

Research Paper

Taxation of Short-Term Rentals via Online Platforms: A Comparative Analysis of Leading EU Tourism Markets

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ABSTRACT

Purpose: The purpose of this study is to evaluate and compare the national tax policies of the leading European tourist countries concerning taxation on short-term rentals through online platforms. Reviewed are the different taxation systems of the most developed tourist markets in the EU and their readiness to implement the Directive on Administrative Cooperation (DAC7) to achieve transparency on revenues earned by entrepreneurs utilizing digital platforms.

Methodology: Collected is information from the tax authorities in Austria, France, Spain, Italy, Germany, Greece and Portugal regarding the tax rates applied on short-term rental properties (STRs). Reviewed are the current policies applied in the different countries for reporting and collecting taxes on STRs offered through online travel agents (OTA) in the EU.

Results: Despite the various and even quite complex systems for taxing the income from STR of different properties, the application of the DAC7 for the control of income from such activities is well accepted by European countries. Some of these countries apply even stricter and easier methods for collecting taxes from STR on OTAs.

Research limitations: It will be useful for the completeness of the study to expand its scope and include all member states of the European Union.

Originality: A good number of articles are published focusing on the implementation and specifications of the Directive on Administrative Cooperation (DAC7) but they do not review the actual taxing rates of the main touristic markets in the EU

Keywords: *DAC7, Taxation, OTA, STR*

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1. Introduction

The rise of online travel agencies (OTAs) has revolutionized the tourism and hospitality industry, acting as intermediaries between customers and travel service providers. These platforms offer a comprehensive solution for travelers, enabling them to plan and book entire trips - including flights, accommodations, and other travel-related services - from a single interface (Aeknarajindawat, 2019; Singh, J., & Sharma, S., 2024).

OTAs have also adopted sophisticated online marketing strategies to enhance their visibility and attract more customers. This includes leveraging user-generated content, online reviews, and real-time feedback to improve service offerings and customer satisfaction (Albattat, 2020; Garcia, Dos Anjos & Doğan, 2022). Among the most prominent OTAs, Airbnb and Booking.com stand out as global leaders in the accommodation booking sector, with their influence on the hotel industry continuing to grow (Diogo, 2018).

The business models of Airbnb and Booking.com differ significantly. While Airbnb is often seen as a representative of the sharing economy, Booking.com remains one of the most popular and influential OTAs globally, particularly in Europe (Borges-Tiago et al., 2021; Ivanov and Atanasova, 2019; Schegg, 2024).

The emergence of platforms like Airbnb reflects the broader impact of the sharing economy on the tourism industry, as noted by Zervas, Proserpio, & Byers (2017). Between 2017 and 2023, Airbnb tripled its revenue, growing from 2.561 billion USD to 9.917 billion USD (Macrotrends, 2024). However, Airbnb's revenue remains significantly lower than that of Booking Holdings, with an EBITDA of approximately 1.5 billion USD compared to Booking's 6.5 billion USD (Macrotrends, 2024).

The growth of short-term rentals (STRs) through online platforms is a key aspect of the sharing economy, which has become a significant social and economic phenomenon in recent years (Martinez-Polo & Martinez-Sanchez, 2018; De Rivera et al., 2016; Hofmann et al., 2017; Key, 2017; Möhlmann, 2015; Pera et al., 2016; Xie & Mao, 2017). The choice between short-term and long-term rental strategies depends on various factors, including property characteristics and location (Shokoohyar et al., 2020).

The rise of STR platforms like Airbnb has been viewed as a threat to traditional hoteliers, impacting hotel revenues, occupancy rates (Zervas et al., 2017), and hospitality employment (Fang et al., 2016), while also raising concerns about tax avoidance

(Guttentag, 2015). The competition comes from STRs low price politics, which is influenced by multiple determinants, which can be analyzed using hedonic price models and advanced regression techniques (Bobrovskaya & Polbin, 2022).

Taxation of income generated through OTAs and STR platforms has become a critical issue for many European countries, particularly in well-developed tourist markets. While the European Union (EU) does not impose taxes directly—leaving this responsibility to individual member states—it does enforce rules to harmonize tax policies across its members (European Commission, 2024). Consequently, each EU country applies its own tax regulations for STR properties within its jurisdiction.

Key taxes to consider include Income Tax, Value-Added Tax (VAT), particularly if the host is classified as a business, Tourist Taxes, and Property Taxes, with some jurisdictions imposing additional taxes on rental properties. Tax residency also plays a crucial role in determining obligations. Residents of the country where the property is located typically need to declare rental income on their annual tax returns, while non-residents may still be subject to withholding taxes on income generated within that country.

The growing trend toward integrating online and offline channels to provide a seamless customer experience further complicates the regulatory landscape. This includes offering personalized services and maintaining strong customer relationships (Zhou et al., 2024). As the STR market continues to expand, understanding the tax implications and regulatory frameworks, such as those outlined in the DAC7 directive, becomes increasingly important for both hosts and platforms operating within the EU.

2. Literature Review

According to a recent study of Tourism Economics (2024) the positive impact of short-term rentals on countries across the EU accounts for €149 billion in economic benefits. This income, generated by STRs, supported 2.1 million jobs, and generated €40 billion in total tax revenue in 2023.

Listing spare homes as tourist accommodations on applications like Airbnb has boosted consumers' adoption of the digital sharing economy (Mehta & Panse, 2024). The most popular tourist cities in Europe have launched a number of measures to restrict the

accommodation in private properties, trying to limit the increase of property prices in these megalopolises.

In Paris, a prohibition on renting a second home short term was implemented six years ago, but average rents and property prices have risen by 21% and 15% respectively (Airbnb newsroom, 2024). French Parliament passed a law aiming to regulate short-term rentals through lowering the tax allowance for furnished tourist accommodation, seeing it falls to 50%, down from 71%, with a cap lowered to €77,700 (down from \$83,500) (Le Monde, 2024). The legislation also lowers tax breaks for non-classified tourist properties to 30%, from 50%, with a €15,000 cap.

In Amsterdam, strict rules limiting STRs to a maximum of 30 days per year were applied, but this action of the local governance did not manage to limit the tourist overnight stays, which have increased by 12% since 2019 (Airbnb newsroom, 2024).

