Semestre Económico (2023), 12(2), 34–52
10.26867/se.2023.v12i2.151
http://semestreeconomico.unap.edu.pe/index.php/revista/index
ISSN: 2072-0572 (Versión impresa) **ISSN: 2523-0840 (Versión digital)**

ORIGINAL ARTICLE

Assessment of the tax harmonisation plan in the European Union

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(Received April 25, 2023; accepted July 30, 2023)

Abstract
Study of Political Economy, Public Finance and European Economic Integration on the tax harmonization plan of the European Union. It is based on the theoretical and methodological frameworks of the Economic Analysis of Law, in order to analyze the European tax harmonization process. In addition to analyzing questions of incentives, efficiency and institutional quality, special attention is paid to the problems of attribution of powers in the European system and the different existing levels of tax pressure and effort in the Member States. This study will also analyze the European Commission's latest proposal on taxation, which aims to achieve tax uniformity, combat tax abuse and put an end to unfair competition practices within the European economic-legislative framework. These initiatives are particularly important in the current socioeconomic context, when new ways of financing the post-Covid recovery fund, curbing the inflation that has been latent in recent months and dealing with the negative externalities that the conflict between Russia and Ukraine may produce are being studied. This is completed with a proposal for the feasibility of fiscal federalism.

Keywords: European Union, economic convergence, tax harmonization, taxation, taxation, economic integration, tax mix, tax effort, underground economy.

1. Introduction

The process of tax harmonization within the European Union (EU), in tune with the growing international economic integration (Sánchez-Bayón, 2019 and 2021a-b), motivates the study on the convergence of the European tax framework, taking into account the different tax systems governing each of the Member States, which, in their measure, alter the free movement of goods, capital and workers (Sánchez-Bayón, 2020a-c and 2022). Given these fiscal divergences, associated with the different ideas about the intervention of the Public Sector within the productive fabric, and its classic functions of allocation as a corrective body for market failures, redistribution of wealth and macroeconomic stabilization, the EU intends to establish a common tax system. Therefore, this study will analyze the feasibility level of a European fiscal federalism, as well as a proposal for it, in order to obtain a joint model within the European framework, which optimizes the level of investment in tune with the aggregate demand.

By virtue of the work carried out by Ashworth and Heyndels, between 2000 and 2002, certain evidence of harmonization in the tax structure of the EU during the period 1965-1995 is affirmed, and they maintain that this convergence has occurred in the six countries that formed part of the initial structure of the European Community. Based on this research, new information is included, contrasted with data up to 2021, which allow a more concrete synthesis of this last period, taking into account important changes such as the entry of new countries such as Austria, Finland and Sweden, as well as the transcendental exit of the United Kingdom; and including in turn, the consequent effects that have developed as a result of the Stability and Growth Pact in 1997; the third phase of the Economic and Monetary Union in 1999; the euro in circulation in 2002; the Lisbon Treaty, ratified in 2007; as well as, the effects provoked after the COVID-19 health crisis (and economic, Bagus et al, 2021; González et al, 2021; Huerta de Soto et al, 2021; Sánchez-Bayón et al, 2022), which has brought about a notable credit issue, and through which the latent inflation during these last two financial years can be explained (Alonso et al, 2023; Sánchez-Bayón et al, 2022 and 2023).

For their part, it is worth analyzing the four bases that project the tax harmonization process, which are the modernization of VAT in accordance with the current situation, excise taxes, the taxation of financial transactions and a common base for corporate income tax; in addition, the levels of tax pressure and effort of each European economy should not be overlooked, as well as the effects that a more profound process of tax convergence may have on them.

Although EU law (art. 93 TEU) and its architecture (Sánchez-Bayón et al, 2018), provides for tax harmonization in relation to value added taxes, and in tune, opens the doors to a possible tax equity on direct taxation, this process faces different drawbacks arising from the principles of unanimity and subsidiarity, which are linked to the difficult coexistence between the EU, as a supranational institution, and the sovereignty of the member countries, which refuse to lose their room for maneuver in fiscal matters, since this is seen as the only stabilization instrument available to the countries of the euro zone, after having ceded their sovereignty, both in relation to their monetary competences and to the budgetary restrictions to which they are subject, by virtue of the Stability and Growth Pact. Likewise, Article 113 TFEU[1] states that the orientation of European economic policy must tend towards fiscal harmonization, although this is difficult to translate into Community policies due to the discrepancies between the executive powers of the member countries.

Along these lines, in July 2020, the European Commission presented a tax reform plan aimed at giving greater symmetry to the European tax structure, while at the same time fighting against tax abuse and putting an end to unfair competition practices within the EU. It is also intended that those proposals that have to do with the introduction or modification of taxes, will be approved by qualified majority instead of unanimously, although their ratification by the European Parliament is still required.

The main premise is that tax harmonization has become very important due to the divergence between member countries in relation to certain taxes such as corporate income tax; the tax difference for a company can be so great that countries such as Ireland, with a rate of 12.5%, could practically be considered a tax haven, compared to countries such as France, where a company pays a corporate income tax of 38%. In addition, the coexistence of 28 different tax systems means that companies operating in different member states have to deal with the corporate tax in force in each of them, as well as with each corresponding tax administration, without there being any European regulations that apply to all countries.

Therefore, through this proposal, the European Commission (EC) intends to simplify the EU tax system and make it fairer, while ensuring greater revenue to finance the stimulus measures designed by the organization, in order to ensure the recovery of economies in the short term and sustain growth in the long term. In fact, the institution itself estimates that, under the current tax framework, the EU loses almost 35 billion euros a year in corporate tax revenue.

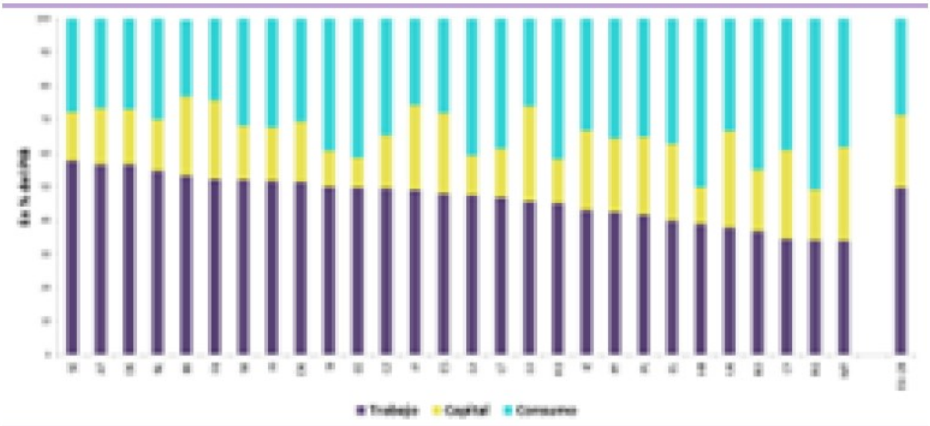
2. Analysis of tax structure, tax burden and tax effort

According to the European Commission's methodology, implicit tax rates are defined as the quotient of the total tax revenues of each category (consumption, labor and capital) with respect to an approximation

1. The Council, acting unanimously in accordance with a special legislative procedure and after consulting the European Parliament and the Economic and Social Committee, shall adopt provisions for the harmonization of legislation concerning turnover t a x e s , […]".

of their respective potential tax bases, obtained from aggregates of consumption and income from the National Accounts. This method provides a comparative view of taxation in the member states:

Figure 1. **Structure of taxation by economic function of the tax base, 2021**



Source: European Commission (2021). European Semester Factsheets: Taxation.

