## Chapter 4

## Selected excise duties in OECD countries

This chapter describes the main features of selected excise duties and their impact on revenue, customer behaviour and markets. It explains the respective impact of ad quantum and ad valorem taxes and how they interact. It shows the detailed excise tax rates on beer, wine, alcoholic beverages, tobacco, and mineral oil products in OECD countries.

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

### 4.1. Introduction

Although excise taxes may cover a very wide range of products, excise taxes on alcohol, tobacco and hydrocarbon oils are common to all OECD countries and raise significant revenues for governments. In recent decades, governments have increasingly used these taxes to influence customer behaviour where consumption of certain products are considered harmful to health or to the environment.

This chapter presents an overview of the key characteristics of excise duties and the evolution in their use by governments in some areas (Section 4.2). It then looks in some detail at the excise rates structure for four main categories of products: alcoholic beverages (Section 4.3), tobacco products (Section 4.4) and mineral oil products (Section 4.5). This is followed by a brief description of the impact of differences in excise rates between countries on cross-border trade (Section 4.6) and on their distributional effects (Section 4.7).

### 4.2. Key characteristics and revenue trends

Excise, unlike value added taxes (VAT) ${ }^{1}$ and other general consumption taxes, is levied only on specific goods. Although many products can be subject to excise, such as chocolate, coffee and orange juice, only a few are considered in this chapter, since they are taxed in all OECD countries. The three principal product groups that are liable to excise in all OECD countries are alcoholic beverages, mineral oils and tobacco products.

Before looking at these three groups in terms of their characteristics and their comparative treatment by different countries, a number of general characteristics on excise may be noted:

- Excise duty is generally calculated by reference to the weight, volume, strength, or quantity of the product, combined in some cases with the value, but sometimes on a value basis only.
- Excise duty does not normally become payable until the goods enter free circulation. Transfers of ownership can take place while goods remain in a controlled warehousing environment or between registered operators without creating an excise charge.
- The excise system is characterised by a small number of taxpayers, who are active in the manufacturing, wholesale stage or importation of the three main product groups.

Unlike VAT, which is collected through a staged collection process by all the stakeholders in the value chain until the final consumer (see Chapter 1), excise duties are normally collected only once from one registered operator at the time the goods are released for consumption. In the European Union, the movement of excisable products between Member States is made under a duty-suspension arrangement until the moment they are released for free circulation. In the United States, where both federal and local excise exist, they are levied by the federal government and by many states and local
governments. Federal excise taxes are collected by the Internal Revenue Service while states may impose the tax according to their own rules and rates.

Excise is normally part of the VAT tax base, meaning that VAT is usually levied on the duty-paid value of the excise products. Therefore, an increase of excise duty rates implies an increase of both excise and VAT burden.

The share of excise duties in total tax revenue has been subject to a long decline since 1965, when they accounted for $14.2 \%$ on average to $7.6 \%$ in 2014 (see Table 4.A4.9). Behind the OECD average there are large differences between countries, with excise accounting for $2.6 \%$ of total tax revenue in New Zealand and $18.1 \%$ in Turkey. In two thirds of the OECD countries ( 24 out of 35 ), the weight of excise duties is between $5 \%$ and $10 \%$ of total tax revenue while it accounts for less than $5 \%$ in 5 countries (Belgium, Canada, New Zealand, Switzerland and the United States) and for more than $10 \%$ in 6 countries (Estonia, Greece, Latvia, Poland, Slovenia and Turkey).

## Ad valorem us. ad quantum excises

In addition to the rates and tax bases, the weight and impact of excise are substantially affected by its structure. There are two main ways in which excisable products can be taxed: ad valorem and ad quantum. Under an ad quantum excise, a fixed amount of tax is levied per unit of the product (e.g. USD 1 per litre), which means that this is a tax on the volume of sales. Under ad valorem excise, the tax is levied as a proportion of the product price (e.g. $20 \%$ of the selling price) and this is a tax on the value of sales. In a number of instances (e.g. tobacco taxes as presented in Table 4.A4.4) the total excise tax results from a mix of ad valorem and specific taxes. The ad quantum tax requires a precise definition of the nature and characteristics of the tax base (e.g. a litre of unleaded gasoline with 94 RON) while the ad valorem tax is simply based on the price.

Most products naturally present a bundle of different characteristics (volume, weight, strength, octane, alcoholic or carbon content, etc.). Ad quantum taxes remain unaffected by changes in the product characteristics that have not been defined as being relevant for the tax base, whereas ad valorem taxes bear on all the characteristics of the product that are reflected in the price. Depending on the type of tax, the impact on production and consumption is different. For example, a specific tax on beer (per \% absolute alcohol in volume) may encourage brewers to develop varieties of beer, including more luxurious products that could be offered at higher prices while remaining subject to the same level of excise as the cheaper product. On the other hand, ad valorem taxes may discourage costly improvements in product quality or encourage consumers to switch to low-cost products. Ad quantum taxes may be easier to administer, because it is necessary only to determine the physical quantity of the product taxed. They also produce a more predictable revenue stream than ad valorem taxes, as revenue does not vary with the price of the product (WHO 2015). On the other hand, ad valorem taxes may keep pace with inflation better than ad quantum taxes, though it also possible to index ad quantum taxes for inflation. Being subject to price variations, ad valorem taxes are possibly more volatile than ad quantum taxes. In addition, empirical evidence has found that ad quantum taxes tend to be more than fully passed through to the consumer (prices rise by more than the tax increase), whereas ad valorem taxes tend to be less than fully passed through (Sassi, et al., 2013).

If distributional goals are taken into account in the design of a specific tax, there may be a case for ad valorem rather than ad quantum taxation as such a policy option can be
expected to increase the tax burden on high-income taxpayers relative to low-income taxpayers, assuming that high-income taxpayers purchase more expensive products. But this is not entirely straightforward: the exact distributional impact will depend on consumption patterns, and even with an ad valorem tax, high-income taxpayers may still end up paying less tax relative to their income than poor households. Addressing redistributive goals is likely to be better achieved through the progressive personal income tax which directly links taxes paid to income (Thomas, A. and Brys, B. 2016) (see also Section 4.6 below).

There may be a case for a combination of ad quantum and ad valorem taxes if a goal of the tax is to discourage consumption of, or maximise revenue from, both high and low value products. Where there are large differences in prices of a product, an ad quantum tax will be less likely to reduce demand for the high value product, and will raise less revenue from it than an ad valorem tax. Additionally, higher income consumers who are more likely to consume high value products may be less responsive than low-income groups to the imposition of a given tax (although ad quantum taxes may reduce the price differentials). Imposing a higher aggregate tax on these expensive products will therefore be necessary to affect behaviour. To achieve this, an ad valorem tax can be combined with an ad quantum tax, which is common with tobacco taxation (see Section 4.3 below).

Setting the "optimal" balance between ad quantum and ad valorem components of excise will depend of the products concerned, the market structure and the government's objective, hence there is no optimal balance between the two taxes in absolute (Keen, 1998). The aim can be the maximisation of tax revenue; to ensure the predictability and stability of the revenue; and/or to influence consumer behaviour.

## Excises as instruments to influence behaviour

While the original reason for introducing excise duties was to raise revenue, they are now increasingly used to discourage consumption of certain products that are considered harmful to health or the environment. Regardless of the reason for which they are implemented, excise taxes affect consumer behaviour. The case put forward in relation to alcoholic beverages and tobacco products is that drinking and smoking are health hazards and increased excise duties help to reduce consumption. For mineral oils, reasons for levying excise taxes relate to energy security concerns and social externalities from energy use, particularly environmental costs. Over the last decade, environmental concerns have played an increasing role in determining the nature and application of taxes e.g. to road fuel, motor vehicles (see Chapter 5) and $\mathrm{CO}_{2}$ emissions. OECD analysis (OECD, 2010) confirms the advantages of environmental taxes over many other environmental policy instruments in terms of environmental effectiveness, economic efficiency, the ability to raise public revenue, and transparency. Also, environmental taxes have been successfully used to address a wide range of issues including waste disposal, water pollution and air emissions. It also shows how the way they are designed and implemented is crucial to their success (OECD, 2011).

A related rationale for applying excise duties on energy is their (cost-) effectiveness in mitigating global warming. At the United Nations Climate Change Conference in Paris (COP21) 195 countries agreed to decarbonise the global economy by the second half of this century (UN, 2015). While energy use accounted for $69 \%$ of total greenhouse gas emissions in 2010 (IEA, 2014), excise duties on fossil fuel based energy increase its price, so reducing demand for it. In addition, if excise duties are levied proportionally on the carbon content
of fuels, they encourage substitution towards less carbon-intensive forms of energy. Taking electricity as an example, producers can switch from coal to less carbon-intensive natural gas, or carbon-free solar and wind power. Besides specific excise duties on energy, carbon taxes (often also levied as excise duties) and tradable emission permits put a price on the carbon content of energy. The principal appeal of using prices to abate carbon emissions is that this encourages abatement where it is cheapest.

Effective Carbon Rates (OECD, 2016), presents the first full analysis of the use of carbon prices in 41 OECD and G20 economies, covering $80 \%$ of global energy use and of $\mathrm{CO}_{2}$ emissions. Only $10 \%$ of emissions are priced above EUR 30 per tonne, a conservative minimum of the climate cost of carbon. Specific excise duties on energy contribute most to average effective carbon rates, clearly dominating carbon taxes and tradable emission permits.

While the main characteristics and objectives ascribed to excise duties are approximately the same across OECD countries, their implementation, especially in respect to tax rates and structure, gives rise to significant differences between countries.

Giving an order of magnitude of the tax burden differences between countries is not straightforward. Although taxes (other than VAT) on alcoholic beverages and tobacco consist almost exclusively of excise duties (ad quantum or ad valorem), their structure may vary widely across countries. For example, standard excise rates on beer may be tempered by the application of reduced rates on small breweries. Different duty rates applicable to substitutes (cigarettes and rolling tobacco) may also blur the picture. If the objective is to measure total burdens on automotive transport services, cross-country comparisons of road fuels show only a part of automotive taxation policy that also includes road tolls, taxes on registration and use of vehicles, taxes on insurance, etc.

### 4.3. Alcoholic beverages

A wide variety of alcoholic beverages exist across the world that can be produced from a range of different ingredients (grapes, apples, malt, rice, etc.) that are fermented or distilled. The Customs Combined Nomenclature Code (CN) provides a classification of alcoholic beverages with which excise categories are intrinsically linked. The CN includes six main categories of alcoholic beverages: beer made from malt (code 22.03); wine of fresh grapes, including fortified wines (code 22.04); vermouth and other wine of fresh grapes flavoured with plants or aromatic substances (code 22.05); other fermented beverages (for example, cider, perry, mead), mixtures of fermented beverages and mixtures of fermented beverages and non-alcoholic beverages (code 22.06); undenatured ethyl alcohol of an alcoholic strength of $80 \%$ pure alcohol by volume (abv) or higher (code 22.07) and undenatured ethyl alcohol of an alcoholic strength of less than $80 \%$ abv (code 22.08). There are inevitably sub-divisions within each of these broad categories but the use of the internationally accepted nomenclature provides for consistency and helps to avoid contradictory definitions in applying rates. Member States of the European Union also apply a harmonised structure for excise duties on alcohol and alcoholic beverages (Council Directive 92/83/EEC). Except otherwise mentioned in country notes, Tables 4.A4.1 and 4.A4.2 cover products under CN codes 22.03 and 22.04. Table 4.A4.3 covers products not included in Tables 4.A4.1 and 4.A4.2.

Given the long history of alcohol taxation, several methods and measures were developed over time for assessing the alcoholic content of a product. Nowadays, the
alcohol by volume (abv) is a standard measure of how much alcohol (ethanol) is contained in an alcoholic beverage. It is defined as the number of litres of pure ethanol present in 100 litres of solution at $20^{\circ} \mathrm{C}$, expressed as a percentage of total volume. As a result, the alcoholic content in Tables 4.A4.1 and 4.A4.2 is expressed in \% abv. In some countries, the alcoholic content of beer is still calculated in degree Plato (measuring the density of beer wort in terms of percentage of extract by weight). In order to provide comparable excise data, the amounts of tax per degree Plato were converted amount per $\%$ abv. There is no precise conversion between degrees Plato and degrees of absolute alcohol but for tax purposes it is assumed that $1 \%$ abv is equivalent to 2.5 degrees Plato. As a result, tax rates expressed in degree Plato have been multiplied by 2.5 to obtain the rates in degree abv.

Excise is applied to alcoholic beverages in two main ways. The duty can be either ad quantum in relation to the alcoholic content of the product or ad valorem calculated according to the value of the product. The two methods are combined to include both the volume (based on alcohol content) and value. One exception is Mexico where the rate of tax is calculated exclusively on the value of the product for alcoholic beverages, with a graduated rate for beer based on the alcoholic content of the product. The high inflation rate in Mexico may have played a role in this decision. Besides countries in the EU levy a circulation tax per hectolitre on alcoholic beverages with the exception of beers and spirits on which the ad quantum method is also applied.

Tables 4.A4.1, 4.A4.2 and 4.A4.3 in respect of excise duties on beer, wine and other alcoholic beverages show the complicated computations for excise duties in many instances. Due to the existence of differing sub-categories and specific rates (e.g. for lowalcohol products and for small breweries) and calculations according to both the value and the nature of the product, it is difficult to be precise about the price differentials from a consumer point of view. However, Tables $4 . A 4.1,4 . A 4.2$ and $4 . A 4.3$ show the large differences that exist between countries: excise on wine (Table 4.A4.2) may vary from zero (Austria, Czech Republic, Germany, Hungary, Israel, Italy, Luxemburg, Portugal, Slovak Republic, Slovenia, Spain and Switzerland) up to more than USD 7 a litre of still wine (Norway) and more than USD 13 a litre of sparkling wine (Turkey). Excise on beer (Table 4.A4.1) also varies from about USD 2 per hectolitre per \% abv (Germany and Luxembourg) up to USD 35 (Finland) and even USD 59 (Israel).

### 4.4. Tobacco products

Historically, as for alcohol taxation, the primary motivation for tobacco taxation was the efficient generation of government revenue, with nearly all countries having taxed tobacco products for many decades or, in some cases, centuries. The relatively low elasticity of demand for tobacco products (i.e. the less than proportionate response of tobacco product consumption to moderate increase in prices), the small number of producers and significant consumption had made tobacco products particularly attractive targets for excise and other taxation. In recent decades, as evidence on the health consequences of tobacco has accumulated, the use of tobacco taxation as a tool for improving public health has gained prominence, as economic evidence showed the effectiveness of increased tobacco product taxes and prices in reducing tobacco use (WHO, 2016).

As with alcohol and mineral oils, there is a sub-division of tobacco products into a number of categories - cigarettes, cigars, cigarette rolling tobacco and pipe tobacco.

Unlike for excises on alcoholic beverages and mineral oils, which are almost exclusively ad quantum, the majority of countries use a combination of specific and ad valorem elements to calculate excise on tobacco products.

Table 4.A4.4 shows large differences between countries. Differences may also exist within a federal structure such as the USA where e.g. local excise rates on cigarettes (on the top of the federal tax) range from USD 0.17 in Missouri to USD 4.35 in New York per pack of 20 cigarettes (FTA, 2016). However, the individual rates or amounts of each tax (ad valorem/ ad quantum excise, VAT, duties, etc.) on tobacco products shown separately (provided in Table 4.A4.4) do not provide sufficient information to assess the overall tax burden on those products. Indeed, a high ad valorem tax can be balanced with a low ad quantum excise (or vice versa) when a mixed excise tax structure applies (i.e. made of both an ad quantum and an ad valorem excise). Ad valorem excise can be assessed on different bases (producer price, import price, retail price) and the combined effect of the VAT rate with excise duties will not be reflected.

A better understanding of the relative taxation levels may be gained by calculating the total tax burden (TTB) as a share of the total retail selling price (RSP) to the final consumer. Table 4.A4.5 shows the total tax burden (ad quantum excise + ad valorem excise + VAT) for cigarettes as a share of the retail selling price of a pack of 20 cigarettes in OECD countries (for the calculation methodology, see note to Table 4.A4.5). This table shows that the total tax burden for a pack of 20 cigarettes varies widely between countries, from $42.54 \%$ of the RSP in the United States (national average estimate of federal and local taxes) and 56.76\% in Australia to $84.10 \%$ in the United Kingdom and $86.51 \%$ in Ireland. However, in all the OECD countries (except the US), the tax burden is above $50 \%$ of the RSP and above $80 \%$ for 10 countries (Chile, Estonia, Finland, France, Greece, Ireland, Latvia, Poland, Turkey and the United Kingdom). Table 4.A4.5. also shows that there are substantial differences in the pre-tax prices, depending on the structure of the market, the geographic location (in particular with respect to cross-border shopping) and the structure of taxes. For example, pre-tax prices tend to be higher in countries where there are no or low ad valorem taxes.

