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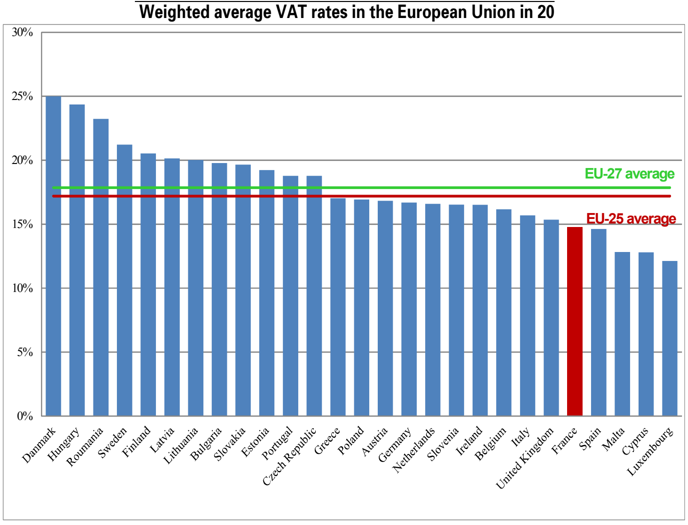
Value added tax in the European Union

- VAT is France's highest-yielding tax. According to the national accounts, it generated €144bn in 2013. However, VAT as a share of GDP of total taxation is relatively small by comparison with the 27-member European Union (EU-27), whereas the ratio of total taxation to GDP in France is high (44.7% in 2013).
- Furthermore, the VAT-to-GDP ratio has decreased since the 1970s in France.
- The comparatively modest share of VAT is mainly due to the fact that the weighted average VAT rate was lower in France (14.8%) than in the EU-27 (17.9%) in 2013, and not to differences in the VAT base. Due to EU legislation, the VAT base is now relatively harmonised in Europe, although differences persist. Only Malta, Luxembourg, Cyprus and Spain had a lower average rate than France in 2013, and the introduction of the intermediate rate (7% in 2012, raised to 10% in 2014) in France has not significantly altered the ranking.
- The relatively low average VAT rate in France, which is 3.1 percentage points below the EU-27 average, is explained by the following factors:

  - a lower than average standard rate accounts for 1.0 point: after the recent increases in the standard VAT rate in many Member States, only four countries had a lower standard VAT rate than France in 2014; five other countries had an identical standard rate of 20%, whereas France's rate was above the average in the 2000s;
  - lower reduced rates account for 0.8 points: the weighted average reduced rate is 5.7% against an EU average of 7.9%;
  - a larger scope of application of reduced rates accounts for 1.3 points: only 65% of the base was taxed at the standard rate in France versus an average 75% in the EU-27 in 2013.

Weighted average VAT rates in the European Union in 20



Source: VAT statements for 2013.

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MINISTÈRE DE L'ÉCONOMIE
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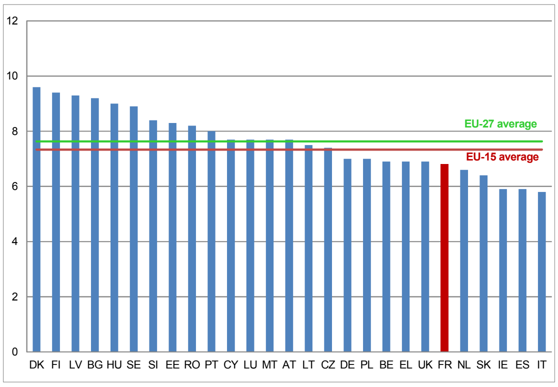
1. The comparatively small and declining share of VAT in GDP in France is due to a relatively low average rate

1.1 France's VAT revenues are low today relative to its European partners

Whereas France has one of Europe's highest tax-to-GDP ratio (44.7% in 2013, according to INSEE, the national statistical institute), **the share of VAT in total tax revenues is relatively low** (15.3% in 2013). In terms of the VAT to GDP ratio, France thus ranked 22nd in the 27-member European Union in 2013, at 6.8% versus an average 7.6% (see Chart 1).