As a result of the referenced data, it is possible to distinguish how countries such as Sweden, Austria, Denmark, Belgium or Holland maintain an asymmetrical structure with respect to their tax trends, while countries such as France, Italy or Portugal, without reflecting a symmetrical distribution, obtain a greater share of income on capital with respect to the aforementioned models. For their part, Luxembourg, Cyprus and Malta distribute their tax rates in proportion to capital, labor and consumption.

Along the same lines, the study of tax harmonization requires the construction of dispersion indicators that synthesize the level of variability of national tax baskets. Through the work done by Ashworth and Heyndels, it is possible to construct measures similar to the σ-convergence used in the study of convergence as a function of income level. By means of these, two measures of dispersion called σ1 and σ2 will be constructed, denoted as the mean absolute deviation and standard deviation respectively. The first fiscal heterogeneity indicator, σ1, for a set *m* of countries can be determined as the mean of the fiscal distance indices for each country. For a country i, referring j to taxes and t to the corresponding year, the fiscal distance with respect to the mean (without country i) will be the aggregation of the differences on the percentages that each of the taxes represent over the total tax revenues (rj).

$$\sigma_{1t} = \frac{1}{m}\sum_i d_i^t = \frac{1}{m}\sum_i \sum_j \left| r_{jt}^i - r_{Jt}^{UE} \right| \tag{1}$$

$$d_t^i = \sum_j \left| r_{jt}^i - r_{jt}^{UE} \right| \; 0 \leq d_j^i \leq 2 \tag{2}$$

This indicator is measured in terms of values between 0 and 2, with 0 when there is full tax equity between the country and the European average, and 2 in the case of a clear tax divergence. Based on this, a complementary measure of tax heterogeneity, σ2, is proposed, based on the standard deviations of the shares of each tax figure:

$$\sigma_{2t} = \sum_j \sqrt{\frac{\sum_i \left(r_{jt}^{i} - r_{jt}^{UE}\right)^2}{m}} \tag{3}$$

3. Methodology and stylized facts

3.1 Analysis of the tax structure, tax burden and tax effort within the European framework

In order to analyze the current economic situation in the EU, we have used the most recent data that allow us to analyze the tax mix (Eurostat, 2021) on the tax structure of the member states, based on the information contained for the period 2000-2021. Given the purpose of the work and in order not to overuse numerical tables, we have chosen to select only the latest data available, for the 2021 fiscal year, in order to focus the content on the present of the taxation of the Member States.

Based on the data expressed in the previous section, it is possible to analyze the tax evolution of the EU countries, as well as to make a synthesis of their tax structure. Table 2, which shows the tax gap index between the member countries, shows a certain convergence between Finland, France, Greece, the Netherlands, Ireland, Italy, Luxembourg, the United Kingdom and Sweden, with respect to the average. However, the tax gap has increased in Germany, Austria, Denmark and Portugal; likewise, the tax gap has remained constant in Belgium and in Spain.

The conventional analysis of harmonization stems from the works of Baumol (1986), Barro and Sala-i-Martin (1992) and Mankiw et al. (1992), where the processes of approximation in income of countries or regions are studied. Based on this line, and in accordance with this previous work, convergence is approached from the perspective of the group or set of countries, while in the time series approach, countries are analyzed individually with respect to some reference.

By using the β-convergence technique, which estimates the relationship between the growth of the magnitude in a period and the value of that magnitude at the origin. This process is called unconditional or absolute convergence and its contrast will be accepted if this relationship is less than zero. In terms of economic growth, under this hypothesis, countries with lower per capita incomes experience higher growth rates[2].

Considering, then, y: tax burden; 0: initial year; T: final year.

$$SDln_t = \left(\frac{1}{n}\sum_{i=1}^{n}\left(ln\gamma_{it} - \overline{ln\gamma_t}\right)^2\right)^{\frac{1}{2}} \tag{4}$$

From it, the so-called beta-convergence velocity (rβ) is estimated:

$$r_\beta = \frac{ln\,(\beta + 1)}{-T} \tag{5}$$

This contrast summarizes the evolution of the dispersion observed in the reference variable during the period under study. As an empirical method, two measures of dispersion were used: the standard deviation of the logarithms (SDln) and the coefficient of variation (CV). Considering, then, for year t, where i is the country, n the number of countries, and yt , the mean of year y.

$$SDln_t = \left(\frac{1}{n}\sum_{i=1}^{n}\left(ln\gamma_{it} - \overline{ln\gamma_t}\right)^2\right)^{\frac{1}{2}} \tag{6}$$

2. This idea is interpreted from the point of view of tax harmonization, in an almost generalized context of increasing tax pressure, although we believe that this is not the most appropriate approach, nor is the interpretation as valid as in the context of economic growth.

$$CV_t = \frac{\left(\frac{1}{n}\sum_{i=1}^{n}(ln y_{it} - \overline{y_t})^2\right)^{\frac{1}{2}}}{\overline{y}_t} \tag{7}$$

For a more specific monitoring of sigma convergence, the annual rate of σ-convergence can be calculated as the percentage change in the indicator (O'Leary, 2001). Likewise, one can contrast the existence of sigma convergence by regressing the dispersion measure over time, so that the beta parameter indicates the existence of sigma convergence, being less than, greater than or equal to zero.

$$CV_t = \alpha' + \beta_t' + \varepsilon \tag{8}$$

Since sigma-convergence is a sufficient but not necessary condition for beta-convergence, Boyle and McCarthy (1997 and 1999) put on the table a new interpretation of convergence, to be instrumentalized together with sigma in order to contrast the existence of beta, called gamma convergence. The idea of convergence is subscribed to in that harmonization has a broader meaning than previous definitions, so that it should not only be confined in that the dispersion decreases - i.e., sigma - or that the smaller observations - i.e., beta - grow larger, but also that movements in the distribution occur that influence the ranking over time.

This observation is obtained by means of the following indicator:

$$RC_t = \frac{var\left[R(y)_{it} + R(y)_{i0}\right]}{var\left[2R(y)_{y0}\right]} \tag{9}$$

Where var[2R(y)$_{y0}$] is the maximum value that the sum of ranks can reach in the case of no variation in the period. Therefore, RC is placed between the values of 0 and 1; denoting a value close to 0 as greater convergence; and therefore, the value 1 is described as the total absence of variations.