The level of the rate plays a crucial role in achieving the objectives of the tax. If the tax is primarily intended to raise revenue then the tax rate would vary depending on the level of revenue required and the elasticity of the demand for the taxed products. A moderate rate may be sufficient to generate stable revenue without creating significant political economy difficulties. If the tax is intended to have a significant impact on customer behaviour then a higher tax rate may be required to achieve the desired health outcomes. In the specific case of tobacco, research has shown that higher taxes and prices on tobacco reduce both prevalence (i.e. from users quitting) and intensity of use (i.e. users consuming less), in particular on vulnerable populations (young people and low income households). In addition, the monetary burden of higher tobacco taxes appears to fall more heavily on the wealthiest users, whose tobacco use declines less, while most of the health and economic benefits from reductions in tobacco use accrue to the most disadvantaged populations, whose tobacco use declines more when taxes increase (WHO 2015). Political economy factors (e.g. industry lobbying, public opposition) may make imposing a high rate difficult to achieve. Earmarking (part of) the revenue from the taxes for specific health related purposes such as funding health programmes and/or tobacco control activities may increase public support, although it reduces the flexibility in government budgeting (OECD, 2016a). Concerns about cross-border trade and bootlegging between countries with high
price differentials may also make it difficult to impose a high tax rate in some countries unless regional co-operation is implemented.

### 4.5. Mineral oil products

Mineral oils are usually sub-divided into product categories in relation to technical specifications such as unleaded gasoline, diesel oil, and heavy fuel oil. Some OECD countries also tax other energy products under an excise tax regime (or under specific taxes on energy products, for example carbon taxes) such as natural gas, electricity and coal. The European Union (EU) Energy Tax Directive (2003/96/EC) sets the EU framework for the taxation of energy products and electricity. The Directive sets minimum tax rates for energy products for all energy products including coal, natural gas and electricity. Taxing Energy Use (OECD, 2015 and 2013) provides a comprehensive overview of specific taxes on energy for 41 OECD and G20 countries and Effective Carbon Rates (OECD, 2016b) elaborates on the role that specific taxes on energy, carbon taxes and tradable emission permits play in mitigating climate change.

A significant feature of excise on mineral oils is the fact that duty rates have been used to influence consumer behaviour to a greater degree than in many other areas. Excise on transport fuels has been around for many years although it was originally motivated by non-environmental needs (such as general revenue generation or sometimes earmarked for infrastructure spending). When the more environmentally-friendly unleaded gasoline appeared on the market it was more expensive to produce and as a consequence not commercially competitive with leaded gasoline as a retail product. This handicap was soon overcome through tax differentials making unleaded gasoline cheaper at the pump. Today, leaded gasoline has disappeared and is even not allowed any more on the market. On the other hand, lower taxes on Liquefied Petroleum Gas (LPG) used as propellant had a much less significant effect on consumer choices since the characteristics of this fuel (not liquid at standard temperature and atmospheric pressure, more difficult to stock, need for specifically equipped stations) have hindered its development. The use of LPG is globally very low compared to diesel and gasoline.

Excise taxes on transport fuels usually are much higher than on mineral oils and, more generally, fossil fuels used in other sectors (OECD, 2013). This can be for various reasons, including a lower elasticity of the tax base in transport, the use of excises to cover (more or less directly) some external costs that are relevant only in transport (most notably congestion), and equity concerns that may lead to lower tax rates on diesel used for household heating (see Table 4.A4.8). Indeed, the vast majority of OECD countries (except the Czech Republic, Hungary, Israel and the Netherlands) tax heating oil for households at a lower rate than diesel for transport use even though these two products are more or less identical.

EU member states have implemented the Energy Taxation Directive (2003/96/EC), which sets out common rules for the taxation of energy products. The Directive is intended to reduce distortions of competition, both between member states as a result from divergent rates of tax on energy products, and between mineral oils and the other energy products. It is also intended to increase incentives to use energy more efficiently. The Directive sets common taxation rules for a range of fuels, including many oil products, coal and natural gas, and for electricity consumption. For each, it sets a minimum level of tax expressed in terms of the volume, weight, or energy content of the fuel. For example
minimum rates on road fuels are as follows: EUR 0.359/l for unleaded gasoline; EUR 0.330/l for gas oil and EUR $0.125 / \mathrm{kg}$ for LPG. On the other hand, the Directive does not specify which taxes should be employed to attain the minimum level and they may include a diversity of specific taxes such as excise, carbon tax, energy tax, etc.

The revenues raised from these taxes are significant, as a result of the considerable level of consumption in the OECD countries and high tax rates in many of them. Although there are large differences between countries, the level of taxation for fuel relative to the base is very high compared to other taxes within the overall economy. For premium unleaded gasoline (Table 4.A4.6), the total tax burden (mainly excise plus VAT) exceeds $100 \%$ of pre-tax prices in all the OECD countries, except Australia, Canada, Mexico, New Zealand and the United States.

Excise levels for diesel fuel are lower than those for gasoline in most countries. Only two countries - Chile and Switzerland - levy a higher excise duty on diesel than on gasoline and only two countries apply the same excise rate to both fuels (Australia and United Kingdom). From an environmental point of view, this is peculiar, as diesel consumption in vehicles has a much greater environmental impact than unleaded gasoline, largely due to the significant differences in $\mathrm{NO}_{\mathrm{x}}{ }^{2}$ and particulate emissions. With more stringent motor vehicle regulations, the difference is becoming less pronounced for new vehicles, although there are concerns about differences between test cycle and onroad performance and the stock of vehicles is still weighted toward older, more polluting diesel vehicles (OECD, 2010; Harding, 2014a).

Excise rates on automotive fuels should not be considered in isolation in assessing the overall tax burden on automotive transport. Vehicles are also subject to registration taxes and recurrent circulation taxes and many countries differentiate those taxes according to the type of fuel used or according to $\mathrm{CO}_{2}$ emissions per unit distance (see Chapter 5). Furthermore, the tax treatment of company car use is often more favourable - sometimes considerably so - than that of other car use (Harding, 2014b).

The rates shown in Tables 4.A4.6 to 4.A4.8 are taken from the International Energy Agency and do not reflect excise duties exclusively but also include in some countries a number of taxes such as contributions to emergency stock funds.

### 4.6. Impact on cross-border trade

Differences in excise rates between countries often result from national traditions, social and health policy, local production and government's financing needs. Such differences are not without impact on the cross-border movement of goods. The development of integrated markets (e.g. the European Union) and elimination of border controls at frontiers have shed light on the disparate excise rates between neighbouring countries to the extent that market forces are affected. In such circumstances the effects of cross-border shopping can have a significant economic impact on businesses and put pressure on the relevant tax authorities to seek closer approximation of excise duty rates with their neighbours. Differences between certain neighbouring countries may also encourage cross-border "bootlegging" activities (McKee et al., 2004). Although some would argue that market forces should encourage moves towards convergence of rates, this is contradictory with other policy factors when issues such as health are taken into account in setting the rates.

### 4.7. Distributional impact of excise

The distributional impact of excise taxes is a concern to many policy makers. Knowing the distributional effects of excise duties allows for better fine-tuning of the distributional impacts of the overall system. The distributional impact of excise taxes varies across the goods on which they are imposed. A recent study for 20 mainly European OECD countries showed that the combined impact of excise taxes on alcohol, tobacco and transport fuels tends to be regressive whether measured as a percentage of income or expenditure (OECD, 2014). On the other hand, research on the distributional impact of excise taxes on transport fuels has shown that these taxes are not regressive (Flues and Thomas, 2015). These results imply that as households earn more they spend a smaller proportion of their income and total expenditure on excise taxes on alcohol and tobacco. Exact burdens can vary depending on tax design. For example, if richer households consume more expensive alcohol and tobacco than poorer households, richer households will face relatively higher tax burdens with an ad-valorem tax that taxes the value of the product compared to an ad quantum tax that taxes the quantity consumed. The non-regressive nature of taxes on transport fuels can be explained both by a smaller likelihood of lower income households owning a car and by driving less if they own a car.

## Notes

1. VAT may also be referred to as Goods and Services Tax (GST). For ease of reading, all value added taxes will be referred to as VAT in this chapter.
2. $\mathrm{NO}_{\mathrm{x}}$ is a generic term for the various nitrogen oxides produced during combustion. These are considered to be important air pollutants.

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ANNEX 4.A4

## Data on excise rates

Table 4.A4.1. Taxation of beer

| Country | Currency | Specific excise per hectolitre per \% abv ${ }^{1}$ |  | Lower excise for small independent breweries |  |  | Excise duty on low alcohol beer (not exceeding 2.8\% abv) <br> Excise per hectolitre of product |  | VAT rate | Excise rates which are progressive by strength |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | National currency | USD | Annual production (hl) | National currency | USD | National currency | USD | \% |  |
| Australia* | AUD | Country note |  | Country note |  |  | Country note |  | 10.0 | Yes |
| Austria | EUR | 5.00 | 5.55 | $\begin{aligned} & <12500 \\ & <25000 \\ & <37500 \\ & \leq 50000 \end{aligned}$ | $\begin{array}{r} 3 \\ 3.5 \\ 4 \\ 4.5 \end{array}$ | $\begin{aligned} & 3.33 \\ & 3.88 \\ & 4.44 \\ & 4.99 \end{aligned}$ | - | - | $\begin{aligned} & 20.0 \\ & 20.0 \\ & 20.0 \\ & 20.0 \end{aligned}$ | No |
| Belgium | EUR | 5.01 | 5.56 | $\begin{array}{r} \leq 12500 \\ \leq 25000 \\ \leq 50000 \\ \leq 75000 \\ \leq 200000 \end{array}$ | $\begin{aligned} & 4.36 \\ & 4.50 \\ & 4.65 \\ & 4.79 \\ & 4.94 \end{aligned}$ | $\begin{aligned} & 4.84 \\ & 4.99 \\ & 5.16 \\ & 5.32 \\ & 5.48 \end{aligned}$ | - | - | $\begin{aligned} & 21.0 \\ & 21.0 \\ & 21.0 \\ & 21.0 \\ & 21.0 \end{aligned}$ | No |
| Canada* | CAD | Country note |  | Country note |  |  | Country note |  | 5.0/13.0/14.0/15.0 | Yes |
| Chile* | CLP | Country note |  | Country note |  |  | Country note |  | 19.0 | No |
| Czech Republic | CZK | 80.00 | 3.25 | $\begin{array}{r} \leq 10000 \\ \leq 50000 \\ \leq 100000 \\ \leq 150000 \\ \leq 200000 \end{array}$ |  | $\begin{aligned} & 1.63 \\ & 1.95 \\ & 2.28 \\ & 2.60 \\ & 2.93 \end{aligned}$ | - | - | $\begin{aligned} & 21.0 \\ & 21.0 \\ & 21.0 \\ & 21.0 \\ & 21.0 \end{aligned}$ | No |
| Denmark* | DKK | 56.02 | 8.33 | $\begin{array}{r} \leq 3700 \\ \leq 20000 \\ <200000 \end{array}$ | Country note <br> Country note <br> Country note |  | 0.00 | 0.00 | $\begin{aligned} & 25.0 \\ & 25.0 \\ & 25.0 \end{aligned}$ | No |
| Estonia | EUR | 8.30 | 9.21 | $\leq 3000$ | 4.15 | 4.61 | - |  | 20.0 | No |
| Finland* | EUR | 32.05 | 35.57 | $\begin{array}{r} \leq 5000 \\ \leq 30000 \\ \leq 55000 \\ \leq 100000 \end{array}$ | $\begin{aligned} & 16.03 \\ & 22.44 \\ & 25.64 \\ & 28.85 \end{aligned}$ | 17.79 <br> 24.90 <br> 28.46 <br> 32.01 | 8.00 | 8.88 | $\begin{aligned} & 24.0 \\ & 24.0 \\ & 24.0 \\ & 24.0 \end{aligned}$ | No |
| France* | EUR | 7.41 | 8.22 | $\leq 200000$ | 7.41 | 8.22 | 3.70 | 4.11 | 20.0 | No |
| Germany | EUR | 1.97 | 2.19 | $\begin{array}{r} \leq 5000 \\ \leq 10000 \\ \leq 20000 \\ \leq 40000 \end{array}$ | $\begin{aligned} & 1.10 \\ & 1.32 \\ & 1.54 \\ & 1.65 \end{aligned}$ | $\begin{aligned} & 1.22 \\ & 1.47 \\ & 1.71 \\ & 1.83 \end{aligned}$ | - | - | $\begin{aligned} & 19.0 \\ & 19.0 \\ & 19.0 \\ & 19.0 \end{aligned}$ | No |
| Greece | EUR | 6.50 | 7.21 | $\leq 200000$ | 3.25 | 3.61 | - | - | 23.0 | No |
| Hungary | HUF | 1620.00 | 5.80 | < 8000 | 810.00 | 2.90 |  |  | 27.0 | No |
| Iceland* | ISK | Country note |  | - | - | - | Country note | - | 11.0 | Yes |
| Ireland* | EUR | 22.55 | 25.03 |  | Country note |  | Country note |  | 23.0 | No |
| Israel* | ILS | 231.00 | 59.43 | - | - | - | Country note |  | 17.0 | No |
| Italy* | EUR | 7.60 | 8.44 | - | - | - | Country note | - | 22.0 | No |
| Japan* | JPY | Country note |  |  |  |  | - | - | 8.0 | No |
| Korea* | KRW | Country note |  |  |  |  | Country note |  | 10.0 | No |
| Latvia* | EUR | 3.80 | 4.22 | $\leq 10000$ | 1.90 | 2.11 |  |  | 21.0 | No |
| Luxembourg* | EUR | 1.98 | 2.20 | $\begin{array}{r} \leq 50000 \\ \leq 200000 \end{array}$ | $\begin{aligned} & 0.98 \\ & 1.12 \end{aligned}$ | $\begin{aligned} & 1.09 \\ & 1.24 \end{aligned}$ | - |  | $\begin{aligned} & 17.0 \\ & 17.0 \end{aligned}$ | No |
| Mexico* | MXN | 26.50\% |  |  |  |  | - | - | 16.0 | Yes |
| Netherlands* | EUR | Country note |  | - | - | - | - | - | 21.0 | Yes |
| New Zealand* | NZD | 27.20 | 18.97 |  |  |  | Country note |  | 15.0 | No |
| Norway* | NOK | See note |  |  |  |  | Country note |  | 25.0 | Yes |

Table 4.A4.1. Taxation of beer (cont.)

| Country | Currency | Specific excise per hectolitre per \% abv ${ }^{1}$ |  | Lower excise for small independent breweries |  |  | Excise duty on low alcohol beer (not exceeding 2.8\% abv) <br> Excise per hectolitre of product |  | VAT rate | Excise rates which are progressive by strength |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | National currency | USD | Annual production (hl) | National currency | USD | National currency | USD | \% |  |
| Poland* | PLN | 19.48 | 5.17 | Country note |  |  | - | - | 23.0 | No |
| Portugal* | EUR | See note |  | Country note |  |  | Country note |  | 23.0 | Yes |
| Slovak Republic | EUR | 3.59 | 3.98 | $\leq 200000$ | 2.65 | 2.94 | - | - | 20.0 | No |
| Slovenia* | EUR | 12.10 | 13.43 |  |  |  | - | - | 22.0 | No |
| Spain* | EUR | Country note |  | - | - | - | Country note |  | 21.0 | Yes |
| Sweden | SEK | 194.00 | 23.02 | - | - | - | - | - | 25.0 | No |
| Switzerland* | CHF | Country note |  |  |  |  | Country note |  | 8.0 | Yes |
| Turkey* | TRY | 0.63 | - | - | - | - | - | - | 18.0 | No |
| United Kingdom* | GBP | 18.37 | 28.09 | Country note |  |  | 8.10 | 12.39 | 20.0 | No |
| United States* | USD | Country note |  |  |  |  | - | - |  | No |

${ }^{*}$ See country notes in Box 4.A4.1.
Note: Conversion of national currency in USD: conversion rates are average market rates (2015) published in OECD Monthly Monetary Statistics (stats.oecd.org).

1. $\% \mathrm{abv}=$ percentage of pure alcohol by volume at $20^{\circ} \mathrm{C}$. In some countries the excise rate on beer is calculated per hectolitre per degree Plato. For ease of reading, all amounts have been converted in $\%$ abv. There is no precise conversion between degrees Plato and $\%$ abv but for tax purposes it is often assumed that $1 \%$ abv is equivalent to 2.5 degrees Plato. As a result, tax rates expressed in degree Plato have been multiplied by 2.5 to obtain the \% abv.
Source: National Delegates; position as at 1 January 2016.