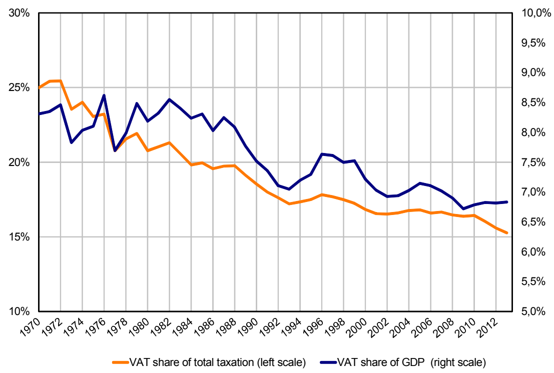
Consistently with these figures, France's VAT to GDP ratio started to decline in the 1970s, then remained relatively stable in the 2000s (see Chart 2). However, the introduction of a intermediate rate of 7% in 2012 and its increase to 10% in 2014, coupled with a rise in the standard rate from 19.6% to 20% in the same year, caused the VAT-to-GDP ratio to rise to 7.0%.

Chart 1: VAT to GDP ratio, in percentage points (2013)



Source: Eurostat (ESA 2010).

Chart 2: VAT as a share of GDP and total taxation (1970-2013))



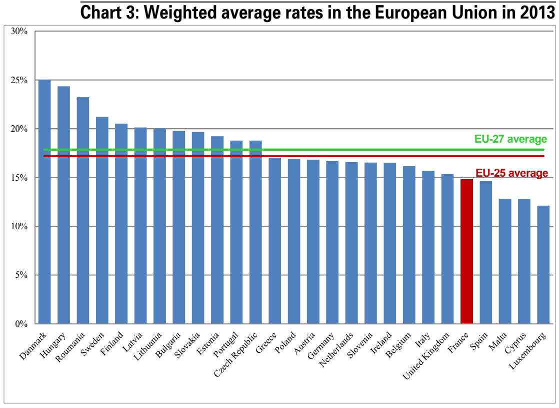
Source: INSEE (Base 2010 accounts).

1.2 The small share of VAT is due to a relatively modest average rate applied to the tax base

France has one of Europe's lowest average VAT rates (see Chart 3). This measure indicates the ratio of VAT receipts to the effective taxable base (i.e., excluding VAT-exempt items). Accordingly, France posted a weighted average VAT rate of 14.8% in 2013 versus a 17.9% unweighted average rate for the EU-27. The weighted average rate is not directly observable from VAT receipts, because of the segmented mechanism for collecting VAT. It is estimated statistically from the national accounts in the reports on countries' VAT own resources called "VAT statements" (see Box 1).

On 1st January 2014, France raised the standard rate from 19.6% to 20%, the intermediate rate from 7% to 10% and the rate applied in Corsica from 8% to 10%, but kept the reduced rate at 5.5%. These changes should entail an increase in the weighted average rate of approximately 0.6 points in 2014, **keeping France's average VAT rate below the EU average in 2014**.

Chart 3: Weighted average rates in the European Union in 2013



Source: statements of own resources from VAT in 2013.

Box 1: **Statement of own resources from VAT**

Member States' contributions to the European Union budget are partly determined by the VAT base. The base is harmonised so that the contributions of each Member State do not depend on specific provisions of national VAT legislation. The calculation is described every year in a report called the "VAT statement".

In its VAT statement, each Member State must describe how it calculates its weighted average rate of VAT using national accounting data, with a breakdown by rate and by taxable base.

The weighted average rate is not, strictly speaking, an average VAT rate. The reason is that, owing to data availability constraints, France's VAT statement for year *n* applies legislation for that year to data from the final INSEE national accounts for year *n-2*. The calculation of the weighted average rate does not include certain items that reduce the effective average VAT rate, such as exemption rules for small businesses and unrecovered VAT.

