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# Tax compliance and wellbeing: an analysis with a global perspective

## Cumplimiento fiscal y bienestar: Un análisis con perspectiva mundial

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#### Abstract

Tax collection is the basis for the development of welfare states in the countries, in their social, economic and environmental aspects, and it is a guarantor of their happiness. The strengthening of tax morale and tax compliance of citizens is not only important to achieve the goals assumed by fiscal policy but also are part of the values that can generate a higher level of personal satisfaction. The aim of this research is to provide a global overview of the changes that have occurred in tax revenues and their relationship with the greater or lesser degree of wellbeing achieved by citizens. To carry out this research, the databases of tax statistics offered by the OECD and the global index of sustainable development offered by the New Economics Foundation have been used. The results show that countries with greater tax collection on their GDP and with more solid tax structures also have high levels of welfare. Among the countries that show the best results are Holland and Norway, with high levels of happiness and tax compliance. However, it must be highlighted the important role played by the environment, which justifies the results reached by some countries, generally with less economic development. The evidence obtained has important implications for the design and application of fiscal policies in the world.

#### Resumen

La recaudación fiscal supone la base para el desarrollo de los estados de bienestar en los países, tanto en su vertientes social, económica y medioambiental, como garante de su felicidad. El fortalecimiento de la moral tributaria y el cumplimiento fiscal de los ciudadanos no solo es importante para lograr alcanzar las metas asumidas por la política fiscal. sino que también forman parte de los valores que pueden generar un mayor nivel de satisfacción personal. El objetivo del presente trabajo es ofrecer una panorámica mundial sobre los cambios que se han producido en los ingresos fiscales y su relación con el mayor o menor grado de bienestar alcanzado por los ciudadanos. Para llevar a cabo esta investigación se han utilizado las bases de datos de estadísticas tributarias ofrecidas por la OCDE y el índice global de desarrollo sostenible que ofrece New Economics Foundation. Los resultados muestran que los países con mayor recaudación tributaria sobre su PIB y con estructuras impositivas más sólidas cuentan también con altos niveles de bienestar. Entre los países que alcanzan los mejores resultados se encuentran Holanda y Noruega, con elevados índices de felicidad y de cumplimiento fiscal. No obstante, hay que destacar el importante papel desempeñado por el medio ambiente, que justifica los niveles de felicidad a los que llegan algunos países, en general de menor desarrollo económico. La evidencia obtenida tiene importantes implicaciones para el diseño y aplicación de políticas fiscales en el mundo.

#### Keywords | palabras clave

Fiscal policy, economics statistics, wellbeing, development economics, fiscal theory, international policy. Política fiscal, estadística económica, bienestar, desarrollo económico, fiscalidad, política internacional.

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#### 1. Introduction

The role of the tax system in society is much more important now than it was before, reason for which it is known as the body that finances the activities of the government and the public sector. Tax policies are increasingly being used to provide non-collection objectives, such as stimulating regions, behaviors and social benefits, among others. Therefore, its perception and its economic, social and environmental effects are increasingly interesting and with a greater impact on the well-being of citizens who are increasingly aware of their importance (Hanousek & Palda, 2004; Adams, 1993; Dubin *et al.*, 1990). However, the broader the role of the state, the higher the revenue the government of a country will need to address the challenges entrusted. Much of this income will come from taxes, thus tax revenues will have to be adapted to these needs. The structure of these systems will have to be a reflection of the preferences of each country, as well as its economic features and other characteristics (Alm *et al.*, 1990, 1992, 1993; Tanzi, 2010; Baier & Glomm, 2001; Yitzhaki, 1974).

The payment of taxes is a tax obligation that all taxpayers must assume as part of their activities (Harbaugh *et al.*, 2007; Alm, 1998; Gordon, 1989). Although it has not been routinely regarded as a pleasant activity, a more positive awareness is gradually developing in the world in meeting tax obligations, as citizens are more committed to the role they play in the achievement of the "Welfare State" (Angelopoulus *et al.*, 2007; Wittle & Woodbury, 1985).

The development of a fair tax system ensures that the resources raised will revert to society in multiple ways that will improve the welfare state and enable more happiness for citizens (Bjornskow *et al.*, 2001; Hayney *et al.*, 2003; Fehr *et al.*, 2003), although it is known that this tax compliance is still far from reaching the desired levels in many countries, with ineligible levels of tax evasion (Paredes, 2016; Alm, 2012; Gutz *et al.*, 2005).

