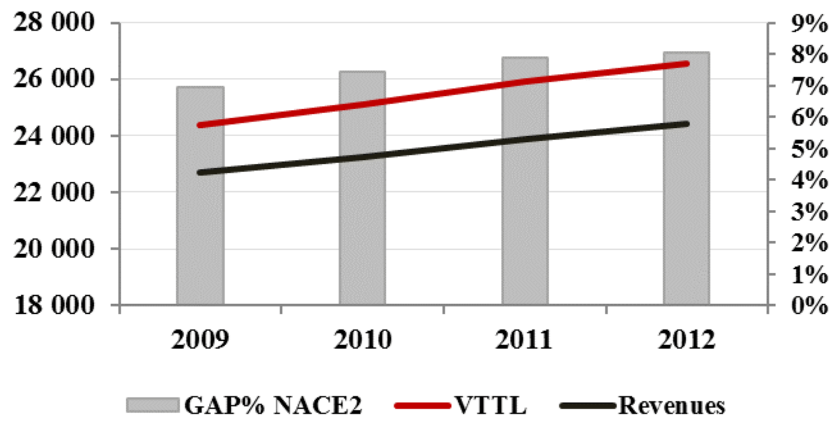
Highlights for 2012

The VAT Gap for the Czech Republic remains above the median of the EU-26 reviewed in this update. During 2012, the gap rose by some 5 percentage points, to 22 percent of the VTTL. A lacklustre performance of revenues (+3.5 percent in domestic currency (Czech koruna) and Euro terms) was unable to keep pace with a sustained increase in the VTTL (+10.1 percent), which is attributable to the increase in nominal economic growth and the substantial increase in the reduced rate.

The reduced rate was increased from 10 to 14 percent at the beginning of 2012.

Table 4.5 Denmark: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million)

Denmark	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	18 682	22 880	24 390	25 107	25 916	26 563
o/w Liability on Household Cons.	*11 109*	*13 256*	*13 716*	*14 271*	*14 549*	*14 961*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*4 477*	*5 839*	*6 861*	*7 117*	*7 310*	*7 620*
o/w Unrecoverable input liability on GFCF of exempt industries	*2 587*	*3 230*	*3 139*	*3 022*	*3 293*	*3 178*
o/w Net Adjustments	*509*	*555*	*674*	*697*	*765*	*804*
VAT Revenues (Eurostat)	16 606	20 862	22 702	23 245	23 870	24 422
VAT Gap	**2 076**	**2 017**	**1 689**	**1 862**	**2 047**	**2 141**
VAT Gap as % of liability	**11%**	**9%**	**7%**	**7%**	**8%**	**8%**



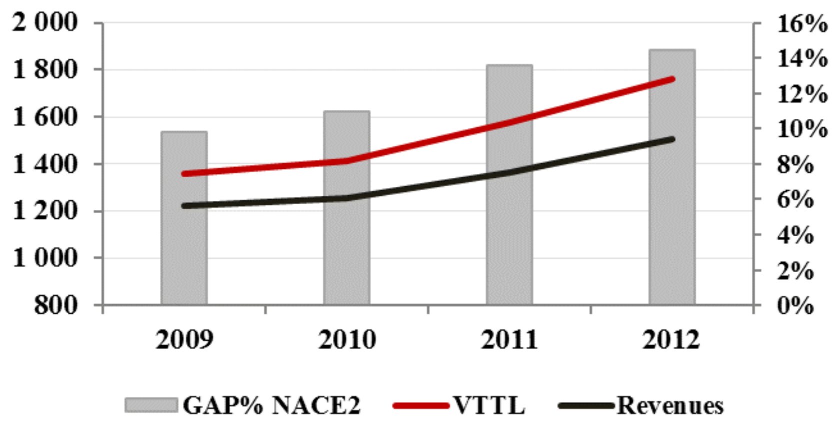
Highlights for 2012

Denmark remains one of the countries with low VAT Gaps among the EU-26 surveyed in this report. Between 2011 and 2012, the VAT Gap was virtually unchanged at 8 percent of the VTTL. Both revenue and the VTTL rose modestly (+2.2 and 2.4 percent, respectively, in domestic currency (Danish krone) terms) along the lines of nominal growth in the country, and despite the mild recession in real GDP.

Denmark did not apply any changes in either the standard or the reduced rates.

Table 4.6 Estonia: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million)

Estonia	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	595	1 128	1 357	1 412	1 577	1 763
o/w Liability on Household Cons.	*421*	*781*	*925*	*989*	*1 083*	*1 180*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*105*	*172*	*215*	*230*	*258*	*286*
o/w Unrecoverable input liability on GFCF of exempt industries	*65*	*168*	*208*	*186*	*226*	*287*
o/w Net Adjustments	*3*	*7*	*8*	*8*	*11*	*10*
VAT Revenues (Eurostat)	520	970	1 224	1 257	1 363	1 508
VAT Gap	**75**	**158**	**133**	**155**	**214**	**255**
VAT Gap as % of liability	**13%**	**14%**	**10%**	**11%**	**14%**	**14%**



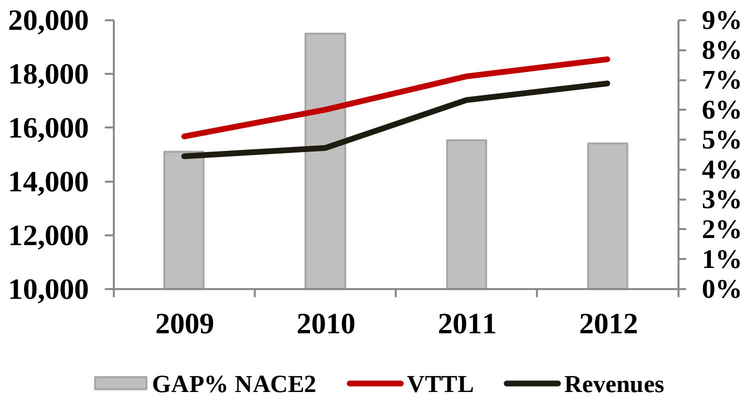
Highlights for 2012

Despite a very sharp reduction in its overall GDP growth rate (from 9.6 to 3.9 percent in 2012), Estonia was able to increase its VAT revenues by over 10 percent. This allowed the country to keep pace with the growth of the VTTL (close to 12 percent), thus resulting in an unchanged VAT Gap, at 14 percent, just around the median value for the EU-26 surveyed in this update. These values are consistent with those of a recently released IMF report on the subject (IMF 2014).

The VAT rates were not modified in the course of the year.

Table 4.7 Finland: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million)

Finland	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	12 392	15 468	**15 671**	**16 682**	**17 913**	**18 545**
o/w Liability on Household Cons.	*6 561*	*8 214*	*8 946*	*9 226*	*9 849*	*10 261*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*3 270*	*4 193*	*3 998*	*4 207*	*4 513*	*4 726*
o/w Unrecoverable input liability on GFCF of exempt industries	*2 349*	*2 699*	*2 251*	*2 729*	*3 006*	*3 092*
o/w Net Adjustments	*211*	*362*	*477*	*521*	*545*	*466*
VAT Revenues (Eurostat)	10 869	13 658	14 951	15 256	17 020	17 640
VAT Gap	**1 523**	**1 810**	720	1 426	893	905
VAT Gap as % of liability	**12%**	**12%**	**5%**	**9%**	**5%**	**5%**



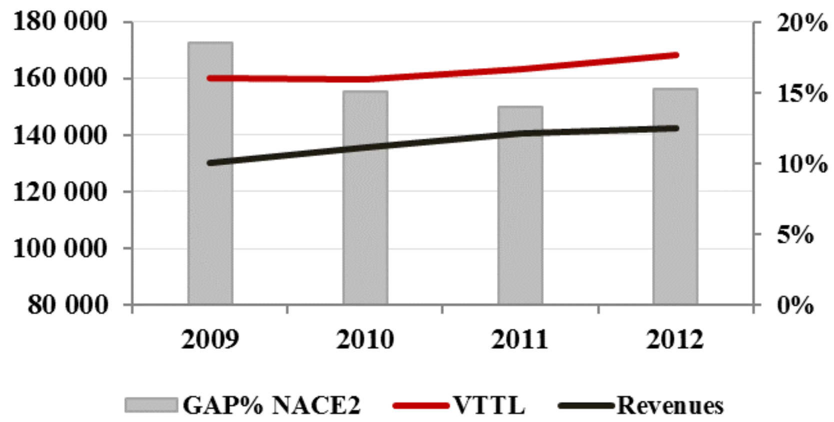
Highlights for 2012

Finland experienced a moderate recession during 2012. Nevertheless, its revenues and VTTL increased above the rate of nominal growth of the economy (3.5 percent vs. 2 percent nominal GDP growth, or 3.3 percent nominal household consumption growth). The VAT Gap was therefore unchanged at 5 percent of VTTL, which means that Finland (together with the Netherlands) has the lowest VAT Gap in the EU-26 included in this report.

VAT rates were not changed during 2012.

Table 4.8 France: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million)

France	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	120 868	147 140	159 929	159 579	163 417	168 082
o/w Liability on Household Cons.	*74 348*	*88 560*	*98 717*	*101 690*	*104 480*	*107 190*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*23 257*	*29 695*	*26 950*	*28 153*	*27 993*	*29 527*
o/w Unrecoverable input liability on GFCF of exempt industries	*19 349*	*24 397*	*30 186*	*25 142*	*26 657*	*27 012*
o/w Net Adjustments	*3 913*	*4 489*	*4 077*	*4 594*	*4 287*	*4 353*
VAT Revenues (Eurostat)	107 163	126 625	130 303	135 579	140 558	142 499
VAT Gap	**13 705**	**20 515**	**29 626**	**24 000**	**22 859**	**25 583**
VAT Gap as % of liability	**11%**	**14%**	**19%**	**15%**	**14%**	**15%**



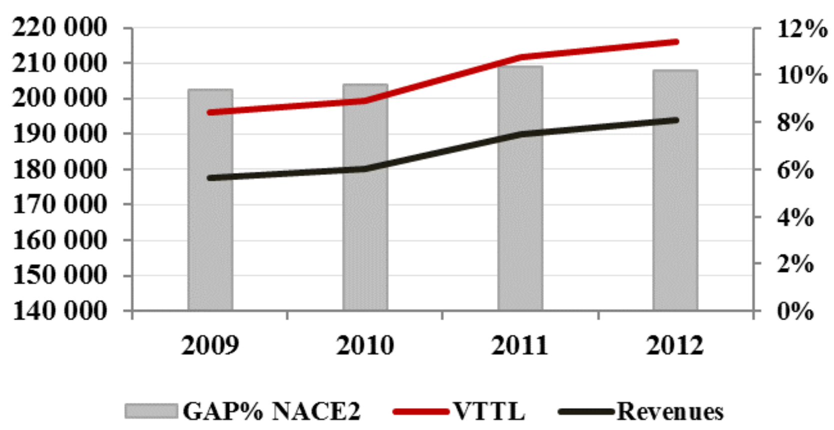
Highlights for 2012

France's economy stagnated during 2012, registering only a marginally better performance compared to the EU as a whole. VAT revenue growth was weak at 1.3 percent. However, the VTTL rose more strongly in line with nominal consumption growth and the slight increases in rates. Consequently the VAT Gap inched up slightly by one percent to 15 percent. France's performance with respect to the VAT Gap continues to place it at around the median in the EU-26 reviewed in this report.