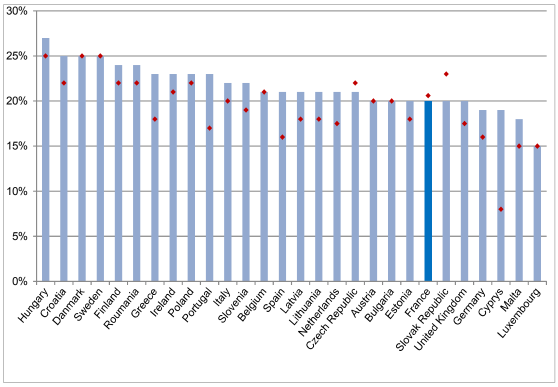
2. Differences in average rates across the EU are due to the level of the standard rate and reduced rates[1], as well as to the structure of the taxable base

2.1 France now has one of the lowest standard rates in the EU

The standard rate in France, unchanged at 19.6% since 1 April 2000, rose to 20% on 1 January 2014. It applies by default to all taxable goods and services for which no other rate has been specified.

Only four EU countries, including Germany (19%), have a standard VAT rate below France's; five other countries had a standard rate of 20% in 2014 (Austria, Bulgaria, Estonia, Slovakia and the United Kingdom). Hungary had a standard rate of 27% and Denmark, Croatia and Sweden a standard rate of 25% in 2014 (see Chart 4). The lowest standard rate is that of Luxembourg, at 15% in 2014 (17% since January 2015), which is the minimum allowed by EU legislation.

Chart 4: Standard VAT rates of 28 EU Member States 1999 (dots) and 2014 (bars)

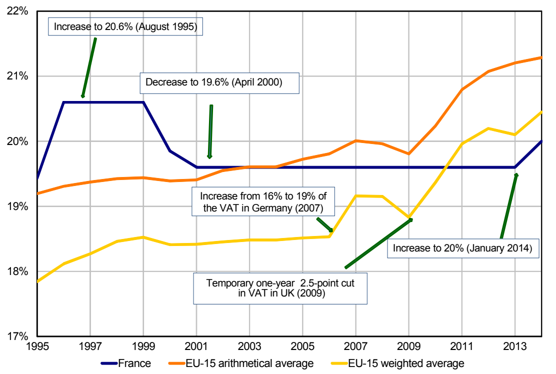


Source: European Commission.

Note: standard rates are shown by dots for 1999 and bars for 2014.

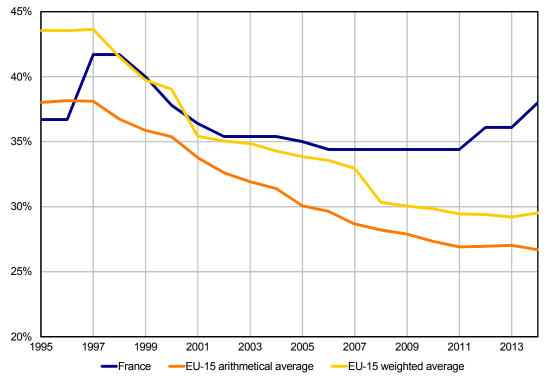
Unlike before the crisis, France's standard VAT rate today is lower than that of its neighbours. Until 2010, its standard rate exceeded the weighted average of the fifteen Member States of 1995 (EU-15)[2]. However, in 2007, Germany raised its standard rate by 3 points from 16% to 19%. In 2009, the United Kingdom cut its rate for a year from 17.5% to 15%[3] as part of a stimulus package, then raised it to 20% in 2011. Since 2010, several EU-15 countries (Greece, Spain, Portugal and the United Kingdom) have raised their standard VAT rate (see Chart 5). In Spain, for example, the standard rate moved from 16% in January 1995 to 18% in July 2010 then 21% in September 2012; in Italy, it rose from 20% in October 1997 to 21% in September 2011 then 22% in October 2013. This pattern contrasts with changes in other taxes. For instance, European countries–on average–have lowered their corporate tax rates (see Chart 6).

Chart 5: Standard VAT rates in the EU-15 (1995-2014)



Sources: Eurostat, European Commission.

Chart 6: Corporate tax rates in the EU-15 (1995-2014)



Source: Taxation trends 2014.

Note: standard rates are shown on an annual average basis. The weighted average for the EU-15 is in orange, the unweighted average in yellow.