The social and economic consequences of tax evasion are well known in terms of efficiency and equity for any economy. Fraud causes budget deficits that require spending or raising taxes, leading to a misallocation of resources, when fraudsters change their behavior regarding investments, working hours, etc., they alter income distribution to the extent that some taxpayers exploit the tax system better than others and generate feelings of distrust before the Law and institutions, as well as loss of collective values. The evidence on tax evasion is extensive (Andreoni et al., 1998; Alm, 1998, 2012; Alm et al., 1999, 2017; Hashimzade et al., 2013; Slemrod & Weber, 2012) and its analysis has aroused great academic interest. In fact, there is a very interesting line of research on tax fraud and well-being that highlights the negative relationship between these variables, which is softened by the role of institutions and the level of social capital (v.gr. Ferrer-i-Carbonell and Gërxhani, 2016; Gërxhani, 2002; Gërxhani, 2004).

Regarding tax evasion, compliance with tax obligations has favorable and important effects for the society; this compliance has not been sufficiently studied and deserves the attention from academics and researchers, since the values being developed can generate a great positive impact for countries (Oishi *et al.*, 2011; Ram, 2009; Turnovsky, 2000). The studies on the dimension of national well-being and happiness have not yet included tax analyses in their variables (Ura *et al.*, 2012; Beytía

& Calvo, 2011), although they do usually include income indicators (Domínguez *et al.*, 2017; Graham, 2010; Stiglitz *et al.*, 2009). Despite this, there is a great interest in academic literature to analyze fiscal morality and its economic and social implications (Togler, 2007; Togler *et al.*, 2010; Frey & Stutzer, 2002; Feld & Tyran, 2002; Frey & Feld, 2002).

The study of the role of compliance with tax obligations in economic development is included among the lines of research at the Salesian Polytechnic University (Ecuador), within the projects conducted on Happiness Management, creativity and social welfare. The design of policies aimed at improving individual, corporate and the well-being of nations, needs them to incorporate elements of fiscal compliance as an objective that clearly promotes social and economic well-being, by enabling that the resources obtained are necessary to be able to provide the coverage of the essential needs for the society. Individuals and businesses contribute to a fairer and more equitable society. There is no doubt about the importance of contributing to companies by implementing measures related to Happiness Management (Ravina *et al.*, 2017) that enable the achievement of better business results.

This work will contribute to this analysis and it is focused on conducting an exploratory analysis on the possible relationships between the rates of tax collection to GDP, explaining this collection by tax categories and sustainable welfare rates. This is a still incipient line of research; thus the results are of great interest to advance on its research. The global perspective offered represents a guide for future analyses, given the differences between countries and regional groups in this field of study. The databases used in this research will allow to have a broad spatial perspective, having information for OECD countries as well as countries in Africa, Latin America and the Caribbean. In the following section, a brief description of the databases and the methodology used is presented.

#### 2. Materials and method

Two databases of global scope and with relevant information to the proposed objectives on the relationship between tax compliance and the level of well-being have been used to carry out this research. There is also temporary coverage of interest, making it possible for the analysis performed to be a reflection of the current moment in which are being discussed the values that should be part of the key elements in the design of public policies in the coming years.

First, the information on global tax statistics data provided by the OECD¹ has been used. The global database of tax statistics developed in close collaboration with regional countries and organizations represents the largest source of comparable statistical data on publicly accessible tax revenue. The database provides reliable and publicly available indicators on the tax structures and levels of individual countries, and it supports global efforts to increase national public revenue with a view to financing sustainable development and economic and social well-being, while aiming at strengthening the capacity of both governments and fiscal policymakers to devise

<sup>1</sup> Available on: https://bit.ly/2Ean9up [Checked on: 05/15/2019]

and undertake tax reforms that translate into an increase in domestic resources to finance the supply of goods and provision of public services, respectively. The database covers 80 countries from 1990 to 2017 from all areas of the world and it provides policymakers and researchers with a valuable and accessible resource based on the OECD internationally recognized standard.