France introduced a second reduced rate of 7 percent (in addition to the existing super-reduced rate of 2.1 percent and the reduced rate of 5 percent) in the course of 2012.

Table 4.9 Germany: VAT receipts, VTTL, composition of VTTL and Gap, 2009–2012 (EUR million)

Germany	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	157 896	160 996	196 095	199 283	211 834	215 997
o/w Liability on Household Cons.	*96 492*	*102 873*	*124 984*	*124 549*	*132 667*	*135 841*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*29 968*	*31 669*	*42 269*	*43 786*	*45 569*	*46 789*
o/w Unrecoverable input liability on GFCF of exempt industries	*30 225*	*25 595*	*27 413*	*29 400*	*31 867*	*31 615*
o/w Net Adjustments	*1 211*	*859*	*1 429*	*1 548*	*1 731*	*1 752*
VAT Revenues (Eurostat)	140 020	139 810	177 680	180 220	189 920	194 040
VAT Gap	**17 876**	**21 186**	**18 415**	**19 063**	**21 914**	**21 957**
VAT Gap as % of liability	**11%**	**13%**	**9%**	**10%**	**10%**	**10%**



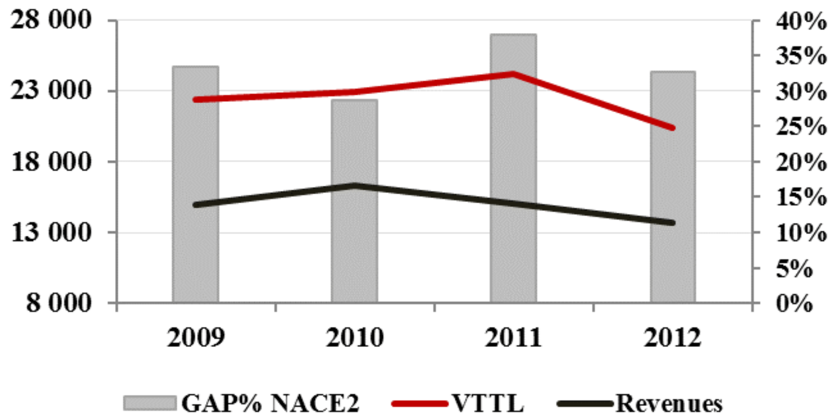
Highlights for 2012

Germany's VAT Gap remained constant between 2011 and 2012, at 10 percent, placing the country again below the median for the EU-26. Both revenues and the VTTL grew at a moderate pace of about 2 percent, reflecting the slowdown in the overall growth rate of the economy and in line with the nominal growth of GDP and household consumption.

There were no changes to the VAT rates.

Table 4.10 Greece: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million)

Greece	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	13 074	19 386	22 395	22 885	24 213	20 364
o/w Liability on Household Cons.	*8 083*	*12 482*	*14 840*	*16 101*	*18 108*	*15 450*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*1 678*	*2 139*	*2 529*	*2 390*	*2 120*	*1 829*
o/w Unrecoverable input liability on GFCF of exempt industries	*3 208*	*4 585*	*4 745*	*4 058*	*3 494*	*2 717*
o/w Net Adjustments	*104*	*180*	*282*	*336*	*491*	*368*
VAT Revenues (Eurostat)	9 824	13 398	14 914	16 308	15 028	13 713
VAT Gap	**3 250**	**5 988**	**7 481**	**6 577**	**9 185**	**6 651**
VAT Gap as % of liability	**25%**	**31%**	**33%**	**29%**	**38%**	**33%**



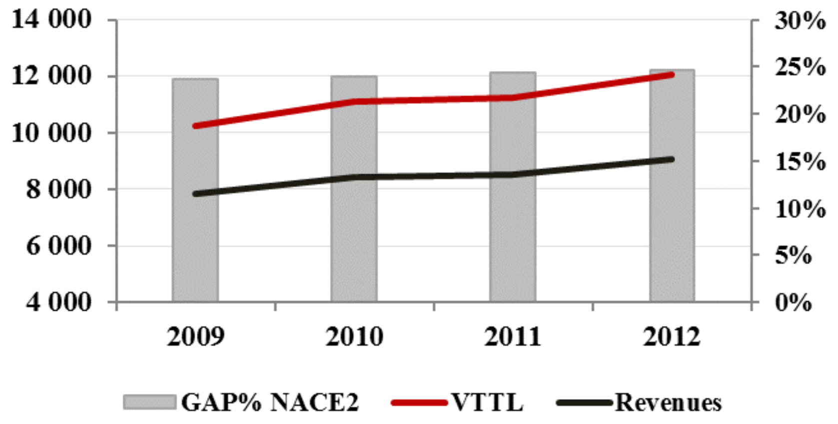
Highlights for 2012

Greece continued to experience a severe recession in 2012, with GDP declining by over 7 percent for the second year in a row. Nevertheless, it appears that increased efforts to ensure compliance with VAT obligations paid off, as the VAT Gap, which had risen strongly since the beginning of the Euro crisis, declined by 5 percentage points in 2012 compared to 2011. While the VTTL declined by close to 16 percent owing to sharp reductions in domestic consumption and imports, the decline in revenues was more moderate, at 8.8 percent, thus resulting in the overall decline in the VAT Gap. Greece however remains one of the countries with a high VAT Gap in the EU-26.

Greece's VAT rates were unchanged over the course of 2012.

Table 4.11 Hungary: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million)

Hungary	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	5 702	10 239	10 240	11 102	11 252	12 055
o/w Liability on Household Cons.	*3 604*	*6 392*	*6 832*	*7 468*	*7 676*	*8 180*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*1 080*	*2 185*	*2 074*	*2 263*	*2 220*	*2 279*
o/w Unrecoverable input liability on GFCF of exempt industries	*946*	*1 552*	*1 278*	*1 292*	*1 259*	*1 361*
o/w Net Adjustments	*71*	*109*	*57*	*78*	*97*	*235*
VAT Revenues (Eurostat)	4 461	7 485	7 820	8 442	8 516	9 084
VAT Gap	**1 241**	**2 754**	**2 420**	**2 660**	**2 736**	**2 971**
VAT Gap as % of liability	**22%**	**27%**	**24%**	**24%**	**24%**	**25%**

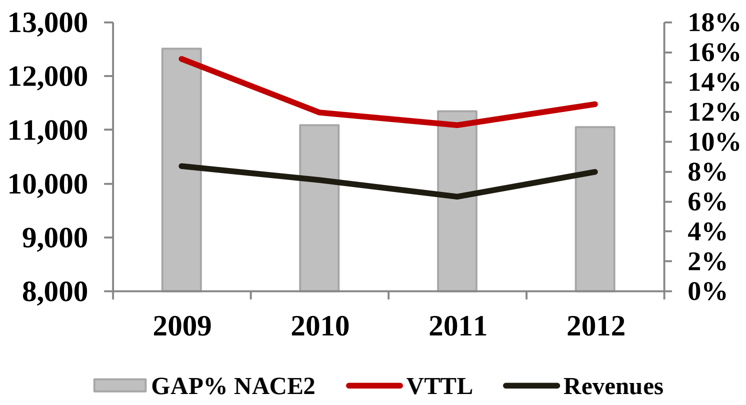


Highlights for 2012

The VAT Gap in Hungary posted a modest increase during 2012, reaching 25 percent of the VTTL. This places Hungary above the median of the EU-26 countries by this yardstick. Revenues recorded robust growth of 6.7 percent in Euro terms (10.4 percent in domestic currency (Hungarian forint) terms), despite the contraction of the overall economy. They were helped in this by the increase in the standard rate to 27 percent, now the highest value in the European Union. The VTTL, however, also rose slightly faster, hence the marginally increased gap.

Table 4.12 Ireland: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million)

Ireland	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	8 447	13 312	12 330	11 324	11 093	11 482
o/w Liability on Household Cons.	*4 350*	*6 395*	*7 027*	*6 922*	*6 920*	*7 243*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*1 410*	*2 091*	*2 710*	*2 654*	*2 640*	*2 705*
o/w Unrecoverable input liability on GFCF of exempt industries	*2 448*	*4 428*	*2 339*	*1 518*	*1 292*	*1 290*
o/w Net Adjustments	*239*	*398*	*253*	*230*	*242*	*244*
VAT Revenues (Eurostat)	7 657	12 364	10 325	10 067	9 755	10 219
VAT Gap	**790**	**948**	**2 005**	**1 256**	**1 338**	**1 263**
VAT Gap as % of liability	**9%**	**7%**	**16%**	**11%**	**12%**	**11%**



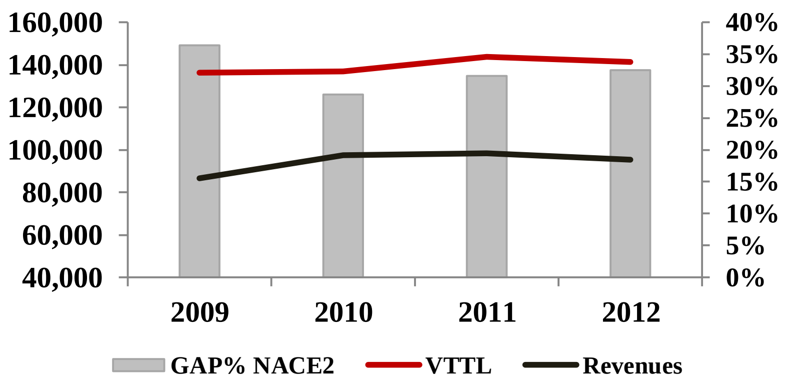
Highlights for 2012

The VAT Gap (as percent of liability) declined moderately from 12 to 11 percent in Ireland during 2012. Revenues rose by 4.8 percent, despite the deceleration in growth observed during the year, and helped by an increase in the standard rate. The VTTL rose more modestly, and as a result, the VAT Gap shrank. Ireland's Gap is below the median of the EU-26 Member states reviewed in this report.