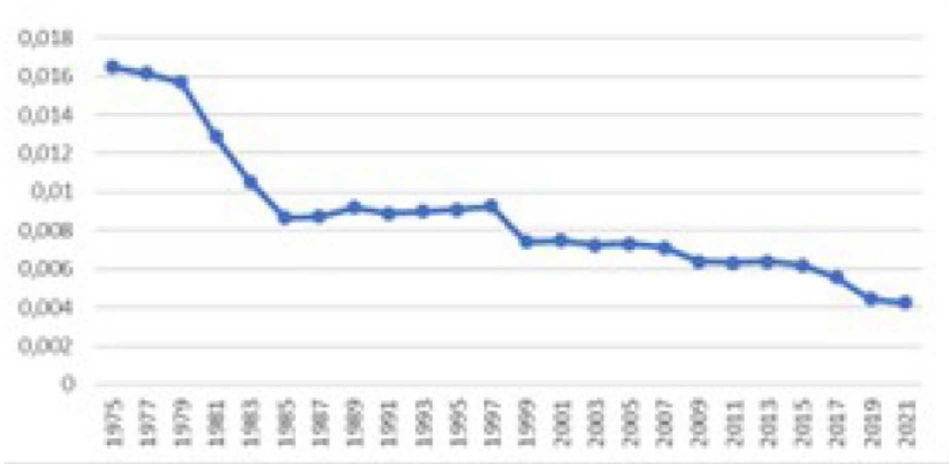
Consequently, according to the above criterion, the analysis of sigma convergence shows a decrease in the dispersion of fiscal pressures among the Eurozone countries for the entire period 1965- 2005. Figure 3 shows this trend, measured by the coefficient of variation, a result similar to that obtained with the alternative measure, standard deviation of the logarithms. A common measure in inequality studies, the Theil index, also shows an almost identical trajectory. The estimation of the sigma convergence equation, summarized below the graph, reveals the significance of the process.

It should be added that these results are similar to those estimated by Delgado and Fernández in 2007, in the study on the convergence of the fiscal structure in the EU, thus reinforcing the conclusion of the existence of a more intense fiscal approximation in the periods indicated. Specifically, a correlation of 0.935 is observed in both indicators, in relation to the level and structure, for the same period (1965-2005).

Under this premise, and on the basis of Table 2 and Graph 3, we can clearly distinguish between five stages; the first during the period between 1974 and 1979, where dispersion decreases slightly; on the other hand, between 1979 and 1984, there is a real convergence of the tax burden with an intense drop in dispersion in a small-time interval, estimated at 23.92%. Thus, the annual rate of σ convergence reaches -4.78%; likewise, during the following years the dispersion continues its downward path until the period between 1992-2005, where there is a stagnation of investment, with small oscillations between the beginning and the end of the period, as well as a very stable fiscal trend. Finally, and from 2005 to 2021, convergence has been driven by a slightly negative slope that minimizes the distance between both indexes, as well as moderately approaching 0.[3]

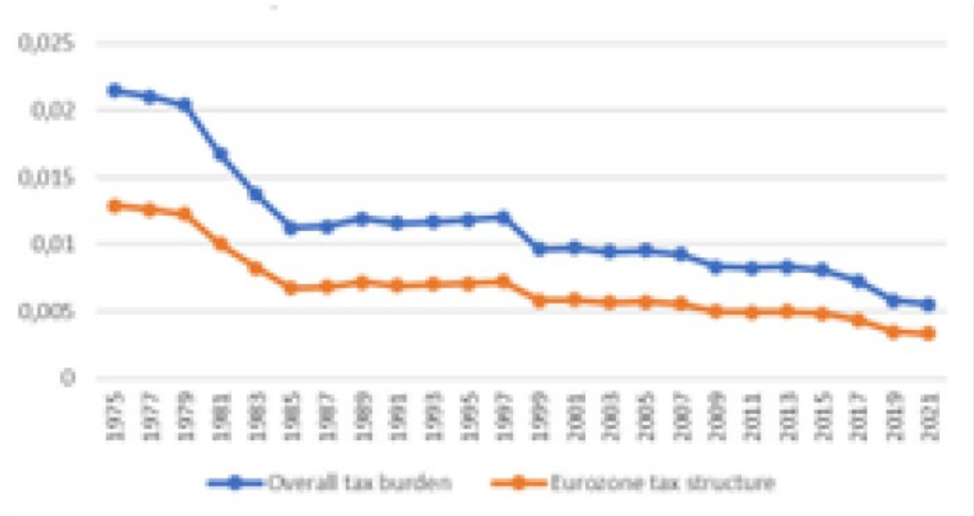
3. It is worth noting that there is a certain correlation between convergence periods and periods of economic recession, mainly explained by the budgetary adjustment that economies have to face, in accordance with the recessionary scenario and debt repayment.

Figure 2. Convergence of the overall tax burden in the euro zone



Source: Own elaboration based on available data and according to the theory of Ashworth, J. and Heyndels.

Figure 3. Convergence of the overall tax burden vs. convergence of the Eurozone tax structure



Source: Own elaboration based on available data and according to the theory of Ashworth, J. and Heyndels.

However, in order to adjust the proposed tax harmonization framework, it is worth analyzing the level of tax effort of the countries, according to their tax burden in relation to GDP, as will be discussed in the following section. Once the process of European integration in the fiscal sphere has been explained, we will go on to explain the resources and conditions to which the EU economies are subject. This is so much so, due to the tax disparity that defines each country, and therefore the tax harmonization process can distort in negative terms certain variables intrinsic to the correct functioning of an economy, such as aggregate demand, the level of savings and investment, and price indexes.

Before comparing the different European tax systems, we must clarify the terms on which the corresponding analysis is based, and first of all, we must differentiate between the two indices. The tax burden is denoted as the relationship between the tax collection in real terms of a country – despite the fact that tax legislation requires its expression in nominal terms – and its GDP, the formula being as follows:

$$pf = \frac{total\ tax\ revenue}{GDP} X100 \cdots\cdots\cdots \tag{10}$$

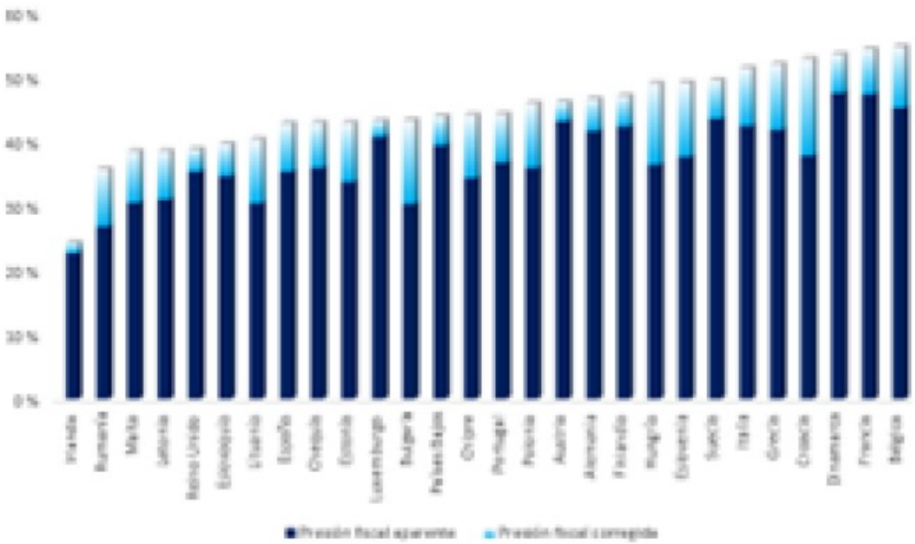
The tax effort is an economic term that introduces the population variable to the above formula. In this way, an economic indicator is obtained that measures the incidence of taxation on the production of the inhabitants, thus establishing the effort of the population of a territory to be able to meet its tax obligations. In order to comply with its expression, the following formula is developed:

$$Fiscal\ ef\ fort = \frac{fiscal\ pressure}{GDP\ per\ capita} X1000 \cdots\cdots\cdots \tag{11}$$

In this analysis, the data will be interpreted from two different perspectives: on the one hand, from the pre-2020 scenario, in order to interpret data that are not distorted by the COVID-19 pandemic, and finally, a link will be established with the current situation, in order to understand the short-term economic development and apply it to the model proposed.

Summarizing the results, it can be seen that, in both projections, Spain is below the average, and it should be noted that the countries with the lowest tax effort – both apparent and corrected – are Ireland and Luxembourg. On the other hand, Eastern European countries such as Bulgaria, Croatia, Hungary, Poland and Romania have the highest levels of fiscal effort in Europe, both in the apparent and corrected indexes. These differences are manifested according to the size of the underground economy and the volume of GDP per capita, i.e. countries with a higher GDP per capita, such as Ireland and Luxembourg, have a miniscule underground economy index, while countries with a considerable volume of underground economy are the economies with the lowest GDP per capita in the region.

Figure 4. **Tax burden relative to GDP in the EU**



Source: Own elaboration based on Eurostat data (2021).

Two cases under study are Sweden and Bulgaria, because in the first case, despite the fact that the Swedish economy is one of those with the highest tax burden in Europe (44.71%), it has a considerably

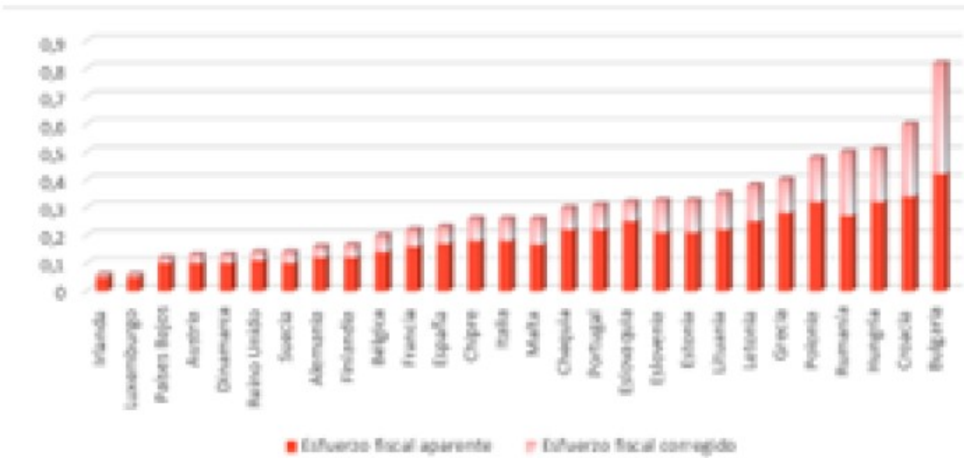
Figure 5. Variation of the tax burden with respect to GDP. Own elaboration based on Eurostat 2021 data.

Source: Own elaboration based on Eurostat data (2021).

low level of tax effort; while Bulgaria is among the countries with the lowest tax burden, and yet its agents have an outstanding tax effort, in aggregate terms.

This data is due to the fact that, at the time of estimating this tax burden indicator, the payment of taxes and social security contributions is not the only factor that interacts with the tax burden borne by taxpayers, but rather income or GDP per capita has an equal influence on the estimation of such burden or effort, since in the face of equal tax burden levels, those taxpayers with lower per capita income will bear a greater tax burden. Indeed, the difference, in terms of per capita income, between Sweden and Bulgaria is almost 40,000 euros. As a consequence of the above, it can be affirmed that there is empirical evidence on the influence of the underground economy on the tax effort indicator, which is even denoted as an expression that is more in line with the true tax burden borne by taxpayers.

Figure 6. Apparent and corrected tax effort in the EU



Source: Own elaboration based on data from CUNEF, World Bank and Eurostat 2021.

This positive correlation is due to the lack of contribution from operators in the unregulated sector, who not only do not contribute to financing the public coffers, but also benefit from the benefits offered by the state (free-rider phenomenon). Therefore, even if the levels of tax pressure are equal, it is worth considering the space occupied by the underground economy in each country, since the larger the underground economy, the smaller the number of individuals on whom the tax burden is spread.

However, neither should it be inferred that a low tax burden results in a reduced underground economy, since countries such as France, Austria and Denmark (48.31%, 42.39% and 46.91%, respectively) have a significantly lower volume of underground economy than the European average (12.8%, 7.1% and 10.9%, respectively). The same is true of countries such as the United Kingdom and Ireland, whose tax burden is 35.03% and 23.15%, respectively, while their undeclared economy is estimated at 9.4% and 10.4%, respectively.

In the case of Spain, it is characterized by a tax burden of around 37.30%, with an acknowledged significant increase in its tax rates for the last two fiscal years, and which is significantly lower than the United Kingdom, but which, nevertheless, is estimated to have a level of underground economy double that of the British country.

All things considered, it is difficult to establish a positive relationship between the level of tax pressure and the size of the hidden economy, but there are other variables that are not included in the models presented, such as the rigidity of the labor market, tax morale, or social transfers, among others. However, these variables do seem to be compressed when introducing GDP per capita in the estimation of the tax effort, since, evaluating the results presented, it can be indicated that there is a certain proportionality relationship between the volume of the hidden economy and the level of tax effort.

4. Results and discussion

4.1 The development of Community VAT and Excise Taxes

Initially, the EU focused on indirect taxation, as it has the greatest impact on international trade. In 1967, the eec agreed that taxation on consumption should be implemented on a rate that taxes the value added as opposed to other modalities such as cascading multiphase or single-phase taxes, it means, those derived from manufacturing and wholesale and retail trade. Therefore, the purpose of establishing a VAT-type tax arises from the interest of taxing the value as it increases in the different stages of production and distribution of goods and services, by means of which the value of the taxed good and its tax rate can be known with precision. By means of this premise, the principle of destination taxation is applied in international trade operations, so that the goods leave the country of origin without the tax applied and therefore such consumption is taxed in the country of destination according to its tax rate. Destination taxation aims to ensure that the relative price of products is not distorted by tax differences between countries, while guaranteeing the neutrality of indirect taxes.