In Athens, the Society for the Environment and Cultural Heritage (ELLET), submitted 16 appeals to the country's top administrative court challenging the conversion of entire buildings into Airbnb accommodation units in the historic "Plaka" neighborhood (Ekathimerini, 2024). The reaction of the urban planning department was "the urban/tourist legislation does not explicitly state that residences rented short-term through a digital platform qualify as tourist accommodations."

Barcelona plans to ban the STR for tourists from 2028 (Forbes, 2024). The latest proposed regulation of Spain's authorities is to impose a 21% VAT rate on landlords who offer properties for short-term rental (Politico, 2024). On the other hand, hotels in Spain are subject to a reduced 10% VAT rate.

In September 2023 New York city enforced policies rooted in the Local Law 18, requiring host registration. The aim was to curb the proliferation of illegal short-term rentals and combat the negative impacts of STRs for locals. The new requirements included the obligations of the STR hosts to be present during the stay, limited the rentals guests allowed to a maximum of two guests, as these guests must have full access to the unit, and last but not least "Hosts must provide documentation to prove they live on-site" (Airdna, 2024).

These rules hit New York's poorest boroughs the hardest, reducing visitor spending in these regions by an estimated \$1.6 billion per year and cutting worker earnings generated by Airbnb guest spending by \$573 million (Airbnb newsroom, 2024).

In Berlin, Germany entire home rentals, unless hosts occupy 50% of the property, were banned which led to 55% decrease of revenue, after a \$100,000 fine was introduced (Airdna, 2024). Despite all these actions of local authorities the prices of hotels have increased 30% to 50% in the last 5 years in these cities. These figures show that harsh restrictions of STRs lead to more negative results than expected, and EU governments should aim to extract the best possible social and financial benefits utilizing smart regulations on STR activity.

Implemented in 2023 was the DAC 7 directive which could help EU member state regulate and manage properly short-term rentals through OTAs. The DAC7 Directive, formally known as Council Directive (EU) 2021/514, amends Directive 2011/16/EU on administrative cooperation in the field of taxation.

The DAC 7 directive aims to enhance tax transparency in the digital economy by requiring platform operators to report income information of sellers using their platforms (Rizzo & Acciaro, 2022). It introduces new obligations for digital platforms to report income generated by sellers, including those involved in short-term rentals, to tax authorities in EU Member States (Pantazi, 2021; Suso, 2020).

The DAC7 Directive aims to close tax gaps by ensuring that income from short-term rentals is reported and taxed correctly (Stevens & Van Wamelen, 2021; Nyka & Zapolska, 2024). This is particularly relevant for platforms like Airbnb, Booking.com, and others that facilitate short-term rental transactions (Suso, 2020; Bei & Celata, 2023). These online platforms are required to report income earned by sellers using their services (Nyka & Zapolska, 2024; Zapolska, 2023).

Any individual or entity that earns income through digital platforms within the EU is subject to the reporting requirements of DAC7 (Nyka & Zapolska, 2024).

From 2023, platform operators must comply with due diligence and reporting obligations on the sellers offering goods or services via digital platforms (Persiani, 2023). EU Member States are mandated to automatically exchange information on income generated by sellers on digital platforms. This includes details such as the identity of sellers, the amount of income earned, and other relevant transaction data (Stevens & Van Wamelen, 2021; Nyka & Zapolska, 2024).

The directive considers the administrative burden on digital platforms and the privacy implications for sellers. It aims to balance the need for transparency with the protection of personal data (Stevens & Van Wamelen, 2021).

Additional obligations on digital platforms are imposed, which may affect their operational models. These obligations are more aligned with employer-employee relations rather than traditional B2B interactions (Nyka & Zapolska, 2024).

Each EU member country is obliged to transpose the directive into its' national law, which can be challenging. For instance, the Polish government has published a draft law to implement DAC7, highlighting potential issues in aligning national legislation with the directive's requirements (Zapolska, 2023). Furthermore, cross-border tax reporting will be affected, encompassing Value Added Tax (VAT) reporting and the associated record-keeping obligations stipulated under the VAT Directive.

The OTAs also have to deal with a set of information obligations under the new DAC7 Directive (Merks, Janssen & Leenders, 2022). The DAC7 and OECD model rules introduce a standardized reporting requirement for OTAs, forcing them to review and report information on the income and transactions of sellers (Zilli, 2022). The overall impact of the DAC7 Directive will enhance tax transparency and reduce tax evasion in the digital economy.

By imposing stringent reporting requirements on digital platform operators and facilitating the automatic exchange of information among EU Member States, the directive aims to create a more transparent and fair tax system. However, the implementation of these requirements will need to balance administrative efficiency, privacy concerns, and the operational impact on digital platforms (Persiani, 2023; Nyka & Zapolska, 2024; Stevens & Van Wamelen, 2021).

3. Methodology

For the purpose of this study, a comprehensive and systematic review of the tax codes and legal frameworks of the selected EU member states was conducted. Primary and secondary data sources, including official reports from platforms such as Airbnb and Booking.com, as well as documentation from EU tax authorities, were analyzed to ensure a robust evidence base.

A comparative analysis was undertaken to examine the tax policies of the most frequently visited EU countries, namely France, Spain, Italy, Germany, Greece, Austria, and Portugal. This analysis aimed to identify key similarities, divergences, and recurring patterns in tax regulations across these jurisdictions.

To facilitate a structured comparison, a detailed comparative table was constructed, focusing on critical variables such as tax rates, permissible deductible expenses, the applicability of Value-Added Tax (VAT), and the implementation of tourist taxes. Quantitative data, including specific fiscal figures, were extracted to evaluate the relative tax burden in each country and to assess the efficiency of taxation systems in capturing income generated from short-term rental activities on platforms like Airbnb. This methodological approach ensures a rigorous and nuanced understanding of the fiscal landscape governing short-term rentals within the EU.

4. Results and discussion

Concerning income taxation, the tax office should investigate what type of contract de facto is concluded and what partial tax base is to be used (Radvan and Kolářová, 2020). Initially, when an individual rents out a portion of their primary residence – “The original idea of the Airbnb” (Guttentag, 2016), the income is regarded as personal income tax. The second option is taxation as a business activity. This applies when the income is generated from renting apartments, houses or other properties that are not primarily used for living purposes. Additional services like cleaning, laundry, providing towels and others can classify this activity as business and the provider of the services as a sole trader.

In Austria income generated from STR is subject to Austrian income tax. When an individual lets more than 10 beds in a property or more than five vacation apartments, including additional service, this may be considered commercial activities income. On the other side, when there are no additional services and less properties are used as STRs the income will be considered as rental.