Ireland raised its standard VAT rate from 21 to 23 percent at the beginning of 2012.

Table 4.13 Italy: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million)

Italy	2000	2005	2009	2010	2011	2012
VTTL	100 292	117 705	136 147	136 758	143 916	141 507
o/w Liability on Household Cons.	*72 081*	*81 980*	*93 371*	*95 018*	*100 645*	*100 331*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*14 345*	*19 280*	*22 975*	*22 941*	*23 237*	*22 598*
o/w Unrecoverable input liability on GFCF of exempt industries	*10 036*	*12 310*	*15 790*	*15 173*	*15 272*	*14 137*
o/w Net Adjustments	*3 830*	*4 135*	*4 012*	*3 626*	*4 762*	*4 441*
VAT Revenues (Eurostat)	77 473	85 317	86 544	97 586	98 456	95 473
VAT Gap	**22 819**	**32 388**	**49 603**	**39 172**	**45 460**	**46 034**
VAT Gap as % of liability	**23%**	**28%**	**37%**	**29%**	**32%**	**33%**



Highlights for 2012

Italy's difficult overall economic conditions resulted in a decline of revenues by more than 3 percent during 2012 (see however the caveats in the next page and table 4.13.1). The VTTL also declined in line with the strong decline in domestic consumption, but by a more moderate -1.8 percent. As a result, the VAT Gap inched upwards, from 32 to 33 percent. This value again puts Italy among the countries with a high VAT Gap in the EU-26.

Italy's VAT rates, modified in late 2011, were not changed during 2012.

Note: Accounting for changes in stocks of VAT credits in Italy

The Italian authorities have produced revenue estimates that correct for the behaviour of VAT taxpayers who may accelerate or delay claims on VAT credits depending on economic circumstances (see for the methodology D'Agosto, Marigliani, Pisani 2013). In the following table, we report the adjusted value of the VAT revenues and the VAT Gap according to this methodology for the period 2009-2012:

Table 4.13.1 Italy: Adjustment for Changes in VAT Credit Stocks

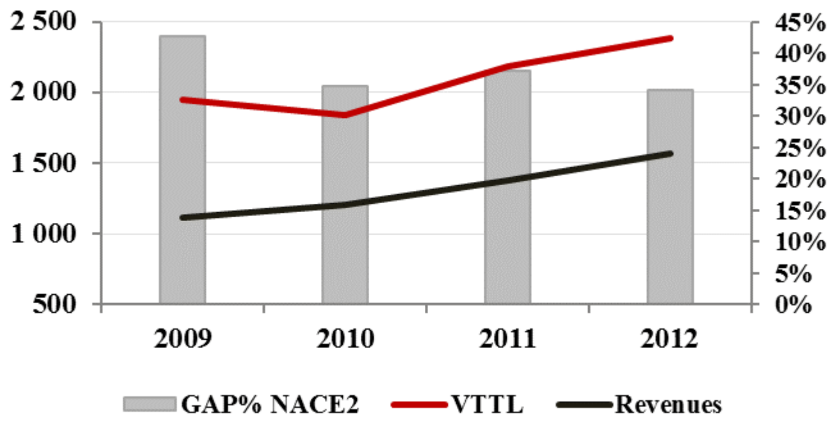
	2009	2010	2011	2012
Revenues Eurostat	86 544	97 586	98 456	95 473
Change in VAT Credit Stocks	-6 268	906	898	-2 902
Revised Revenues	92 812	96 680	97 558	98 375
Revised VAT Gap	43 637	40 643	46 877	43 447
Revised VAT Gap (% VTTL)	32.0%	29.6%	32.5%	30.6%

Source: Communication from Italian Authorities

As is apparent, the behaviour of changes in VAT credit stocks appears anti-cyclical, and thus the values of the VAT Gap for 2009 and 2012 (both years of substantial recession in Italy) are reduced compared to the estimates in Table 4.13. As these adjustments are not available for other countries, we report the data in table 4.13 in the summary tables.

Table 4.14 Latvia: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million)

Latvia	2000	2005	2009	2010	2011	2012
VTTL	711	1 190	1 946	1 841	2 186	2 389
o/w Liability on Household Cons.	*549*	*838*	*1 355*	*1 342*	*1 581*	*1 726*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*117*	*212*	*340*	*333*	*398*	*422*
o/w o/w Unrecoverable input liability on GFCF of exempt industries	*42*	*134*	*235*	*151*	*193*	*211*
o/w Net Adjustments	*3*	*6*	*16*	*16*	*14*	*20*
VAT Revenues (Eurostat)	599	1 011	1 114	1 202	1 374	1 570
VAT Gap	**112**	**179**	**832**	**639**	**812**	**818**
VAT Gap as % of liability	**16%**	**15%**	**43%**	**35%**	**37%**	**34%**



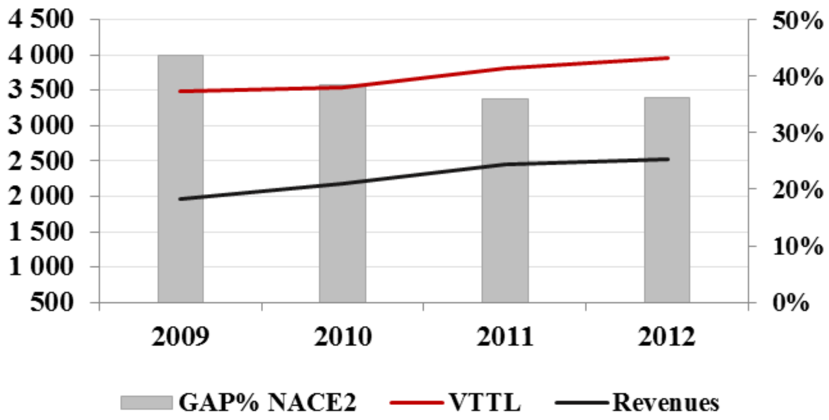
Highlights for 2012

VAT revenues posted a robust growth in Latvia in 2012, at over 14 percent, spurred by the strong economic performance of the country, the best in the EU-26. The VTTL also rose briskly, reflecting the high growth rate of the economy, at 9 percent. The VAT Gap therefore declined from 37 to 34 percent in the course of the year. Latvia however remains in the top percentiles of the EU-26 countries reviewed in this report.

Latvia was the only EU-26 country that lowered its standard rate from 22 to 21 percent in the second half of 2012.

Table 4.15 Lithuania: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million)

Lithuania	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	1 347	2 325	3 480	3 539	3 820	3 957
o/w Liability on Household Cons.	*1 036*	*1 743*	*2 696*	*2 779*	*3 045*	*3 219*
o/w o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*152*	*262*	*418*	*442*	*419*	*407*
o/w o/w Unrecoverable input liability on GFCF of exempt industries	*153*	*306*	*366*	*307*	*341*	*317*
o/w Net Adjustments	*6*	*14*	*-1*	*10*	*16*	*14*
VAT Revenues (Eurostat)	939	1 488	1 961	2 180	2 444	2 521
VAT Gap	**408**	**837**	**1 519**	**1 358**	**1 377**	**1 436**
VAT Gap as % of liability	**30%**	**36%**	**44%**	**38%**	**36%**	**36%**



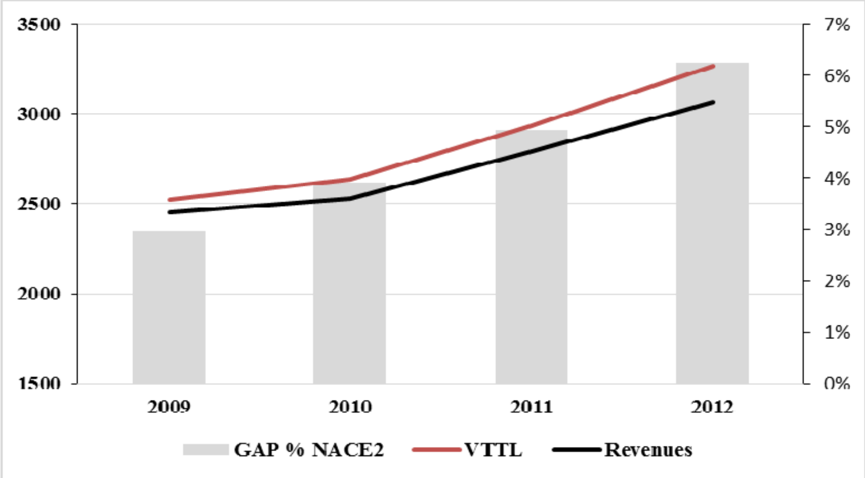
Highlights for 2012

The VAT Gap in Lithuania was virtually constant between 2011 and 2012, at the high level of 36 percent. Revenues rose by a modest 3.2 percent, in view of the reduced (albeit robust for the EU) growth in GDP. The VTTL also kept pace with a growth of 3.6 percent, thus resulting in an unchanged VAT Gap. At 36 percent, Lithuania ranks among the countries with the highest VAT Gap in Europe.

The VAT rates were not changed in 2012.

Table 4.16 Luxembourg: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million)

Luxembourg	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	1 449	2 039	2 525	2 634	2 937	3 268
o/w Liability on Household Cons.	*734*	*919*	*958*	*1 010*	*1 094*	*1 127*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*379*	*509*	*544*	*548*	*586*	*615*
o/w Unrecoverable input liability on GFCF of exempt industries	*178*	*241*	*282*	*283*	*289*	*296*
o/w Net Adjustments	*158*	*369*	*741*	*794*	*969*	*1 228*
VAT Revenues (Eurostat)	1 234	1 863	2 451	2 531	2 792	3 064
VAT Gap	**215**	**176**	**74**	**103**	**145**	**204**
VAT Gap as % of liability	**15%**	**9%**	**3%**	**4%**	**5%**	**6%**



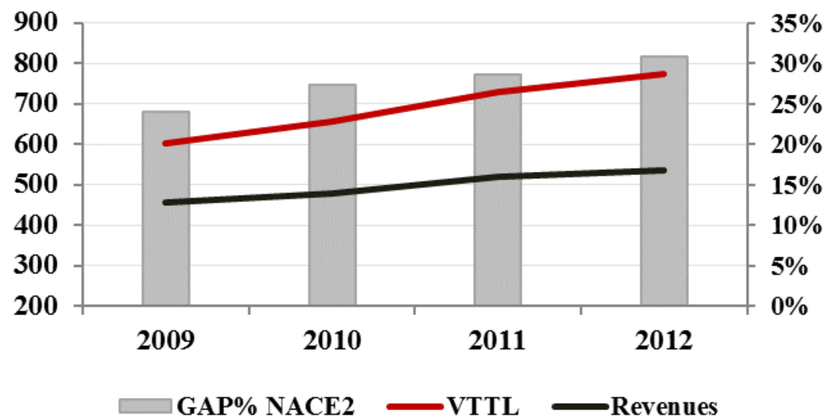
Highlights for 2012

The VAT Gap rose by one percentage point between 2011 and 2012 in Luxembourg. The robust growth in revenues (9.7 percent) is estimated to be in large part attributable to the growth of E-commerce-related revenues and other exports that do not reclaim input VAT. However, the VTTL on account of domestic base and E-commerce also grew rapidly, despite the modest decline in GDP registered during the year. As a result, the Gap rose from 5 to 6 percent, to place the country among the countries with one of the lowest VAT Gap in the EU-26 in this report.