The Global Sustainable Development Index was first published in 2006 by the New Economics Foundation and has continued to develop in 2009, 2012 and 2016². The development of this index combines four variables to show the level of well-being of a country adjusted to the possibility of developing in the long term thanks to the sustainability of its natural resources. The information is available for 133 countries around the world in 2016. The components of the Global Sustainable Development Index are listed in Table 1. The state of the planet and the supply of natural resources are considered relevant aspects to promote economic development. This index is presented as innovative and has been the first to incorporate the environmental variable in the global measurement of well-being at the international level, including the level of well-being and life expectancy of citizens that relates to the ecological impact of consumption patterns. This indicator has 4 fundamental components:

Table 1. Composition and sources of the Global Development Index

Components	Source of information
Well-being	Gallup Global Survey
Hope of Life	United Nations Development Program
Ecological footprint	Global Footprint Network
Inequality	Life expectancy inequalities and per capita income levels

Source: http://happyplanetindex.org/

The information offered by this database comes from different sources, which is combined in order to offer great detail about the situation of happiness in the world. As the index is developed from primary sources, combining them to introduce elements that broaden the world's view of well-being, it is of greater interest to use the indicator to carry out the objectives of this work.

The databases used have enabled a descriptive statistical analysis with scatter plots. It is a mathematical diagram that uses Cartesian coordinates to display the values of two variables for a dataset and that allows to analyze visually the relationship between the total tax revenue with the sustainable development index. In this way, the objective is to classify countries according to their greater or lesser fiscal commitment and the effect they have on the happiness of their citizens, considering the greater or lesser correlation between these two variables, as well as the positive sign (direct relationship: when one variable increases, the other increases as well) or negative (reverse ratio: when one variable increases the other reduces) depending on the situation of the quadrant it occupies.

<sup>2</sup> Available on: https://bit.ly/2cMW6oI [Checked on: 05/15/2019]

This methodology also allows to see the possible relationship on a global scale considering the 80 countries available in the OECD database in 2016, establishing the type of relationship between variables and the strength of the relationship, which could be measured by the traditional correlation coefficients such as Pearson's (parametric) or Spearman's (non-parametric, which is used in cases where the variables examined do not meet normal criteria or when the variables are ordinal). This study uses Pearson coefficient, as it is incorporated by Excel for the adjustment line and also it meets the normal and independent conditions by having a high number of countries and only one observation of each variable for each country. Formally defined as:

Coefiente correlación de Pearson= 
$$\frac{\sum\limits_{j}\sum\limits_{j}(x_{j}-\bar{x})(y_{j}-\bar{y})}{\sqrt{\sum\limits_{j}(x_{j}-\bar{x})^{2}\sum\limits_{j}(y_{j}-\bar{y})^{2}}}$$

Additionally, the scatter chart can help to easily identify patterns related to groups, analyzing differences between groups, different positions between groups, groups of clusters, patterns not related to groups, outliers and extremes values.

#### 3. Results

This section is focused on the information for the year 2016, which is the last year available for the Sustainable Development database. The analysis has also been performed for the remaining years available (2006, 2009 and 2012), but by space limitation and since there are no major changes in the results, only the evidence obtained for the last year is provided. With respect to the overall data of tax statistics, the study will be conducted for the total tax revenue on GDP, and for its main components (Indirect taxation, income taxation, social security contributions and imposition on property). The exploratory analysis is presented in the scatter plots that present the results obtained, in which the main features to be highlighted in each have been marked.

#### 3.1. Total tax revenue on GDP

This section presents the information about the percentage of total tax revenue on GDP and the level of sustainable development. The aim of this exploratory analysis was to highlight the extent to which countries with higher tax revenues and with more commitment to public funding of state actions are those where higher sustainable well-being is also achieved. This last aspect is very important, since a measure of well-being that contemplates environmental aspects in its measurement has been selected, being aware that it is increasingly necessary to take into account these aspects when capturing more fully all dimensions of the well-being of individuals.

The results obtained are presented in Figure 1, identifying the main groups of countries found. The total tax collection ratio on GDP (total government revenue as a percentage of GDP) have been used as an indicator of tax compliance, as well as the global indicator of sustainable development to measure well-being. Graphical analysis allows to verify the European countries that have reached the highest values for

the tax compliance indicator, confirming the further development of their tax systems and their greater fiscal commitment (group collected in the upper right quadrant). In turn, welfare levels in these countries are also among the highest. The case of Norway, the Netherlands, Denmark and France is remarkable. A second group of countries is found, consisting of other European countries, Argentina, Brazil, and Japan among others that reach balanced levels of tax compliance and welfare (group noted in the center of the figure).