The rental income is taxed at progressive rates from 0% to 55% depending on the total annual income, including other sources like salaries, for example. Non-residents have limited tax liability of €2,126 at Austrian-source income. Residents have an unlimited tax liability of €11,693. For rental income below €730 per year and lack of other taxable

income there is exemption of taxes (Austria – Tax Considerations on Short-Term Lettings, 2023).

In France two options of taxation are possible depending on the amount of rental income. The primary option is the "régime micro-BIC" which can be represented as a tax regime for micro-activity. This regime is applied to hosts limited within the following annual turnover, which should not exceed the threshold shown below for the last 2 years of operation of the property:

- €15,000 for properties that are not classified as tourism accommodations. This case brings a deduction of 30% of the gross annual revenues from the STR. The income after deductions is taxable.
- €77,700 applies for properties that fall in the tourism classified STRs. The deductions in this case account for 50% of the gross annual income. (France–Tax Considerations on Short Term Property Lets, 2024; French Finance Law, 2024).

In France some properties are located in “non-tight” zones, or zones that don’t have imbalances between supply and demand for accommodations. In this case the STRS can use an additional 21% deduction. If the above-mentioned turnovers for the previous years are higher than the actual turnover of the rented property, then a micro-activity tax regime will be automatically applied. Individuals have the option to switch to “régime réel”, if they want, where deduction of the actual expenses is applied.

Option two is "Régime Réel" (the actual expenses tax regime) and there are deductible expenses such as: mortgage payments, taxes for the property, repairs, fees of management, utility bills, insurance, interest on mortgage and depreciations, and others. Furnished properties can deduct depreciation as a percentage of the accounting value of the property according to French tax law, excluding the land below the property.

The STR income may be subject to VAT if two conditions are met, simultaneously: the length of the stay exceeds 30 nights and the accommodation is rented out in “régime para hôtelier”, where at least three of the following services are included: breakfast, cleaning, supply of linen, reception services.

At present the maximum number of days per year that a person’s main residence can be rented out to tourists is 120 days. From 2025 some municipalities may adjust this number of days to 90 by voting, if they wish and explain their reasons, to lower the maximum

stay. This policy already applies in the “tensile areas” – usually cities with more than 50 000 inhabitants. This classification affects more than 1,800 municipalities and 5.2 million homes in France (Monmarcheimmobilier, 2025).

An individual who wants to rent out the non-primary property can do so by addressing the municipality where the property is situated. There are no such strict time limits for renting this property, but certain rules apply, as the owner must verify that the condominium by-law does not include exclusively bourgeois housing clause which automatically prohibits any professional activity. Taxation of non-residents is subject to rates from 20% to 45%, including income tax and social surtaxes. For EU member countries residents’ social surtaxes are discounted from 17.2% to 7.5%.

In Germany the income from STR is subject to personal income tax in Germany. It can be classified as Passive Rental Income, when the property is solely used for rental purposes, and Business Income, when additional services like breakfast and cleaning are present. Trade tax is applied on business income above EUR 24,500. STRs are qualified as small businesses when their annual turnover in the previous year was under EUR 22,000 and did not exceed EUR 50,000 in the current year. Small business activities do not have to charge guests VAT (Germany – Tax Considerations on Short-Term Lettings, 2021).

In Greece there is no zero tax, the lowest is 15%. In Greece income tax depends on the source of the income, be it from employment or from rental activities, and is calculated accordingly. The gross income can be deducted with compensations paid by lessors when terminating a lease contract with the lessee, if applicable, and flood protection construction of up to 10%. Another 40% can be deducted on the base of expenses for utilities, aesthetic construction work on the property if the expenses fall within the period of January 2020 until end of 2024. Reductions cannot exceed EUR 16,000 yearly and equally distributed over the years.

STRs are not subject to VAT if their annual turnover does not exceed EUR 10,000 per year. Reduced by 9% VAT for the islands of Chios, Kos, Leros, Lesvos and Samos applies.

In Italy there are two options for taxation. Personal income tax regime or so called “cedolare secca” is the option for individuals that let up to 4 apartments via OTAs. They

come into the tax regime of a 21% flat rate for their first property, and 26 % for the second apartment respectfully.

The second tax option is progressive individual tax from 23% to 50%, depending on the annual income (Italy– Tax Considerations on Short-Term Lettings, 2024). Intermediaries like Booking.com and Airbnb apply 21% withholding tax on the STR fees in a case when they serve as payment operators between the host and guest.

In Portugal there are specific rules are applicable to income earned from STR apply in 3 ways depending on the role of the individual who rents out the property. One property could be let for short-term rental by the owner of the property, by a company that manages the property of an individual or both previous cases in one taxable year. In these cases the income of STR is considered as a self-employment type and the taxation category according Portugal tax law is B.

When the income from STR is considered Category B the deductibles account for 65% of the gross income, after applying 0,35 coefficient. These expenses and charges amount to at least 15% of the gross income (Portugal – Tax Considerations on Short-Term Lettings, 2021).

The taxable income determined by applying the coefficient will be added by the positive difference between 15% of the gross income and the sum of the following expenses:

1. Social security contributions or a fixed deduction of EUR 4,104 when the social contributions are above this amount;
2. Expenditures for salaries and other wage related costs reported to the Portuguese tax authorities;
3. Expenses for rents related to the professional activity, supported by invoices or other documents;
4. 1.5% to 4% of the tax registration value of the STR property, depending on the case of renting out. When there is professional activity related to the property functioning the tax is 1,5% and respectfully when the owner is the taxpayer the deduction is 4% of the value of the property;
5. Expenses that are connected to the business activity of the property as STR that include utilities, insurance, leasing taxes, service support activities and others, obligatory reported to the Portuguese tax authorities;

6. Imports or intra-community acquisition of goods and services related to the activity.

The expenditures described in point 3, 4 and 5, who do not fully engage in the entrepreneurial and professional activity, are valid only at rate of 25%.