## Box 4.A4.1. Country notes

Australia: The excise rates for beer in individual containers not exceeding 48 litres are: AUD 41.08 per litre of alcohol where volume of alcohol does not exceed $3 \%$, AUD 47.85 where volume of alcohol exceeds $3 \%$ but does not exceed $3.5 \%$ and AUD 47.85 where volume exceeds $3.5 \%$. The rates for beer in individual containers exceeding 48 litres are: AUD 8.21 per litre of alcohol where volume of alcohol does not exceed $3 \%$, AUD 25.73 where volume of alcohol exceeds $3 \%$ by volume of alcohol but not more than $3.5 \%$, and AUD 33.70 where volume exceeds $3.5 \%$. These rates apply as of 1 February 2016. Each rate is calculated on the amount by which the alcohol content exceeds $1.15 \%$ by volume of alcohol. Beer that does not contain more than $1.15 \%$ cent by volume of alcohol is free of excise. These rates are indexed to inflation in February and August each year. Independent brewers receive an excise refund of $60 \%$ of the excise paid up to a maximum of AUD 30000 per financial year for beer sold directly from the brewery.
Canada: Excise duty rates for beer are imposed per hectolitre of product (not per hectolitre per degree alcohol). Provincial and territorial governments also charge various mark-ups and levies on beer, generally at rates that exceed the federal level. Federal excise duty rates: (1) On all beer or malt liquor containing more than $2.5 \%$ absolute ethyl alcohol by volume, CAD 31.22 per hectolitre. (2) On all beer or malt liquor containing more than $1.2 \%$ absolute ethyl alcohol by volume but not more than $2.5 \%$ absolute ethyl alcohol by volume, CAD 15.61 per hectolitre. (3) On all beer or malt liquor containing not more than $1.2 \%$ absolute ethyl alcohol by volume, CAD 2.591 per hectolitre. Reduced rates of excise duty apply on the first 75000 hectolitres of beer produced per year by Canadian brewers at the following rates: (1) On the first 2000 hectolitres of beer and malt liquor brewed in Canada: (a) if it contains more than $2.5 \%$ absolute ethyl alcohol by volume, CAD 3.122 per hectolitre; (b) if it contains more than $1.2 \%$ absolute ethyl alcohol by volume but not more than $2.5 \%$ absolute ethyl alcohol by volume, CAD 1.561 per hectolitre; and (c) if it contains not more than $1.2 \%$ absolute ethyl alcohol by volume, CAD 0.2591 per hectolitre. (2) On the next 3000 hectolitres of beer and malt liquor brewed in Canada: (a) if it contains more than $2.5 \%$ absolute ethyl alcohol by volume, CAD 6.244 per hectolitre; (b) if it contains more than $1.2 \%$ absolute ethyl alcohol by volume but not more than $2.5 \%$ absolute ethyl alcohol by volume, CAD 3.122 per hectolitre; and (c) if it contains not more than $1.2 \%$ absolute ethyl alcohol by volume, CAD 0.5182 per hectolitre. (3) On the next 10000 hectolitres of beer and malt liquor brewed in Canada:(a) if it contains more than $2.5 \%$ absolute ethyl alcohol by volume, CAD 12.488 per hectolitre; (b) if it contains more than $1.2 \%$ absolute ethyl alcohol by volume but not more than $2.5 \%$ absolute ethyl alcohol by volume, CAD 6.244 per hectolitre; and (c) if it contains not more than $1.2 \%$ absolute ethyl alcohol by volume, CAD 1.0364 per hectolitre. (4) On the next 35000 hectolitres of beer and malt liquor brewed in Canada: (a) if it contains more than $2.5 \%$ absolute ethyl alcohol by volume, CAD 21.854 per hectolitre; (b) if it contains more than $1.2 \%$ absolute ethyl alcohol by volume but not more than $2.5 \%$ absolute ethyl alcohol by volume, CAD 10.927 per hectolitre; and (c) if it contains not more than $1.2 \%$ absolute ethyl alcohol by volume, CAD 1.8137 per hectolitre. (5) On the next 25000 hectolitres of beer and malt liquor brewed in Canada: (a) if it contains more than $2.5 \%$ absolute ethyl alcohol by volume, CAD 26.537 per hectolitre; (b) if it contains more than $1.2 \%$ absolute ethyl alcohol by volume but not more than $2.5 \%$ absolute ethyl alcohol by volume, CAD 13.269 per hectolitre; and (c) if it contains not more than $1.2 \%$ absolute ethyl alcohol by volume, CAD 2.2024 per hectolitre.

Chile: The sale of alcoholic beverages (including wine, beer, distilled alcoholic beverages and other alcoholic beverages) is subject to $19 \%$ VAT and also to a surtax on the sale or import of alcoholic beverages. The rate applied to beer is of $20.5 \%$ and does not depend upon the degree of alcohol that the beer contains. The tax is applied to the VAT base, that is the sale`s price (excluding VAT itself) and levies sales made between wholesale dealers. For sales between wholesalers, the tax paid to the vendor is creditable against the tax applied on sales at each stage of the value chain (including imports) until the last sale to the final retailer. The sale from the retailer to the final consumer is not subject to the surtax and the retailer cannot deduct the input tax.

## Box 4.A4.1. Country notes (cont.)

Denmark: Lower rates on small independent breweries: production $\leq 3700 \mathrm{hl}$ receives a tax reduction of DKK 77.08 per hl; production $>3700 \mathrm{hl}$ but $\leq 20000 \mathrm{hl}(\mathrm{X})$ receives a tax reduction of DKK 259.939/( $\mathrm{X}+6.83$ ) per hl; production $>20000 \mathrm{hl}$ receives a tax reduction of DKK 22.02 - (X/9083) per hl. An additional duty is placed on products which contain a mixture of beer and non-alcoholic drinks. Rates: DKK 9.38/l. of mixture with alcohol content $\leq 10 \%$ vol. in the final product and DKK 16.39/l. of mixture with alcohol content $>10 \%$ vol. in the final product. Beer with alcohol content less than $2.8 \%$ vol. is free of excise tax.

Finland: Beer with an alcoholic content less than $0.5 \%$ vol. is free of excise.
France: Beer with alcoholic content above $18 \%$ support an additional taxation for social budget: EUR 2.96/ degree of alcohol/hectolitre
Iceland: The duty in Iceland is ISK 112 per centilitre of alcohol per litre minus 2.25 centilitres. For example, one litre of beer that has $6 \%$ abv has 6 centilitres alcohol per litre. So the duty for one litre of beer that contains $6 \%$ abv would be as follows: $(6-2.25)^{*} 112=$ ISK 420 per litre. As a result of this formula, beer with less than $2.25 \%$ abv is not taxed.

Ireland: There is remission or repayment of $50 \%$ alcohol products tax (excise duty) on beer brewed in independent small breweries producing up to 30000 hl a year. For low alcohol beer, the rate is 0.00 (beer $\leq 1.2 \%$ abv) and EUR 11.27 (beer > 1.2\% abv up to $2.8 \% \mathrm{abv}$ ).
Israel: The duty was set as ILS 231 on 1 January 2016. The amount is updated each year according to the change in the Consumer Price Index (CPI). There is no duty on beer under $2 \%$ alcohol (or under $3.8 \%$ alcohol if marketed in reusable bottles). The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Italy: Beer with volume of alcohol does not exceed 0.5 percent is not taxed.
Japan: Excise rates are JPY 22000 per hectolitre of product. Small brewers who produce no more than 13000 hectolitre of beer per year pay JPY 18700 per hectolitre on the first 2000 hectolitres for the first five years of the license (temporary measure).
Korea: The rate of Liquor Tax on beer is $72 \%$ of the manufacturer's price. In addition, Education Tax ( $30 \%$ on the amount of Liquor Tax levied) is also levied.

Latvia: Starting from 1 March 2016 the excise per hectolitre per \% abv is EUR 4.2; excise per hectolitre per \% abv for small independent breweries is EUR 2.1 (not less than EUR 7.8 per hectolitre of beer). The reduced rate for small independent breweries (annual production up to 50000 hl ) is applied for the first produced 10000 hl of beer.
Luxembourg: Rates for small breweries (annual production up to 200000 hl ) range from EUR 0.40 to EUR 0.45. Additional rate for alcopops: EUR 600 per hectolitre.

Mexico: The rates apply to the value of the goods as follows: $26.5 \%$ for beer and other alcoholic beverages up to $14^{\circ}$ Gay-Lussac (GL); $30 \%$ for beverages above $14^{\circ} \mathrm{G} . \mathrm{L}$. and up to $20^{\circ} \mathrm{G} . \mathrm{L} . ; 53 \%$ for beverages above $20^{\circ} \mathrm{G} . \mathrm{L}$. As a mechanism to discourage the use of disposable containers, taxpayers should pay the greater amount between the result of applying the corresponding rate to the value or a MXN 3 per litre fee (taxpayers that use re-usable containers can reduce an amount of MXN 1.26 per litre).
Netherlands: Most beers in the Netherlands are in the range $11^{\circ}-15^{\circ}$ Plato, usually $12^{\circ}$ Plato, with an excise duty of EUR $37.96: 12=$ EUR 3.16 per degree Plato. Excise duty rates are as follows per hectolitre of product: a) Up to $7^{\circ}$ Plato EUR 8.83 ; b) $7^{\circ}-11^{\circ}$ Plato EUR 28.49 ; c) $11^{\circ}-15^{\circ}$ Plato EUR 37.96 ; d) 15 or more degrees Plato EUR 47.48. Rates for small breweries (annual production up to 200000 hl ) are as follows: a) up to $7^{\circ}$ Plato the above mentioned rate; b) $7^{\circ}-11^{\circ}$ Plato EUR 26.35 ; c) $11-15$ degrees Plato EUR 35.11 ; d) 15 or more degrees Plato EUR 43.92. For beer with a maximum alcohol content of $0.5 \%$ a consumer tax of EUR 8.83 per hectolitre is applicable and a VAT rate of $6 \%$.

Box 4.A4.1. Country notes (cont.)
New Zealand: The excise rate for beer containing more than $2.5 \%$ abv is NZD 27.870 per litre of alcohol in finished product. The rate for beer containing more than $1.15 \%$ abv but not more than $2.5 \%$ abv is NZD 41.797 per litre of product. There is no excise duty on beer containing less than $1.15 \% \mathrm{abv}$.

Norway: Excise rates are as follows per hectolitre of product: a) 0.0-0.7\% abv: NOK 0; b) 0.7-2.7\% abv: NOK 327; c) 2.7-3.7\% abv: NOK 1 229; d) 3.7-4.7\% abv: NOK 2 129. The excise rate for beer with an alcoholic content of more than $4.7 \%$ abv is NOK 476 per degree of alcohol and hectolitre.

Poland: Allowances for small breweries: sale $\leq 20000 \mathrm{hl}$ a year tax is reduced by PLN $30 / \mathrm{hl}$; sale $\leq 70000 \mathrm{hl}$ a year tax is reduced by PLN $15 / \mathrm{hl}$; sale $\leq 150000 \mathrm{hl}$ a year tax is reduced by PLN $12.00 / \mathrm{hl}$ and by PLN 9.00/hl if the producer sells no more than 200000 hl a year. However, the amount of exemption cannot exceed $50 \%$ of the amount of excise duty calculated with the standard rate of excise duty on beer.

Portugal: Excise rates for beer are as follows per hectolitre of product: (a) $>0.5$. $\% \leq 1.2 \%$ abv EUR 7.98 ; (b) $>1.2 \leq 2.8 \%$ abv EUR 10.0; (c) $>2.8^{\circ} \leq 4.4 \%$ abv EUR 15.98; (d) $>4.4^{\circ} \leq 5.2 \%$ abv EUR 20.0 ; (e) $>5.2^{\circ} \leq 6 \%$ abv EUR 23.99; (f) > 6\% abv EUR 28.06 (rates as at 31 March 2016). Rates for small breweries (annual production up to 200000 hl ) are $50 \%$ of the normal rates.

Slovenia: Specific excise per hectolitre per degree abv: EUR 12.10.
Spain: Excise rate according to strength is: beer < $1.2 \%$ abv is free of excise; beer between $1.2 \%$ and $2.8 \%$ abv is EUR $2.75 / \mathrm{hl}$; beer between $2.8 \%$ abv and $11^{\circ}$ Plato is EUR $7.48 / \mathrm{hl}$; beer with a degree Plato $>11$ and not > $15=$ EUR 9.96/hl; beer with a degree Plato $>15$ and not $>19=$ EUR $13.56 / \mathrm{hl}$; beer with a degree Plato $>19$ = EUR 0.91/hl and per degree Plato. There is no tax on Beer in Ceuta and Melilla (Spanish cities situated in the North of Africa).

Switzerland: Rates per hectolitre: light beer (up to $10.0^{\circ}$ Plato): CHF 16.88, regular and special beer ( 10.1 to $14.0^{\circ}$ Plato): CHF 25.32 , strong beer (from $14.1^{\circ}$ Plato): CHF 33.76. Reductions for small breweries from $40 \%$ (annual production max. 15000 hl ) to $0 \%$ (annual production min. 55000 hl ). Beer with more than $15 \% \mathrm{vol}$. is taxed as an alcoholic beverage (CHF 2900 per hectolitre of absolute alcohol).

Turkey: The minimum tax amount is TL 103 per hectolitre/degree. If the amount computed according to the tax rate $(63 \%)$ is lower than the minimum tax amount, the minimum tax amount is paid.
United Kingdom: Beer with an alcoholic content not exceeding $1.2 \%$ abv is free of excise. Lower strength beer duty applies to beer 1.3 to $2.8 \%$ abv. High strength beer duty was introduced from 1 October 2011 and is a duty applied to all beer exceeding $7.5 \%$ abv in addition to general beer duty. Reduced duty rates apply for independent breweries producing: less than 5000 hectolitres, $50 \%$ of the standard rate of duty; between 5000 hectolitres and and 30000 hectolitres = annual production -2500 /annual production X standard rate of duty; between 30000 hectolitres and 60000 hectolitres = annual production ( $2500-8.33 \%$ of annual production in excess of 30000 ) /annual production X standard rate of duty. No further reduction of the Lower Strength Beer Duty rate can be claimed by a small brewer.

United States: The weighted average Federal and State excise tax rate is USD 22 per hectolitre of product. The Federal tax is USD 18.00 per barrel ( 31 gallons). 1 barrel $=1.1735$ hectolitres. Small domestic brewers who produce less than 2 million barrels of beer per calendar year pay USD 7.00 in federal tax per barrel on the first 60000 barrels. There is no progressive rate structure based on alcohol content and no Federal VAT.

Table 4.A4.2. Taxation of wine

|  | Currency | Still wine |  |  | Sparkling wine |  |  | Low-alcohol (still) wine (<8.5\% abv) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Excise per hectolitre of product |  | $\begin{gathered} \text { VAT } \\ \hline \% \end{gathered}$ | Excise per hectolitre of product |  | $\begin{gathered} \text { VAT } \\ \hline \% \end{gathered}$ | Excise per hectolitre of product |  | VAT |
|  |  | National currency | USD |  | National currency | USD |  | National currency | USD | \% |
| Australia* | AUD | Country note | - | 10.00 | Country note | - | 10.00 | Country note | - | 10.00 |
| Austria | EUR | 0.00 | 0.00 | 20.00 | 100.00 | 110.99 | 20.00 | 0.00 | 0.00 | 20.00 |
| Belgium | EUR | 74.91 | 83.14 | 21.00 | 256.32 | 284.48 | 21.00 | 23.91 | 26.54 | 21.00 |
| Canada* | CAD | 62.00 | 48.51 | 5.0/13.0/14.0/15.0 | 62.00 | 48.51 | 5.0/13.0/14.0/15.0 | Country note | - | 5.0/13.0/14.0/15.0 |
| Chile* | CLP | Country note | - | 19.00 | Country note | - | 19.00 | Country note | - | 19.00 |
| Czech Republic | CZK | 0.00 | 0.00 | 21.00 | 2340.00 | 95.15 | 21.00 | 0.00 | 0.00 | 21.00 |
| Denmark* | DKK | 1161.00 | 172.64 | 25.00 | 1496.00 | 222.45 | 25.00 | 534.00 | 79.41 | 25.00 |
| Estonia* | EUR | 111.98 | 124.28 | 20.00 | 84.67 | 93.97 | 20.00 | 48.55 | 53.88 | 20.00 |
| Finland* | EUR | 339.00 | 376.25 | 24.00 | 339.00 | 376.25 | 24.00 | Country note | - | 24.00 |
| France* | EUR | 3.77 | 4.18 | 20.00 | 9.33 | 10.36 | 20.00 | 3.77 | 4.18 | 20.00 |
| Germany* | EUR | 0.00 | 0.00 | 19.00 | 136.00 | 150.94 | 19.00 | 0.00 | 0.00 | 19.00 |
| Greece | EUR | 20.00 | 22.20 | 23.00 | 20.00 | 22.20 | 23.00 | 20.00 | 22.20 | 23.00 |
| Hungary | HUF | 0.00 | 0.00 | 27.00 | 16460.00 | 58.96 | 27.00 | 0.00 | 0.00 | 27.00 |
| Iceland* | ISK | Country note | - | 11.00 | Country note | - | 11.00 | Country note | - | 11.00 |
| Ireland* | EUR | 424.84 | 471.52 | 23.00 | 849.68 | 943.04 | 23.00 | 141.57 | 157.13 | 23.00 |
| Israel* | ILS | 0.00 | 0.00 | 17.00 | See note | - | 17.00 | 0.00 | 0.00 | 17.00 |
| Italy | EUR | 0.00 | 0.00 | 22.00 | 0.00 | 0.00 | 22.00 | 0.00 | 0.00 | 22.00 |
| Japan | JPY | 8000.00 | 66.11 | 8.00 | 8000.00 | 66.11 | 8.00 | 8000.00 | 66.11 | 8.00 |
| Korea* | KRW | See note | - | 10.00 | Country note | - | 10.00 | Country note | - | 10.00 |
| Latvia* | EUR | 70.00 | 77.69 | 21.00 | 70.00 | 77.69 | 21.00 | Country note |  | 21.00 |
| Luxembourg* | EUR | 0.00 | 0.00 | 14 or 17 | 0.00 | 0.00 | 17.00 | 0.00 | 0.00 | 14.00 |
| Mexico* | MXN | 26.5\%/30\% | - | 16.00 | 26.5\%/30\% | - | 16.00 | 26.5\% | - | 16.00 |
| Netherlands* | EUR | 88.36 | 98.07 | 21.00 | 254.41 | 282.36 | 21.00 | 44.18 | 49.03 | 21.00 |
| New Zealand* | NZD | Country note | - | 15.00 | Country note | - | 15.00 | Country note | - | 15.00 |
| Norway* | NOK | 5712.00 | 708.33 | 25.00 | 5712.00 | 708.33 | 25.00 | Country note | - | 25.00 |
| Poland | PLN | 158.00 | 41.91 | 23.00 | 158.00 | 41.91 | 23.00 | 158.00 | 41.91 | 23.00 |
| Portugal | EUR | 0.00 | 0.00 | 13.00 | 0.00 | 0.00 | 23.00 | 0.00 | 0.00 | 23.00 |
| Slovak Republic* | EUR | 0.00 | 0.00 | 20.00 | 79.65 | 88.40 | 20.00 | 0.00 | 0.00 | 20.00 |
| Slovenia | EUR | 0.00 | 0.00 | 22.00 | 0.00 | 0.00 | 22.00 | 0.00 | 0.00 | 22.00 |
| Spain* | EUR | 0.00 | 0.00 | 21.00 | 0.00 | 0.00 | 21.00 | 0.00 | 0.00 | 21.00 |
| Sweden* | SEK | 2517.00 | 298.61 | 25.00 | 2517.00 | 298.61 | 25.00 | Country note | 0.00 | 25.00 |
| Switzerland* | CHF | 0.00 | 0.00 | 8.00 | 0.00 | 0.00 | 8.00 | 0.00 | 0.00 | 8.00 |
| Turkey* | TRY | 557.00 | 204.55 | 18.00 | 3763.00 | 1381.93 | 18.00 | 557.00 | 204.55 | 18.00 |
| United Kingdom* | GBP | 273.31 | 417.91 | 20.00 | 350.07 | 535.28 | 20.00 | 84.21 | 128.76 | 20.00 |
| United States* | USD | 47.00 | 47.00 | - | 116.00 | 116.00 | - | Country note | - | - |