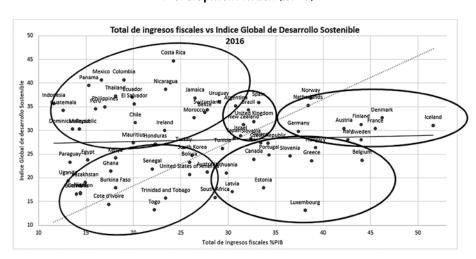


Figure 1. Total Tax Revenue vs. Tax Revenue Global Sustainable Development Index (2016)

The next group consists of mainly Latin American countries, which without having high levels of public income they reach the highest levels of well-being (group marked in the upper left quadrant). Costa Rica is in this group, which is a country that most often appears in the rankings of the happiest countries of the world. To better understand this type of result, it must be taken into account that the overall rate of sustainable well-being includes the level of subjective well-being of individuals, their life expectancy, the ecological footprint and the levels of inequality; therefore, this measure provides a very interesting insight into the welfare conditions of these countries.

There are countries in the fourth group with high levels of tax revenue, but low levels of well-being (group located in the lower right quadrant). In this case, its explanation relates to the fact that it deals with small countries, such as Luxembourg and Portugal. Their lower level of well-being is linked to higher inequalities and lower rates of subjective well-being.

In the last welfare group (group located in the lower left quadrant) are countries with lower tax revenues and lower levels of well-being. In this group, the result is striking for the United States, with a much smaller than expected weight of its tax revenue on GDP and in turn significant social inequalities and lower commitment to the environment, justifying its low level of well-being. On the other hand, there are

countries with tax and welfare income despite their low ecological impact that takes place in sub-Saharan Africa and the average impact on the Middle East and North Africa, but that do not translate into a high rate due to the other factors.

Thus, Sub-Saharan Africa has the lowest score for life expectancy, subjective well-being and inequality between the two results. These values are explained by the poverty conditions presented by these countries, showing that it is not feasible to talk about development and social welfare when basic needs are not met.

The exploratory analysis of the relationship of fiscal compliance and happiness for the main tax groups that make up the Tax Systems in the countries of the world was also conducted in this study:

- Tax revenue from indirect taxation on GDP.
- Tax revenue of income on GDP.
- Revenue from Social Security contributions on GDP.
- Income on property over GDP.

#### 3.2. Indirect tax revenue relative to GDP

Indirect taxation is every time more important in the Tax Systems, hence, it is one of the areas that is expected to develop more in the coming years in all the countries of the world. Figure 2 shows the results of this analysis.

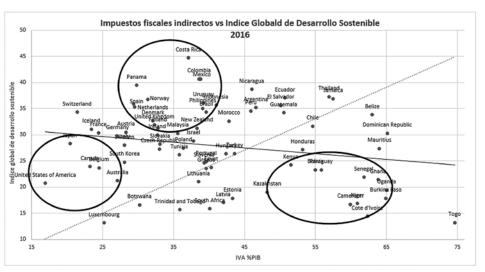


Figure 2. Indirect taxes vs. Global Sustainable Development Index (2016)

A large distribution in the behaviors of the countries analyzed is observed, since indirect taxation is the main source of income in countries with low levels of well-being. This is the case in Senegal and Kenya, among others (group indicated in the lower right quadrant). On the other hand, countries with lower levels of indirect

tax share in their public revenues are seen, but which excel in their welfare levels. In addition to Costa Rica, there are countries such as Norway, Holland, Colombia and Mexico (group that are marked in the upper quadrant). Finally, there are countries with reduced indirect taxation weight and low levels of well-being (group located in the lower left quadrant), in this group stands out USA.

#### 3.3. Income tax in relation to GDP

Income tax is one of the main taxes in the tax systems of most developed countries. The analysis of this variable allows to establish several groups of countries in terms of the levels reached by this variable (Figure 3). A first group, including countries with high tax revenues from this tax along with high levels of well-being stands out, this is the case for Norway, Switzerland, Sweden, Spain, Mexico and the Netherlands. This is the group that is underlined in the upper right quadrant.