When the STR taxpayers fall into the "simplified regime" of category B the annual costs are not deductible from the STR income. This applies in cases when the turnover for the tax year is below EUR 200,000. To calculate the income that is taxable are used the following coefficients for deductions: renting out a room: 0,15 coefficient, renting out an apartment or a house: 0,35, and renting out properties located in certain containment areas as defined by municipalities: 0,50

When an individual or company decides to use the Category F for taxation of STR income in Portugal it can apply all documents for expenses made during the tax year and deduct them from the gross annual income. Some expenses like the Additional municipality tax, financial expenses, depreciation, comfort accessories, furniture and decoration costs are not deductible in this case of taxation. In this case the taxable income is subject to taxation at a special tax rate of 28%, which is valid for both Portuguese citizens and foreigners.

Every taxpayer in Portugal should register every rental agreement and issue electronic receipts utilizing his/her account in the Portuguese tax authorities website.

Since the end of 2024 some changes were applied to Portugal's short-term rental licenses. New STR licenses are suspended in high-density areas to address housing shortages. Existing licenses can now be transferred with property sales, adding property value.

The planned CEAL tax for short-term rentals has been removed, providing financial stability. License expiry dates every five years have been eliminated, offering long-term security to property owners. Municipalities now have increased autonomy to set regulations that cater to their specific local needs. These changes were made to create a more balanced approach to the short term rental market in Portugal.

In Spain the regulation and taxation of short-term rentals in Spain are complex issues influenced by broader housing market dynamics, economic impacts, and the need for effective policy enforcement. While specific taxation measures are not detailed in the abstracts, the regulatory context and socioeconomic implications provide a comprehensive understanding of the challenges and potential strategies for managing STRs in Spain.

Table I: Countries comparison of taxes

Country	Personal income tax	Deductible Expenses	VAT
Austria	Up to €13,308: 0% €13,308 - €21,617: 20% €21,617 - €35,836: 30% €35,836 - €69,166: 40% €69,166 - €103,072: 48% €103,072 - €1,000,000: 50% above €1,000,000: 55% Non-residents are subject to income tax on Austrian-source income at normal rates (including a fictitious income increase of €10,888)	Mortgage payments, Insurance costs, Maintenance costs, Depreciation, Platform fees, Other general expenses which are caused by the rental activity. Austrian tax authorities also recognize lump sum expenses of 30% to 50% of the income (without VAT and tourist taxes) under certain conditions, instead of the actual expenses. The annual depreciation on the building portion of the property is generally 1.5%. Maintenance and repair costs have to be depreciated for tax purposes for the duration of 15 years depending on the nature of the repairs or renovation.	10% In Austria, you are required to register for VAT if you supply services to the value of €35,000 within a 12 month-period.
France	Up to €11,294: 0% €11,294 - €28,797: 11% €28,797 - €82,341: 30% €82,341-€177,106: 41% Above €177,106: 45%	STR within a "micro-Bic" regime: Non-classified tourism accommodation - 30% allowance within a limit of €15,000; Classified - 50% allowance for ceiling of €77,700 turnover "Regime reel" - expenses for rental activity utilities, repair costs, property tax, maintenance, garbage, property management fees, insurance, mortgage interests and insurance on the mortgage, depreciation are deductible.	10% VAT does not apply for "small undertaking" hosts (turnover below €85,000)
Germany	Up to €9,744 – 0% €9,745- €14,753 : 14% €14,754- €57,918: 24% €57,919 - €274,612: 42% Above €274, 613: 45%	Depreciation, interest expenses, maintenance costs, property taxes, street cleaning, garbage disposal, water supply, heating costs, home insurance Deductions available for tax depreciation (e.g., capital allowances / wear and tear) Depreciation is calculated based on the acquisition costs of the building. The depreciation rate is in most cases 2% per annum, if the building is not classified as a company asset.	7% Reduced VAT rate of 7% applies to STR for periods no longer than 6 months.
Greece	€0 - €12,000: 15% €12,001 - €35,000: 35%, above €35,001: 45%.	Expenses incurred for the repair, maintenance, renovation or any other fixed and/or operational costs of the real estate property, at a percentage of 5% of the rental income. Any rent paid, when you sublease the property,	13% Reduced 9% VAT for 5 islands. No VAT up to €10.000 turnover/year.
Italy	Up to €28,000: 23% €28,000 - € 50,000: 35% over €50,000: 43% "Cedolare secca" flat rate at 21% for first property 26% for the next	For individuals there is a 5% statutory expenses deductible from the STR income. For business units, over 4 apartments, operational costs are deductible.	10% STRs, carried out for business purposes are exempt from VAT.
Portugal	Up to €8,059 - 13% 8,059 - €12,160: 16.50% 12,160 - €17,233: 22% 17,233 - €22,306: 25% 22,306 - €28,400: 32% 28,400 - €41,629: 35.50% 41,629 - €44,987: 43.50% 44,987 - €83,696: 45% Over 83,696: 48% 25% flat tax - non-residents	Category F - deductible expenses have to be effectively incurred, and necessary to obtain the income from immovable property (with the exception of financial costs, depreciation, furniture, household appliances, decoration and comfort accessories, as well as the Additional Municipal Property Tax). The taxable income is subject to taxation at a special tax rate of 28% (for both tax and non-tax residents). Category B - self-employment income: After applying coefficient 0.35 to the self-employment	6% in Portugal mainland ; 5% and 4% for services located in Madeira and Azores, respectively. Taxpayers may benefit from a VAT exemption if the annual

	Additional solidarity rate applies on income exceeding €80,000: 2.5% €250,000: 5%, Category F: 28% (flat rate for both residents and non-residents)	income, its assumed that you incurred expenses amounting to 65% of the income. Such expenses and charges amount to at least 15% of the gross income. The taxable income determined by applying the coefficient will be added by the positive difference between 15% of the gross income and the sum of the most common operating expenses and a specific deduction of €4,104, as some expenses when only partially allocated to the entrepreneurial and professional activity, are considered in only 25%..	turnover from STR is less than €12,500 in the previous calendar year
Spain	Up to €12,450: 19% €12,451 to €20,200: 24% €20,201 to €35,200: 30% €35,201 to €60,000: 37% €60,000 to €300,000: 45% Above €300,000: 47% Non-resident individuals are subject to a 24% (regular fixed tax rate), or a 19% rate if they are residents of an EU Member State or EEA country.	Expenses paid by the rental property owner related to the rental activity can be deducted from this income: Mortgage interest, Depreciation, House insurance, Property taxes, Garbage, taxes, Agency costs (such as the Airbnb service fee), Maintenance and repair costs, Other supplies (energy, water, etc.) if paid by the lessor For home sharing rentals, in which the individual only rents a room or other parts of the property, the taxpayer may only deduct the above mentioned expenses in proportion to the part of the property rented. Effective depreciation costs on property are deductible under Spanish law. The depreciation cost will be considered effective if it does not exceed 3% of the cadastral value or the acquisition value of the property.	10% Accommodation services without providing hotel services is an activity considered subject to, but exempt from VAT under Spanish law.