Luxembourg did not change its VAT rates in the course of 2012.

Table 4.17 Malta: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million)

Malta	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	283	438	606	662	733	777
o/w Liability on Household Cons.	*218*	*323*	*351*	*374*	*393*	*420*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*42*	*62*	*228*	*256*	*308*	*319*
o/w Unrecoverable input liability on GFCF of exempt industries	*22*	*37*	*26*	*30*	*31*	*36*
o/w Net Adjustments	*2*	*16*	*2*	*1*	*1*	*2*
VAT Revenues (Eurostat)	236	397	457	477	520	536
VAT Gap	**47**	**40**	**150**	**184**	**213**	**241**
VAT Gap as % of liability	**17%**	**9%**	**25%**	**28%**	**29%**	**31%**



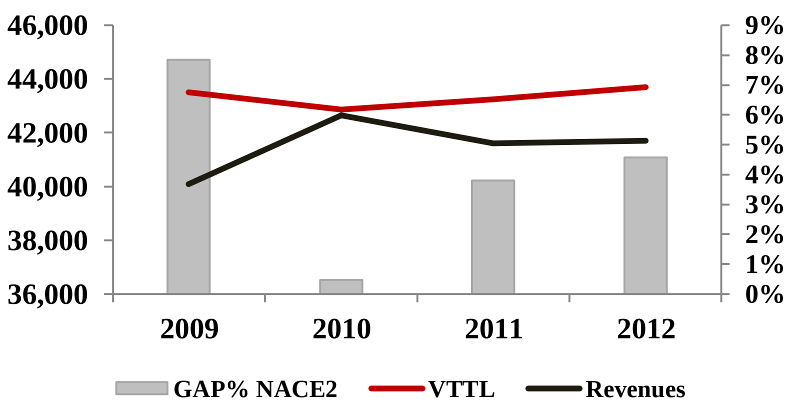
Highlights for 2012

The VAT Gap in Malta saw a slight increase in 2012 from 2011, as a 3 percent increase in VAT revenues was insufficient to keep pace with the strong increase of over 6 percent in the VTTL, in line with the nominal growth of the economy. The VAT Gap in 2012, at 31 percent, places Malta among the countries with a high VAT Gap in the EU-26 surveyed in this update.

The VAT rates were not modified during the course of 2012.

Table 4.18 Netherlands: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million)

Netherlands	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	31 617	38 014	43 504	42 855	43 255	43 699
o/w Liability on Household Cons.	*15 954*	*18 586*	*22 398*	*22 769*	*23 122*	*23 719*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*8 339*	*11 320*	*11 156*	*11 020*	*10 805*	*11 217*
o/w Unrecoverable input liability on GFCF of exempt industries	*7 063*	*7 807*	*9 312*	*8 400*	*8 645*	*8 306*
o/w Net Adjustments	*261*	*300*	*637*	*666*	*683*	*636*
VAT Revenues (Eurostat)	28 849	36 950	40 086	42 654	41 610	41 699
VAT Gap	**2 768**	**1 064**	**3 418**	**201**	**1 645**	**2 000**
VAT Gap as % of liability	**9%**	**3%**	**8%**	**0%**	**4%**	**5%**

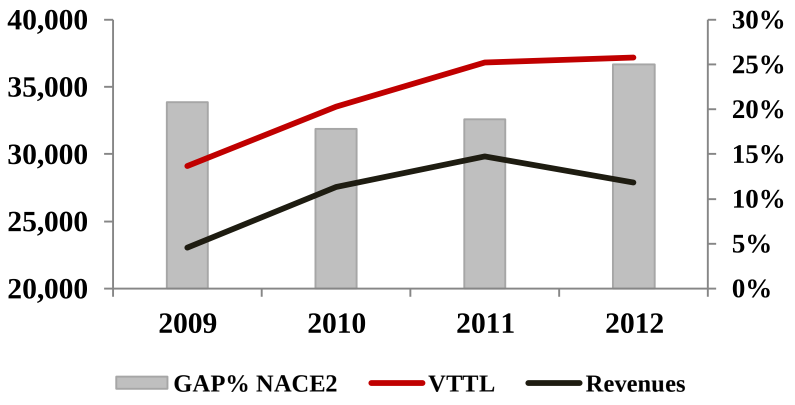


Highlights for 2012

The Netherlands have (together with Finland) the lowest VAT Gap in the EU-26 analysed in this update. During the year 2012, the VAT Gap nevertheless saw a slight increase (from 4 to 5 percent), as VAT collections stagnated, largely in view of the downturn in the economy (GDP fell by 1.3 percent in real terms). This result on the revenue side occurred despite the increase in the standard rate from 19 to 21 percent (which took effect in the last three months of the year), breaking a long record of stable VAT rates. These VAT Gap results are about 2 percentage points higher, for 2011 and 2012, than the results produced by the Netherlands Ministry of Finance (Ministerie van Financiën, 2014).

Table 4.19 Poland: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million)

Poland	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	15 483	20 753	29 119	33 517	36 798	37 198
o/w Liability on Household Cons.	*10 528*	*13 995*	*19 147*	*21 881*	*24 024*	*25 015*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*3 056*	*4 205*	*5 746*	*6 667*	*7 043*	*7 049*
o/w Unrecoverable input liability on GFCF of exempt industries	*1 587*	*2 123*	*3 612*	*4 242*	*4 754*	*4 121*
o/w Net Adjustments	*311*	*430*	*614*	*726*	*977*	*1 013*
VAT Revenues (Eurostat)	12 877	18 837	23 056	27 535	29 843	27 881
VAT Gap	**2 606**	**1 916**	**6 063**	**5 981**	**6 955**	**9 317**
VAT Gap as % of liability	**17%**	**9%**	**21%**	**18%**	**19%**	**25%**



Highlights for 2012

The VAT Gap in Poland showed an important increase in 2012, from 19 percent in 2011 to 25 percent. While the economy as a whole slowed down (with the overall GDP growth rate reduced in half, albeit still positive at 2 percent), the VTTL rose (albeit less than nominal GDP growth). However, the VAT revenues showed a substantial deterioration (-6.6 percent in Euro terms and -5.1 percent in domestic currency (Polish zloty) terms), resulting in the increased VAT Gap. The decline on the revenue side appears to be the result at least in part of increased illegal practices involving the fictitious export and import of products. With a 25% VAT Gap, Poland is above the median of the EU-26. The VAT rates were not changed in 2012.

Note – Alternative Gap computation for Poland

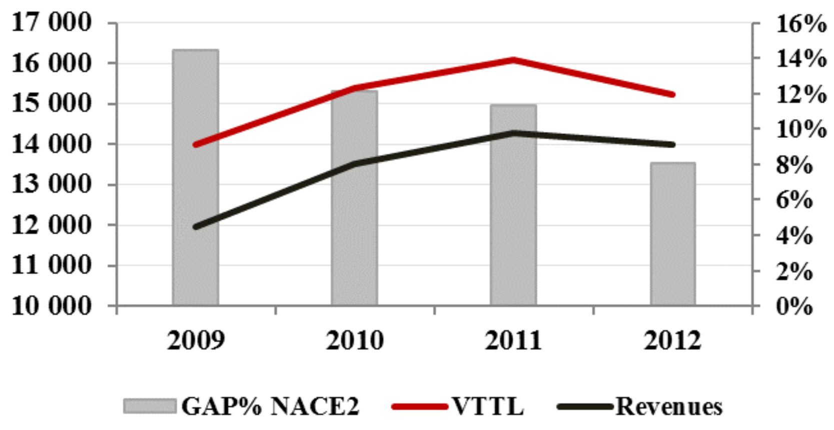
The Polish authorities have pointed out a desirable correction to the estimates presented in Table 4.19. The correction concerns the Eurostat revenue data, which do not include VAT returns to households associated with housing construction. Given the importance of the adjustment, the alternative results are shown in Table 4.24.1 below:

Table 4.19.1 - Poland - Alternative Gap calculations

	2009	2010	2011	2012
VTTL (NACE 2)	29119	33517	36798	37198
Revenues (Eurostat)	23056	27536	29843	27881
Correction for Revenues	231	255	259	243
Alternative Revenues	22825	27281	29584	28124
Alternative Gap	6294	6236.4	7055	9317
Alt. Gap % of VTTL	22%	19%	19%	25%

Table 4.20 Portugal: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million)

Portugal	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	10 084	13 450	13 995	15 392	16 083	15 223
o/w Liability on Household Cons.	*6 644*	*8 868*	*9 499*	*10 404*	*11 169*	*10 738*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*2 045*	*2 925*	*2 893*	*3 094*	*3 173*	*3 040*
o/w Unrecoverable input liability on GFCF of exempt industries	*1 043*	*1 237*	*1 293*	*1 485*	*1 378*	*1 084*
o/w Net Adjustments	*352*	*421*	*310*	*409*	*363*	*361*
VAT Revenues (Eurostat)	9 734	13 001	11 971	13 527	14 265	13 995
VAT Gap	**350**	**449**	**2 023**	**1 865**	**1 819**	**1 228**
VAT Gap as % of liability	**3%**	**3%**	**14%**	**12%**	**11%**	**8%**



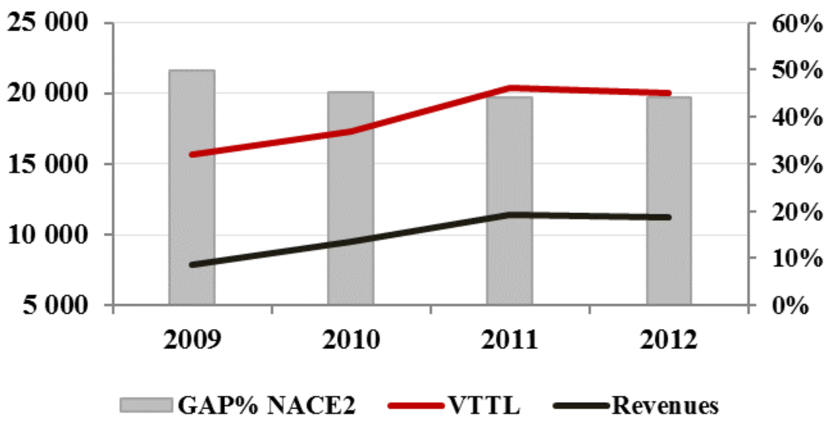
Highlights for 2012

Portugal saw the continuation of a trend towards a lower VAT Gap during 2012. The result is however a mixed bag of news, dominated by the strong recession that continued to affect Portugal's overall economic performance. Despite a decline in revenues by about 1.5 percent, the VTTL declined even further, by over 5 percent, reflecting weak consumption and investment (by exempt sectors). As a result, the overall VAT Gap fell from 11 to 8 percent. This places Portugal amongst the countries with one of the lowest VAT Gap in the EU-26.