2.2 The scope of application of reduced rates varies across the EU

France has applied three reduced rates since 2012. It introduced a intermediate rate of 7% in 2012–increased to 10% in 2014–which supplements the "super–reduced" rate of 2.1% and the reduced rate of 5.5%:

- **The super-reduced rate (2.1%)** applied in 2014 to drugs refunded by national health insurance (Sécurité Sociale), the press, the public broadcasting license fee and the first 140 performances of live shows.

(1) In this article, "reduced rates" refer to all rates below the standard rate; "reduced rate" (in the singular) denotes the 5.5% rate in France.

(2) The benchmark chosen here is Europe in 1995, as our comparison runs from 1995 to the present. We show the weighted average in addition to the unweighted average in order to emphasise the impact of the VAT and corporate-tax reforms by major European economies.

(3) The announcement of a temporary VAT cut stimulates consumption by raising the cost of future consumption relative to present consumption. This policy can prove effective when interest rates are already zero. See for example: Correia, I., Farhi, E., Nicolini, J.P. and Teles, P. (2013), "Unconventional Fiscal Policy at the Zero Bound", American Economic Review, 103(4): 1172-1211.

- **The reduced rate of 5.5%** applies mainly to: food; equipment and services for disabled or dependent persons; energy subscription (electricity, gas, heating); books[4]; school meals; renovation and construction of public housing; work performed to improve energy efficiency of dwellings; live shows and cinema.
- **The intermediate rate, introduced in 2012 at 7% and raised to 10%** on 1st January 2014, applies chiefly to: renovation of private-sector dwellings (excluding heating renovations); transport services and on-premises and take-away catering (excluding alcoholic beverages); hotels; museum tickets; non-refundable drugs.

Some products are taxed identically by most Member States. Food, for instance, is generally taxed at the reduced rate. Nearly all EU countries tax consumer durables such as household appliances or certain recreational goods (such as music and sports gear) at the standard rate in 2014. This reflects the fact that Member States legislation is partly harmonised by the VAT Directive (see Box 2). However, Denmark, which has no reduced rate, taxes food products at the standard rate (25%), as do Bulgaria and Estonia (20%). Hotels and transport are also taxed at reduced rates in many countries. For example, hotels are taxed at less than 10% in most EU countries, with some notable exceptions such as United Kingdom. Catering is taxed at a reduced or intermediate rate in a smaller number of EU countries, including France and Italy. Passenger transport is taxed at the intermediate rate[5] in France; several neighbouring countries such as Spain, Italy and the United Kingdom apply a reduced or zero rate.

Box 2: **The VAT Directive**

Council Directive 2006/112/EC[a], known as the VAT Directive, provides a framework for Member States' VAT legislations. It sets the minimum level for **the standard rate at 15%.** Member States **can introduce one or two reduced rates that, normally, should not be less than 5%.** The Directive waives these rules for **certain Member States, which have been allowed to keep reduced rates, including super-reduced rates (under 5%[b]) or zero rates**[c], for selected items.

Exports–particularly intra-EU trade–are generally zero-rated in the producer country and **taxed at the consumer country's rate** under the "destination principle". The EU VAT Directive does not apply to French overseas *départements* and non-EU countries.

Some exemptions are allowed, such as certain public-interest services (healthcare, education and social security), the financial and insurance sectors, and gambling and lottery games. **There are also derogation measures for simplification purposes**, such as the VAT exemption for small businesses whose turnover does not exceed a defined threshold.

a. Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax is an update to the 1977 directive that introduced regulations for national VAT systems.
b. Article 110 of the VAT Directive allows Member States that applied lower rates at 1 January 1991 to maintain them on a transitional basis. However, the Directive prohibits the enlargement of the scope of application of these super-reduced rates.
c. Zero rate VAT means that the producer "applies" the rate to its production. The producer therefore sells without having to collect VAT but can deduct VAT paid on its purchases-unlike under the VAT exemption rules for small businesses. This distinction reflects the fact that, as a rule, a producer subject to VAT is allowed to deduct VAT on its inputs only as they relate to its taxed sales.