Source: Author's elaboration based on Airbnb Tax Considerations and tax laws on STR for Austria, France, Germany, Greece, Italy, Portugal, Spain

In Germany and Spain deductible are many expenses such as: depreciation of the price of the property, interest expenses, maintenance and repair costs, property taxes, street cleaning, garbage disposal, water supply, heating costs, home insurance, house insurance, agency costs (such as the Airbnb service fee) if paid by the lessor. In Greece and Italy there are 5% statutory expenses.

In France, when the taxed individual is classified within the "régime micro-BIC", the fixed deduction ("abattement"), vary between 30% for non-classified tourism accommodation and 50% for classified tourism accommodation according to French Finance Law (French Finance Law, 2024). Focusing on the personal tax, most of the countries implement a progressive tax scale. Hence, the tax for short term rentals, are included in the total taxable income of the individual and may vary from 0% to 55% depending on the country and the size of income.

Austria, France and Germany have non-taxable limit income which varies from 9800 to 13300 euro, depending on the country. In Italy there is a fixed 21% flat tax for the first

property rented out via Airbnb platform. This tax is directly collected from the hosts by Airbnb and disbursed to the Italian tax authorities afterwards.

The tax burden varies significantly across countries, with Austria and Greece imposing the highest effective rates, while Italy and Portugal offer flat-rate options that may benefit certain hosts. Countries like Austria and France provide flexibility with lump-sum deductions, while others (e.g., Italy, Greece) limit deductions, potentially increasing the tax burden. VAT rates and exemptions are generally favorable for small-scale hosts, with Portugal and Greece offering the most competitive rates. Countries like Portugal and Spain have more complex tax systems, requiring hosts to navigate multiple regimes and rules.

Trying to compare the taxation practices in the best developed tourist countries in EU a scenario model is constructed, considering an individual who rents out an apartment in the considered countries. For the purpose of this survey some of the variables are set as follows:

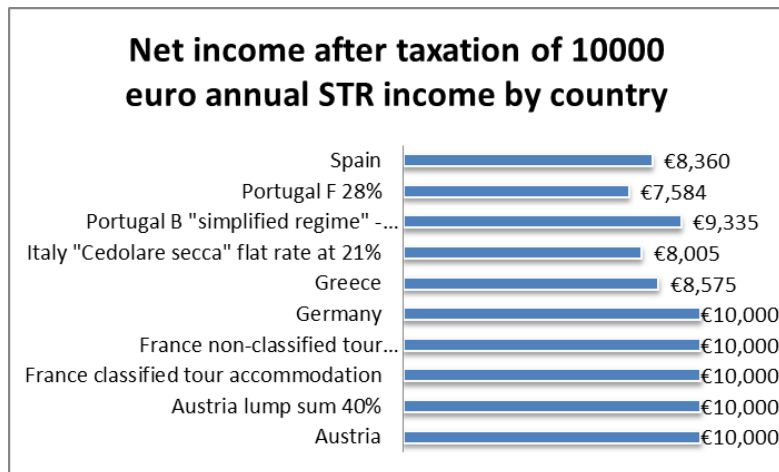
- 1- bedroom apartment – 100 euro rent per day;
- Two scenarios of occupancy rate – 100 days and 200 days per year
- Deductible expenses are set to 5000 euro per year for each case and calculated as 100/365 and 200/365 ratios depending on the scenario chosen.

Table II: Taxation of 10000 euro annual STR income

Country taxation	Gross Income	Taxable income	Applicable tax %	Amount of tax	Net income
Austria	10000	8630	0%	0	€10,000
Austria lump sum 40%	10000	6000	0%	0	€10,000
France classified tour accommodation	10000	5000	0%	0	€10,000
France non-classified tour accommodation	10000	7000	0%	0	€10,000
Germany	10000	8630	0%	0	€10,000
Greece	10000	9500	15%	1425	€8,575
Italy "Cedolare secca" flat rate at 21%	10000	9500	21%	1995	€8,005
Portugal B "simplified regime" - coef. 0.35	10000	3500	16.5% + 2.5%	665	€9,335
Portugal F 28%	10000	8630	28%	2416.4	€7,584
Spain	10000	8630	19%	1639.7	€8,360

Source: Author's elaboration

The income after taxes is presented in figure 1:

Figure 1: Net income after taxation of 10000 annual income from STR

Source: Author's elaboration

When taking into account the second scenario – 200 days occupancy of the apartment as STR we have the following results, presented in table III.

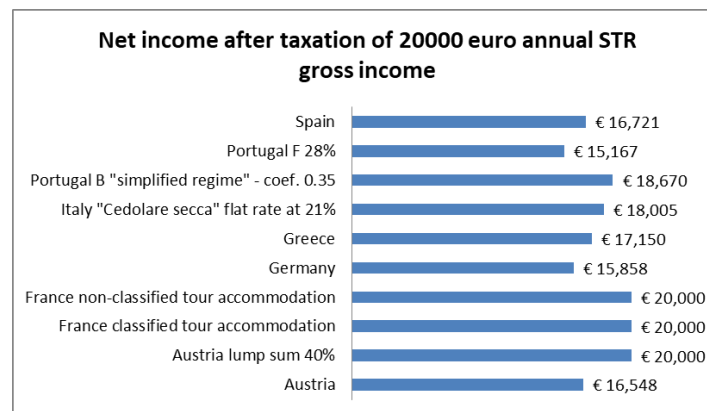
Table III: Taxation of 20000 euro annual STR income

Country taxation	Gross Income	Taxable income	Aplicable tax %	Amount of tax	Net income
Austria	20000	17260	20%	3452	€ 16,548
Austria lump sum 40%	20000	12000	0%	0	€ 20,000
France classified tourist accommodation	20000	10000	0%	0	€ 20,000
France non-classified tourist accommodation	20000	14000	0%	0	€ 20,000
Germany	20000	17260	24%	4142	€ 15,858
Greece	20000	19000	15%	2850	€ 17,150
Italy "Cedolare secca" flat rate at 21%	20000	9500	21%	1995	€ 18,005
Portugal B "simplified regime" - coef. 0.35	20000	7000	16.5% + 2.5%	1330	€ 18,670
Portugal F 28%	20000	17260	28%	4833	€ 15,167
Spain	20000	17260	19%	3279	€ 16,721

Source: Author's elaboration

In the second scenario we do not take into account the VAT payments in the cases of Greece and Portugal where an annual turnover of more than €10000 and €12500 respectfully would lead to VAT payments and of course VAT deductions through expenses.