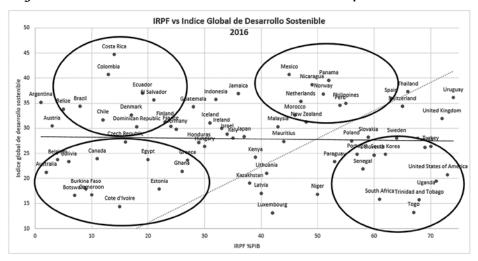


Figure 3. Personal Income Tax (IRPF) vs. Sustainable Development Index (2016)

There is also a big group of countries with high income tax weight in their public income, but without any improvement in their well-being levels. The countries herein are US, Luxembourg, Portugal, as well as a significant number of African countries (see group in the lower right quadrant). This is a tax that appears as the most important regardless of the size of the country. There is a group of countries with low levels of tax share in their tax revenues. In this group there are economies, which despite this have reached high levels of well-being thanks to their better living conditions and I environment: Costa Rica, Colombia and Ecuador, among others (it is the group in the upper left quadrant). Also within this group, there are countries with low levels of well-being, among them Canada, Australia and Greece, as well as African countries (group indicated in the lower left quadrant). It is noteworthy the diversity of countries found in this situation with different sizes and economic development.

## 3.4. Tax revenue from Social Security Contributions in relation to GDP

One of the taxes with greatest interest by its direct relationship on the welfare of citizens of an economy is that of Social Security contributions, since it is the tax related to allowance payments and income redistribution. The analysis carried out (Figure 4) has allowed to identify those countries in which this tax plays an important role. Among them are Costa Rica, Holland, Spain, Panama and Germany, which also reach very high levels of well-being (group located in the upper right quadrant). Otherwise, South Africa, Kenya and Canada would be with lower levels in both indicators (group located in the lower left quadrant).

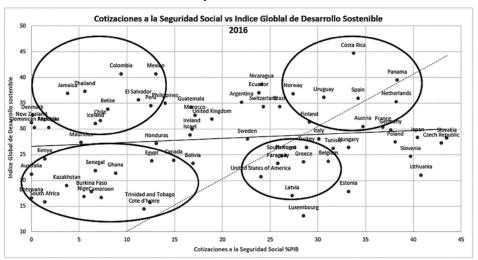


Figure 4. Social Security Contributions vs. Global Sustainable Development Index (2016)

In analyzing this indicator, countries are found with a low weight of this tax in their tax revenues, but with reasonable and even high levels of well-being: such as Colombia, Mexico and Denmark (group located in the Left Upper Quadrant). The US's results are one more time surprising, since US does not reach high levels of well-being (right lower quadrant group), despite its high income levels for this concept.

## 3.5. Property tax relative to GDP

Property tax offers an interesting prospect of analysis, as this is a prominent tax for only a small number of people. Nevertheless, the evidence reached (Figure 5) makes it possible to verify that this is a tax established in countries with high levels of income and development, excepting Colombia. US results are still surprising, since US continues reaching very low levels of well-being (group in the lower right quadrant).

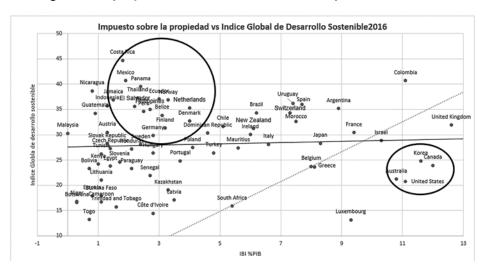


Figure 5. Property tax vs. Global Sustainable Development Index (2016)

A group of countries that show reduced development of property taxation but have high levels of well-being should also be mentioned. In this case it is also found Costa Rica, Norway, Holland, Austria, Germany, Mexico and Panama (group indicated in the upper left quadrant).

#### 4. Conclusions and discussion

The first results obtained in the research have been presented with the aim of demonstrating the positive contribution of tax compliance to the well-being of citizens and their happiness. This analysis provides elements of interest not only to be considered in national wellness analyses but also to improve corporate well-being, within the research line of Happiness «Happiness Management». Strengthening a "tax morality" in a country will contribute both to improving tax collection and to increasing society's social commitment. In fact, higher tax compliance is shown to be linked to better levels of well-being. There is no doubt that reducing tax evasion favors a fairer contribution. But it is no less important to note that having committed and happy workers is also related to having templates in which there is greater responsibility for taxation as an element that reinforces social morals and work ethic.