For its part, the choice of VAT is linked to the objective of creating a common market where differences in the level of taxation on consumption do not distort the relative prices of products, thus avoiding competition between countries in the international market. Consequently, Community VAT has undergone few variations, mainly due to the unanimity requirement governing the tax field. VAT legislation has numerous exemptions, reduced rates and special treatments, which not only adulterate the economy as a whole, but complicate the tax and increase compliance costs for both tax administrations and businesses.

Next, we proceed to analyze the VAT collection performance through an indicator that measures whether the tax manages to tax the totality of final consumption:

$$\frac{RIVA}{BP\,X_t} = IRIVA \tag{12}$$

Translating the formula, the VAT Collection Index (IRIVA) is the ratio between actual collection, which is obtained from tax data, and potential collection (BP xt), where BP is the potential base, obtained from national accounting, and "t" is the general tax rate.

Based on the data referenced in the table, the actual collection of community VAT is approximately half of the potential collection, a very low value that indicates that half of the consumption is not made and if it is made it is not in an effective way.[4]

4. VAT shows its complexity when it comes to identifying exempt transactions, since there are always circumstances in the

Figure 7. VAT collection rate and comparison of the rates applied in the different countries by category.

ÍNDICE DE RECAUDACIÓN DEL IVA

	2013	2015	2017	2018	2019	Media
UE-15	0,55	0,57	0,57	0,55	0,49	0,55

Source: El Economista (2019). Why does Spain collect less than the European average?

With regard to special treatments, the directive establishes various goods and services that may be exempt. Firstly, those deriving from operations related to health, education and social services are exempted in order to compensate for the alleged regressive nature of VAT. The purpose of this policy is to benefit final consumers with the aim of lowering the price of goods and services. On the other hand, for technical reasons, most financial and insurance services, as well as certain transactions related to real estate and gambling, are exempt. However, according to scientific evidence, exemptions cause major problems, such as the fact that businesses cannot deduct the VAT they pay on their purchases, and therefore end up paying a higher price, while prices are lower for end consumers. In addition, VAT is no longer neutral in international trade transactions, since companies operating in the foreign market incorporate the input VAT that they have not been able to deduct into their prices.

The reduced rates are applied to goods and services expressly contemplated by the directive, and their determination is derived from social reasons, in order to attenuate the regressive impact of VAT, since being a general tax, it taxes all goods and services, ditto with those that are basic necessities. However, empirical evidence affirms that the greatest savings in absolute terms are obtained by the wealthiest families:

The VAT harmonization process has its origins in Directive92/77/EEC[5], which established that a common minimum rate of 15%, subject to a periodic two-year review. Subsequently, the Council extended the period of validity of the minimum rate until the end of 2017, and Member States could set one or two reduced rates of at least 5% for certain goods and services. Along the same lines, Directive 47/2009 was adopted in 2009, concerning reduced VAT rates for locally supplied labor-intensive services

Consequently, in December 2011, the European Commission approved a communication that establishes the basic principles that the future of Community VAT should follow, and which were assumed by the EU Council, which are to establish an analysis between the economic, social or technical reasons that motivated the VAT exemptions when they were applied, and whether they are valid according to the current reality; to review the use of reduced rates and limit it when more efficient

market that cause uncertainty as to whether they fall within the scope of the exemption. In addition, exemptions complicate compliance with the tax by companies that carry out transactions that are subject to VAT Exempted and simultaneously non-exempted; as under this circumstance, according to state regulations, they are required to determine the deductible portion of their activities. In Spain, the pro rata rule is applied, in its twofold general or special variant, or, as the case may be, taxation of sectors differentiated by activity.

5. The White Paper on the Internal Market, published by the European Commission, advocated the elimination of tax barriers, and as early as 1987, and proposed to govern commercial transactions between member countries based on the "place of origin principle". However, the Member States rejected these proposals, and as an alternative, decided to make the market more dynamic through t h e country of destination principle for transactions between VAT taxable persons. Also, in 2005, the European Commission agreed to make the indirect taxation system more uniform, through Implementing Regulation 282/2011, so that there would be a certain administrative cohesion in order to combat tax fraud derived from intra-Community transactions, in relation to Value Added Tax.

alternatives exist; to focus efforts on improving the operation of VAT under the principle of destination taxation; to establish a "one-stop shop" for companies operating in several Member States, particularly SMEs; to digitalize the operation of VAT, as well as to regulate a standard self-assessment model for the entire EU.

For its part, in June 2018, the European Council adopted a Directive establishing a permanent standard minimum VAT rate of 15%, and in December of the same year, legislative acts were approved regarding the establishment of an improved operating system on the current VAT structure, as well as on its digital publications; in addition to ensuring transparency on administrative cooperation in cross-border transactions. Thus, in 2019 also the council instituted a new legal structure for VAT declaration and settlement, in connection with e-commerce.

With regard to excise duties, Directive 2003/96/EC of October 27, 2003 was the new regulatory basis for the excise duty on mineral oils, the purpose of which is to extend the scope of application of the duty to all products in the energy and electric sectors.

Moreover, since the tax rates are specific, i.e., a fixed amount applied to physical units of the taxed product (e.g., liters of gasoline), the new directive also sought to update the minimum level of taxation required, the real value of which depreciates with inflation. In May 1995, the Commission presented a new proposal for a tax on CO2 emissions and energy consumption which, while maintaining the taxable object of the first proposal, established more flexible criteria for its introduction and regulation. However, it was not possible to reach an agreement on this second proposal either, a circumstance that led to the abandonment of the idea of Community taxation of CO2 emissions and, subsequently, to a major reorientation of the Community proposal. Specifically, on March 12, 1997, the Commission presented a proposal for the taxation of energy products which sought to extend the scope of the taxation of mineral oils to all energy products. This proposal was the origin of the directive finally adopted in October 2003. The period required to reach agreement, at that time already between 15 Member States, was more than six years. Once again, numerous special or transitional arrangements had to be put in place to allow ratification by all the Member States. More recently, on April 13, 2011, the European Commission presented a proposal to introduce a profound reform in the taxation of European products, whose philosophy is similar to that of the unsuccessful 1992 proposal. The aim is to tax all energy products according to their energy and carbon content, with equal weighting of each variable. The aim is to encourage, on the one hand, energy efficiency and, on the other hand, the consumption of the most environmentally friendly products. In addition, once again, the Commission aims to eliminate distortions in the proper functioning of the single market. And with the aim of protecting the competitiveness of the European companies, special treatments are foreseen, as well as a gradual implementation.