Figure 2: Net income after taxation of 20000 annual income from STR



Source: Author's elaboration

If we assume that a quarter of the income equals to the expenses for these services, then we should add VAT payments of €1950 in Greece and €900 in the Portugal case. Assumable VAT payments would lead to rather low net income after taxes, respectfully €15200 for Greece and between €14267 and €17770 for Portugal, depending on the taxation regime that is chosen (B or F).

The overall results show that France and Austria's lump sum taxation regime offer the least tax burden of all countries included in the survey, they actually do not apply income taxes in these cases. Germany as well is good choice for STR in cases where the annual income is below €10000. In Portugal and Austria are visible the large gaps between the 2 possible taxation methods in these countries, while in France there is no difference when taking in account these income scenarios.

To enhance tax compliance, particularly among individual hosts, some countries, including Italy and France, have established agreements with Airbnb to facilitate tax withholding at the source. Under this arrangement, Airbnb collects the applicable taxes directly, deducts them from the payments owed to the host, and remits the tax to the fiscal authorities of the country where the service is rendered. These practices show that some countries already have implemented measures to collect information from OTAs and even collect payments through online platforms. This fact shows that the implementation of DAC7 will distribute and equalize these practices among EU members.

Some of the agreements, for tax withholding at the source, that these countries have accomplished with OTAs can be represented in the following list:

1. France: OTAs like Airbnb are required to collect and remit tourist taxes on behalf of hosts since 2017.
2. Italy: OTAs are required to withhold a 21% flat tax on rental income and remit it to the Italian tax authorities
3. Portugal: OTAs are required to withhold the tax on rental income for non-resident hosts and remit it to the Portuguese tax authorities. For residents, OTAs report income, but hosts are responsible for paying taxes
4. Spain: OTAs are required to withhold 19% tax on rental income for non-resident hosts and remit it to the Spanish tax authorities. For residents, OTAs report income, but hosts are responsible for paying taxes.
5. Greece: OTAs are required to withhold a 24% tax on rental income for non-resident hosts and remit it to the Greek tax authorities. For residents, OTAs report income, but hosts are responsible for paying taxes.
6. Germany: OTAs are required to collect and remit tourist taxes on behalf of hosts in certain cities (e.g., Berlin, Munich). Income tax is not withheld at source, but OTAs report rental income to the tax authorities under the DAC7 Directive.
7. Additionally in Greece and France property listings on OTAs require a valid registration number obtained from local authorities in order to operate online.

5. Conclusion

The top tourist destinations countries in EU apply different taxation schemes in order to collect taxes from STR activity. They all have implemented features of the DAC7 Directive and successfully even collect taxes at source. Some have more stringent tax regimes, especially the southern countries like Greece, Spain, Italy and Portugal. On the other hand Austria, Germany and France have non-taxable income limits.

In the case of France the amount of deductible expense before taxes guarantees non-taxable income to the limit of €23,000. France is trying to limit the STRs through application of limited number of days of primary house lending in “tensile areas” and the need for local municipality approval of STR activities, but it is not so effective in generating revenue for local governments, compared the other countries from the study.

As most of these countries try to discourage over-tourism, they apply higher taxes for such activities. In Portugal an individual that chooses the regime “F” of taxation have to pay 28% fixed tax, which is quite high compared to the other countries in the study. On the other hand in Greece and Italy the deductible income for non-business activities in tourism accounts for only 5% of that income.

One of the most favorable tax regimes is the Austrian lump sum regime, when 30% to 50% of the income is deductible and income bellow €13,300 is not taxable. In conclusion, the evidence suggests that several countries have independently adopted elements consistent with the DAC7 Directive prior to its formal legislation. The full implementation of this directive throughout the EU is therefore expected to yield significant advantages, particularly for those nations that have already taken preliminary steps.

The study reveals significant heterogeneity in tax policies across the EU, reflecting differing national priorities and administrative approaches. Hosts operating in multiple jurisdictions must carefully consider the tax implications in each country, balancing progressive tax rates, deductible expenses, and VAT obligations to optimize their tax burden. Policymakers could benefit from harmonizing certain aspects of STR taxation to reduce complexity and promote cross-border compliance

References

- Aeknarajindawat, N. (2019). The factors influencing tourists' online hotel reservations in Thailand: An empirical study. *International Journal of Innovation, Creativity and Change*, 10(1), 121-136. [chrome-extension://efaidnbmnnnibpcajpcgclefindmkaj/https://www.ijicc.net/images/vol10iss1/10120_Aeknarajindawat_2019_E_R.pdf](https://www.ijicc.net/images/vol10iss1/10120_Aeknarajindawat_2019_E_R.pdf)
- Airbnb newsroom (2024) New report finds NYC's short-term rental law takes toll on outer boroughs, By Airbnb · November 11, 2024, <https://news.airbnb.com/new-report-finds-nycs-short-term-rental-law-takes-toll-on-outer-boroughs/>
- Airdna, (2024) The Aftermath of NYC's Short-Term Rental Crackdown: One Year Later, <https://www.airdna.co/blog/nycs-short-term-rental-crackdown>
- Albattat, A. (2020). The impact of online marketing in travel agency. *The Emerald handbook of ICT in tourism and hospitality* (pp. 85-96). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83982-688-720201006>
- AUSTRIA – TAX CONSIDERATIONS ON SHORT-TERM LETTINGS (2023) https://assets.airbnb.com/help/AirbnbTaxGuide2024_Austria_ENGLISH.docx.pdf
- Bei, G., & Celata, F. (2023). Challenges and effects of short-term rentals regulation: A counterfactual assessment of European cities. *Annals of Tourism Research*, 101, 103605. <https://doi.org/10.1016/j.annals.2023.103605>