Two databases of great interest have been used to carry out this research, as they allow this analysis to be carried out with a global perspective, something unusual in most tax work, but that the OECD's global tax statistics database and the New Economics Foundation's global indicator of sustainable development allow for temporary coverage very current. In addition, in this work a new measure of well-being is used, as it incorporates environmental variables in its measurement. Primary sources of welfare information (as is the case with the Gallup Happiness Survey) have not been used, but instead indicators that synthesize a greater amount of information

of great relevance to this analysis and that has allowed to draw conclusions of great interest to public policymaking.

The results obtained, although inconclusive, constitute a first exploratory approach that has allowed a good number of countries in the world to be characterized by the share of their tax revenues in their GDP and the overall level of well-being of the population. In this regard, it was observed how, in general, the Nordic countries led by Norway and a big part of the countries of the European Union-15 (including The Netherlands, Germany and France) are very well positioned on the indicators used. There is no doubt that fiscal development and compliance in these countries has helped to raise awareness of their importance and has improved their well-being levels, not only because more public actions have been addressed but because they have made a great effort to compromise their citizens with their compliance, which has possibly generated a sense of well-being and happiness. Their improved levels of well-being have also been helped by high life expectancy and confidence in government institutions, lower perceptions of corruption-related issues along with reduced levels of inequality.

There is another group of countries, including European countries, Latin America and other world economies such as Japan, which reach average levels in relation to the weight of their government revenue on GDP and their welfare levels, where life expectancy has a great contribution. Among these countries stands out Costa Rica, which is the country with the highest level of well-being in the world. In these countries the results are justified by their high levels of natural resources and other environmental indicators.

Another pattern of differentiated results can be found between countries, in general, small countries with a very high weight in their GDP tax revenues, but it is not observed that they correspond to adequate levels of well-being and happiness, mainly because of the existence of significant inequalities among their population. The most remarkable example in this group is Luxembourg.

There are reduced values in the two groups of indicators used in the Asia Pacific and North African and Sub-Saharan Africa country group. These are expected results that show the need for reforms at all levels. This group also includes the United States, which is a very important result, and which is justified by its lower environmental commitment and high levels of inequality.

An exploratory analysis was also conducted in this articled, based on the relationship between tax compliance and happiness for the main tax groups that shape tax systems in the countries of the world. Some very important differences between them were found. Evidence shows that direct taxation is not yet properly developed globally. On the other hand, income taxes and social contributions show the greatest impact on well-being. Finally, the property tax, while very important for some of the world's great economies, has the least contribution to the happiness of citizens.

Although the analysis carried out has been mainly descriptive, results that are quite promising and that attract great interest were obtained; thus, there is no doubt that this line of research should continue in order to provide government authorities with new opportunities to reformulate public policies by increasing the welfare levels of individuals. Governments and businesses must pass on the value of tax compliance

as a key element in ensuring a society that guarantees the well-being of all. Delving into the information offered by each of the taxes are also aspects of great value for the design of tax policies, because they must take into account the different contribution to happiness of the different taxes.