* Country notes: see Box 4.A4.2.

Note: Conversion of national currency in USD: conversion rates are average market rates (2015) published in OECD Monthly Monetary Statistics (stats.oecd.org).
Source: National delegates; position as at 1 January 2016.

## Box 4.A4.2. Country notes

Australia: All wine (including still, sparkling and low alcohol wine) is liable for the wine equalisation tax (WET). WET applies at $29 \%$ of the value of the wine at the last wholesale sale (before adding GST). A rebate of WET paid, or the amount of WET that would have been paid had the buyer not quoted, applies to eligible producers, up to a maximum of AUD 500000 each financial year. The Australian Government announced in the 2016-17 Budget that the maximum rebate amount will be reduced to AUD 350000 from 1 July 2017 and to AUD 290000 from 1 July 2018 and eligibility will be narrowed from 1 July 2019.

Canada: (1) A rate of CAD 0.62 per litre applies to wine with more than $7 \%$ abv. The rate is CAD 0.295 per litre on wine of more than $1.2 \%$ abv, but not more than $7 \%$ abv; and for all wine with $1.2 \%$ abv or less the rate is CAD 0.0205 per litre. (2) Fortified wine in excess of $22.9 \%$ abv would not be included in the definition of "wine" (and, therefore, fall within the definition of "spirits"). Provincial and territorial governments also charge various mark-ups and levies on wine, generally at rates that exceed the federal level.
Chile: The sale of alcoholic beverages is subject to a surtax of $20.5 \%$ on the sale or import of wine, sparkling wine, champagne, cider and other alcoholic beverages (among others). The tax is applied to the VAT base, that is the sale`s price (excluding VAT itself), and levies sales made between wholesale dealers. For sales between wholesalers, the tax paid to the vendor is creditable against the tax applied on sales at each stage of the value chain (including imports) until the last sale to the final retailer. The sale from the retailer to the final consumer is not subject to this surtax and the retailer cannot deduct the input tax nor is levied with this tax the sale of wine in bulk made by producers to a taxpayer seller subject to this surtax.
Denmark: The rate for high-alcohol wine > $15 \%$ abv - maximum $22 \%$ abv is DKK 1555 per hectolitre. Medium-alcohol wine < $6 \%$ abv - maximum $15 \%$ abv is DKK 1161 per hectolitre. Low-alcohol wine $<1.2 \%$ abv - maximum $6 \%$ abv is DKK 534 per hectolitre. The rates for sparkling wine correspond to the rates for still wine plus DKK 335 per hectolitre. An additional duty is placed on products which contain a mixture of wine and non-alcoholic drinks. Rates: DKK 7.13 per litre of mixture with alcohol content $\leq 10 \%$ abv in the final product and DKK 11.50 per litre of mixture with alcohol content $>10 \%$ abv in the final product.

Estonia: Excise rate for low alcohol up to $6 \%$ vol. still and sparkling wine is EUR 48.55 (rates as at 1 February 2016).
Finland: Excise rates for low alcohol wine are as follows: a) over $1.2 \%$ abv and up to $2.8 \%$ abv EUR 22.00 ; b) over $2.8 \%$ abv and up to $5.5 \%$ abv EUR 169.00 ; c) over $5.5 \%$ abv and up to $8.0 \%$ abv EUR 241.00.

France: A reduced rate applies to the following categories of low-alcohol wine: cider, perry, mead, grapes juice lightly sparking.

Germany. Excise rate for low alcohol sparkling wine $<6 \% \mathrm{abv}$ is EUR 51.00. Intermediate products with a volume of alcoholic degree between $1.2 \%$ and $22 \%$ abv are taxed according to the following rates: $>15 \%$ abv $-22 \% \mathrm{abv}=$ EUR $153 / \mathrm{hl} ;<=15 \% \mathrm{abv}=$ EUR $102 / \mathrm{hl} ;<=15 \% \mathrm{abv}$ and sparkling = EUR 136/hl.
Iceland: The duty rate is ISK 102 per centilitre of alcohol per litre minus 2.25 centilitres for wine up to $15 \%$ abv. For example, one litre of wine that has $15 \%$ abv has 15 centilitres alcohol per litre. So the duty for one litre of wine that contains $6 \%$ abv would be as follows: $(15-2.25) * 102=$ ISK 1300.50 per litre.

Ireland: The rate for low alcohol wine applies to wine with an alcoholic content of less than $5.5 \% \mathrm{abv}$. The rate for still wine with alcoholic content $>15 \%$ abv is EUR 616.45.

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

Korea: The rate of liquor tax on wine is $30 \%$ on the manufacturer's price (or imported price). In addition, Education Tax ( $10 \%$ of the amount of Liquor tax levied) is also levied. These rates are applicable to both still and sparkling wine regardless of alcohol content.

## Box 4.A4.2. Country notes (cont.)

Latvia. Starting from 1 March 2016 the excise for wine (still and sparkling) is EUR 74 per hectolitre. There is no specific rate for low-alcohol (still) wine (< $8.5 \%$ abv).

Luxembourg: The reduced VAT rate (12\%) applies to still wine with alcoholic content $\leq 13 \%$ abv. Additional rate for alcopops: EUR 600 per hectolitre.
Mexico: All rates apply to the value of the goods, and not per hectolitre of product, as follows: $26.5 \%$ for beer and other alcoholic beverages up to $14^{\circ}$ Gay-Lussac (GL); $30 \%$ for beverages above $14^{\circ} \mathrm{G} . \mathrm{L}$. and up to $20^{\circ} \mathrm{G} . \mathrm{L}$.; $53 \%$ for beverages above $20^{\circ}$ G.L.
Netherlands: Excise duty rate for still wine $>15 \%$ abv is EUR $129.81 / \mathrm{hl}$. Excise duty rate for low alcohol (max $8.5 \% \mathrm{abv}$ ) sparkling wine is EUR $48.25 / \mathrm{hl}$. For low alcohol wine $<1.2 \%$ abv the VAT rate is $6 \%$.
New Zealand: The excise rate for unfortified wine is NZD 2.7870 per litre of product.
Norway: The rate shown in Table 4.2 is the rate for wine with an alcoholic content of $12 \%$ abv. Excise rates for wine with an alcoholic content of $4.7 \%-22 \%$ abv $=$ NOK 476 per vol. pct. alcohol and per hectolitre.
Slovak Republic: The rate of EUR $54.16 / \mathrm{hl}$ applies to sparkling fermented beverages with an alcoholic strength by volume not exceeding $8.5 \%$ abv. The rate for intermediate products is EUR 84.24/hl.
Spain: Intermediate products - products to which distilled alcohol has been added - and with a volume of alcoholic degree between $1.2 \%$ abv and less than $22 \%$ abv are taxed according to the following rates: alcoholic degree $>1.2 \%$ abv and less than $15 \%$ abv $=$ EUR 36.65/hl. Others = EUR 61.08/hl.

Sweden: Excise rates for low alcohol wine are as follows: a) < 2.25\% abv: SEK 0; b) $7 \%-8.5 \%$ abv: SEK 1797; c) $4.5 \%-7 \%$ abv SEK 1306 ; d) $2.25 \%-4.5 \%$ abv SEK 884 . No special rates for sparkling wine.

Switzerland: In general wine with more than $15 \%$ abv is taxed as an alcoholic beverage (CHF 2900 per hectolitre of absolute alcohol). Natural wines made from fresh grapes with more than $18 \% \mathrm{abv}$ are taxed as an alcoholic beverage (CHF 1450 per hectolitre of absolute alcohol up to $22 \%$ abv then CHF 2900 per hectolitre of absolute alcohol).

Turkey: The excise rate is $0 \%$.
United Kingdom: Reduced rates for lower strength drinks (wine categories) are as follows: a) exceeding $1.2 \%$ - not exceeding $4 \%$ abv = GBP 84.21; b) exceeding $4 \%$ - not exceeding $5.5 \%$ abv = GBP 115.80; and c) low strength sparkling wine exceeding $5.5 \%$ - less than $8.5 \%$ abv = GBP 264.61. d) sparkling wine and made wine at least $8.5 \%$ abv but not exceeding $15 \%$ abv = GBP 350.07. Rate in the band exceeding $15 \%$ abv but not exceeding $22 \%$ abv = GBP 364.37 (wine and made wine). The duty rates on wine changed on 21 March 2016 to: Excise duty rate on still wine 277.84, reduced rate for lower strength drinks (wine categories) a) exceeding $1.2 \%$ - not exceeding $4 \% \mathrm{abv}=$ GBP 85.60 ; b) exceeding $4 \%$ - not exceeding $5.5 \%$ abv = GBP 117.72; and c) low strength sparkling wine exceeding $5.5 \%$ - less than $8.5 \% \mathrm{abv}=$ GBP 268.99 d ) sparkling wine and made wine at least $8.5 \%$ abv but not exceeding $15 \%$ abv = GBP 355.87. Rate in the band exceeding $15 \%$ abv but not exceeding $22 \%$ abv = GBP 370.41 (wine and made wine).
United States: The weighted average Federal and State excise tax rate is USD 47 per hectolitre of product for still wine up to $14 \%$ abv and USD 116 for sparkling wine. The Federal excise rates are as follows: a) up to $14 \%$ abv: USD 1.07 per gallon; b) $14 \%-21 \%$ abv: USD 1.57 per gallon; c) $21 \%-24 \%$ abv: USD 3.15 per gallon; d) artificially carbonated wine USD 3.30 per gallon; and e) sparkling wine USD 3.40 per gallon. 26.42 US gallons = 1 hectolitre. There is no Federal VAT.

Table 4.A4.3. Taxation of alcoholic beverages ${ }^{1}$

|  | Currency | Tax per hectolitre of absolute alcohol |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Excise |  | VAT rate \% | Small distillery rate |
|  |  | National currency | USD |  |  |
| Australia* | AUD | 8105.00 | 6089.41 | 10.00 | No |
| Austria* | EUR | 1200.00 | 1331.85 | 20.00 | Yes |
| Belgium | EUR | 2992.79 | 3321.63 | 21.00 | No |
| Canada* | CAD | 1169.60 | 915.18 | $5.0,13.0,14.0$ or 15.0 | No |
| Chile* | CLP | See note | - | 19.00 | No |
| Czech Republic | CZK | 28500.00 | 1158.87 | 21.00 | No |
| Denmark* | DKK | 15000.00 | 2230.48 | 25.00 | No |
| Estonia | EUR | 2172.00 | 2410.65 | 20.00 | No |
| Finland* | EUR | 4555.00 | 5055.49 | 24.00 | No |
| France* | EUR | 1737.56 | 1928.48 | 20.00 | No |
| Germany* | EUR | 1303.00 | 1446.17 | 19.00 | Yes |
| Greece* | EUR | 2450.00 | 2719.20 | 23.00 | No |
| Hungary* | HUF | 333385.00 | 1194.10 | 27.00 | Yes |
| Iceland* | ISK | 1380000.00 | 10462.79 | 11.00 | No |
| Ireland | EUR | 4257.00 | 4724.75 | 23.00 | No |
| Israel* | ILS | See note | - | 17.00 | No |
| Italy* | EUR | 1035.52 | 1149.30 | 22.00 | No |
| Japan* | JPY | See note | - | 8.00 | No |
| Korea* | KRW | See note | - | 10.00 | No |
| Latvia* | EUR | 1360.00 | 1509.43 | 21.00 | No |
| Luxembourg | EUR | 1041.15 | 1155.55 | 17.00 | No |
| Mexico* | MXN | 53\% | - | 16.00 | No |
| Netherlands* | EUR | 1686.00 | 1871.25 | 6.0 or 21.0 | No |
| New Zealand* | NZD | See note | - | 15.00 | No |
| Norway | NOK | 73100.00 | 9064.98 | 25.00 | No |
| Poland | PLN | 5704.00 | 1513.00 | 23.00 | No |
| Portugal* | EUR | 1327.94 | 1473.85 | 23.00 | Yes |
| Slovak Republic* | EUR | 1080.00 | 1198.67 | 20.00 | No |
| Slovenia* | EUR | 1320.00 | 1465.04 | 22.00 | No |
| Spain* | EUR | 913.28 | 1013.63 | 21.00 | Yes |
| Sweden | SEK | 51148.00 | 6068.10 | 25.00 | No |
| Switzerland* | CHF | 2900.00 | 3014.55 | 8.00 | Yes |
| Turkey* | TRY | 15071.00 | 5534.70 | 18.00 | No |
| United Kingdom* | GBP | 2766.00 | 4229.36 | 20.00 | No |
| United States* | USD | 995.00 | 995.00 | - | No |

* Country notes: see Box 4.A4.3.

Note: Conversion of national currency in USD: conversion rates are average market rates (2015) published in OECD Monthly Monetary Statistics (stats.oecd.org).

1. Alcoholic beverages other than those included in Tables 4.1 and 4.2.

Source: National delegates; position as at 1 January 2016.

## Box 4.A4.3. Country notes

Australia: The excise duty of AUD 81.05 per litre of alcohol applies to spirits and other excisable beverages (except beer). A lower rate of AUD 75.70 per litre of alcohol applies to brandy (distilled from grape wine). These rates apply as of 1 February 2016 and are indexed to inflation in February and August of each year. The Australian Government announced in the 2016-17 Budget that it would provide a refund of 60 per cent of excise paid up to AUD 30000 per financial year to domestic distilleries and producers of low strength alcoholic beverages from 1 July 2017.

Austria: For small distilleries producing not more than 4 hl pure alcohol per year the rate is EUR 648.(54\% of the standard rate).

Canada: (1) Spirits are subject to excise duty at the rate of CAD 11.696 per litre abv. Spirits containing not more than $7 \%$ abv are subject to excise duty at the rate of CAD 0.295 per litre. (2) Beer with an alcoholic strength in excess of $11.9 \%$ abv is deemed to be Spirits. Provincial and territorial governments also charge various mark-ups and levies on spirits, generally at rates that exceed the federal level.
Chile: Alcoholic beverages are subject to a surtax on the sale or import. The rates applied are the following: $31.5 \%$ on liquors, brandy, vermouth, pisco, whiskey and other distilled alcoholic beverages; 20.5\% on beer, wine, sparkling wine, champagne, cider and other alcoholic beverages. The tax is applied to the VAT base, that is the sale`s price (excluding VAT itself) and levies sales made between wholesale dealers. For sales between wholesalers, the tax paid to the vendor is creditable against the tax applied on sales at each stage of the value chain (including imports) until the last sale to the final retailer. The sale from this retailer to the final consumer is not subject to the surtax and the retailer cannot deduct the input tax nor is levied with this tax the sale of wine in bulk made by producers to a taxpayer seller subject to this surtax.