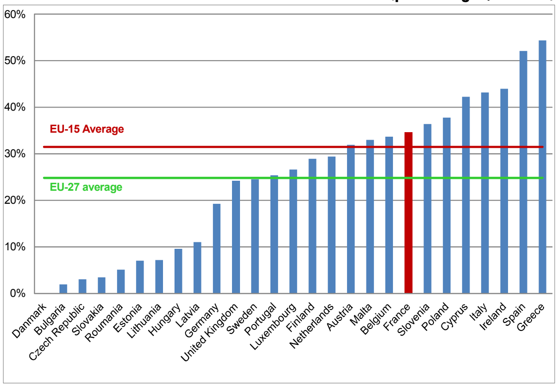
In contrast, some other rates are highly specific. France taxes soft drinks at a reduced rate and pay TV channels at the intermediate rate, but a number of Member States do not. Unlike France, most EU countries do not tax home care services at reduced rates. For example, they are taxed at the standard rate in Germany, the United Kingdom and Spain. Admission fees for cultural services (live shows, cinema, theatre) are taxed at a reduced rate (5.5%) in France–one of the lowest rates in the EU. The construction of public housing (low-income and intermediate-income), taxed at a reduced or intermediate rate in France, is also often subject to the standard rate elsewhere in the EU, although it is zero-rated in the United Kingdom and VAT-exempt in Germany[6]. By contrast, funeral services are taxed at the standard rate in France but often taxed at the intermediate rate or exempt elsewhere.

Special VAT rules apply to Corsica and the French overseas *départements* (DOMs). Corsica enjoys specific rates for petrol and petroleum products (13%), farming equipment, and low-voltage electricity (10%); some theatre and circus performances, as well as the sale of animals to persons not subject to VAT, are taxed at 0.9%, and the super-reduced rate applies to some of the goods and services taxed at 5.5% in mainland France. Certain forms of sea transport between the mainland and Corsica are exempt. Guadeloupe, Martinique and Reunion have a standard rate of 8.5% and a reduced rate of 2.1%. VAT is not applied in the overseas départements of French Guiana and Mayotte.

(4) VAT on books was raised temporarily to 7% between 1 April 2012 and 31 December 2012.
(5) It is also partly exempt for coach transport of non-residents.
(6) When an exemption is applied, the producer cannot deduct VAT on inputs. This generates residual VAT charges for firms, unlike the "zero rate" rule, which does not restrict the ability to deduct VAT.

Overall, excluding overseas, France has a standard-rate taxable base equal to 65% of the total taxable base, compared with 81% for Germany (and approximately 75% in the EU-27 on an unweighted average basis). The Baltic Countries, some countries in central and eastern Europe (Romania, Slovakia and Bulgaria) and Denmark have taxable bases almost entirely taxed at the standard rate (Denmark's only zero rate is on newspaper sales, which form a small base). In contrast, the countries where the standard-rate base accounts for a smaller share than in France are Spain, Ireland, Greece, Italy and Poland. Compared with the rest of Europe, the share of products subject to the standard rate in the total taxable base is relatively modest in France, ranking it in 20th place in 2013 (see Chart 7).

Chart 7: Share of products taxed at reduced rates in the theoretical VAT base in the EU (percentages, in 2013)



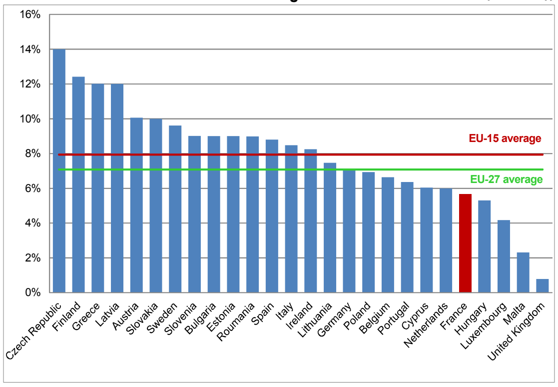
Source: DG Trésor calculations from statements of own resources by Member States (for 2013). The countries shown are the members of the EU in 2013.

Note: All rates below the minimum allowed standard rate (15%) are regarded as reduced rates, and the rates equal to or greater than 15% are treated as standard rates.

