Detecting Citizens' Preferences for Tax Policy Choices in Decentralized Settings: Subnational Tax Harmonization and Race to the Bottom in Spain

Las preferencias ciudadanas hacia alternativas de política fiscal en Estados descentralizados: armonización tributaria y competencia fiscal en España

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Key words

Tax Harmonization

- Fiscal Barometer
- Spain
- Inheritance and Gift Tax
- Citizen Preferences

Palabras clave

Armonización fiscal

- Barómetro fiscal
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- y Donaciones
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Abstract

The eventual disconnection between voters' preferences and specific policies is of special concern in decentralized countries, where any policy initiative might be simultaneously seen either as an erosion or a reinforcement of selfrule. The aim of this paper is to apply this framework to the harmonization of the Spanish Inheritance and Gift Tax (IGT). We econometrically contrast whether citizens' living in Autonomous Communities (ACs) that led a tax race to the bottom regarding this tax or in those that exert a greater taste for political autonomy are more likely to oppose a more nationally uniform tax than the rest of Spaniards. Empirically, we exploit data from the 2019 wave of the Institute for Fiscal Studies Fiscal Barometer. According to our main results, citizens living in low taxation ACs and citizens living in some more pro-self-rule regions are even more likely to favor harmonization.

Resumen

La eventual desconexión entre las preferencias de los votantes y las políticas concretas es de especial interés en Estados descentralizados, donde cualquier iniciativa política también puede verse como una erosión o un refuerzo del autogobierno. El objetivo de este artículo es aplicar este marco conceptual a la armonización del Impuesto sobre Sucesiones y Donaciones español (ISD), contrastando econométricamente si los ciudadanos que viven en comunidades autónomas que lideraron una carrera fiscal a la baja en este impuesto o en aquéllas más proclives al autogobierno se oponen en mayor medida que el resto de españoles a la armonización tributaria de este impuesto. Empíricamente, explotamos los datos del Barómetro Fiscal de 2019 del Instituto de Estudios Fiscales. Según nuestros principales resultados, los ciudadanos que viven en algunas regiones donde gobiernan partidos nacionalistas tienen incluso más probabilidades de favorecer la armonización.

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INTRODUCTION¹

A long-standing debate in political science examines how citizens' political positions are formed. Since the early work of Downs (1957), where politicians adapt their political manifestos to voter preferences, more recent research has suggested that voters are more likely to act as followers than as leaders (Holcombe, 2021). This potential disconnection between voter preferences and specific policies is especially concerning in decentralized countries, where, simultaneously, subnational political autonomy stands out as a political totem and many policy initiatives may be controversially viewed as either an erosion or a reinforcement of self-rule (Hobolt and Vries. 2016; Schakel and Brown, 2022).

In line with this theoretical framework, the aim of this paper is to examine a specific controversial decentralized policy, namely, the harmonization of the Spanish Inheritance and Gift Tax (henceforth, IGT). Our objective is twofold. On the one hand, we are interested in contrasting the so-called citizen leader hypothesis. That is, to determine whether citizens living in those Spanish regions or autonomous communities (henceforth, ACs) that are in a race to the bottom in terms of the IGT agree with this policy agenda, and therefore, are less likely to support the harmonizing of the IGT. Furthermore, the pro-self-rule hypothesis is contrasted. That is, the work examines whether citizens living in regions that are more supportive of political autonomy are less likely to support a policy that erodes self-government².

Our approach and findings provide new contributions to this subject area. Although a line of research has focused on how citizens' preferences for decentralization and policy-based considerations influence their views in support of either greater decentralization or specific policies, there is almost no research on citizens' views regarding the efficient decentralization of tax powers and their possible effects (Norris, 1999; León, 2012; López-Laborda and Rodrigo, 2012 and 2015; Brown, 2013; Dupuy, Verhaegen and Ingelgom, 2021).

As for subnational tax instruments, past research provides strong theoretical and empirical insight regarding the decentralization of tax powers to reduce the financial dependency of subnational governments on central government transfers to the greatest extent possible (Olson, 1969; Rodden, Eskeland and Litvack, 2003). To do so, and in addition to encouraging benefit taxation-related revenues, the general recommendation is for subnational governments to limit their taxation powers to immobile tax bases, to instruments with fewer redistributive aims, and those avoiding predatory tax competition (Tiebout, 1956; Musgrave, 1959; Oates, 1972)³. In addition, for commonly decentralized taxes, subnational government tax autonomy should be generally restricted to only permit the local establishment of tax rates within a range, and setting minimum values in order to discourage harmful tax competition (Martínez-Vázquez, 2015).

Despite its widely accepted benefits, in practice, few decentralized systems reach a

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² Since some regions belong to both groups, we were unable to perform an analysis establishing whether cit-

izens living in regions that enjoyed the tax race to the bottom are more or less supportive of harmonizing the IGT than citizens with a greater desire for political autonomy.

³ Although no subnational tax is expected to meet all of the desirable features, subnational tax powers should be granted on tax bases that are evenly distributed across the entire country, on taxes that have significant revenue potential, which present limited sensitivity to the business cycle, which are easy to administer and which have low compliance costs, and which can gain citizens' acceptability (Ter-Minassian, 2020).

sufficient level of subnational tax autonomy. Considerable discussion exists regarding which institutional frameworks and political economy processes may result in the desired outcomes, but scholars in the areas of political science and fiscal federalism have long recognized that political bargaining may easily lead to inefficient decentralization arrangements (Lockwood, 2009; Weingast, 2013).