The VAT rates were unchanged in Portugal in 2012.

Table 4.21 Romania: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million)

Romania	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	4 510	9 826	15 651	17 297	20 382	20 053
o/w Liability on Household Cons.	*3 046*	*6 739*	*8 758*	*10 749*	*12 456*	*12 296*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*844*	*1 603*	*2 764*	*2 446*	*2 834*	*2 651*
o/w Unrecoverable input liability on GFCF of exempt industries	*561*	*1 201*	*3 754*	*3 567*	*4 415*	*4 464*
o/w Net Adjustments	*59*	*284*	*375*	*535*	*677*	*641*
VAT Revenues (Eurostat)	2 633	6 439	7 852	9 494	11 412	11 212
VAT Gap	**1 877**	**3 387**	**7 799**	**7 803**	**8 970**	**8 841**
VAT Gap as % of liability	**42%**	**34%**	**50%**	**45%**	**44%**	**44%**



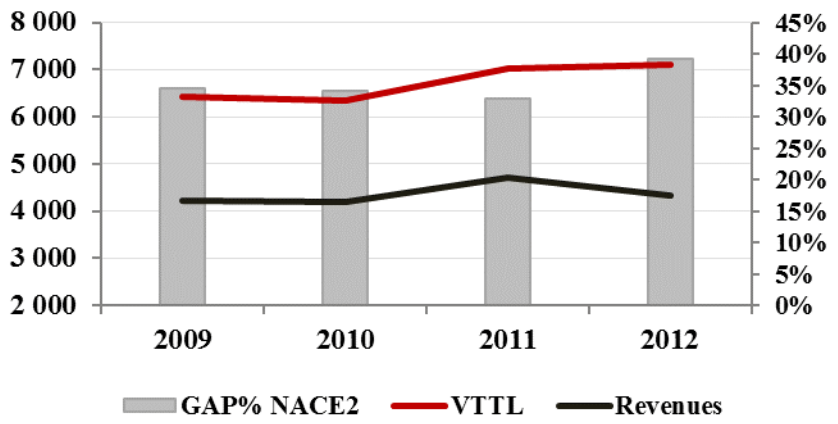
Highlights for 2012

The VAT Gap registered in Romania in 2012 is the highest in the EU-26 reviewed in this report, a record solidified since the onset of the great recession of 2009. On the positive side, the VAT Gap showed a stable behavior compared to 2011, but in an overall context of economic stagnation. The VTTL rose by 3.5 percent in domestic currency (Romanian leu) terms, along the lines of nominal growth (it fell by one percent in Euro terms). A similar trend was present in revenue collection, so that the gap between the two variables held steady at 44 percent.

VAT rates were unchanged in 2012.

Table 4.22 Slovakia: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million)

Slovakia	2000	2005	2009	2010	2011	2012
VTTL	2 974	4 866	6 438	6 516	7 014	7 114
o/w Liability on Household Cons.	*1 968*	*3 402*	*4 606*	*4 756*	*5 070*	*5 243*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*579*	*889*	*1 133*	*1 104*	*1 162*	*1 181*
o/w Unrecoverable input liability on GFCF of exempt industries	*400*	*545*	*703*	*670*	*777*	*688*
o/w Net Adjustments	*26*	*29*	*-4*	*-15*	*5*	*2*
VAT Revenues (Eurostat)	2 168	3 880	4 221	4 182	4 711	4 328
VAT Gap	**806**	**986**	**2 217**	**2 334**	**2 303**	**2 786**
VAT Gap as % of liability	**27%**	**20%**	**34%**	**36%**	**33%**	**39%**



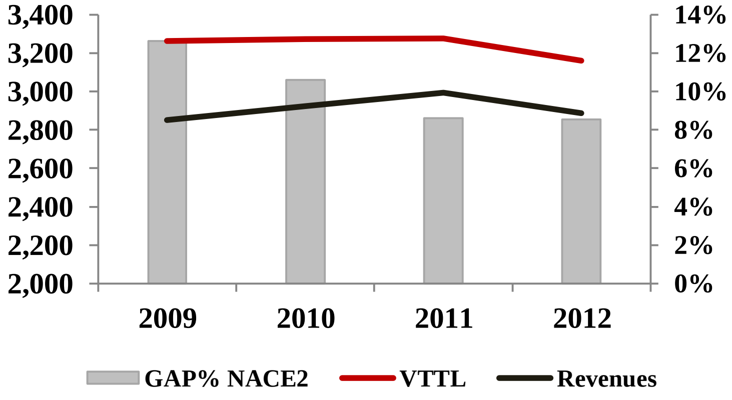
Highlights for 2012

The VAT Gap marked a substantial increase in Slovakia during 2012, growing from 33 percent to 39 percent of the VTTL. The main driver of the increase was a substantial reduction in VAT revenues, which declined by over 8 percent in nominal terms, while the VTTL rose by a modest 1.4 percent, somewhat below the nominal growth of the economy. Slovakia thus remains one of the countries with the highest VAT Gap in the EU-26 countries surveyed in this report.

The VAT rates were not changed in 2012.

Table 4.23 Slovenia: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million)

Slovenia	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	1 657	2 610	3 263	3 273	3 277	3 160
o/w Liability on Household Cons.	*1 123*	*1 732*	*2 174*	*2 254*	*2 307*	*2 241*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*256*	*446*	*521*	*536*	*528*	*516*
o/w Unrecoverable input liability on GFCF of exempt industries	*216*	*328*	*453*	*376*	*327*	*295*
o/w Net Adjustments	*62*	*104*	*116*	*107*	*115*	*108*
VAT Revenues (Eurostat)	1 599	2 472	2 851	2 926	2 996	2 889
VAT Gap	**58**	**138**	**413**	**347**	**282**	**270**
VAT Gap as % of liability	**4%**	**5%**	**13%**	**11%**	**9%**	**9%**



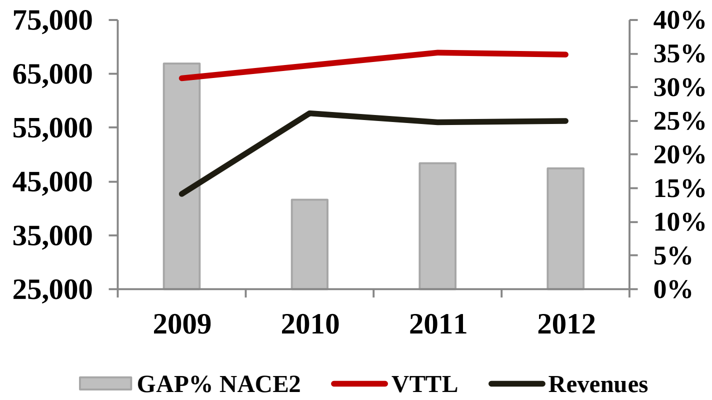
Highlights for 2012

The VAT Gap remained substantially unchanged in Slovenia during 2012. The country suffered the third largest drop in GDP in the EU during that year. As a result, both revenues and the VTTL declined by roughly the same amount, 3 percent, thus leading to a stable VAT Gap of 9 percent. This puts Slovenia among the countries with a low VAT Gap in the EU-26 reviewed in this report. The estimates in Table 4.23 are very close to the unpublished ones produced by the Slovenian authorities.

The VAT rates were not changed in 2012.

Table 4.24 Spain: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million)

Spain	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	40 777	58 591	64 163	66 546	68 913	68 537
o/w Liability on Household Cons.	*28 309*	*38 085*	*41 275*	*44 472*	*47 244*	*49 751*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*6 289*	*10 044*	*12 049*	*11 768*	*12 037*	*12 404*
o/w Unrecoverable input liability on GFCF of exempt industries	*5 215*	*9 252*	*9 884*	*9 346*	*8 661*	*5 403*
o/w Net Adjustments	*963*	*1 210*	*955*	*959*	*971*	*979*
VAT Revenues (Eurostat)	38 159	58 213	42 669	57 690	56 009	56 125
VAT Gap	**2 618**	**378**	**21 494**	**8 856**	**12 904**	**12 412**
VAT Gap as % of liability	**6%**	**1%**	**33%**	**13%**	**19%**	**18%**



Highlights for 2012

The VAT in Spain saw a small decrease during the course of 2012. Revenues stagnated, as a result of the recession that continued to affect the country, and despite an increase in both the standard and the reduced rates. The VTTL declined modestly, mostly on account of low investments in exempt sectors. As a result, the VAT Gap declined from 19 to 18 percent. The VAT Gap in Spain is just above the median of the EU-26. See also Table 4.24.1 for an alternative calculation of the Gap proposed by the authorities.

Spain increased its standard and reduced rates during 2012, from 18 to 21 percent and from 8 to 10 percent.