2.3 Reduced rates are relatively low in France

France also has one of the lowest average reduced rates in Europe (5.7%) (see Chart 8). The unweighted average of average reduced rates for the EU-27 is 7.9% (excluding Denmark, which confines the zero rate to newspaper sales). The only countries with a lower average reduced rate are Luxembourg (with reduced rates of 3% and 6%), Malta (5% and 7%, with zero rate products) and the United Kingdom (with a zero rate and a reduced rate of 5%). Hungary is a case apart, for it applies a reduced rate of 18% in addition to its standard rate of 27%. By contrast, Greece, which taxes a very large proportion of products at reduced rates (54%), has higher reduced rates averaging 12.0%.

Chart 8: Average reduced rate in the EU (in 2013))



Source: 2013 VAT statements, DG Trésor calculations.

Note : Denmark has a zero rate for newspaper sales but these represent a small taxable base. When a country applies several reduced rates, we weight them by the corresponding bases.

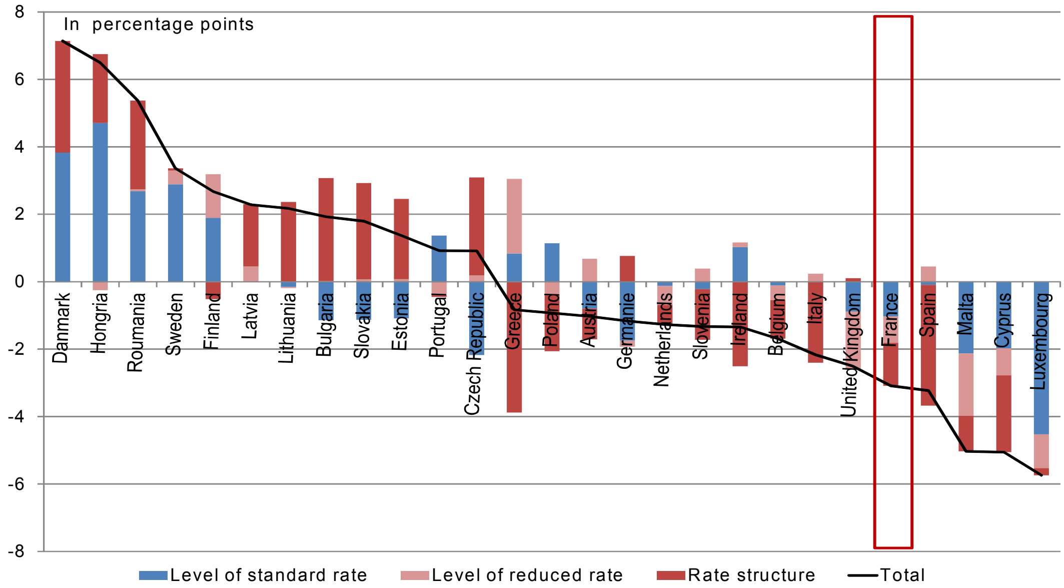
Some reduced rates, however, apply to products consumed by general government. For example, reimbursable drugs that make up most of France's 2.1% VAT taxable base are largely paid for by general government, but VAT paid by general government has no impact on the public deficit since it is both an expenditure and a receipt.

Finally, we can break down the gap between the French and EU-27 average VAT rates by assessing the effects of the standard rate, of the level of reduced rates and of the structure of the taxable base (i.e., the breakdown of the base according to the different rates at which it is taxed). According to our calculations, the gap of 3.1 percentage points between the average rates for the EU-27 and France in 2013 can be analysed as follows[7] :

- 1.0 point would be eliminated if France aligned its standard VAT rate with the average rate, assuming no change in the taxable base.
- 0.8 points would be eliminated if France aligned its reduced rates with the EU average.
- 1.3 points would be eliminated if the proportion of the taxable base subject to reduced rates in France was identical to the EU average.

(7) This breakdown is sensitive to the order examined. For example, if we began by aligning the share of the standard-rate base with the EU average, the yield on the alignment of the standard rate would be greater.

Chart 9: Breakdown of gap between French weighted average rate and EU average (in 2013)



Source: VAT statements by Member States, DG Trésor calculations.