### References

- Adams, C. (1993). For Good and Evil. The Impact of Taxes on the Course of Civilization. London, Canadá: Madison Books.
- Alm, J. (1998). Tax Compliance and Administration. Working Paper No. 98-12, Center for Economic Analysis, Department of Economics, University of Colorado at Boulder.
- Alm, J. (2012). Measuring, explaining, and controlling tax evasion: lessons from theory, experiments, and field studies. *International Tax and Public Finance*, 19(1), 54-77. https://doi.org/10.1007/s10797-011-Economía, 9(18)1-2
- Alm, J., Jackson B., & McKee, M. (1993). Fiscal Exchange, Collective Decision Institutions, and Tax Compliance. Journal of Economic Behavior and Organization, 22(3), 285-303. https://doi. org/10.1016/0167-2681(93)90003-8
- Alm, J., Bloomquist, K., & McKee, M. (2017). When you know your neighbourg pays taxes: Information, peer effects and tax compliance. *Fiscal Studies*, 38(4), 587-613. https://doi.org/10.1111/1475-5890.12111
- Alm, J., McClelland, G. H., & Schulze, W. D. (1992). Why Do People Pay Taxes? *Journal of Public Economics*, 48(1), 21-48. https://doi.org/10.1016/0047-2727(92)90040-M
- Alm, J., McClelland, G. H. y Schulze, W. D. (1999). Changing the Social Norm of Tax Compliance by Voting. KYKLOS, 52(2), 141-171. https://doi.org/10.1111/j.1467-6435.1999.tb01440.x
- Alm, J., McKee, M., & Beck, W. (1990). Amazing Grace, Tax Amnesties and Compliance. *National Tax Journal*, 43(1), 23-37. https://www.jstor.org/stable/41788822
- Andreoni, J., Erard, B., & Feinstein J. (1998). Tax Compliance. *Journal of Economic Literature*, 36(2), 818-860. https://www.jstor.org/stable/2565123
- Angelopoulos, K., Economides G., & Kammas P. (2007). Tax-Spending Policies and Economic Growth: Theoretical Predictions and Evidence from the OECD. *European Journal of Political Economy*, 23(4), 885-902. https://doi.org/10.1016/j.ejpoleco.2006.10.001
- Baier, S., & Glomm G. (2001). Long-Run Growth and Welfare Effects of Public Policies with Distortionary Taxation. Journal of Economic Dynamics and Control, 25(12), 2007-2042. https://doi.org/10.1016/S0165-1889(00)00017-8
- Beytía, P., & Calvo, E. (2011). ¿Cómo medir la felicidad? Claves de Políticas Públicas, 4. http://dx.doi. org/10.2139/ssrn.2302809
- Bjørnskov, C., Dreher, A., & Fischer, J. (2007). The Bigger the Better? Evidence of the Effect of Government Size on Life Satisfaction around the World. *Public Choice*, 130(3-4), 267-92. https://doi.org/10.1007/s11127-006-9081-5
- Domínguez-Barrero, F., López-Laborda, J., & Rodrigo-Sauco, F. (2017). Tax Evasion in Spanish Personal Income Tax by Income Sources, 2005-2008: From the Synthetic to the Dual Tax. European Journal of Law and Economics, 44(1), 47-65. http://dx.doi.org/10.1007/s10657-016-9553-0
- Dubin, J., Graetz, M. y Wilde, L. (1990). The effects of audit rates on the Federal Individual Income Tax, 1977-1986. *National Tax Journal*, 43(4), 395-409. https://www.jstor.org/stable/41788861
- Fehr, E., Fischbacher, U., Rosenbladt, B., von Schupp, J., & Wagner, G. G. (2003). A Nation-Wide Laboratory. Examining Trust and Trustworthiness by Integrating Behavioral Experiments into Representative Surveys. CESifo Working Paper No. 866, IZA Discussion Paper No. 715. http://dx.doi. org/10.2139/ssrn.385120