Note – Alternative Gap computation for Spain

The Spanish authorities have pointed out that there are two desirable corrections to the estimates presented in the previous Table 4.24. The first correction takes into account the taxable moment with respect to real estate construction, where there is a difference between national account conventions and tax code conventions. Given the importance of real estate in the latest business cycle in Spain, the authorities feel that it is important to account for that. The second correction concerns the use of Eurostat revenue data, which approximates the "accrual" method by lagging revenues by one quarter. The authorities have instead calculated and publish a series that in their view more accurately reflects the accrual concept of VAT revenues. These adjustments are shown in table 4.24.1 below:

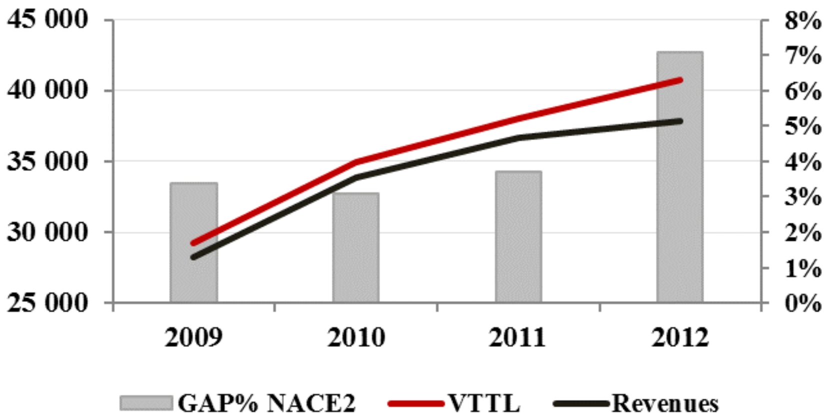
Table 4.24.1 - Spain - Alternative Gap calculations

	2009	2010	2011	2012
VTTL (NACE 2)	64163.4	66545.6	68913.3	68537.4
Correction for Real Estate	-1265.0	-423.2	-612.3	-1047.4
Alternative VTTL	62898.4	66122.4	68301.0	67490.0
Revenues (Eurostat)	42669.0	57690.0	56009.0	56228.0
Correction for Revenues	11438.3	427.7	941.8	1042.4
Alternative Revenues	54107.3	58117.7	56950.8	57270.4
Alternative Gap	8791.2	8004.7	11350.2	10219.5
Alt. Gap % of VTTL	14.0%	12.1%	16.6%	15.1%

As is apparent, the two proposed correction are particularly important for the year 2009, which saw the worst of the real estate crisis, and for which the Gap is reduced by 19 points. The corrections are also substantial for 2011 and 2012. As we are not in a position to adjust other countries according to this methodology, we maintain in the overall table the values shown in table 4.24 for comparison purposes.

Table 4.25 Sweden: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (EUR million)

Sweden	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	24 469	27 937	29 188	34 908	38 043	40 748
o/w Liability on Household Cons.	*13 376*	*15 093*	*15 806*	*18 823*	*20 343*	*21 778*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*7 757*	*8 724*	*8 573*	*10 101*	*10 936*	*11 662*
o/w Unrecoverable input liability on GFCF of exempt industries	*3 016*	*3 731*	*4 230*	*5 297*	*5 974*	*6 446*
o/w Net Adjustments	*320*	*389*	*578*	*687*	*790*	*861*
VAT Revenues (Eurostat)	23 073	26 786	28 199	33 825	36 631	37 861
VAT Gap	**1 396**	**1 152**	**989**	**1 082**	**1 412**	**2 886**
VAT Gap as % of liability	**6%**	**4%**	**3%**	**3%**	**4%**	**7%**



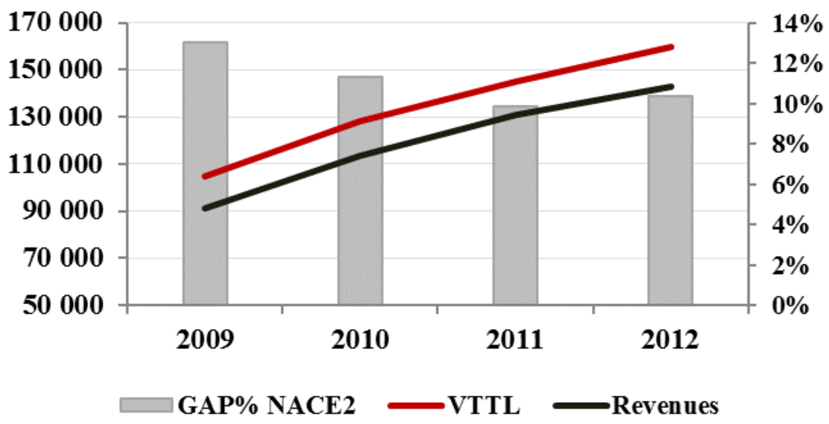
Highlights for 2012

Sweden's VAT Gap, one of the lowest in the EU-26 surveyed in this update, registered a notable increase in 2012. The sharply reduced real growth rate of the overall economy (from 2.9 percent to 0.9 percent) was undoubtedly a major driver in the lacklustre performance of revenues, which registered a very small decline (-0.3 percent in Euro terms and -0.4 percent in domestic currency (Swedish krona) terms). The VTTL grew in line with the nominal growth of the economy, and thus the VAT Gap rose from 4 to 7 percent. This result nevertheless confirms the status of the country as one with the lowest Gaps in the EU-26.

The VAT rates were not modified during the year.

Table 4.26 United Kingdom: VAT receipts, VTTL, composition of VTTL and gap, 2009–2012 (Euro million)

United Kingdom	**2000**	**2005**	**2009**	**2010**	**2011**	**2012**
VTTL	121 490	139 488	104 909	128 203	144 995	159 501
o/w Liability on Household Cons.	*83 769*	*93 593*	*66 953*	*82 615*	*94 035*	*103 683*
o/w Unrecoverable input liability on Intermediate consumption, Government and NPISH	*27 762*	*34 943*	*28 026*	*34 810*	*38 731*	*42 296*
o/w Unrecoverable input liability on GFCF of exempt industries	*7 860*	*8 320*	*8 499*	*9 475*	*10 198*	*11 113*
o/w Net Adjustments	*2 100*	*2 632*	*1 430*	*1 303*	*2 031*	*2 409*
VAT Revenues (Eurostat)	106 512	123 766	91 229	113 714	130 683	142 943
VAT Gap	**14 977**	**15 722**	**13 680**	**14 489**	**14 312**	**16 557**
VAT Gap as % of liability	**12%**	**11%**	**13%**	**11%**	**10%**	**10%**



Highlights for 2012

The VAT Gap held essentially steady in the United Kingdom between 2011 and 2012. Despite a sharp registered slowdown in overall economic growth, VAT revenues had a very strong performance (+9.4 percent) in Euro terms, indeed the strongest in the EU-26 reviewed in this report. However, this reflected in large part the appreciation of the domestic currency (British pound sterling) against the Euro: expressed in domestic currency terms, the increase in revenues was a more modest 2.2 percent, which matched the moderate growth of the VTTL, thus the unchanged Gap. The VAT Gap of the UK is below the median of the EU-26. These estimates are very close to and consistent with those produced by the United Kingdom tax agency (HMRC 2014).

VAT rates were not modified during 2012.

Appendix A – Methodological Notes

The methodology employed in this report has been described in detail in the 2013 VAT Gap report, and the reader is encouraged to consult it as necessary. In the next few paragraphs, we only discuss some methodological/database changes that were introduced in this update.

Use Tables and National Accounts

The main data sources on final and intermediate consumption as well as on GFCF, are the use tables published by Eurostat. The use tables show the use of goods and services by product and by type of use, i.e. as intermediate consumption (by industry), final consumption, gross capital formation or exports. The use tables are part of the input-output framework of the national accounts system. In principle, EU Member States follow the European System of Accounts 95 (ESA 95) for these purposes.

The estimates contained in this report have thus been produced through a different database than the one employed in the 2013 VAT Gap report. The latter was based on the WIOD (World Input-Output Database), which had produced estimates of use tables for 36 industries and 59 products for all EU Member States and several others for the period 2000-2009. These estimates relied on the NACE-1 classification of Eurostat, which has been superseded by the NACE-2 classification. The data collected and published by Eurostat starting from 2008 provide a 65-industry by 65-product classification. The increase in the number of products and industries has allowed a greater degree of precision in producing estimates of weighted-average VAT rates applicable to NACE-2 products.

In particular, out of 59 NACE-1 products:

- 32 have approximately 1-to-1 correspondence to NACE-2 items;
- 12 are aggregated into large groups (for example, 2 NACE-1 products: *DA15: Manufacture of food products and beverages* and *DA16: Manufacture of tobacco products* correspond to a single NACE-2 product: *C10-C12: Food products, beverages and tobacco products*);
- 10 products are split into more detailed classification (for example, *DG24: Manufacture of chemicals and chemical products* is split into two separate groups in NACE-2: *C20 : Chemicals and chemical products* and *C21: Basic pharmaceutical products and pharmaceutical preparations*);
- 5 products have multiple (N-to-N) correspondence with 3 NACE-2 products.

Forecasting Use Tables

Table A.1 shows 2009-2012 use table availability. All data was retrieved from the Eurostat website. In cases when data were not available, the use table values were forecasted from the previous year either using each industry's total intermediate consumption growth, or, if that was unavailable, total intermediate consumption growth for all of the industries, and if that was unavailable, using total gross value added growth for the country. The growth coefficients were taken from the Eurostat published series.

Table A.1: Available and forecasted use tables

	2009	2010	2011	2012
AT	+	+		
BE	+	+		
BG	+	+		
CZ	+	+	+	
DE	+	+		
DK	+			
EE	+	+		
ES	+			
FI	+	+	+	
FR	+	+		
GR	+	+	+	
HU	+	+		
IE	+	+		
IT	+	+		
LT	+	+		
LU	+	+	+	+
LV	+	+		
MT				
NL	+	+		
PL	+	+		
PT	+	+		
RO	+	+		
SE	+	+		
SI	+	+		
SK	+	+		
UK	+	+	+	
Source: Eurostat				

Data Confidentiality Restrictions

In the case of five countries (Latvia, Lithuania, Luxembourg, Malta and Poland) data which was restricted or aggregated for confidentiality reasons, had to be imputed. For each of the problematic cases it was possible to obtain necessary data for some of the past years. As a result, the missing values could be complemented by applying the assumption that the ratio between consumption and supply categories for particular groups of products and industries, is constant in time.

Propex Sources

In order to account for the proportion of intermediate consumption on which VAT is not recoverable, it is necessary to estimate the propex for each (partially or totally exempt) industry. In the 2013 VAT Gap report, the industry proportion of non-deductible inputs (pro-rata or propex) was estimated as a share of exempted outputs of that industry using the household consumption data (assuming that the proportion of exempted outputs would be equal to the proportion of exempted consumption in each category). In the current study we have relied on the more accurate estimates derived from Member States Communications to the EC whenever possible.

VAT Rates Sources

In the 2013 VAT Gap report we relied on the household consumption data (3 and 4 digit COICOP series published by Eurostat) to derive average VAT rates for the NACE-1 categories. In the current study, whenever possible we derived the VAT rates from the Member States Communications to the EC and only resorted to weights from household consumption if that was not available there.

Revenues

Revenue estimates used for the individual country and the comparative tables in Chapters 3 and 4 are also retrieved from Eurostat and consist of cash revenues lagged by three months to approximate accruals. A number of Member States produce alternative revenue series to better approximate accruals or to take into account some peculiarities of national statistics. While in the overall tables in Chapters 3 and 4 only Eurostat sources are used (in order to maintain consistency of treatment across countries), we have noted in individual country sections alternative estimates of revenues and the resulting alternative VAT Gap calculations (Italy, Poland, Spain).