Czech Republic: The reduced rate of CZK 14300 per hectolitre of pure alcohol applies for small fruit grower's distilleries producing no more than 30 litres of fruit spirit per year per household. The excise duty of CZK 2340 per hectolitre of product is applicable for intermediate products.
Denmark: An additional duty is placed on products which contain a mixture of spirits and non-alcoholic drinks, Rates: DKK 4.21 per litre of mixture.
Finland: Excise rates are as follows: (a) CN - code 2208. alcoholic content between $1.2 \%$ abv and $2.8 \% \mathrm{abv}$. EUR 800; (b) Other products EUR 4555.

France: Additional taxation for social budget: EUR 557.90/hectolitre of pure alcohol.
Germany: The rates for small distilleries are EUR 730 or EUR 1 022. Additional rate for alcopops: EUR 5550 per hectolitre of absolute alcohol.

Greece: The rate for ouzo and ethyl alcohol (derogation possible for several regions but only applied in the department of Dodecanese) is EUR 1225 per hectolitre of pure alcohol.

Hungary: A reduced rate of $50 \%$ applies to ethyl-alcohol produced by fruit growers' distilleries from fruit supplied to them by private fruit growers. The application of reduced rate is limited to 43 litres of pure alcohol for private consumption per fruit grower household per year.
Iceland: Excise rate shown in the table is the rate for other alcohol than beer or wine up to $15 \% \mathrm{abv}$. The rate is ISK 138 per each centilitre of alcohol by volume exceeding $2.25 \% \mathrm{abv}$.

Israel: The excise rates for all kinds of alcoholic beverages is ILS 84.24 per litre of absolute alcohol. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Italy: Taxation applies for beverages of alcoholic strength exceeding $1.2 \%$ abv. The rate of EUR 88.67 applies to intermediate products.

## Box 4.A4.3. Country notes (cont.)

Japan: Excise rates are as follows: a) Whiskey and brandy ( $40 \%$ abv) JPY 40 000; b) Spirits ( $37 \% \mathrm{abv}$ ) JPY 37 000; c) Shochu Group A and B ( $25 \%$ abv) JPY 25000.

Korea: As Excise Tax for liquor is based on the value of the product, the rate does not vary with alcohol content. For whiskey, brandy, general distilled spirits, liquor, diluted soju and distilled soju, the Liquor tax is $72 \%$ and the Education tax is $30 \%$.

Latvia: Starting from 1 March 2016 the excise rate is EUR 1400 per hectolitre of absolute alcohol.
Luxembourg: Additional rate for alcopops: EUR 600 per hectolitre.
Mexico: The excise tax is set at an ad valorem rate and not per hectolitre of product. The rates for alcoholic beverages apply to the value of the goods as follows: $26.5 \%$ up to $14^{\circ}$ Gay-Lussac (G.L.); $30 \%$ above $14^{\circ} \mathrm{G} . \mathrm{L}$. and up to $20^{\circ} \mathrm{G} . \mathrm{L} . ; 53 \%$ above $20^{\circ}$ G.L.

Netherlands: For low alcohol spirits with an alcoholic content $<1.2 \%$ the VAT rate is $6 \%$.
New Zealand: For alcoholic beverages with $9-14 \%$ abv, the excise rate is NZD 2.7870 per litre. For alcoholic beverages above $14 \%$ abv, the excise rate is NZD 50.759 per litre of absolute alcohol (with the exception of unfortified wine and vermouth which has the rate of NZD 2.7870 per litre of product).

Portugal: Intermediate products are taxed at EUR 72.86/hl; Ethyl alcohol/spirits: EUR 1 327.94/hl (rates applicable as at 31 March 2016). A reduced rate of $50 \%$ for small distilleries applies.
Slovak Republic: A reduced rate of $50 \%$ of the national rate of excise duty on ethyl alcohol, applies to ethyl alcohol produced by fruit growers' distilleries. The application of the reduced rate is limited to 43 litres of ethyl alcohol for personal consumption of the fruit growers' household per year.

Slovenia: Tax per hectolitre of absolute alcohol is EUR 1320.
Spain: The excise rate in the Canary Islands is EUR 714.63 per Hl of pure alcohol. There is a special regime for small distilleries for which the rate is EUR 799.19 per hl (or EUR 622.23 in the Canary Islands).

Switzerland: Under certain conditions farmers do not pay tax on the first 5 litres of pure alcohol produced per year for their personal consumption. A reduced rate of $30 \%$ is applied to the first 30 litres of pure alcohol produced per year by small producers. Normal rate: CHF 2900 per hectolitre. Special rate for certain types of wines: CHF 1450 per hectolitre. Special rate for alcopops: CHF 11600 per hectolitre (Alcopop -also called ready to drink (RTD) or designer drink) is a mix of alcohol and soda.

Turkey: The excise rate is $0 \%$. If the tax amount computed according to the tax rate is lower than the minimum tax amount specified in the table, then the minimum tax amount is paid.
United Kingdom: All drinks over $22 \%$ abv are taxed as spirits. Most other mixtures of spirits with other types of alcohol are also taxed as spirits. Still cider and perry exceeding $1.2 \%$ - not exceeding $7.5 \% \mathrm{abv}=\mathrm{GBP}$ 38.87 , still cider and perry exceeding $7.5 \%$ - less than $8.5 \% \mathrm{abv}=$ GBP 58.75 , sparkling cider and perry exceeding $1.2 \%$ - not exceeding $-5.5 \%$ abv = GBP 264.61, sparkling cider and perry exceeding $5.5 \%$ - less than $8.5 \% \mathrm{abv}=$ GBP 264.61. The duty rates on sparkling cider and perry exceeding $5.5 \%$ - less than $8.5 \% \mathrm{abv}$ changed on 21 March 2016 to GBP 268.99.
United States: The weighted average Federal and State excise tax rate is USD 995 per hectolitre. The Federal excise rate is USD 13.50 per proof gallon. A proof gallon is a US gallon ( 3.785 litres) containing $50 \%$ alcohol. There is no Federal VAT.

Table 4.A4.4. Taxation of tobacco

|  | Currency | Cigarettes |  |  | Cigars ${ }^{2}$ |  |  | Rolling tobacco for cigarettes |  |  | VAT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Specific excise <br> per 1000 |  | Excise on value | Specific excise <br> per 1000 |  | Excise on value | Specific excise per 1000 grams |  | Excise on value |  |
|  |  | National currency | USD | $\%$ of RSP ${ }^{1}$ | National currency | USD | $\%$ of RSP ${ }^{1}$ | National currency | USD | \% of RSP | \% |
| Australia* | AUD | 530.96 | 398.92 | 0.00 | Country note | - | 0.00 | 663.72 | 498.66 | 0.00 | 10.00 |
| Austria* | EUR | 45.00 | 49.94 | 40.00 | 0.00 | 0.00 | 13.00 | 0.00 | 0.00 | 56.00 | 20.00 |
| Belgium | EUR | 39.52 | 43.86 | 45.84 | 0.00 | 0.00 | 10.00 | 23.70 | 26.30 | 31.50 | 21.00 |
| Canada* | CAD | 105.15 | 82.28 | Country note | 22.89 | 17.91 | Country note | 131.44 | 102.85 | Country note | 5.0/13.0/14.0/15.0 |
| Chile* | CLP | 46323.00 | 70.80 | 30.00 | 0.00 | - | 52.60 | 0.00 | - | 59.70 | 19.00 |
| Czech Republic | CZK | 1290.00 | 52.45 | 27.00 | 1420.00 | 57.74 | - | 1896.00 | 77.10 | - | 21.00 |
| Denmark* | DKK | 1182.50 | 175.84 | 1.00 | 500.00 | 74.35 | 10.00 | 788.50 | 117.25 | 0.00 | 25.00 |
| Estonia* | EUR | 46.50 | 51.61 | 34.00 | 211.00 | 234.18 | 0.00 | 61.00 | 67.70 | 0.00 | 20.00 |
| Finland* | EUR | 37.50 | 41.62 | 52.00 | 0.00 | 0.00 | 31.00 | 26.00 | 28.86 | 52.00 | 24.00 |
| France | EUR | 48.75 | 54.11 | 49.70 | 19.00 | 21.09 | 23.00 | 67.50 | 74.92 | 32.00 | 20.00 |
| Germany | EUR | 98.20 | 108.99 | 21.69 | 14.00 | 15.54 | 1.47 | 48.49 | 53.82 | 14.76 | 19.00 |
| Greece | EUR | 82.50 | 91.56 | 20.00 | 0.00 | 0.00 | 35.00 | 156.70 | 173.92 | 0.00 | 23.00 |
| Hungary* | HUF | 15700.00 | 56.23 | 25.00 | 0.00 | 0.00 | 14.00 | 14000.00 | 50.14 | 0.00 | 27.00 |
| Iceland* | ISK | 22990.00 | 174.30 | 0.00 | Country note | - | 0.00 | 16450.00 | 124.72 | 0.00 | 24.00 |
| Ireland* | EUR | 271.96 | 301.84 | 9.20 | Country note | - | 0.00 | 291.68 | 323.73 | 0.00 | 23.00 |
| Israel* | ILS | 395.00 | 101.62 | Country note | 0.00 | 0.00 | Country note | 454.03 | 116.81 | 0.00 | 17.00 |
| Italy | EUR | 17.34 | 19.25 | 58.70 | 0.00 | 0.00 | 23.00 | 0.00 | 0.00 | 58.50 | 22.00 |
| Japan* | JPY | 12244.00 | 101.19 | 0.00 | 12244.00 | 101.19 | 0.00 | 12244.00 | 101.19 | 0.00 | 8.00 |
| Korea* | KRW | 145450.00 | 109.25 | 64.64 | Country note | - | 0.00 | 103200.00 | 77.52 | 0.00 | 10.00 |
| Latvia* | EUR | 54.20 | 60.16 | 25.00 | 42.69 | 47.38 | - | 58.00 | 64.37 | - | 21.00 |
| Luxembourg | EUR | 18.39 | 20.41 | 46.65 | 0.00 | 0.00 | 10.00 | 10.00 | 11.10 | 34.30 | 17.00 |
| Mexico* | MXN | 350.00 | 22.05 | 38.77 | Country note | - | Country note | Country note | - | Country note | 16.00 |
| Netherlands | EUR | 178.28 | 197.87 | 1.09 | 0.00 | 0.00 | 5.00 | 78.68 | 87.33 | 4.60 | 21.00 |
| New Zealand* | NZD | Country note | - | 0.00 | Country note | - | 0.00 | 386.14 | 269.27 | 0.00 | 15.00 |
| Norway | NOK | 2500.00 | 310.02 | 0.00 | 2500.00 | 310.02 | 0.00 | 2500.00 | 310.02 | 0.00 | 25.00 |
| Poland* | PLN | 206.76 | 54.84 | 31.41 | 393.00 | 104.24 | - | 141.29 | 37.48 | 31.41 | 23.00 |
| Portugal* | EUR | 90.85 | 100.83 | 17.00 | 0.00 | 0.00 | 25.00 | 78.00 | 86.57 | 20.00 | 23.00 |
| Slovak Republic* | EUR | 59.50 | 66.04 | 23.00 | 71.11 | 78.92 | - | 71.11 | 78.92 | 0.00 | 20.00 |
| Slovenia* | EUR | 68.82 | 76.38 | 21.18 | 0.00 | 0.00 | 6.00 | 40.00 | 44.40 | 35.00 | 22.00 |
| Spain | EUR | 24.10 | 26.75 | 51.00 | 0.00 | 0.00 | 15.80 | 22.00 | 24.42 | 41.50 | 21.00 |
| Sweden | SEK | 1500.00 | 177.96 | 1.00 | 1320.00 | 156.60 | 0.00 | 1833.00 | 217.46 | 0.00 | 25.00 |
| Switzerland* | CHF | 118.32 | 122.99 | 25.00 | 5.60 | 5.82 | 1.00 | 38.00 | 39.50 | 25.00 | 8.00 |
| Turkey* | TRY | 221.00 | 81.16 | 65.25 | 221.00 | 81.16 | 40.00 | 221.00 | 81.16 | 65.25 | 18.00 |
| United Kingdom* | GBP | 189.49 | 289.74 | 16.50 | 236.37 | 361.42 | 0.00 | 185.74 | 284.01 | 0.00 | 20.00 |
| United States* | USD | 135.00 | 135.00 | Country note | Country note | - | - | Country note | - | - | - |

* Country notes: see Box 4.A4.4.

Note: Conversion of national currency in USD: conversion rates are average market rates (2015) published in OECD Monthly Monetary Statistics (stats.oecd.org).

1. RSP. Retail selling price.
2. Cigars. Denmark and Japan tax cigars at a rate per 1000 pieces and not according to weight. In Denmark it is assumed that a cigar weighs 3 grams and in Japan 1 gram.
Source: National delegates and European Commission; position as at 1 January 2016.

## Box 4.A4.4. Country notes

Australia: The excise rate of AUD 0.53096 per stick applies to cigarettes or cigars (in stick form) not exceeding in weight 0.8 grams per stick actual tobacco content. Other tobacco products are subject to an excise rate of AUD 663.72 per kilogram of tobacco content.
Austria: The excise duty on cigars is $13 \%$ of RSP, at least EUR 100 for 1000 pieces. Minimum excise duty on rolling tobacco for cigarettes is EUR 80 per kg. The minimum excise duty on cigarettes is $98 \%$ of the total excise duty burden on cigarettes falling under the WAP.
Canada: The excise duty on cigars is CAD 22.88559 per 1000 cigars plus an additional excise duty based on the greater of CAN 0.08226 per cigar and $82 \%$ of the sale price. Each Province and Territory also levies a tobacco tax at varying rates on all tobacco products. Retail sales prices are then subject to GST/HST and, in some cases, when the HST is not applicable, to a provincial sales tax.
Chile: The sale of tobacco products is subject to $19 \%$ VAT and to a tax on the sale or import of processed tobacco, cigarettes and cigars. The tax applied to processed tobacco is of $59.7 \%$ on the sales' price. Cigarettes are taxed at a rate of $30 \%$ over the pack` sales price and with an additional rate of 0.0010304240 of a Monthly Tax Unit per cigarette contained in the pack (a Monthly Tax Unit equals approximately CLP 44955 or USD 68.71). Cigars are taxed at a rate of $52.6 \%$. The tax base of the excise tax is the sale' price to the final consumer, including VAT and the tax levied on tobacco, cigarettes and cigars.
Denmark: The excise tax for other smoking tobaccos is DKK $738.5 / 1000 \mathrm{~g}$. for coarse-cut tobacco
Estonia: For cigarettes, the minimal excise amount to be paid is EUR 90 per 1000 items (cigarettes)
Finland: Cigarette paper: excise $60 \%$ of RSP. Other smoking tobacco: EUR $28.75 / \mathrm{kg}$ and $48 \%$ of RSP. Minimum excise tax is 188.50 per 1000 pieces for cigarettes and EUR $114.50 / \mathrm{kg}$ for fine cut rolling tobacco for cigarettes. As of 1 July 2016, the excise tax on cigarettes is EUR 41.50 per 1000 cigarettes and $52 \%$ of RSP. Minimum excise tax is EUR 200 per 1000 cigarettes. For cigars excise tax is $32 \%$ of RSP. For fine cut rolling tobacco for cigarettes EUR $28.50 / \mathrm{kg}$ and $52 \%$ of RSP. Minimum excise tax for fine cut rolling tobacco is EUR $121.50 / \mathrm{kg}$. Other smoking tobacco: EUR $33.00 / \mathrm{kg}$ and $48 \%$ of RSP.
Hungary: Minimum excise tax is HUF 28000 per 1000 pieces for cigarettes, HUF 4000 per 1000 pieces for cigar and cigarillo. VAT as $\%$ of tax included retail selling price is $21.26 \%$.
Iceland: There is no specific excise rate for a piece of cigar. The rate is ISK 16450 per 1000 grams of cigars (i.e. the same rate as for rolling tobacco).

Ireland: The rate of excise duty on cigarettes in Ireland is EUR 271.96 per 1000 cigarettes together with an amount equal to $9.20 \%$ of the price at which the cigarettes are sold by retail or EUR 307.61 per 1000 cigarettes, whichever is the greater. The rate of excise duty on cigars is EUR 315.359 per kilogram. The rate of excise duty on fine-cut tobacco for the rolling of cigarettes is EUR 291.683 per kilogram. Other smoking tobacco is subject to excise duty at a rate of EUR 218.783 per kilogram.
Israel: Excises on value for cigarettes and for cigars are $270 \%$ and $90 \%$ of the wholesale price, respectively. The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
Japan: The tax consists of a national element, a prefectural element and a municipal element.
Korea: The excise tax on cigars is KRW 294800/1000g. National tax (Individual Consumption Tax) levies on tobacco since 2015.
Latvia: Starting from 1 July 2016 the specific excise is EUR 56.20 per 1000 cigarettes and $25 \%$ of RSP. Minimum excise EUR 93.70 per 1000 cigarettes.