- Feld L.P., & Tyran, J.R. (2002). Tax Evasion and Voting: An Experimental Analysis. KYKLOS, 55(2), 197-222. https://doi.org/10.1111/1467-6435.00183
- Ferrer-i-Carbonell A., & Gërxhani, K. (2016). Tax evasion and well-being: A study of the social and institutional context in Central and Eastern Europe. European Journal of Political Economy, 45, 149-159. https://doi.org/10.1016/j.ejpoleco.2016.09.004
- Frey, B.S., & Stutzer, A. (2002). Happiness and Economics. Nueva Jersey, Estados Unidos: Princeton University Press.
- Frey, B.S., & Feld, L.P. (2002). Deterrence and Morale in Taxation: An Empirical Analysis. CESifo Working Paper No. 760.
- Gërxhani, K. (2002). The informal sector in transition: Tax evasion in an institutional vacuum. Amsterdam, Países Bajos: Thela Thesis/Tinbergen Institute.
- Gërxhani, K. (2004). Tax evasion in transition: outcome of an institutional clash? Testing Feige's conjecture in Albania. *European Economic Review*, 48(4), 729–745. https://doi.org/10.1016/j.euroecorev.2003.08.014
- Gordon, J. P. P. (1989). "Individual morality and reputation costs as deterrents to tax evasion". *Journal of Public Economics*, 33(4), 797-805. https://doi.org/10.1016/0014-2921(89)90026-3
- Graham, C. (2010). The challenges of incorporating empowerment into HDI. Some lessons from happiness economics and quality of life research, United Nations Development Programme.
- Gütz, W., Levati V., & R. Sausgruber (2005). Tax morale and (De)centralization: An Experimental Study. *Public Choice*, 125(1-2), 171-188. https://doi.org/10.1007/s11127-005-3414-7
- Habibov, N., & Afandi, E. (2015). Pre-and post-crisis life-satisfaction and social trust in transitional countries: an initial assessment. *Social Indicators Research*, 121(2), 503-524. https://doi.org/10.1007/s11205-014-0640-8
- Hanousek, J., & Palda, F. (2004). Quality of government services and the civic duty to pay taxes in the Czech and Slovak Republics, and other transition countries. *Kyklos*, *57*(2), 237-252. https://doi.org/10.1111/j.0023-5962.2004.00252.x
- Harbaugh, W.T., Mayr, U., & Burghart, D.R. (2007). Neural responses to taxation and voluntary giving reveal motives for charitable donations. Science, 316(5831), 1622-1625. https://doi. org/10.1126/science.1140738
- Hashimzade, N., Myles, G. D., & Tran-Nam, B. (2013). Applications of behavioural economics to tax evasion. *Journal of Economic Surveys*, 27(5), 941-977. https://doi.org/10.1111/j.1467-6419.2012.00733.x
- Hayney, M.S., Love, G.D., Buck, J.M., Ryff, C.D., Singer, B., & Muller, D. (2003). The association between psychosocial factors and vaccine-induced cytokine production. *Vaccine*, 21(19-20), 2428–2432. https://doi.org/10.1016/S0264-410X(03)00057-4
- Oishi, S., Schimmack, U., & Diener, E. (2011). Progressive Taxation and the Subjective Well-Being of Nations. *Psychological Science*, 23(1), 86-92. https://doi.org/10.1177/0956797611420882
- Paredes P.R. (2016). Evasión tributaria vs. Mecanismos de control implementados por la administración pública. *Revista Retos*, 12(2), 181-198. https://doi.org/10.17163/ret.n12.2016.04
- Ram, R. (2009). Government Spending and Happiness of the Population: Additional Evidence from Large Cross-Country Samples. *Public Choice*, 138(3-4), 483-490. https://www.jstor.org/stable/40270884
- Ravina R., Villena F., & Gutiérrez G.A. (2017). Una aproximación teórica para mejorar los resultados de innovación en las empresas desde la perspectiva del Happiness Management. *Revista Retos*, 7(14), 113-129. https://doi.org/10.17163/ret.n14.2017.06
- Slemrod, J., & Weber, C. (2012). Evidence of the invisible: Toward a credibility revolution in the empirical analysis of tax evasion and the informal economy. *International Tax and Public Finance*, 19(1), 25-53. https://doi.org/10.1007/s10797-011-9181-0
- Stiglitz, J., Sen, A., & Fitoussi, J-P. (2010). Report by the Commission on the Measurement of Economic Performance and Social Progress. Recuperado de: https://bit.ly/2sq0MvV

- Tanzi, V. (2010). Sistemas fiscales en la OCDE: evolución reciente, competencia y convergencia. Papeles de Economía Española, 125-126, 1-17.
- Torgler, B. (2007). Tax compliance and Tax morale: A theoretical and empirical análisis. Cheltelham, UK: Edward Elgar Publishing.
- Torgler, B., Schneider, F., & Schaltegger, C. (2010). Local autonomy, tax morale and the shadow economy. *Public Choice*, 144(1-2), 293-321. https://doi.org/10.1007/s11127-009-9520-1
- Turnovsky, S, J. (2000). Fiscal Policy, Elastic Labor Supply, and Endogenous Growth. *Journal of Monetary Economics*, 45(1), 185-210. https://doi.org/10.1016/S0304-3932(99)00047-1
- Ura, A., Alkires A., & Sangmo T, (2012). An extensive analysis of GNH index. Thimphu, Bhutan: Centre of Buthan Studes.
- Witte, A., & Woodbury, D. (1985). The effect of tax laws and tax administration on tax compliance: The case of U.S. individual income tax. *National Tax Journal*, 30(1), 1-13. https://www.jstor.org/stable/41791992
- Yitzhaki, S. (1974). A note on income tax evasion: a theoretical analysis. *Journal of Public Economics*, 3 (2), 201-202. https://doi.org/10.1016/0047-2727(74)90037-1