Note: With, t_M, t_R and t_N as the average, reduce and normal rates, and α the share of the standard rate, the gap with the average rate can be written as

$$t_M - t_M{}^* = \underbrace{\alpha(t_N - t_N{}^*)}_{\text{Standard rate}} + \underbrace{(1-\alpha)(t_R - t_R{}^*)}_{\text{Reduced rate}} + \underbrace{(\alpha - \alpha^*)(t_N{}^* - t_R{}^*)}_{\text{Structure}}$$

The * designates EU average values, and we write $1 - \alpha^* = \dfrac{t_N{}^* - t_M{}^*}{t_N{}^* - t_R{}^*}$. α^* is the average share taxed at the average standard rate in the EU.

3. Other factors can explain the differences in VAT-to-GDP ratios, but international comparisons are more complex

The differences in tax rates and in the scope of reduced rates are not the only factors that explain the gaps in VAT yields. The VAT base accounts for only about one-half of GDP, but this proportion can vary from one country to another. For example, the countries in which consumption represents a smaller share of GDP or in which household rents (actual or imputed) make up a larger share of GDP can have different VAT yields even if the rules applied are identical. Likewise, owing to territoriality rules, heavy exporting countries can have a lower VAT-to-GDP ratio, except where the principle of origin applies–as was the case, for example, for electronic services until 2015[8].

There is also some leeway for VAT exemption in certain sectors, but France makes little use of such exemptions by way of derogation. Indeed, the share of exemptions by way of derogation effectively applied by France in the harmonised base (i.e., the taxable base if the Member State applied no derogation) was one of the smallest in the EU in 2013, as France uses this derogation in only three cases: the VAT exemption for small businesses whose turnover does not exceed a stated threshold[9], public water supply services in localities with under 3,000 inhabitants, and certain forms of passenger transport[10]. By contrast, other countries exempt large sectors from VAT. For example, Germany exempts the sale of land for construction and the sale of new buildings. Many small businesses in the UK are exempt because of the high turnover threshold for eligibility (2.9 million firms were exempt and 1.95 million were subject to VAT 2010[11]), a rule that results in a very large tax-exempt base by comparison with other Member States.

A final cause of gaps in VAT yields is the difference in the efficiency of VAT collection by tax authorities. For example, some countries may be more subject to VAT fraud. However, no totally harmonised method for assessing fraud has yet been

(8) For example, VAT on online music purchases was collected by the country in which the service was based and not by the country in which the consumer was located.

(9) Firms with a turnover below specified thresholds are exempt from reporting and paying VAT on the provision of services and on sales. In return, the firms concerned cannot deduct VAT on their purchases.

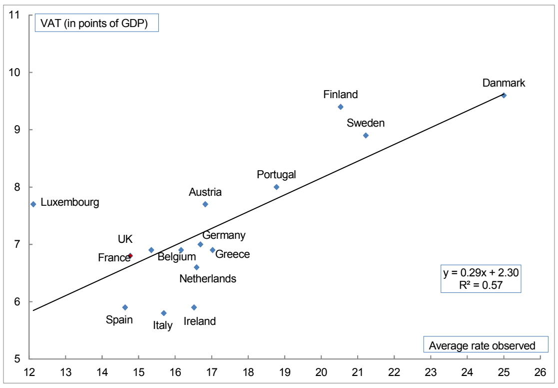
(10) These consist of certain categories of international railway transport, transport between the mainland and Corsica, and coach transport of foreign tourists in transit.

(11) See Mirrlees et al. (2011), "Tax by design", Institute for Fiscal Studies.

developed, so international comparisons are highly fragile and sensitive to the assumptions chosen. In addition, not all VAT due can be collected, particularly when companies fail and cannot pay their tax bill.

In any event, we observe that the main determinant of VAT yield is the average VAT rate applied to the base actually taxed. Countries with high average rates, such as Denmark, Sweden, Finland and Portugal, also collect a substantial amount of VAT measured in points of GDP. In contrast, Spain has modest VAT receipts and, at the same time, one of the lowest weighted average rates in Europe (see Chart 10).

Chart 10: VAT share of GDP as a function of the weighted average VAT rate in the EU-15 in 2013



Source: Eurostat, VAT statements of 2013.

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