Comparison of Results

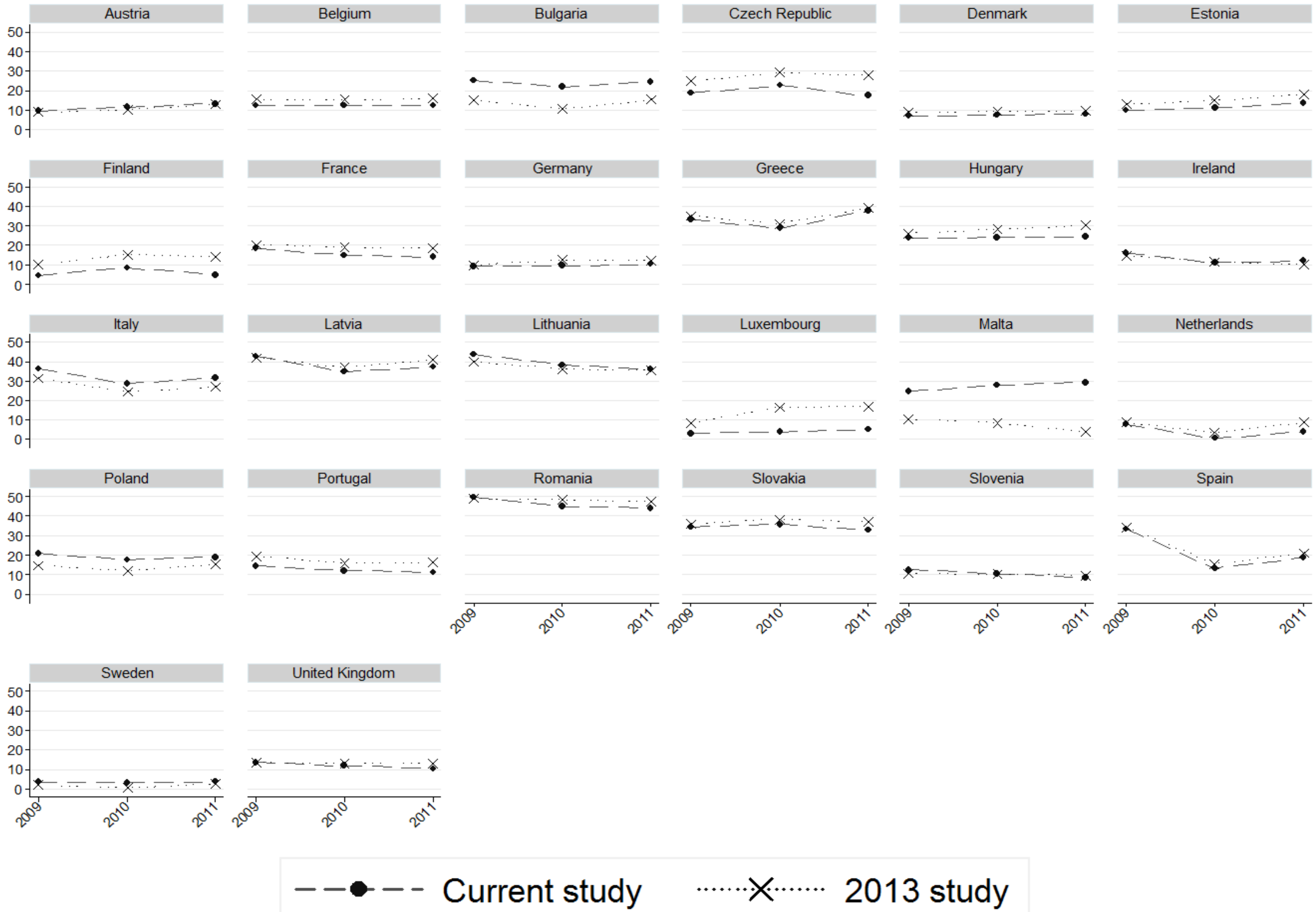
As shown in table A.2, the new set of estimates for 2009-2011 differs slightly from the results presented in the 2013 VAT Gap report. Overall, the VAT Gap estimates for the EU-26 taken as a single unit, in percentage terms, are virtually identical for 2009, and show a somewhat lower value for 2010 and 2011. Accordingly, in this report the VAT Gaps are estimated at 16 percent in 2011, 15 percent in 2010 and 19 percent in 2009, while in the 2013 VAT Gap report these estimates are 17.59 percent (rounded up to 18 percent), 16.4 percent and 19 percent, respectively. The refined results represent a deviation of -1.6 percentage points for 2011 and -1.3 percentage points for 2010. In absolute terms, the VAT Gaps for the EU-26 are estimated at Euro 171 billion in 2011, 152 billion in 2010 and 182 billion in 2009. The corresponding estimates under the 2013 VAT Gap report were 192 billion, 169 billion and 180 billion, respectively. The refined results are 11% lower in 2011 and 10% lower in 2010. For the exact figures and comprehensive data, see Appendix B.

The differences for 2010 and 2011 are attributable to two main factors. First, the liability arising from unrecoverable input VAT into exempt GFCF activities has been re-estimated based on new information provided by national authorities. This has contributed to a reduction in the overall VTTL amounting to Euro 14.5 billion (out of the total reduction of Euro 21 billion) in 2011. Second, the more recent use tables based on the new classifications offer a greater degree of precision in terms of both finer matching of VAT rates and exemptions, and better estimation of growth of individual categories of goods and services. Accordingly, for 2011 the overall household consumption liability increased by Euro 21 billion, but the unrecoverable liability of intermediate consumption of industry and government decreased by Euro 27 billion. These resulted in a total reduction of the overall VTTL of about Euro 6 billion.

Individual country results are more diverse, depending on how these two factors are distributed. Figure A.1 shows that the trends revealed for 2009-2011 in the 2013 VAT Gap report are similar for most countries, but in some the levels are different. At one extreme, the revised estimates for Slovenia are virtually identical, on average, to the previous ones. At the other extreme, the revised estimates for Malta have changed substantially due to a correction to the treatment of gambling exports (for which input VAT is not recoverable). The revised estimates for Bulgaria are also substantially higher, but this is explained by the very large upward revision in national accounts from NACE Rev. 1 to NACE Rev. 2. Other notable outliers are Poland (+5 percent), Italy (+4.6 percent), both countries on account of finer estimates of rates applicable to food and beverages, and, in the opposite direction, Luxembourg (due to availability of new information on “tank tourism”, E-commerce and the treatment of the financial sector), the Czech Republic (-7 percent), Portugal (-4.6 percent) and Hungary (-4 percent).

Table A.2 Comparison of Results				
	2009	**2010**	**2011**	**Average**
AT	0.5%	1.3%	0.3%	0.7%
BE	-3.3%	-3.1%	-3.7%	-3.4%
BG	10.1%	11.5%	8.9%	10.2%
CZ	-6.2%	-6.8%	-8.7%	-7.2%
DE	-0.5%	-3.1%	-2.1%	-1.9%
DK	-2.2%	-1.9%	-1.8%	-2.0%
EE	-3.1%	-4.0%	-4.5%	-3.8%
ES	-1.0%	-2.3%	-2.5%	-1.9%
FI	-5.7%	-6.8%	-9.4%	-7.3%
FR	-1.9%	-4.1%	-4.7%	-3.6%
GR	-1.7%	-2.6%	-1.4%	-1.9%
HU	-2.5%	-4.5%	-6.0%	-4.3%
IE	1.3%	-0.3%	1.9%	1.0%
IT	4.9%	4.1%	4.8%	4.6%
LT	3.8%	2.1%	0.4%	2.1%
LU	-5.5%	-12.8%	-12.0%	-10.1%
LV	0.8%	-2.2%	-4.0%	-1.8%
MT	13.6%	18.7%	24.6%	19.0%
NL	-0.9%	-3.0%	-5.0%	-3.0%
PL	6.1%	5.8%	3.6%	5.2%
PT	-5.1%	-3.9%	-5.0%	-4.6%
RO	0.5%	-3.2%	-3.5%	-2.1%
SE	1.4%	2.4%	1.2%	1.7%
SI	1.9%	0.1%	-1.1%	0.3%
SK	-1.8%	-2.6%	-4.2%	-2.9%
UK	0.0%	-1.2%	-2.7%	-1.3%
EU-26	0.1%	-1.4%	-1.6%	-1.0%
Legend: VAT Gap as calculated in this study, minus VAT Gap in TAXUD 2013				

Figure A.1 - Differences in Gap Estimates, 2009-2011



Appendix B – Statistical Appendix

Table B.1 – VTTL (Euro millions)				
	2009	**2010**	**2011**	**2012**
Austria	24,456	25,690	27,009	27,807
Belgium	26,948	28,733	29,669	29,887
Bulgaria	4,208	4,229	4,434	4,697
Czech Republic	12,029	13,450	13,602	14,644
Denmark	24,390	25,107	25,916	26,563
Estonia	1,357	1,412	1,577	1,763
Finland	15,671	16,682	17,913	18,545
France	159,929	159,579	163,417	168,082
Germany	196,095	199,283	211,834	215,997
Greece	22,395	22,885	24,213	20,364
Hungary	10,240	11,102	11,252	12,055
Ireland	12,328	11,324	11,093	11,481
Italy	136,147	136,758	143,916	141,507
Latvia	1,946	1,841	2,186	2,389
Lithuania	3,480	3,539	3,820	3,957
Luxembourg	2,525	2,635	2,937	3,268
Malta	606	659	731	777
Netherlands	43,504	42,855	43,255	43,665
Poland	29,119	33,517	36,798	37,198
Portugal	13,995	15,392	16,083	15,223
Romania	15,651	17,297	20,382	20,053
Slovakia	6,438	6,516	7,015	7,114
Slovenia	3,263	3,273	3,277	3,160
Spain	64,163	66,546	68,913	68,537
Sweden	29,188	34,908	38,043	40,748
United Kingdom	105,411	128,822	145,724	159,501
EU-26	965,485	1,014,037	1,075,015	1,099,018
Source: Own Calculations				