4.2 Tax on financial transactions

Regarding the taxation of financial transactions, in 1972, the Keynesian economist James Tobin proposed an international tax on all spot transactions between one currency and another, the rate of which would be proportional to the amount of the transaction. This issue has come to the fore as a result of the role played by financial institutions during the course of the financial crisis, as well as the massive public spending that has been earmarked to rescue them.

In the case of VAT, it taxes the value added at each stage of the production process, therefore, in each consideration of goods and services, companies are affected to charge VAT on the operation carried out, which, as explained above, in the subsequent liquidation of the tax, companies can deduct the amount of VAT they have borne on their purchases. Therefore, in order to comply with the normal operation of VAT, it is essential to know the value of each taxable transaction, which is impossible with certain financial services that do not have a certain price, such as the collection of a payroll in the current account, direct debits, the granting of a loan or withdrawing money with a credit card. According to the European Commission, approximately two thirds of financial services are not priced.

On many occasions, financial services are exempt, which generates distortions, since financial entities cannot deduct the VAT they pay on their purchases, which generates a higher cost for them. Precisely in this economic reality, one of the symptoms suffered by the financial system is that credit has been too easy and cheap for individuals, while the opposite has been the case for companies, and the VAT exemption has negatively stimulated both directions, according to The Institute for Fiscal Studies. Ideally, financial institutions should be able to apply VAT to deduct it in the way that they bear it on their purchases, thus encouraging the vertical integration of the maximum number of activities as opposed to the possible outsourcing of important services for the financial sector such as security, cleaning and IT services.

According to a study conducted by the Institute for Fiscal Studies, it is estimated that VAT assessments do not the Spanish financial sector's deductibles correspond to an additional cost of 6.05%, and it is also a reality that the different financial institutions compete with each other in an unequal manner, since those that are subject to higher tax rates are discriminated against with respect to those with lower rates.

In September 2011, the European Commission launched a directive with the aim of establishing a common system of taxation on financial transactions, COM (2011) 594 final, whose framework of purposes breaks down into definitively harmonizing indirect taxation on financial transactions to ensure the full functioning of the single market; ensuring that financial institutions contribute substantially and fairly to the financing of the costs caused by the economic crisis; and establishing disincentives for those transactions that do not reinforce the efficiency of the financial markets.

The proposal aims at harmonizing the elements inherent to the Financial Transaction Tax - hereinafter FTT - in order to consolidate the full functioning of the single market, as well as to avoid tax arbitrage practices. It also offers a certain degree of sovereignty to the participating States, in accordance with the principle of subsidiarity and proportionality contemplated by the TFEU.

Regarding the application of the tax, it would be levied on all transactions related to any financial instrument, as they are potentially substitutable. For example, those that are negotiable in the foreign exchange market, units or shares in collective investment institutions and derivative contracts.

These transactions must be carried out by financial institutions in the Member States, for which the general principle of residence is set as a general principle along with the principle of the place of issue of the instruments, in order to avoid possible relocations. Transactions are therefore taxed only when there is a consistent link between the transaction and the territory of application of the FTT. This proposal also sets minimum rates depending on the origin of the transactions, as it is understood that the impact on the markets is different depending on whether the origin is a derivative or another financial product. The proposed directive offers a rate of 0.01% for derivative transactions and 0.1% for other transactions, which achieves the objectives set in two ways: on the one hand, it leaves each country room for maneuver to reduce the rates or not, depending on its legal position, and on the other hand, it ensures that the rates are significantly low to avoid, as far as possible, the risk of relocations.

However, this is by no means an easy task, and should it be achieved, the reaction of the markets to the new tax should be closely watched. The FTT is a cascading tax on financial instruments that can be transferred during their life. The greater the number of transfer transactions, the greater the tax burden. Precisely, that is the purpose, to tax the negative externalities caused by very frequent transactions that are indicative of speculation and capable of destabilizing the markets.

However, according to the Mirrlees Report (2021), the real effect may be that the tax will be passed on to savers in particular, resulting in lower returns. Along these lines, it could be justified to want financial institutions to bear the cost they have incurred as a result of the economic crisis, but nevertheless, there are doubts as to whether the FTT is the most efficient instrument, and by virtue of this report, a favorable treatment of the financial sector with respect to VAT is advocated, rather than the introduction of an FTT.

4.3 Common consolidated corporate income tax base

As far as direct taxation is concerned, these are exclusive competencies that belong to the Member States and for which they have been reluctant to cede their sovereignty, since through these prerogatives, countries have a certain margin of maneuver to attract investment.

Companies operating in more than one Member State are regulated by the tax legislation of each country where their head office is located, which entails a technical and economic cost in knowing the different tax laws of each country as well as dealing with different tax authorities.

The effort is directly proportional, i.e., the larger the number of Member States and those in which they operate, the higher the cost of these companies, thus hindering the proper functioning of the common market. This effort follows a direct proportionality, i.e., the greater the number of Member States and those in which they operate, the higher the cost for these companies, thus hindering the proper functioning of the common market. In 2001, the European Commission launched an action plan based on two major proposals, the first to establish a taxation system based on the country-of-origin principle, and the second to establish a common consolidated corporate tax base. The first proposal (COM/05/702) focused mainly on SMEs operating in more than one Member State and offered, among other things, to use the home country principle to determine the applicable tax base so that they would not be subject to the different tax structures of the countries in which they operate. This proposal has its origin in a study by Lodin and Gammie (2001), which, as stated above, is focused only on SMEs, since the costs of complying with various regulations are proportionally higher for them than for large companies. This system was intended to be voluntary, both for business entities and for the countries that join it, with a trial period of five years. However, as with other proposals, insufficient progress has been made in this regard and the Commission is currently focusing on the second of the proposals submitted in the 2001 plan.

Specifically, by virtue of an agreement dated March 16, 2011 (COM/2011/121) the Commission proposes to establish a common consolidated tax base for IS, so that companies operating in more than one Member State would enjoy a special prerogative, if they voluntarily so request, which is to determine a single tax base for corporate income tax purposes valid for all EU countries. The proposed directive proposes only the calculation of a common base, so that each country could continue to apply the tax rate according to its particular conditions and considerations. Each country would therefore be free to set its own corporate tax rate, as at present, but with the addition of a common tax base, in order to accommodate companies operating in more than one state.

However, an objective territorial profit distribution system must be established so that each Member State taxes its share of the total profit. For this reason, as it's occurs the case in the United States and Canada, the proposed directive provides for a formula for apportioning the total profit among the Member States in which the companies operate. Essentially, it uses three factors to indicate the origin of this profit: sales, employees and assets. The first takes into account the interest of the country to which the operation is destined, while the factors that weight workers and assets make it possible to compare the profit in relation to the interest of the country of origin. The proposed directive studies each of these factors in detail, as well as the country to which it corresponds.