## Box 4.A4.4. Country notes (cont.)

Mexico: An ad-valorem rate of $160 \%$ on the producer or importer price applies for all categories. A reduced rate of $30.4 \%$ applies for cigars or rolling tobacco as long as these products are fully handmade. The ad-valorem tax applies at the stage of the producer or importer but on the retail price. In addition a charge of MXN 0.35 should be paid for each sold or imported cigarette. This charge also applies for cigars and other tobacco (MXN 0.35 per each 0.75 grams), with the exemption of those that are fully handmade.

New Zealand: The excise rate for 1000 cigarettes with actual tobacco content not exceeding in weight of 0.8 kg is NZD 545.39. The excise rate for Cigarettes exceeding 0.8 kg in actual tobacco content per 1000 cigarettes is NZD 777.18 The excise rate per kilo of tobacco content for other tobacco products, such as snuff, cigars, cheroots and cigarillos is NZD 681.72.
Poland: Since 1 January 2015 the excise duty rate for cigars is calculated on per kilogramme basis.
Portugal: Rates applicable since 31 March 2016. Excise tax on cigarettes is reduced to (1) EUR 18.50 and $41 \%$ for cigarettes sold in Azores Islands and made by small producers from the Azores and Madeira Islands; (2) 78.37 and $20 \%$ for cigarettes sold in Madeira Island and made by small producers from the Azores and Madeira Islands.
Slovak Republic: Tax on rolling tobacco for cigarettes includes other smoking tobacco. The excise for cigars is EUR 71.11/kg.

Slovenia: Minimum excise duty is EUR 106 per 1000 cigarettes. Minimum excise duty is EUR 88 per kilo of rolling tobacco for cigarettes. Minimum excise duty for cigars is EUR 40 per kilo.

Switzerland: If the Retail Selling Price for 1000 cigarettes is CHF 375.00 or less, minimum excise duty (specific + on value) yields CHF 212.10 for 1000 pieces. Specific excise per 1000 grams of rolling tobacco for cigarettes: the minimum excise duty (specific + on value) yields CHF 80.00 per 1000 grams.

Turkey: Minimum tax amount per 1000 cigarettes is TL 221.00. Specific tax amount is 0.2468 for 1 pack of cigarettes. Tax on cigarettes and other tobacco products computed according to the tax rate cannot be less than the minimum tax amount. After calculating the tax according to minimum tax amount system, specific tax amount is added to the tax for 1 pack of cigarettes.
United Kingdom: Specific excise rate for cigars is given per kilogramme and not for 1000 units. Specific rates exist for "other smoking tobacco" and "other chewing tobacco" which are currently both set at GBP 84.98 per kilo.

United States: State taxes vary widely. The weighted average of Federal and State taxes per thousand cigarettes is USD 135.00. Federal specific excise tax rates on tobacco are: USD 50.33 per thousand for small cigarettes (no more than 3 pounds per thousand); USD 105.69 per thousand for large cigarettes; USD 50.33 per thousand for small cigars weighing no more than 3 pounds per thousand; $52.75 \%$ of the manufacturers price but not more than USD 402.60 per thousand for large cigars; and USD 24.78 per pound ( 54.63 per kg) for roll-your-own tobacco. Some states also tax on an ad valorem basis.

Table 4.A4.5. Tax burden as a share of total price for cigarettes ${ }^{1}$

|  | $\begin{gathered} \text { Ex-tax price } \\ (\text { USD })^{2} \end{gathered}$ | Specific excise \% RSP ${ }^{3}$ | Excise on value \% RSP ${ }^{4}$ | VAT/GST/RST \% RSP ${ }^{5}$ | Total tax share \% RSP | Price of a 20 cigarettes pack ${ }^{6}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Currency | Price (RSP in local currency) | Price (RSP in USD) |
| Australia | 5.54 | 47.67 | 0.00 | 9.09 | 56.76 | AUD | 17.05 | 12.81 |
| Austria | 1.08 | 20.79 | 40.00 | 16.67 | 77.46 | EUR | 4.33 | 4.81 |
| Belgium | 1.38 | 13.90 | 45.84 | 17.36 | 77.10 | EUR | 5.52 | 6.00 |
| Canada* | 2.19 | 60.93 | 0.00 | 9.05 | 69.80 | CAD | 9.25 | 7.24 |
| Chile | 0.65 | 36.76 | 30.00 | 15.97 | 82.73 | CLP | 2458.00 | 3.76 |
| Czech Republic | 0.76 | 32.20 | 27.00 | 17.36 | 76.56 | CZK | 80.14 | 3.26 |
| Denmark | 1.28 | 57.89 | 1.00 | 20.00 | 78.89 | DKK | 40.80 | 6.07 |
| Estonia | 0.65 | 30.29 | 34.00 | 16.67 | 80.96 | EUR | 3.07 | 3.41 |
| Finland | 1.06 | 11.80 | 52.00 | 19.35 | 83.15 | EUR | 5.68 | 6.30 |
| France | 1.44 | 14.40 | 49.70 | 16.67 | 80.81 | EUR | 6.75 | 7.49 |
| Germany | 1.51 | 36.78 | 21.69 | 15.97 | 74.44 | EUR | 5.34 | 5.93 |
| Greece | 0.69 | 44.50 | 20.00 | 18.70 | 83.20 | EUR | 3.70 | 4.11 |
| Hungary | 0.91 | 29.67 | 25.00 | 21.26 | 75.93 | HUF | 1058.00 | 3.79 |
| Iceland | 3.91 | 37.54 | 0.00 | 19.35 | 56.89 | ISK | 1195.00 | 9.06 |
| Ireland | 1.39 | 58.61 | 9.20 | 18.70 | 86.51 | EUR | 9.28 | 10.30 |
| Israel* | 1.71 | 25.08 | 39.27 | 14.53 | 78.87 | ILS | 31.50 | 8.10 |
| Italy | 1.17 | 7.67 | 51.03 | 18.03 | 76.73 | EUR | 4.52 | 5.02 |
| Japan | 1.27 | 56.95 | 0.00 | 7.41 | 64.36 | JPY | 430.00 | 3.55 |
| Korea | 0.89 | 64.65 | 0.00 | 9.09 | 73.74 | KRW | 4500.00 | 3.38 |
| Latvia | 0.61 | 37.95 | 25.00 | 17.36 | 80.30 | EUR | 2.79 | 3.10 |
| Luxembourg | 1.84 | 18.39 | 46.65 | 17.00 | 68.20 | EUR | 5.20 | 5.77 |
| Mexico | 0.98 | 14.76 | 38.77 | 13.79 | 67.33 | MXN | 47.42 | 2.99 |
| Netherlands | 1.42 | 60.06 | 1.09 | 17.36 | 78.51 | EUR | 5.94 | 6.59 |
| New Zealand* | 2.69 | 64.29 | 0.00 | 13.04 | 77.34 | NZD | 17.00 | 11.85 |
| Norway | 3.90 | 48.80 | 0.00 | 20.40 | 69.20 | NOK | 102.00 | 12.65 |
| Poland | 0.66 | 31.13 | 31.41 | 18.70 | 81.24 | PLN | 13.30 | 3.53 |
| Portugal | 1.06 | 42.15 | 17.00 | 18.70 | 77.85 | EUR | 4.31 | 4.78 |
| Slovak Republic | 0.72 | 59.50 | 23.00 | 16.67 | 79.30 | EUR | 3.12 | 3.46 |
| Slovenia | 0.84 | 39.22 | 21.18 | 18.03 | 78.43 | EUR | 3.51 | 3.90 |
| Spain | 1.04 | 10.86 | 51.00 | 16.96 | 78.82 | EUR | 4.44 | 4.93 |
| Sweden | 1.29 | 57.38 | 1.00 | 20.00 | 79.31 | SEK | 52.63 | 6.24 |
| Switzerland | 3.51 | 27.84 | 25.00 | 7.41 | 60.25 | CHF | 8.50 | 8.84 |
| Turkey | 0.73 | 12.34 | 65.25 | 15.25 | 82.62 | TRY | 11.50 | 4.22 |
| United Kingdom | 1.81 | 50.94 | 16.50 | 16.67 | 84.10 | GBP | 7.44 | 11.38 |
| United States* | 3.58 | 37.38 | 0.00 | 5.16 | 42.54 | USD | 6.23 | 6.23 |

* Canada and the United States, national average estimates calculated for prices and taxes reflect the fact that different rates are applied by state/province over and above the applicable federal tax. For Canada, the weighted rate is as it was on 1 January 2016. The VAT rate will increase in three Canadian provinces during 2016.
* Israel: The statistical data are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
* New Zealand: the share of specific excise includes the customs duties of 0.13\%.

1. The share of taxes are presented as a \% of Retail Selling Price (RSP) for a pack of 20 cigarettes. The RSP is defined as the Weighted Average Price (WAP) i.e. the average consumer price of a tobacco product based on the prices of individual brands and weighted by sales of each brand in the country. Where the WAP is not available, the RSP is defined as the average price of the most sold brand of cigarettes on the market (MSB - see Annex C). This table reflects the situation for the year 2015 since it is based on annual average prices and taxes that are not available for 2016 at the time of this publication.
2. The pre-tax price includes the producer and distributor margins. It is estimated by the deduction of the the total tax share from the RSP.
3. Specific excise: a specific excise tax is a tax on a specific good produced or imported in a country charged as a fixed amout per unit of the product. The amount shown in this table is as a percentage of RSP.
4. Excise on value: an excise on value or ad valorem is a tax on a product produced or imported in a country charged as a percentage of the value of a transaction. Example: 50\% of the RSP.
5. VAT/GST: Value added tax or Goods and services tax (see Chapter 1). RST: Retail sales taxes for Canada (in some provinces) and the United States. The amount is shown as a percentage of RSP.
6. Price of a 20 cigarettes pack of cigarettes on the market according to the Weighted Average Price (WAP) method when available and the Most Sold Brand (MSB) method when WAP is not available.
Source: National delegates, European Commission and World Health Organisation; 2015.

## Technical note to Table 4.A4.5. Calculation of the total tax burden (TTB)

Total tax burden (TTB) measurement involves the definition of a reference retail price on the market for the product and a methodology to assess the total tax burden in that price. The TTB shown in Table 4.A4.5 is the weighted average selling price (WSP), i.e. the average consumer price of a tobacco product based on the prices of individual brands and weighted by sales of each brand in the country. The WAP is considered more appropriate given the dynamics of the market with several popular brands and regular changes in cigarette prices. It also ensures transparency and a level playing field for manufacturers. The WAP has been adopted by the EU as the reference retail price for measuring the tax burden on tobacco products. However, the WAP is not available in all countries. Where the WAP is not available, the RSP is defined as the average price of the most sold brand of cigarettes on the market (see Annex D).

The TTB calculation in Table 4.A4.5 only includes indirect taxes levied on cigarettes (i.e. excise duties or similar taxes, VAT and import duties), which usually have the most significant impact on the price of tobacco products. Certain other taxes, in particular direct taxes such as corporate taxes, can potentially impact tobacco prices to the extent that producers pass them on to final consumers. However, because of the practical difficulty of obtaining information on these taxes and the complexity in estimating their potential impact on price in a consistent manner across countries, they are not considered. The import duty is only used in the calculation of tax shares if the most sold brand of cigarettes was imported into the country.

Table 4.A4.6. Taxation of premium unleaded (94-96 RON) gasoline (per litre), $2015^{1}$

| Country | Currency | Ex-tax price ${ }^{2}$ | Ex-tax price ${ }^{2}$ | Excise ${ }^{3}$ |  | VAT rate ${ }^{4}$ | VAT amount | Total tax | Total price | Total tax as \% of total price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | National currency | USD | National currency | USD | \% | USD | USD | USD |  |
| Australia | AUD | 0.851 | 0.639 | 0.392 | 0.295 | 10.00 | 0.093 | 0.388 | 1.027 | 37.8 |
| Austria* | EUR | 0.450 | 0.499 | 0.482 | 0.535 | 20.00 | 0.207 | 0.742 | 1.241 | 59.8 |
| Belgium | EUR | 0.603 | 0.658 | 0.619 | 0.687 | 21.00 | 0.285 | 0.972 | 1.641 | 59.2 |
| Canada* | CAD | 0.755 | 0.591 | 0.338 | 0.264 | 9.05 | 0.077 | 0.342 | 0.933 | 36.7 |
| Chile* | CLP | 374.30 | 0.572 | 317.00 | 0.484 | 19.00 | 0.170 | 0.654 | 1.227 | 53.4 |
| Czech Republic | CZK | 11.730 | 0.477 | 12.840 | 0.522 | 21.00 | 0.210 | 0.732 | 1.209 | 60.5 |
| Denmark* | DKK | 3.852 | 0.673 | 4.137 | 0.615 | 25.00 | 0.297 | 0.912 | 1.485 | 61.4 |
| Estonia | EUR | 0.448 | 0.497 | 0.423 | 0.469 | 20.00 | 0.193 | 0.663 | 1.160 | 57.1 |
| Finland* | EUR | 0.451 | 0.501 | 0.681 | 0.756 | 24.00 | 0.302 | 1.057 | 1.558 | 67.9 |
| France* | EUR | 0.439 | 0.487 | 0.624 | 0.693 | 20.00 | 0.236 | 0.929 | 1.416 | 65.6 |
| Germany* | EUR | 0.461 | 0.512 | 0.655 | 0.727 | 19.00 | 0.235 | 0.962 | 1.474 | 65.3 |
| Greece | EUR | 0.463 | 0.514 | 0.670 | 0.744 | 23.00 | 0.289 | 1.033 | 1.547 | 66.8 |
| Hungary | HUF | 142.580 | 0.511 | 120.000 | 0.430 | 27.00 | 0.254 | 0.684 | 1.194 | 57.2 |
| Iceland* | ISK | 92.090 | 0.698 | 69.860 | 0.530 | 24.00 | 0.295 | 0.824 | 1.523 | 54.1 |
| Ireland | EUR | 0.471 | 0.523 | 0.588 | 0.653 | 23.00 | 0.270 | 0.923 | 1.446 | 63.8 |
| Israel* | ILS | 2.080 | 0.535 | 3.056 | 0.786 | 17.00 | 0.224 | 1.010 | 1.545 | 65.4 |
| Italy | EUR | 0.469 | 0.521 | 0.728 | 0.808 | 22.00 | 0.292 | 1.100 | 1.621 | 67.9 |
| Japan* | JPY | 64.800 | 0.536 | 56.300 | 0.465 | 8.00 | 0.080 | 0.545 | 1.081 | 50.5 |
| Korea | KRW | 881.000 | 0.779 | 781.890 | 0.691 | 10.00 | 0.147 | 0.838 | 1.617 | 51.8 |
| Latvia | EUR | 0.448 | 0.498 | 0.411 | 0.457 | 21.00 | 0.200 | 0.657 | 1.155 | 56.9 |
| Luxembourg* | EUR | 0.453 | 0.503 | 0.462 | 0.513 | 17.00 | 0.173 | 0.685 | 1.188 | 57.7 |
| Mexico* | MXN | 12.158 | 0.766 | 0.000 | 0.000 | 16.00 | 0.123 | 0.123 | 0.888 | 13.8 |
| Netherlands | EUR | 0.458 | 0.508 | 0.744 | 0.859 | 21.00 | 0.287 | 1.146 | 1.655 | 69.3 |
| New Zealand* | NZD | 1.054 | 0.735 | 0.671 | 0.468 | 15.00 | 0.180 | 0.648 | 1.383 | 46.9 |
| Norway* | NOK | 4.940 | 0.613 | 5.820 | 0.722 | 25.00 | 0.334 | 1.055 | 1.668 | 63.3 |
| Poland* | PLN | 1.883 | 0.499 | 1.669 | 0.443 | 23.00 | 0.217 | 0.659 | 1.159 | 56.9 |
| Portugal | EUR | 0.491 | 0.545 | 0.618 | 0.686 | 23.00 | 0.283 | 0.969 | 1.514 | 64.0 |
| Slovak Republic* | EUR | 0.514 | 0.570 | 0.515 | 0.572 | 20.00 | 0.228 | 0.800 | 1.370 | 58.4 |
| Slovenia* | EUR | 0.432 | 0.479 | 0.545 | 0.605 | 22.00 | 0.239 | 0.843 | 1.323 | 63.8 |
| Spain* | EUR | 0.496 | 0.550 | 0.462 | 0.513 | 21.00 | 0.223 | 0.736 | 1.287 | 57.2 |
| Sweden* | SEK | 4.384 | 0.520 | 5.575 | 0.661 | 25.00 | 0.295 | 0.957 | 1.477 | 64.8 |
| Switzerland* | CHF | 0.596 | 0.620 | 0.735 | 0.764 | 8.00 | 0.111 | 0.875 | 1.494 | 58.5 |
| Turkey | TRY | 1.510 | 0.555 | 2.177 | 0.799 | 18.00 | 0.244 | 1.043 | 1.598 | 65.3 |
| United Kingdom | GBP | 0.309 | 0.472 | 0.580 | 0.887 | 20.00 | 0.272 | 1.159 | 1.631 | 71.0 |
| United States* | USD | 0.492 | 0.492 | 0.143 | 0.143 | - | - | 0.143 | 0.635 | 22.5 |

* Country notes: see Box 4.A4.6.