Table B.2 - Household VAT Liability (Euro millions)				
	2009	**2010**	**2011**	**2012**
Austria	16,280	17,230	17,980	18,524
Belgium	15,801	16,663	17,228	17,278
Bulgaria	3,016	3,177	3,351	3,664
Czech Republic	7,043	7,902	8,142	9,037
Denmark	13,716	14,271	14,549	14,961
Estonia	925	989	1,083	1,180
Finland	8,946	9,226	9,849	10,261
France	98,717	101,690	104,480	107,190
Germany	124,984	124,549	132,667	135,841
Greece	14,840	16,101	18,108	15,450
Hungary	6,832	7,468	7,676	8,180
Ireland	7,027	6,922	6,920	7,243
Italy	93,371	95,018	100,645	100,331
Latvia	1,355	1,342	1,581	1,726
Lithuania	2,696	2,779	3,045	3,219
Luxembourg	958	1,010	1,094	1,127
Malta	351	374	393	420
Netherlands	22,398	22,769	23,122	23,719
Poland	19,147	21,881	24,024	25,015
Portugal	9,499	10,404	11,169	10,738
Romania	8,758	10,749	12,456	12,296
Slovakia	4,606	4,756	5,070	5,243
Slovenia	2,174	2,254	2,307	2,241
Spain	41,275	44,472	47,244	49,751
Sweden	15,806	18,823	20,343	21,778
United Kingdom	66,953	82,615	94,035	103,683
EU-26	607,476	645,433	688,560	710,096
Source: Own Calculations				

Table B.3 – Intermediate Consumption VAT Liability (Euro millions)				
	2009	**2010**	**2011**	**2012**
Austria	4,751	4,795	4,900	5,067
Belgium	5,775	6,343	6,627	6,703
Bulgaria	652	579	613	575
Czech Republic	3,067	3,456	3,558	3,729
Denmark	6,861	7,117	7,310	7,620
Estonia	215	230	258	286
Finland	3,998	4,207	4,513	4,726
France	26,950	28,153	27,993	29,527
Germany	42,269	43,786	45,569	46,789
Greece	2,529	2,390	2,120	1,829
Hungary	2,074	2,263	2,220	2,279
Ireland	2,710	2,654	2,640	2,705
Italy	22,975	22,941	23,237	22,598
Latvia	340	333	398	422
Lithuania	418	442	419	407
Luxembourg	544	548	586	615
Malta	228	256	308	319
Netherlands	11,156	11,020	10,805	11,217
Poland	5,746	6,667	7,043	7,049
Portugal	2,893	3,094	3,173	3,040
Romania	2,764	2,446	2,834	2,651
Slovakia	1,133	1,104	1,162	1,181
Slovenia	521	536	528	516
Spain	12,049	11,768	12,037	12,404
Sweden	8,573	10,101	10,936	11,662
United Kingdom	28,532	35,434	39,464	42,296
EU-26	199,724	212,663	221,254	228,213
Source: Own Calculations. This includes unrecoverable VAT liability of exempt industries, general government and NPISHs				

Table B.4 – GFCF VAT Liability (Euro millions)				
	2009	**2010**	**2011**	**2012**
Austria	2,191	2,387	2,635	2,733
Belgium	4,039	4,126	4,278	4,293
Bulgaria	459	422	400	397
Czech Republic	1,654	1,793	1,666	1,653
Denmark	3,139	3,022	3,293	3,178
Estonia	208	186	226	287
Finland	2,251	2,729	3,006	3,092
France	30,186	25,142	26,657	27,012
Germany	27,413	29,400	31,867	31,615
Greece	4,745	4,058	3,494	2,717
Hungary	1,278	1,292	1,259	1,361
Ireland	2,339	1,518	1,292	1,290
Italy	15,790	15,173	15,272	14,137
Latvia	235	151	193	221
Lithuania	366	307	341	317
Luxembourg	282	283	288	296
Malta	26	30	31	36
Netherlands	9,312	8,400	8,645	8,093
Poland	3,612	4,242	4,754	4,121
Portugal	1,293	1,485	1,378	1,084
Romania	3,754	3,567	4,415	4,464
Slovakia	703	670	777	688
Slovenia	453	376	327	295
Spain	9,884	9,346	8,661	5,403
Sweden	4,230	5,297	5,974	6,446
United Kingdom	8,499	9,475	10,198	11,113
EU-26	138,341	134,876	141,328	136,342
Source: Own Calculations. This includes unrecoverable VAT liability on investments of exempt sectors, incl. General Govt. and NPISHs				

Table B.5 – VAT Revenues (Euro millions)				
	2009	**2010**	**2011**	**2012**
Austria	22,158	22,735	23,447	24,563
Belgium	23,600	25,230	26,019	26,896
Bulgaria	3,156	3,299	3,362	3,739
Czech Republic	9,784	10,420	11,246	11,377
Denmark	22,702	23,245	23,870	24,422
Estonia	1,224	1,257	1,363	1,508
Finland	14,951	15,256	17,020	17,640
France	130,303	135,579	140,558	142,499
Germany	177,680	180,220	189,920	194,040
Greece	14,914	16,308	15,028	13,713
Hungary	7,820	8,442	8,516	9,084
Ireland	10,325	10,067	9,755	10,219
Italy	86,544	97,586	98,456	95,473
Latvia	1,114	1,202	1,374	1,570
Lithuania	1,961	2,180	2,444	2,521
Luxembourg	2,451	2,531	2,792	3,064
Malta	457	477	520	536
Netherlands	40,086	42,654	41,610	41,699
Poland	23,056	27,535	29,843	27,881
Portugal	11,971	13,527	14,265	13,995
Romania	7,852	9,494	11,412	11,212
Slovakia	4,221	4,182	4,711	4,328
Slovenia	2,851	2,926	2,996	2,889
Spain	42,669	57,690	56,009	56,125
Sweden	28,199	33,825	36,631	37,861
United Kingdom	91,229	113,714	130,683	142,943
EU-26	783,278	861,583	903,848	921,798
Source: Eurostat				

Table B.6 – VAT Gap (Euro millions)				
	2009	**2010**	**2011**	**2012**
Austria	2,298	2,954	3,563	3,244
Belgium	3,348	3,503	3,650	2,991
Bulgaria	1,052	930	1,073	957
Czech Republic	2,245	3,030	2,356	3,267
Denmark	1,689	1,862	2,047	2,141
Estonia	133	155	214	255
Finland	720	1,426	893	905
France	29,626	24,000	22,859	25,583
Germany	18,415	19,063	21,914	21,957
Greece	7,481	6,577	9,185	6,651
Hungary	2,420	2,660	2,736	2,971
Ireland	2,003	1,256	1,338	1,262
Italy	49,603	39,172	45,460	46,034
Latvia	832	639	812	818
Lithuania	1,519	1,358	1,377	1,436
Luxembourg	74	103	145	204
Malta	150	182	211	241
Netherlands	3,418	201	1,645	1,966
Poland	6,063	5,981	6,955	9,317
Portugal	2,023	1,865	1,819	1,228
Romania	7,799	7,803	8,970	8,841
Slovakia	2,217	2,334	2,304	2,787
Slovenia	413	347	282	270
Spain	21,494	8,856	12,904	12,412
Sweden	989	1,082	1,412	2,886
United Kingdom	14,181	15,108	15,041	16,557
EU-26	182,207	152,454	171,167	177,220
Source: Own Calculations				

Table B.7 – VAT Gap (percent of VTTL)				
	2009	**2010**	**2011**	**2012**
Austria	9	11	13	12
Belgium	12	12	12	10
Bulgaria	25	22	24	20
Czech Republic	19	23	17	22
Denmark	7	7	8	8
Estonia	10	11	14	14
Finland	5	9	5	5
France	19	15	14	15
Germany	9	10	10	10
Greece	33	29	38	33
Hungary	24	24	24	25
Ireland	16	11	12	11
Italy	36	29	32	33
Latvia	43	35	37	34
Lithuania	44	38	36	36
Luxembourg	3	4	5	6
Malta	25	28	29	31
Netherlands	8	0	4	5
Poland	21	18	19	25
Portugal	14	12	11	8
Romania	50	45	44	44
Slovakia	34	36	33	39
Slovenia	13	11	9	9
Spain	33	13	19	18
Sweden	3	3	4	7
United Kingdom	13	12	10	10
EU-26	19	15	16	16
Source: Own Calculations				

Table B.8 – VRR, Policy Gap and VAT Gap (average 2009-2012)			
	VRR	Policy Gap	VAT Gap
AT	48%	41%	11%
BE	54%	48%	12%
BG	49%	35%	23%
CZ	50%	38%	20%
DE	49%	41%	10%
DK	49%	44%	8%
EE	44%	37%	12%
ES	59%	49%	21%
FI	55%	51%	6%
FR	56%	49%	16%
GR	63%	48%	33%
HU	57%	43%	24%
IE	56%	48%	13%
IT	62%	48%	32%
LT	56%	29%	39%
LU	30%	25%	5%
LV	51%	32%	37%
MT	55%	36%	28%
NL	50%	43%	4%
PL	55%	47%	21%
PT	59%	52%	11%
RO	56%	26%	46%
SE	51%	40%	4%
SI	50%	44%	10%
SK	54%	36%	36%
UK	58%	47%	11%

Source: Own Calculations. See Box 3.3 for an explanation of terms

References

D'Agosto, Elena, Massimiliano Marigliani, Stefano Pisani (2013): "Asymmetries in the Territorial VAT Gap", paper presented at the conference "The shadow economy, tax evasion and governance", Munster, July 2013

Eurostat (2008): "NACE Rev. 2 – Statistical classification of economic activities in the European Union", Methodologies and Working Papers, available at http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-07-015/EN/KS-RA-07-015-EN.PDF

HM Revenue and Customs (2014): "Second estimate of the VAT gap for 2012-13", London, March 19, available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/292860/Second_estimate_of_the_VAT_gap_for_2012-13.pdf

International Monetary Fund (2014): Republic of Estonia - Technical Assistance Report—Revenue Administration Gap Analysis Program—The Value-Added Tax Gap, IMF Country Report No. 14/133

Ministerie van Financiën, Directoraat-generaal Belastingdienst Juli 2014: Onderzoek naar macro-economische schatting van gemiste omzetbelasting (btw gap) (PDF copy)

The 2013 VAT Gap report: "Study to quantify and analyse the VAT Gap in the EU-27 Member States", September 2013, available at http://ec.europa.eu/taxation_customs/resources/documents/common/publications/studies/vat-gap.pdf

TAXUD (2013): "Tax reforms in EU Member States 2013 - Tax policy challenges for economic growth and fiscal sustainability", Taxation Papers, Working Paper n. 38, available at http://ec.europa.eu/taxation_customs/resources/documents/taxation/gen_info/economic_analysis/tax_papers/taxation_paper_38.pdf

TAXUD (2014): VAT Rates Applied in the Member States of the European Union (and prior issues), available at http://ec.europa.eu/taxation_customs/resources/documents/taxation/vat/how_vat_works/rates/vat_rates_en.pdf

Timmer, M. P. (2012), "The World Input-Output Database (WIOD): Contents, Sources and Methods", WIOD Working Paper Number 10, downloadable at http://www.wiod.org/publications/papers/wiod10.pdf