This proposal aims to reduce the administrative burden, compliance costs and bureaucratic uncertainty of having to deal with 28 different tax systems when determining taxable profits. This common basis provides not only a single common structure, but also simplifies compliance. In addition, a "one-stop-shop" system is offered, where companies file a single return in the country of residence of the company or where the parent company is located in the case of groups. The Commission also aims to eliminate distorting incentives for intra-group transfers, since the common consolidated basis would be the same for the whole EU.

It also allows the offsetting of losses between companies of the same group located in different Member States. However, there are also doubts about its possible negative effects. For example, there could be opportunistic behavior that takes advantage of this flexibility, so that the regulations allow the profit to be allocated to countries with lower tax rates. As a result, corporate groups will establish new tax planning practices with the aim ofreducing the size of their tax bill.

In order to achieve this proposal, it is essential to ensure the correct synchronization and cooperation between each of the tax administrations of the Member States, in addition to establishing criteria.

The Member States would otherwise have some leeway, by means of their enforcement policy, to attract companies. Otherwise, member states would have some leeway, through their enforcement policy, to attract business. In sum, the recent announcement that the European Commission was for the first time opening an official investigation into possible illegal transfer pricing agreements between the tax administrations of three countries, Ireland, the Netherlands and Luxembourg, and three large multinationals, Apple, Starbucks and Fiat, respectively, serves as a latent example of the fact that a regulation is as important as its correct application and control. Likewise, the common base would coexist with the corporate taxes of each Member State, resulting in the different tax administrations ensuring effective compliance with two different systems, which undoubtedly represents a higher cost. As it is optional, it would be left to the free choice of the companies to determine in advance which system requires less expense for them.

On the other hand, the definition of the same base has other empirical effects that are also noteworthy: in the words of Auerbach et al. (2010), the common base increases tax competition on tax rates, whose margins would be much more characteristic if they are subject to a common tax base. Also, its very definition may contain certain incentives, as is the case, for example, with R&D activities, which means establishing a common policy on these other extra-fiscal objectives. In this regard, it has been pointed out (Fuest, 2008) the effect it may have on competition with third countries, due to the well-known difficulties of modifying a Community directive once it has been approved. Finally, a study should be carried out on the effect of the common base on the rest of the corporate tax bases of each Member State, since it may happen that they progressively adapt their bases to the common base, as has been happening with VAT and has been discussed earlier in this study.

Although its implementation has been under study since 2004, the existing divergence, both in personal income tax and corporate income tax, has become evident due to the fact that in recent years tax structures have been modeled, via direct taxes, by means of a generalized downward trend, influenced by the entry of new countries with significantly lower levels of taxation. The European Commission's tax reform is intended to put an end to these controversies by intensifying the fight against tax evasion and abuses of market power, boosting tax fairness and curbing unfair competition practices.

This package consists of three basic precepts, firstly, a Tax Action Plan, which includes 25 measures to simplify the tax framework of the member countries, as well as to adjust it to the current socioeconomic situation; on the other hand, it proposes to amend the Directive on administrative cooperation expressed above, through which, it is intended to extend the tax transparency rules promoted by the EU to digital platforms, with the purpose of taxing the profits obtained online for the part that corresponds to them. In this way, the national authorities determine the taxable event, as well as reduce the bureaucracy derived from the administrative burden on websites, which require different reports to be submitted, depending on national requirements.

The European Commission is also proposing to reform the Code of Conduct for business taxation, which aims to ensure that the way in which Member States examine each other's tax systems complies with the principles of fair tax competition and avoids unlawful tax practices. This point is particularly sensitive for countries such as Ireland, Belgium, the Netherlands and Malta, given their considerable flexibility for companies.

In this line, the EU wants to establish tax equity, through a framework with non-member countries, whereby both adhere to standards of good tax governance, and thus expand geographic coverage.

5. Conclusions

Increasing European integration, encompassed under measures such as the Schengen Treaty, monetary union and VAT harmonization, has brought about some fiscal convergence between economies.This is particularly accentuated in the countries that have been linked to the integration process for the longest time. For its part, the EU, in recent years, has been assuming increasing tax powers over the Member States, which, although this prerogative was not contemplated in the TFEU, is a situation that has arisen as a result of the need to increase the level of tax collection and correct the negative externalities that have affected the single market. Therefore, it can be said that the EU's tax powers do not derive from a positivized norm, but are being consolidated as part of common law.

For their part, the answer to this question coincides in that the taxes that consolidate the tax harmonization process are nourished by the same ideas, which are to establish a one-stop shop, simplify the application of the tax, and encourage cooperation between member countries to the same extent that their competitive eagerness is reduced. This measure can reduce the level of the underground economy, as well as increase the marginal propensity of taxpayers to declare what they earn during a fiscal year, and reduce their bureaucratic costs.

Therefore, and given the differences that still exist within the European fiscal framework, it is necessary, in the first instance, to harmonize the economic environment through a common system so that companies become indifferent to operating in one country or another and, therefore, the free movement of people, companies and goods is truly guaranteed. In short, the level of undeclared economy in the member countries is higher than the budget deficit that is used to issue public debt, so that a lower volume of underground economy can be translated into a lower level of indebtedness.

Therefore, despite the existing gap between some of the European economies, it is possible to make their tax rates more flexible and facilitate their application in order to optimize collection rates and reduce the tax burden.

References

Albi, E. (2001). *European tax harmonization: a review of the situation.* Papeles de Economía Española, 87: 33-43.

Alonso MA, SánchezBayón A, Castro-Oliva M (2023). *Austrian business cycle theory applied to the Spanish case: from the beginning of the euro to the great recession and its recovery.* Re- view De Métodos Cuantitativos Para La Economía Y La Empresa, 35, 280-310. https://doi.org/10.46661/revmetodoscuanteconempresa.6837

Álvarez, S., Fernández De Soto, M.L. and González, A.I. (2003). *The taxation of savings in the European Union: harmonization or competition?.* Crónica Tributaria, 109, pp. 9-36.

Ashworth, J. Y., Heyndels, B (2000). *The evolution of national tax structures in the European Union, in H.Ooghe; F. Heylen; R. Vander Vennet and J.Vermaut (eds.): The Economic and Business Consequences of the EMU.* A Challenge for Governments, Financial Institutions and Firms, Boston: Kluwer Academic Publishers, pp. 155-180.

Ashworth, J. Y., Heyndels, B. (2002). *The impact of EU-membership on reve-nue structures, in W. Meeusen and J. Villaverde (eds.): Convergence issues in the European Union.* Cheltenham: Edward Elgar, pp. 103-129.

Auerbach, A., Devereux, M.P., and Simpson, H. (2010). *Taxing Corporate Income, in J. Mirrlees, S. Adam, T. Besley, R. Blundell, S. Bond, R. Chote, M. Gammie, P. Johnson, G. Myles and J. Poterba (Eds.), Dimensions of tax design: the mirrlees review, oxford university press.*

Bagus, P., Peña-Ramos, J.A., Sánchez-Bayón, A. (2021). *Covid-19 and the Political Economy of Mass Hysteria.* International Journal of Environmental Research and Public Health, 18(4):1376. https://doi.org/10.3390/ijerph18041376.