Note: Conversion of national currency in USD: conversion rates are average market rates (2015) published in OECD Monthly Monetary Statistics (stats.oecd.org). See also Annex A.

1. Prices and taxes as at 4th Quarter 2015 (1st Quarter 2015 for Iceland).
2. Pre-tax price is the price excluding VAT and excise.
3. Excise taxes are expressed in local currency/USD per litre. They include all non-VAT taxes levied on the product. For the purposes of this table, payments made to specific bodies that use all the amounts collected to accomplish specific missions (e.g. some emergency stock fees) are not considered as "taxes" and are included in the ex-tax price. When different rates apply to the same product depending e.g. on its biofuel or sulphur content, the rate shown is the one applicable to the most commonly used fuel in the country.
4. GST for Australia and New Zealand, sales taxes for the United States and Consumption Tax for Japan. GST/HST and provincial sales taxes for Canada. VAT for all other countries.
Source: International Energy Agency, Energy Prices and Taxes and European Commission Excise Duty Tables Part II.
StatLink ज्ता sta http://dx.doi.org/10.1787/888933420162

## Box 4.A4.6. Country notes

Austria: the excise amount of EUR $0.482 / \mathrm{l}$ applies to unleaded gasoline with minimum $4.6 \%$ biofuel content and sulphur content $\leq 10 \mathrm{mg} / \mathrm{kg}$. Otherwise the excise duty is EUR 0.515/l.
Canada: excise rates include federal and provincial/urban taxes (the federal rate is CAD 0.1 per litre). The federal GST rate is $5 \%$. The weighted VAT rate including provincial VAT rates was $10.46 \%$ on 1 January 2016 and the weighted VAT/sales tax rate was $9.05 \%$ The VAT rate will increase in three Canadian provinces during 2016.

Chile: the Fuel Price Stabilisation Mechanism (Mecanismo de Estabilización de Precios de los Combustibles, "MEPCO") introduced in July 2014 is the variable component of the excise, and acts weekly either as a tax or a tax credit to stabilise consumer price compared to international market price variations.
Denmark: the excise amount is for fuel with a minimum amount of $4.8 \%$ of biofuels. It includes the Excise Tax, the Environment Tax and the $\mathrm{NO}_{\mathrm{x}}$ Tax.

Finland: the excise amount for premium unleaded gasoline includes taxes of energy and $\mathrm{CO}_{2}$ components and strategic stockpile fee.
France: a rate is determined for each region ranging from EUR 0.6064/l up to EUR 0.6241. An additional tax of max. EUR $0.073 / 1$ can be applied by region councils or in Corse to finance sustainable, railway or river navigation substructure.
Germany: the excise amount is for unleaded gasoline with sulphur content $\leq 10 \mathrm{mg} / \mathrm{kg}$. Otherwise the excise amount is EUR 0.6698/l.
Iceland: since this country is not member of the IEA or the EU, data is taken from European Automobile Manufacturers Association.
Israel: the statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
Japan: the excise amount is given for regular unleaded (91RON) instead of premium unleaded. This amount includes the Gasoline Tax and the Road Tax.
Luxembourg: the excise amount is for unleaded gasoline with sulphur content $\leq 10 \mathrm{mg} / \mathrm{kg}$. Otherwise the excise amount is EUR 0.464/l.
Mexico: there are no excise duties on volume. A tax (Impuesto Especial de Productos y Servicios) is charged as a percentage of the value of the product at wholesale level. It is included in the ex-tax price.
Netherlands: the amount of EUR $0.774 / \mathrm{l}$ excise includes the excise tax of $0.766 / l$ and the stockpiling tax of 0.008/l.
New Zealand: the excise amount includes the National land transport fund tax, the Petroleum engine monitoring levy and the Local authority tax.

Norway: the excise amount includes the Excise tax and the $\mathrm{CO}_{2}$ tax.
Poland: the excise amount includes the Excise tax and the fuel charge.
Slovak Republic: the excise amount is EUR $0.55052 / l$ for gasoline with biofuel content lower than the minimum.

Slovenia: the excise amount includes the $\mathrm{CO}_{2}$ tax of EUR 41.47/1000l.
Spain: the excise amount of EUR $0.462 / \mathrm{l}$ includes the Excise tax (EUR $0.424 / \mathrm{l}$ ) and the average Regional authorities tax (EUR 0.038/l).

Sweden: the actual excise amount is EUR 5.850/l (EUR 2.60 Gasoline tax $+3.25 \mathrm{CO}_{2}$ tax). However, the amount shown in the table is $95 \%$ of this amount to account for the tax-exempt E85 content (5\%) of gasoline.

Switzerland: the excise amount includes the Emergency fund tax, the Excise tax and the surcharge for $\mathrm{CO}_{2}$ emissions.

United States: average federal and state taxes - there is no VAT
European Union: Directive 93/2006/EC sets minimal excise rates for energy products and electricity.

Table 4.A4.7. Taxation of automotive diesel (per litre), $2015^{1}$

| Country | Currency | Ex-tax price ${ }^{2}$ | Ex-tax price ${ }^{2}$ | Excise ${ }^{3}$ |  | VAT rate ${ }^{4}$ | VAT amount | Total tax | Total price | Total tax as \% of total price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | National currency | USD | National currency | USD | \% | USD | USD | USD |  |
| Australia | AUD | 0.749 | 0.563 | 0.392 | 0.295 | 10.00 | 0.086 | 0.380 | 0.943 | 40.3 |
| Austria* | EUR | 0.476 | 0.528 | 0.397 | 0.441 | 20.00 | 0.194 | 0.634 | 1.163 | 54.6 |
| Belgium | EUR | 0.516 | 0.573 | 0.480 | 0.533 | 21.00 | 0.232 | 0.765 | 1.338 | 57.2 |
| Canada* | CAD | 0.724 | 0.567 | 0.265 | 0.207 | 9.05 | 0.070 | 0.277 | 0.844 | 32.9 |
| Chile* | CLP | 342.500 | 0.523 | 802.000 | 1.226 | 19.00 | 0.332 | 1.558 | 2.081 | 74.9 |
| Czech Republic | CZK | 13.300 | 0.541 | 10.950 | 0.445 | 21.00 | 0.207 | 0.652 | 1.193 | 54.7 |
| Denmark | DKK | 3.857 | 0.574 | 2.997 | 0.446 | 25.00 | 0.255 | 0.700 | 1.274 | 55.0 |
| Estonia | EUR | 0.467 | 0.518 | 0.393 | 0.436 | 20.00 | 0.191 | 0.627 | 1.145 | 54.7 |
| Finland* | EUR | 0.494 | 0.548 | 0.506 | 0.562 | 24.00 | 0.266 | 0.828 | 1.376 | 60.2 |
| France* | EUR | 0.420 | 0.466 | 0.468 | 0.519 | 20.00 | 0.197 | 0.717 | 1.183 | 60.6 |
| Germany* | EUR | 0.547 | 0.607 | 0.470 | 0.522 | 19.00 | 0.214 | 0.736 | 1.343 | 54.8 |
| Greece | EUR | 0.563 | 0.625 | 0.330 | 0.366 | 23.00 | 0.228 | 0.594 | 1.219 | 48.7 |
| Hungary* | HUF | 155.070 | 0.555 | 110.350 | 0.395 | 27.00 | 0.257 | 0.652 | 1.207 | 54.0 |
| Iceland* | ISK | 102.450 | 0.777 | 61.840 | 0.469 | 24.00 | 0.299 | 0.768 | 1.545 | 49.7 |
| Ireland | EUR | 0.496 | 0.550 | 0.479 | 0.532 | 23.00 | 0.249 | 0.781 | 1.331 | 58.6 |
| Israel* | ILS | 2.262 | 0.582 | 2.928 | 0.753 | 17.00 | 0.227 | 0.980 | 1.562 | 62.7 |
| Italy | EUR | 0.475 | 0.527 | 0.617 | 0.685 | 22.00 | 0.267 | 0.951 | 1.479 | 64.3 |
| Japan | JPY | 70.000 | 0.579 | 34.600 | 0.286 | 8.00 | 0.069 | 0.355 | 0.934 | 38.0 |
| Korea | KRW | 591.820 | 0.523 | 528.750 | 0.467 | 10.00 | 0.099 | 0.566 | 1.090 | 52.0 |
| Latvia | EUR | 0.444 | 0.493 | 0.333 | 0.370 | 21.00 | 0.181 | 0.551 | 1.045 | 52.8 |
| Luxembourg* | EUR | 0.429 | 0.476 | 0.335 | 0.372 | 17.00 | 0.144 | 0.516 | 0.992 | 52.0 |
| Mexico* | MXN | 10.541 | 0.664 | 0.000 | 0.000 | 16.00 | 0.106 | 0.106 | 0.770 | 13.8 |
| Netherlands | EUR | 0.476 | 0.528 | 0.490 | 0.544 | 21.00 | 0.225 | 0.769 | 1.297 | 59.3 |
| New Zealand | NZD | 0.937 | 0.653 | 0.004 | 0.003 | 15.00 | 0.098 | 0.101 | 0.755 | 13.4 |
| Norway | NOK | 5.090 | 0.631 | 4.450 | 0.552 | 25.00 | 0.296 | 0.848 | 1.479 | 57.3 |
| Poland* | PLN | 2.002 | 0.531 | 1.459 | 0.387 | 23.00 | 0.211 | 0.598 | 1.129 | 53.0 |
| Portugal* | EUR | 0.518 | 0.575 | 0.402 | 0.446 | 23.00 | 0.235 | 0.681 | 1.256 | 54.2 |
| Slovak Republic* | EUR | 0.532 | 0.590 | 0.368 | 0.408 | 20.00 | 0.200 | 0.608 | 1.199 | 50.7 |
| Slovenia* | EUR | 0.428 | 0.475 | 0.462 | 0.513 | 22.00 | 0.217 | 0.730 | 1.205 | 60.6 |
| Spain* | EUR | 0.494 | 0.548 | 0.368 | 0.408 | 21.00 | 0.201 | 0.609 | 1.158 | 52.6 |
| Sweden* | SEK | 5.266 | 0.625 | 5.051 | 0.599 | 25.00 | 0.306 | 0.905 | 1.530 | 59.2 |
| Switzerland* | CHF | 0.632 | 0.657 | 0.763 | 0.793 | 8.00 | 0.116 | 0.909 | 1.566 | 58.1 |
| Turkey | TRY | 1.510 | 0.555 | 1.595 | 0.586 | 18.00 | 0.205 | 0.791 | 1.346 | 58.8 |
| United Kingdom | GBP | 0.333 | 0.509 | 0.580 | 0.887 | 20.00 | 0.279 | 1.166 | 1.675 | 69.6 |
| United States* | USD | 0.494 | 0.494 | 0.150 | 0.150 | - | - | 0.150 | 0.644 | 23.3 |

${ }^{*}$ See country notes in Box 4.A4.7.
Note: Conversion of national currency in USD: conversion rates are average market rates (2015) published in OECD Monthly Monetary Statistics (stats.oecd.org). See Annex A.

1. Prices and taxes as at 4th Quarter 2015.
2. Pre-tax price is the price excluding VAT and excise
3. Excise taxes are expressed in local currency/USD per litre. They include all non-VAT taxes levied on the product. For the purposes of this table, payments made to specific bodies that use all the amounts collected to accomplish specific missions (e.g. some emergency stock fees) are not considered as "taxes" and are included in the ex-tax price. When different rates apply to the same product depending e.g. on its biofuel or sulphur content, the rate shown is the one applicable to the most commonly used fuel in the country.
4. GST for Australia and New Zealand, sales taxes for the United States and Consumption Tax for Japan. GST/HST and provincial sales taxes for Canada. VAT for all other countries.
Source: International Energy Agency, Energy Prices and Taxes and European Commission Excise Duty Tables Part II.


## Box 4.A4.7. Country notes

Austria: The excise amount of EUR $0.397 / l$ applies to automotive diesel with minimum $6.6 \%$ of biofuel and sulphur content $\leq 10 \mathrm{mg} / \mathrm{kg}$ ). Otherwise the excise amount is EUR $0.425 / \mathrm{l}$.

Canada: Excise rates include federal and provincial/urban taxes (the federal rate is CAD 0.04 per litre). The federal GST rate is $5 \%$. The weighted VAT rate including provincial VAT rates was $10.46 \%$ on 1 January 2016 and the weighted VAT/sales tax rate was $9.05 \%$ The VAT rate will increase in three Canadian provinces during 2016.

Chile: The Fuel Price Stabilisation Mechanism (Mecanismo de Estabilización de Precios de los Combustibles, "MEPCO") introduced in July 2014 is the variable component of the excise, and acts weekly either as a tax or a tax credit to stabilise consumer price compared to international market price variations.
Finland: The excise amount of EUR $0.506 / 1$ includes the Excise tax for sulphur content (for automotive diesel with low sulphur content $<0.001 \%$ ), the Energy $/ \mathrm{CO}_{2}$ tax and the Precautionary stock fee.
France: A rate is determined for each region ranging from EUR 0.6064/l up to EUR 0.6241. An additional tax of max. EUR 0.073/l can be applied by region councils or in Corse to finance sustainable, railway or river navigation substructure.

Germany: The excise amount is for diesel with sulphur content $\leq 10 \mathrm{mg} / \mathrm{kg}$.
Iceland: Since this country is not member of the IEA or the EU, data is taken from European Automobile Manufacturers Association.
Israel: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
Luxembourg: The excise amount is for diesel with sulphur content $\leq 10 \mathrm{mg} / \mathrm{kg}$. Otherwise the excise amount is EUR 0.338/l.

Mexico: Excise taxes on gasoline and diesel in 2015 had three components: (1) the excise-carbon tax, set proportionally to the carbon content of the fuel and implemented through a fixed amount per litre, whose main purpose is to send a carbon price signal to contribute to Climate Change commitments; (2) the excise tax specifically earmarked as transfers to the State's governments, proportional to their consumption, also implemented as a fixed amount per liter; and (3) the main excise tax, which, changed each month in value according to a set of criteria which essentially subtracted from the fuel's controlled price the cost of importing or producing fuel, plus the costs of distribution, logistics, related items, and the retail profit for gas station owners. This general excise tax could even become a negative tax (a subsidy) if domestic prices for fuel were low and international reference prices were high, and this was the case for the first 3 years of the decade. The 2016 excise tax reforms changed completely this latter component. Now, the general excise tax on gasoline and diesel is also a fixed quota tax per liter. During the transition period before full price liberalisation of fuels in 2018, the fixed quota of the excise tax will have a complementary quota component (positive or negative) to ensure that the final fuel prices do not vary outside a price band of $+/-3 \%$ of the price they had in 2015. This complementary quota can never become equal in size to the excise tax, so general fossil fuel subsidies would be precluded from happening again.
Netherlands: The amount of EUR $0.490 / \mathrm{l}$ excise includes the excise tax of $0.482 / \mathrm{l}$ and the stockpiling tax of 0.008/l.

Poland: the excise amount includes the Excise tax and the fuel charge.
Portugal: Automotive diesel used for agriculture is taxed at a lower VAT rate of $13 \%$.
Slovak Republic: The excise amount is EUR $0.386 / 1$ for diesel with biofuel content lower than minimum of $6.8 \%$.

Slovenia: The excise amount includes the $\mathrm{CO}_{2}$ tax of EUR 44.93/10001.

## Box 4.A4.7. Country notes (cont.)

Spain: The excise amount of EUR $0.368 / \mathrm{l}$ includes the Excise tax (EUR 0.331/l) and the average Regional authorities tax (EUR 0.037/l).
Sweden: The tax amount of SEK 5.051/l relates to Class 1 automotive diesel (aromatic content < 5\% vol.; max sulphur content of 10 wppm. Higher taxes apply to Class 2 (SEK 5.331/l) and Class 3 (SEK 5.477/l) diesel.
Switzerland: The tax amount of CHF 0.763 includes the Excise tax and the Emergency fund tax.
United States: Average federal and state taxes - there is no VAT.
European Union: Directive 93/2006/EC sets minimal excise rates for energy products and electricity.