- Bobrovskaya, E., & Polbin, A. (2022). Determinants of short-term rental prices in the sharing economy: The case of Airbnb in Moscow. *Applied Econometrics*, 65, 5-28. DOI: 10.22394/1993-7601-2022-65-5-28
- Borges-Tiago, T., M., Arruda, C., Tiago, F., & Rita, P. (2021). Differences between TripAdvisor and Booking.com in branding co-creation. *Journal of Business Research*, 123, 380-388. <https://doi.org/10.1016/j.jbusres.2020.09.050>
- De Rivera, Javier, Gordo, Angel, Cassidy, Paul, and Apesteguía, Amaya. (2017) "A netnographic study of P2P collaborative consumption platforms' user interface and design", *Environmental Innovation and Societal Transitions* 23 : 11-27, DOI: <https://doi.org/10.1016/j.eist.2016.09.003>
- Diogo (2018). What reasons lead guests to choose Airbnb and Booking.com to book peer to peer rentals? *A comparison between the two major booking platforms. Repositorio-aberto.up.pt.* [online] doi:sigarra:300875.
- Ekathimerini (2024) The legal battle that could transform Airbnb, Giorgos Lialios, 05.01.2024 <https://www.ekathimerini.com/news/1228576/the-legal-battle-that-could-transform-airbnb/>
- Fang, B., Ye, Q., & Law, R. (2016). Effect of sharing economy on tourism industry employment. *Annals of Tourism Research*, 57, 264-267.
- Forbes (2024) Barcelona Announces Plan To Ban Tourist Rental Apartments By 2028, Isabelle Kliger, Jun 21, 2024, <https://www.forbes.com/sites/isabellekliger/2024/06/21/barcelona-announces-plan-to-ban-tourist-rental-apartments-by-2028/>
- FRANCE – TAX CONSIDERATIONS ON SHORT-TERM LETTINGS (2024) https://assets.airbnb.com/help/AirbnbTaxGuide2024_France_ENGLISH.pdf
- FRANCE–TAX CONSIDERATIONS ON SHORT TERM PROPERTY LETS (2024). https://assets.airbnb.com/help/AirbnbTaxGuide2024_France_ENGLISH.pdf
- French Finance Law (2024) The special regime (underlined above), which allows a 71% deduction representative of expenses, does not concern apply to all tourism accommodations, but only the classified ones according to Article L324-1 of the tourism Code (systems of number of stars). That classification decision is taken by an appointed body following a visit. The accommodation must meet a certain number of criteria and the request has to be made by the Host. <https://french-business-law.com/french-legislation-art/article-l324-1-1-of-the-french-tourism-code/>
- French Finance Law (2024) The threshold of €77,700 and the 50% rebate are applicable for the fiscal year 2023 by application of an administrative tolerance, despite the reform provided by Article 45 of the French finance law for 2024, https://www.assemblee-nationale.fr/dyn/16/textes/l16b1680_projet-loi
- Garcia, G., Dos Anjos, S., & Doğan, S. (2022). Online travel agencies and their role in the tourism industry. *Advances in Hospitality and Tourism Research (AHTR)*, 10(3), 361-386.
- GERMANY – TAX CONSIDERATIONS ON SHORT-TERM LETTINGS (2021) <https://assets.airbnb.com/help/Airbnb-Tax-Guide-2021-Germany-ENGLISH-Final.pdf>
- GREECE – TAX CONSIDERATIONS ON SHORT-TERM LETTINGS (2023) https://assets.airbnb.com/help/AirbnbTaxGuide2024_Greece_ENGLISH.pdf
- GTP (2024). Greek Tax Authorities to Crack Down on Undeclared Income from Short-Term Rentals, Posted On 28 Aug 2024, <https://news.gtp.gr/2024/08/28/greek-tax-authorities-to-crack-down-on-undeclared-income-from-short-term-rentals/>
- Guttentag, D., (2015) Airbnb: disruptive innovation and the rise of an informal tourism accommodation sector. *Curr. Issues Tour.* 18 (12), 1192–1217. https://scholarworks.umass.edu/ttra/2017/Academic_Papers_Visual/19
- Guttentag, D., (2016). Why tourists choose Airbnb: A motivation-based segmentation study underpinned by innovation concepts, <https://dspacemainprd01.lib.uwaterloo.ca/server/api/core/bitstreams/5adce82e-7d68-4e5b-8782-e86a81e7291e/content>
- Hofmann, Eva, Hartl, Barbara, and Penz, Elfriede. (2017) "Power versus trust—what matters more in collaborative consumption?", *Journal of Services Marketing* 31.6 (2017): 589-603, DOI: <https://doi.org/10.1108/JSM-09-2015-0279>

ITALY– TAX CONSIDERATIONS ON SHORT-TERM LETTINGS (2024) Airbnb - Tax Guide 2024 - Italy ENGLISH CLEAN.docx