Blundell, R. (2013). *Diseñando un sistema fiscal para el siglo XXI", in A. ESTELLER MORÉ and J.M. DURÁN CABRÉ (Dirs.), Por una verdadera reforma fiscal, Ariel Economía, Barcelona.*

Boscá, J.E., J.R. García and D.Taguas (2005). Effective tax rates and tax convergence in the OECD: 1965- 2001, Hacienda Pública Española / Revista de Economía Pública, nº174, pp. 119-141.

Cnossen, S. (2004). Reform and coordination of corporation taxes in the European Union: an alternative agenda, Bulletin for International Fiscal Documentation, no. 58(4), pp. 134-150.

Durán Cabré, J.M. (2010). La reforma del IVA: ¿es ¿es suficiente con aumentar el tipo?, REVISTA 3CONOMI4, 4: 71-79.

Durán Cabré, J.M. (2014). Tax harmonization in the European Union: evolution and current priorities.

European Commission (2011). Focus on the Crisis: The main impacts on eu tax systems. taxation trends in the european union, Brussels.

Eurostat (2008). Structures of the taxation systems in the European Union, European Union.

Faíña Medín, J.A. (1983). Presión fiscal, capacidad imponible y carga tributaria", in Instituto de Estudios Fiscales, Hacienda Pública Española, 80.

GEMMELL, N. and KNELLER, R. (2003). Fiscal Policy, Growth and Convergence in Europe", New Zealand Treasury, Working Paper 03/14. Fiscal Policy, Growth and Convergence in Europe", New Zealand Treasury, Working Paper 03/14.

González E, Sánchez-Bayón A (2021). Rescue and transformation of the Spanish tourism sector via European Next Gen EU funds. Multidisciplinary Encounters, 23(69): 1-15.

González-Páramo, J.M. (2000). Harmonization and tax competition in Europe. Situación actual, perspectivas e implicaciones para España", in García-Milà (ed.): Nuevas fronteras de la política económica, Barcelona Centre de Recerca en Economía Internacional, Universitat Pompeu Fabra, pp. 89-137.

Huerta De Soto J, Sánchez-Bayón A, Bagus P. (2021). Principles of Monetary & Financial Sustainability and Wellbeing in a Post-COVID-19 World: The Crisis and Its Management. Sustainability, 13(9):4655. https://doi.org/10.3390/su13094655

Pérez De Ayala, J.L. (1972). Reflexiones y sugerencias sobre los estudios en torno al "esfuerzo fiscal"", in Revista de Economía Política, 60.

Pizarro Santos, M and Trigo Portela, J. (1999). España en Europa. Un esfuerzo fiscal desproporcionado, Círculo de Empresarios, Monografía 6, Madrid, Grupo Mundi-Prensa.

Reinhard, N., Hofreither, M., and Schneider, F. (1989). The Consequences of Progressive Income Taxation for the Shadow Economy: Some Theoretical Considerations", in D. Bös and B. Felderer, The Political Economy of Progressive Taxation. Felderer, The Political Economy of Progressive Taxation, Springer Nature Publishing.

Sánchez-Bayón A (2019). Converging problems of law, economics and sociology in post-global ization. Law and Social Change, 57: 12-41.

Sánchez-Bayón, A. (2020a). Job-destroying welfare economy measures in the digital economy. Semestre Económico, 23(55), 87-112. DOI: https://doi.org/10.22395/seec.v23n55a4

Sánchez-Bayón A (2020b). Renewal of economic-business thinking after globalization. Bajo Palabra, 24, 293-318. DOI: https://doi.org/10.15366/bp.2020.24.015

Sánchez-Bayón A (2020c). A History of HR and its digital transformation: From Fordism to Talentism and the management of happiness, Rev. Spanish Association of Occupational Medicine Specialists 29(3): 198-214.

Sánchez-Bayón A (2021a). Taking stock of the digital economy in the face of technological singularity: changes in occupational well-being and entrepreneurial culture. Sociology and Technoscience, 11(2). 53-80. DOI: https://doi.org/10.24197/st.Extra_2.2021.53-80

Sánchez-Bayón, A. (2021b). Urgencia de una filosofía económica para la transición digi- tal, Miscelánea Comillas. Rev. Human and Social Sciences, 79(155): 521-551. DOI: https://doi.org/10.14422/mis.v79.i155.y2021.004

Sánchez-Bayón, A. (2022). Heterodox reading of the European digital transformation of tourism: paradoxes and failures due to model change. Atlantic Review of Economics-AROEC, 5(2), 1- 18.

Sánchez-Bayón A, Campos G, Fuente C (2018). Evolution and evaluation of European construction and its institutional relations (1946-2011): keys on the role of civil society and case study of the European Movement. Law and Social Change, 52: 1-69

SánchezBayón A, González-Arnedo E, Andreu-Escario Á (2022). Spanish Healthcare Sector Management in the COVID-19 Crisis Under the Perspective of Austrian Economics and New Institutional Economics. Frontiers in Public Health 10:801525 (1-15). doi: 10.3389/fpubh.2022.801525.

Sánchez-Bayón A, Castro-Oliva M (2022). History of recent capital and wage deflation in Spain: Review of business cycle theory developments. Iberian Journal of the History of Economic Thought, 9(2), 111-131. https://doi.org/10.5209/ijhe.82760.

Sánchez-Bayón A, Castro-Oliva M (2023). Heterodox management of periodic economic crises: Developments in Austrian cycle and capital theory. Economics & Business, 5(1), 31-03. https://doi.org/10.33326/27086062.2023.1.1594. https://doi.org/10.33326/27086062.2023.1.1594

Sánchez, J. and J.S. Gómez (1999). Some considerations on the harmonization of direct taxation in the EU, Economists, 80.

Sanz, J.F; Romero, D.; Álvarez, S; Chocarro, G. And Ubago, Y. (2005). Corporate income tax in the Europe of the Twenty-Five: a comparative analysis of the main items.

Schneider, F., Buehn, A. and Montenegro, C.E. (2011). Shadow economies all over the world: new estimates for 162 countries from 1999 to 2007, in F. Schneider, Handbook of the Shadow Economy, Cheltenham (UK), Edward Elgar Publishing.

Schneider, F. and Enste, D. (2000). Shadow Economies Around the World: Size, Causes, and Conse quences, Journal of Economic Literature, American Economic Association, 38.

Anexos

Annex I: Fiscal distance of each country (*di*) fiscal heterogeneity (σ1) in the EU-15.

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Alemania	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Austria	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Bélgica	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Dinamarca	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
España	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Finlandia	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Francia	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Grecia	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Holanda	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Irlanda	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Italia	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Luxemburgo	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Portugal	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Reino Unido	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Suecia	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Source: Own preparation based on the above calculations and using data provided by Datosmacro.