Table 4.A4.8. Taxation of light fuel oil for households (per litre), $\mathbf{2 0 1 5}^{1}$

| Country | Currency | Ex-tax price ${ }^{2}$ | Ex-tax price ${ }^{2}$ | Excise ${ }^{3}$ |  | VAT rate ${ }^{4}$ | VAT amount | Total tax | Total price | Total tax as \% of total price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | National currency | USD | National currency | USD | \% | USD | USD | USD |  |
| Australia* | AUD | See note |  |  |  | 10.00 |  |  |  |  |
| Austria* | EUR | 0.438 | 0.486 | 0.098 | 0.109 | 20.00 | 0.119 | 0.228 | 0.714 | 31.9 |
| Belgium | EUR | 0.389 | 0.432 | 0.019 | 0.021 | 21.00 | 0.095 | 0.116 | 0.548 | 21.1 |
| Canada* | CAD | 0.892 | 0.698 | 0.052 | 0.041 | 9.05 | 0.067 | 0.108 | 0.805 | 13.4 |
| Chile* | CLP | 493.030 | 0.753 | 0.239 | 0.000 | 19.00 | 0.143 | 0.144 | 0.897 | 16.0 |
| Czech Republic* | CZK | 11.762 | 0.478 | 10.950 | 0.445 | 21.00 | 0.194 | 0.639 | 1.117 | 57.2 |
| Denmark* | DKK | 4.600 | 0.684 | 2.667 | 0.397 | 25.00 | 0.270 | 0.667 | 1.351 | 49.4 |
| Estonia | EUR | 0.499 | 0.554 | 0.111 | 0.123 | 20.00 | 0.135 | 0.259 | 0.812 | 31.8 |
| Finland* | EUR | 0.434 | 0.481 | 0.187 | 0.208 | 24.00 | 0.165 | 0.373 | 0.855 | 43.7 |
| France | EUR | 0.456 | 0.506 | 0.076 | 0.085 | 20.00 | 0.118 | 0.203 | 0.709 | 28.6 |
| Germany* | EUR | 0.389 | 0.432 | 0.061 | 0.068 | 19.00 | 0.095 | 0.163 | 0.595 | 27.4 |
| Greece* | EUR | 0.433 | 0.481 | 0.230 | 0.255 | 23.00 | 0.169 | 0.425 | 0.906 | 46.9 |
| Hungary* | HUF | 103.618 | 0.371 | 110.350 | 0.395 | 27.00 | 0.207 | 0.602 | 0.973 | 61.9 |
| Iceland* | ISK | See note |  |  |  | 24.00 |  |  |  |  |
| Ireland* | EUR | 0.427 | 0.474 | 0.102 | 0.114 | 13.50 | 0.079 | 0.193 | 0.666 | 28.9 |
| Israel* | ILS | 2.107 | 0.542 | 2.928 | 0.753 | 17.00 | 0.220 | 0.973 | 1.516 | 64.2 |
| Italy | EUR | 0.514 | 0.570 | 0.403 | 0.447 | 22.00 | 0.224 | 0.671 | 1.242 | 54.1 |
| Japan* | JPY | 67.728 | 0.560 | 2.540 | 0.021 | 8.00 | 0.046 | 0.067 | 0.627 | 10.8 |
| Korea* | KRW | 729.995 | 0.645 | 72.450 | 0.064 | 10.00 | 0.071 | 0.135 | 0.780 | 17.3 |
| Latvia | EUR | 0.471 | 0.523 | 0.057 | 0.063 | 21.00 | 0.123 | 0.187 | 0.710 | 26.3 |
| Luxembourg* | EUR | 0.362 | 0.402 | 0.010 | 0.011 | 14.00 | 0.058 | 0.069 | 0.471 | 14.6 |
| Mexico* | MXN | See note |  |  |  |  |  |  |  |  |
| Netherlands | EUR | 0.184 | 0.204 | 0.490 | 0.544 | 21.00 | 0.157 | 0.701 | 0.905 | 77.4 |
| New Zealand* | NZD | See note |  |  |  |  |  |  |  |  |
| Norway | NOK | 5.908 | 0.733 | 2.490 | 0.309 | 25.00 | 0.260 | 0.569 | 1.302 | 43.7 |
| Poland | PLN | 2.017 | 0.535 | 0.232 | 0.062 | 23.00 | 0.137 | 0.199 | 0.734 | 27.1 |
| Portugal | EUR | 0.463 | 0.514 | 0.343 | 0.380 | 13.00 | 0.116 | 0.497 | 1.011 | 49.1 |
| Slovak Republic* | EUR | See note |  |  |  |  |  |  |  |  |
| Slovenia | EUR | 0.392 | 0.435 | 0.201 | 0.223 | 22.00 | 0.145 | 0.368 | 0.802 | 45.8 |
| Spain* | EUR | 0.316 | 0.350 | 0.088 | 0.097 | 21.00 | 0.094 | 0.191 | 0.541 | 35.3 |
| Sweden* | SEK | See note |  |  |  |  |  |  |  |  |
| Switzerland | CHF | 0.498 | 0.518 | 0.163 | 0.170 | 8.00 | 0.055 | 0.225 | 0.743 | 30.2 |
| Turkey | TRY | 1.240 | 0.455 | 0.237 | 0.087 | 18.00 | 0.098 | 0.185 | 0.640 | 28.9 |
| United Kingdom | GBP | 0.281 | 0.430 | 0.111 | 0.170 | 20.00 | 0.120 | 0.290 | 0.720 | 40.2 |
| United States* | USD | 0.986 | 0.986 | 0.000 | 0.000 | 0.00 | 0.000 | 0.000 | 0.986 | 0.0 |

${ }^{*}$ See country notes in Box 4.A4.8.
Note: Conversion of national currency in USD: conversion rates are average market rates (2015) published in OECD Monthly Monetary Statistics (stats.oecd.org). See also Annex A.

1. Prices and taxes as at 4th quarter 2015.
2. Pre-tax price is the price excluding VAT and excise.
3. Excise taxes are expressed in local currency/USD per litre. They include all non-VAT taxes levied on the product. For the purposes of this table, payments made to specific bodies that use all the amounts collected to accomplish specific missions (e.g. some emergency stock fees) are not considered as "taxes" and are included in the ex-tax price. When different rates apply to the same product depending e.g. on its biofuel or sulphur content, the rate shown is the one applicable to the most commonly used fuel in the country.
4. GST for Australia and New Zealand, sales taxes for the United States and Consumption Tax for Japan. GST/HST and provincial sales taxes for Canada. VAT for all other countries.
Source: International Energy Agency, Energy Prices and Taxes and European Commission Excise Duty Tables Part II.
StatLink .inाst http://dx.doi.org/10.1787/888933420185

## Box 4.A4.8. Country notes

Australia: No data is available.
Austria: Tax amount of EUR $0.098 / \mathrm{l}$ applies to light fuel oil with sulphur content $\leq 10 \mathrm{mg} / \mathrm{kg}$. Otherwise the excise duty is EUR 0.128/l.
Canada: Excise rates include provincial/urban taxes. There is no federal excise tax on diesel fuel used as heating oil in respect of buildings or for the generation of electricity unless the diesel fuel is used in or by a vehicle of any mode of transportation. The federal GST rate is $5 \%$. The weighted VAT rate including provincial VAT rates was $10.46 \%$ on 1 January 2016 and the weighted VAT/sales tax rate was 9.05\% The VAT rate will increase in three Canadian provinces during 2016.

Chile: Domestic Kerosene is covered weekly by the Oil Price Stabilisation Fund (Fondo de Estabilización de Precios del Petróleo, "FEPP") which applies a tax or a fiscal credit, measured in USD per m3. The tax is not included in the VAT base at any stage of the import, production, refining, distribution or sale to the consumer, and the fiscal credit is deductible from the taxable base on the first sale or importation.

Czech Republic: Fuel oil marked in accordance with Directive 95/60/EC is subject to reimbursement of an excise duty amount of CZK 10 290/1000l when it has been duly proved that the fuel oil has been used for heating purposes.

Denmark: The amount of DKK 2.667/l includes the Excise tax of DKK 2.215/l; the Environment tax of DKK 0.451/l and the $\mathrm{NO}_{\mathrm{x}}$ tax of DKK 0.0009/l.

Finland: The excise amount of EUR 0.1874/l includes the Excise tax Energy/ $\mathrm{CO}_{2}$ tax (EUR 0.1839/l) and the Precautionary stock fee (EUR 0.00353/l).

Germany: The excise amount is for properly marked gas oil with a sulphur content $\leq 50 \mathrm{mg} / \mathrm{kg}$.
Greece: The excise of EUR $0.230 / 1$ for heating oil for households applies during the winter season (15 October-15 April). Otherwise the excise is 0.330/l.

Hungary: Market prices are not available in IEA/EU Statistics. Price data is extracted from economic information available on http://countryeconomy.com/energy/prices-gasoline-gas-oil-heating/hungary.
Iceland: No data is available
Ireland: The rate of $0.102 / l i t r e ~ a p p l i e s ~ t o ~ m a r k e d ~ g a s ~ o i l ~(m a r k e d ~ d i e s e l) . ~ M a r k e d ~ k e r o s e n e ~ i s ~ a l s o ~$ widely used for heating (including domestic heating) and the rate for that is EUR 0.05073/litre.
Israel: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
Japan: Kerosene for households.
Korea: Kerosene for households
Luxembourg: A reduced VAT rate of $14 \%$ applies to heating gas oil.
Mexico: No data is available.
Netherlands: The amount of EUR $0.490 / 1$ excise includes the excise tax of $0.482 / 1$ and the stockpiling tax of 0.008/l.
New Zealand: No data is provided because the product is not consumed in significant quantities.
Norway: The amount of NOK 2.49/l includes base tax of NOK $1.59 / 1$ and $\mathrm{CO}_{2}$ tax of NOK 0.90/l.
Slovak Republic: No data is provided because the product is not consumed in significant quantities.

## Box 4.A4.8. Country notes (cont.)

Slovenia: The excise amount represents its average value in the 4th Quarter 2015.
Spain: The excise amount of EUR 0.088/l includes the Excise tax (EUR 0.085/l) and the average Regional authorities' tax (EUR 0.003/l).

Sweden: Price data are not available.
United States: Average federal and state taxes - there is no VAT.
European Union: Directive 93/2006/EC sets minimal excise rates for energy products and electricity.

Table 4.A4.9. Excises (5121) as percentage of total taxation

|  | 1965 | 1975 | 1985 | 1990 | 1995 | 2000 | 2005 | 2010 | 2011 | 2012 | 2013 | 2014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australia | 15.5 | 11.8 | 13.9 | 10.3 | 9.4 | 9.2 | 7.6 | 7.4 | 6.7 | 6.3 | 6.1 | 5.5 |
| Austria | 9.8 | 7.9 | 7.0 | 6.1 | 6.1 | 6.1 | 6.4 | 5.8 | 5.9 | 5.7 | 5.5 | 5.3 |
| Belgium | 8.3 | 6.6 | 4.7 | 4.9 | 5.3 | 5.1 | 5.3 | 5.0 | 4.8 | 4.6 | 4.5 | 4.6 |
| Canada | 9.8 | 6.3 | 7.9 | 5.9 | 5.6 | 4.7 | 4.9 | 4.5 | 4.3 | 4.2 | 4.1 | 4.1 |
| Chile |  |  |  | 9.3 | 7.9 | 10.3 | 7.8 | 7.1 | 6.8 | 6.8 | 7.3 | 7.6 |
| Czech Republic |  |  |  |  | 9.8 | 9.3 | 9.8 | 10.8 | 11.2 | 11.1 | 10.7 | 8.7 |
| Denmark | 26.3 | 13.8 | 12.0 | 10.0 | 10.7 | 11.1 | 10.3 | 9.1 | 9.1 | 9.1 | 9.1 | 8.2 |
| Estonia |  |  |  |  | 7.5 | 9.5 | 12.2 | 12.6 | 13.5 | 13.9 | 13.3 | 13.0 |
| Finland | 13.4 | 11.5 | 12.0 | 9.8 | 9.9 | 9.0 | 8.6 | 8.2 | 8.8 | 8.8 | 8.5 | 8.3 |
| France | 10.8 | 6.5 | 6.2 | 6.2 | 6.7 | 6.2 | 5.7 | 5.4 | 5.4 | 5.3 | 5.4 | 5.4 |
| Germany | 11.1 | 8.8 | 6.8 | 6.9 | 7.1 | 7.5 | 8.4 | 7.0 | 6.9 | 6.5 | 6.3 | 6.1 |
| Greece | 17.3 | 13.6 | 14.4 | 12.0 | 14.4 | 8.9 | 8.2 | 10.0 | 11.1 | 10.4 | 10.6 | 10.6 |
| Hungary |  |  |  |  | 10.0 | 10.4 | 9.7 | 9.2 | 9.4 | 9.3 | 8.7 | 8.4 |
| Iceland | 1.1 | 3.0 | 6.0 | 2.0 | 8.9 | 9.3 | 9.2 | 8.6 | 8.6 | 8.6 | 8.2 | 7.4 |
| Ireland | 39.2 | 26.0 | 19.0 | 17.0 | 15.0 | 13.2 | 10.7 | 10.7 | 10.4 | 9.9 | 9.9 | 9.3 |
| Israel ${ }^{1}$ |  |  |  |  | 3.4 | 3.5 | 4.5 | 5.8 | 5.5 | 5.5 | 5.2 | 5.0 |
| Italy | 14.8 | 10.2 | 5.8 | 7.7 | 7.9 | 6.3 | 5.6 | 5.4 | 6.0 | 6.6 | 6.5 | 6.9 |
| Japan | 17.2 | 11.3 | 10.5 | 6.6 | 7.4 | 7.2 | 6.9 | 6.5 | 6.4 | 6.2 | 6.0 | 5.3 |
| Korea |  | 22.0 | 13.7 | 13.2 | 13.5 | 13.3 | 12.0 | 10.6 | 7.9 | 8.3 | 8.0 | 7.7 |
| Latvia |  |  |  |  | 6.6 | 11.6 | 12.6 | 12.8 | 12.4 | 11.5 | 11.4 | 11.2 |
| Luxembourg | 9.8 | 7.3 | 10.3 | 9.9 | 11.9 | 12.2 | 11.8 | 9.3 | 9.4 | 9.1 | 8.4 | 8.3 |
| Mexico |  |  | 11.4 | 9.9 | 10.9 | 10.3 | 4.6 | 4.6 | 4.6 | 4.5 | 4.4 | 6.0 |
| Netherlands | 8.1 | 6.3 | 5.4 | 5.7 | 7.7 | 8.3 | 8.8 | 8.1 | 7.9 | 7.5 | 7.3 | 7.2 |
| New Zealand | 12.4 | 9.4 | 7.4 | 7.0 | 5.8 | 5.4 | 3.9 | 2.9 | 2.8 | 2.7 | 2.5 | 2.6 |
| Norway | 13.9 | 10.3 | 14.5 | 12.4 | 12.5 | 8.7 | 7.4 | 7.0 | 6.6 | 6.3 | 6.4 | 6.5 |
| Poland |  |  |  |  | 12.0 | 11.0 | 13.0 | 13.2 | 12.7 | 12.4 | 12.5 | 12.0 |
| Portugal | 15.2 | 13.0 | 16.1 | 13.8 | 14.7 | 11.3 | 11.9 | 10.4 | 9.4 | 8.9 | 8.1 | 8.2 |
| Slovak Republic |  |  |  |  | 8.7 | 9.1 | 11.5 | 10.2 | 9.9 | 9.6 | 8.9 | 8.5 |
| Slovenia |  |  |  |  | .. | 8.4 | 9.0 | 11.6 | 11.5 | 12.3 | 12.0 | 11.7 |
| Spain | 5.6 | 2.2 | 5.4 | 5.8 | 7.7 | 7.5 | 6.4 | 6.6 | 6.4 | 6.3 | 6.9 | 6.8 |
| Sweden | 14.9 | 8.8 | 9.4 | 7.3 | 7.2 | 6.0 | 6.1 | 6.0 | 5.8 | 5.7 | 5.5 | 5.2 |
| Switzerland | 9.0 | 7.7 | 6.8 | 1.8 | 1.8 | 5.4 | 5.1 | 5.2 | 4.8 | 4.9 | 4.7 | 4.7 |
| Turkey | 23.2 | 17.6 | 3.8 | 0.9 | 1.0 | 11.7 | 21.2 | 19.9 | 17.8 | 18.3 | 18.6 | 18.1 |
| United Kingdom | 21.8 | 12.7 | 11.2 | 9.7 | 11.3 | 10.5 | 8.8 | 8.9 | 8.5 | 8.5 | 8.2 | 8.1 |
| United States | 12.7 | 7.6 | 6.2 | 4.2 | 4.6 | 3.7 | 3.9 | 4.1 | 4.0 | 4.0 | 3.6 | 3.4 |
| Unweighted average ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| OECD-Average | 14.2 | 10.5 | 9.5 | 8.0 | 8.3 | 8.6 | 8.6 | 8.3 | 8.1 | 8.0 | 7.8 | 7.6 |

1. Israel: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.
2. Unweighted averages: All member counties are taken into account for the calculation of the unweighted averages, including countries that had not implemented the relevant taxes for the year considered. They are counted with a value of zero in the numerator and 1 in the denominator. However, countries that did not exist at the time considered (Czech and Slovak Republics before 1993; Slovenia before 1991) are not included in the calculation of the averages. Are also excluded from the calculation of the averages the countries for which no data is available for the time considered (Chile before 1990, Estonia, Hungary and Israel before 1995, Korea before 1975; Mexico before 1980; Poland before 1995; and Slovak Republic before 2000).
Source: OECD Revenue Statistics 2016 (1965-2015).


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