- Ivanov, I. and Atanasova, I. (2019). Hotel Reservations Via Online Travel Agency Booking.com. Eu Dimensions Of The ‘Best Price’ Clause. *CBU International Conference Proceedings*, [online] 7(0), pp.143–150. Available at: <https://ideas.repec.org/a/aad/iseicj/v7y2019i0p143-150.html>.
- Key, M. (2017) “Domains of Digital Marketing Channels in the Sharing Economy”, *Journal of Marketing Channels* 24.1-2 (2017): 27-38, DOI: <https://doi.org/10.1080/1046669X.2017.1346977>
- Le Monde (2024), “French Parliament passes law to tighten Airbnb regulation”, November 2024, French Parliament passes law to tighten Airbnb regulation
- MARTINEZ-POLO, J., MARTINEZ-SANCHEZ, J. (2018). “Reputation and Trust in Sharing Economy Platforms: The Case of Traity.” *Annals of Spiru Haret University. Economic Series*, 18(2), 143-158. doi: <https://doi.org/10.26458/1827>
- Mehta, K., & Panse, C. (2024). Symmetrical Adoption Pattern of the Digital Sharing Economy. *Advances in Hospitality and Tourism Research (AHTR)*, 12(1), 62-92. <https://doi.org/10.30519/ahtr.1206637>
- Merkx, M., Janssen, A., & Leenders, M. (2022). Platforms, a Convenient Source of Information Under DAC7 and the VAT Directive: A Proposal for More Alignment and Efficiency. *EC Tax Review*, 31(4). DOI: 10.54648/ecta2022020
- Möhlmann, Mareike. (2015) “Collaborative consumption: determinants of satisfaction and the likelihood of using a sharing economy option again”, *Journal of Consumer Behaviour* 14.3 (2015): 193-207, DOI: <https://doi.org/10.1002/cb.1512>
- Nyka, M., & Zapolska, K. (2024). The Impact of the DAC7 Directive on the Functioning of Platforms and Platform Operators, from the Perspective of the Legal Model of Their Collaboration with Individuals. *Bialostockie Studia Prawnicze*, 29, 177. DOI: 10.15290/bsp.2024.29.02.13
- Pantazi, T. (2021). Regulating short-term rentals: Joined cases C-724/18 and C-727/18 Cali Apartments. *Maastricht Journal of European and Comparative Law*, 28(4), 573-581. <https://doi.org/10.1177/1023263X211014688>
- Pera, Rebecca, Viglia, Giampaolo, and Furlan, Roberto. *2016) “Who am I? How compelling self-storytelling builds digital personal reputation”, *Journal of Interactive Marketing* 35 (2016): 44-55, DOI: <https://doi.org/10.1016/j.intmar.2015.11.002>
- Persiani, A. (2023). DAC7: Some Thoughts on the Different Roles of Platform Operators and the Appropriate Definition of the Scope of Reporting Obligations. *EC Tax Review*, 32(4). DOI: 10.54648/ecta2023021
- Politico (2024) Disproportionate STR regulations threaten to hurt ordinary Europeans, <https://www.politico.eu/sponsored-content/disproportionate-str-regulations-threaten-to-hurt-ordinary-europeans/>
- PORTUGAL – TAX CONSIDERATIONS ON SHORT-TERM LETTINGS (2021) <https://assets.airbnb.com/help/Airbnb-Tax-Guide-2021-Portugal-ENGLISH-Final.pdf>
- Radvan, M. and Kolářová, Z. (2020). Airbnb Taxation. *The financial law towards challenges of the XXI century: (conference proceedings)*. 1. vyd. Brno: Masaryk university, 2020. s. 481-494, 14 s., <http://dx.doi.org/10.2139/ssrn.3624818>
- Rizzo, A., & Acciaro, M. (2022). DAC 7-The Exchange of Tax Information for Businesses with Digital Platforms in the European Union. *Transatlantic Antitrust and IPR Developments*, (2). <http://dx.doi.org/10.2139/ssrn.4307818>
- Schegg, R. (2024). *School of Management | I.* [online] Available at: <https://www.hevs.ch/media/document/22/schegg-2024-european-hotel-distribution-survey-hotrec-public.pdf> [Accessed 13 Aug. 2024].
- Shokoohyar, S., Sobhani, A., & Sobhani, A. (2020). Determinants of rental strategy: short-term vs long-term rental strategy. *International Journal of Contemporary Hospitality Management*, 32(12), 3873-3894. <https://doi.org/10.1108/IJCHM-03-2020-0185>
- Singh, J., & Sharma, S. (2024). The Future Prospect of Online Travel Agencies in Hotel Bookings. *Utilizing Smart Technology and AI in Hybrid Tourism and Hospitality* (pp. 215-222). *IGI Global*. DOI: 10.4018/979-8-3693-1978-9.ch009

- SPAIN – TAX CONSIDERATIONS ON SHORT-TERM LETTINGS (2021)
<https://assets.airbnb.com/help/Airbnb-Tax-Guide-2021-Spain-ENGLISH-FInal.pdf>
- Spain Accountants (2024) <https://www.europeaccountants.com/spain/tax-rates>
- Sroka, E. T. (Ed.). (2024). *Short-term rental platforms as deemed suppliers in the EU VAT system*. Kluwer Law International BV. [chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ifa.nl/media/igidyrg/emilia-teresa-sroka-short-term-rental-platforms-as-deemed-suppliers-in-the-eu-vat-system.pdf](https://www.ifa.nl/media/igidyrg/emilia-teresa-sroka-short-term-rental-platforms-as-deemed-suppliers-in-the-eu-vat-system.pdf)
- Stevens, S. A., & van Wamelen, J. T. (2021). The DAC7 Proposal and Reporting Obligation for Online Platforms. *EC Tax Review*, 30(1). <https://doi.org/10.54648/ecta2021003>
- Suso, M. A. (2020) E-Platforms Providing Services in the Short-Term Rental Accommodation Market: The Challenges for Taxation of These Services under the EU VAT. *International VAT Monitor* Volume 2020, Issue 1, January/February 2020, Pages 8-15. ISSN: 09250832
- Tourism Economics (2024) Harnessing the Short-Term Rental Advantage in Europe, accessed February 2025, [Harnessing-the-Short-Term-Rental-Advantage-in-Europe-Oxford-Economics-December-2024-web](https://www.tourism-economics.com/wp-content/uploads/2024/12/Harnessing-the-Short-Term-Rental-Advantage-in-Europe-Oxford-Economics-December-2024-web.pdf) - Adobe cloud storage
- www.macrotrends.net. (2024). *Airbnb Financial Statements 2017-2022 | ABNB*. [online] Available at: <https://www.macrotrends.net/stocks/charts/ABNB/airbnb/financial-statements>
- Xie, Karen, and Mao, Zhenxing. (2017) “The impacts of quality and quantity attributes of Airbnb hosts on listing performance”, *International Journal of Contemporary Hospitality Management* 29.9 (2017): 2240-2260, DOI: <https://doi.org/10.1108/IJCHM-07-2016-0345>
- Zapolska, K. (2023). DAC7 Directive 2021/514/EU: Review of Some Solutions in the Context of the Fundamental Rights of Entrepreneurs. *Bialostockie Studia Prawnicze*, 28, 91. DOI: 10.15290/bsp.2023.28.04.05
- Zervas, G., Proserpio, D. and Byers, J.W. (2017). The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry. *Journal of Marketing Research*, [online] 54(5), pp.687–705. <https://doi.org/10.1509/jmr.15.0204>
- Zhou, Q., Shankar, A., Dixit, A., Bhatia, M., & Mehrotra, A. (2024). Current Dynamics and Future Growth of Online Travel Agencies. *Journal of Global Information Management (JGIM)*, 32(1), 1-28. DOI: 10.4018/JGIM.341797
- Zilli, G. (2022). The OECD Model Rules and DAC7: A Critical Assessment of Selected Design and Enforcement Issues. *European Taxation*, 62(12), 521-536. DOI: 10.59403/q4vtcc