As mentioned above, our research focuses on the decentralization of the Inheritance and Gift Tax in Spain, one of the most decentralized countries in the world (OECD, 2021a), and one that stands out given its complex revenue assignments or decentralized tax powers (Committee of Experts, 2017). The Inheritance and Gift Tax is one of the taxes that was decentralized to regional governments in Spain, and which, as we will see below, has received considerable attention and has evoked much controversy⁴. In the case of the Inheritance and Gift Tax, the ACs exert considerable discretionary power, extending beyond those typically recommended in the theory of fiscal federalism (Ter-Minassian, 2020), and those observed in the most common international practices (OECD, 2021b). The Inheritance and Gift Tax is a highly redistributive tax and generally has a highly mobile tax base. These features make it a poor candidate for decentralization in the first place. Especially so within the general context of an international policy trend promoting substantial reductions in wealth taxes (Scheuer and Slemrod, 2021; Lierse, 2022), and when no institutional measures have been put into place domestically to avoid a race to the bottom.

In this current Spanish setting, given the wide discretion granted to the ACs, including the introduction of a tax credit for the entire tax liability that may result from this tax in their regions, a theoretically predictable race to the bottom has taken place. In many ACs, this has led to the virtual disappearance of the Inheritance and Gift Tax (IVIELab, 2020), along with the interregional mobility of top income taxpayers (López-Laborda and Rodrigo, 2022).

In contrast, Spanish citizen opinions gathered from the 2019 special questionnaire of the Institute for Fiscal Studies Fiscal Barometer (Ministry of Finance) strongly favored a more inter-regionally harmonized Inheritance and Gift Tax (Tax Sociology Area, 2020). This sentiment was also echoed in the conclusions of the report produced by a recent committee of experts on the reform of the Spanish tax system (*Comité de Personas Expertas*, 2022)⁵.

In our analysis, we examined the data from this unique questionnaire of the Fiscal Barometer⁶ to determine whether citizens living in ACs where the IGT was almost abolished are more likely to oppose the harmonization of this tax as compared to other Spaniards. Furthermore, given the eroding implications for subnational autonomy caused by tax harmonization, we also contrast whether citizens living in more proself-rule ACs are also less likely to support harmonization.

⁴ In fact, the Great Recession Wealth Taxation and the Inheritance and Gift Tax specifically, have received increasing attention (Piketty and Saez, 2013).

⁵ For a review on tax competition across subcentral jurisdictions, see Blöchlinger and Pinero-Campos (2011). This work (2011: 24) identifies three features of a good design in the allocation of tax powers across governmental levels which appear to prevent a race to the bottom: 1) the existence of vertical tax competition; 2) the establishment of a minimum tax burden; and 3) the creation of fiscal arrangements — especially related to fiscal equalization schemes— with no pervasive incentives for entering a race to the bottom.

⁶ In addition to the Fiscal Barometer, another yearly survey was conducted by the Spanish Center for Sociological Research (henceforth, CIS) which gathers the views of Spaniards on fiscal issues. While both surveys ask citizens about their general views on tax fraud and the tax-benefit system as a whole, the one by the CIS interviewees Spaniards about their preferences for different tax structures without dealing with the allocation of tax powers across levels of government.

Specifically, two empirical exercises were performed. The first examines whether citizens living in both groups of ACs are more likely than other Spaniards to oppose a more harmonized tax (without involving any specific policy detail on how to achieve it). The second exercise aims to identify whether those citizens are also more likely to oppose harmonization if the latter would agree to allow ACs to increase rates but not decrease a minimum centrally-established common tax rate for all Spaniards.

Given the limitations posed by the dataset itself and controlling for factors identified by the literature regarding citizen preferences for tax structure, our principal empirical findings tend to reject our hypotheses. On the one hand, our results suggest that citizens living in low taxation ACs (in terms of IGT) are not more likely than other Spaniards to oppose harmonization, and those living in Madrid even favor a specific harmonization policy that may result in a significant tax increase for its residents. On the other hand, we find that citizens living in the more pro-self-rule regions of Galicia, the Basque Country and the Canary Islands are more likely to oppose a vague policy initiative regarding harmonization. However, this pro-self-rule effect disappears when harmonization is designed for a minimum centrally-established tax burden. In this specific case, and contrary to expectations, citizens in Navarre and Catalonia are more likely to favor this latter type of harmonization. All in all, the results obtained provide evidence of a substantial disconnection between the current preferences of citizens regarding efficient tax power decentralization and the system in force. Based on citizens' views, it is plausible to push for a policy agenda that defends IGT harmonization in Spain.

The rest of the paper is organized as follows: Section 2 provides a review of the relevant literature. Section 3 describes the institutional framework. Section 4 presents the formal testing hypotheses, discusses the data, the estimation approach and the empirical findings. Section 5 presents a conclusion.

LITERATURE REVIEW

Citizens' views regarding policy initiatives affecting the division of powers consists of their generalized preferences for decentralization as well as their views on the specific policy instrument under discussion (Norris, 1999; Hobolt and Vries, 2016). For this reason, the subject's policy-based considerations when assessing a specific initiative may be undermined by the role of the specific initiative on eroding/enhancing the current level of decentralization. All in all, regarding general views on federalization/decentralization, the literature identifies a pro-decentralization effect caused by devolution, and a pro-federal preference for those with stronger regional identification ties (respectively, Dupuy, Verhaegen and Ingelgom, 2021; Schakel and Brown, 2022).

In the Spanish context, according to the scant empirical evidence on the relationship of the distribution of powers and specific public policies, both policy-based and pro-self-rule preferences appear to matter. López-Laborda and Rodrigo (2012, 2015) find that citizens that recognize efficiency gains made by subnational governments tend to support decentralization, a result that is also shared by those having stronger regional identification ties. Similarly, but from the revenue side, López Laborda and Rodrigo (2014) contrasted citizens' views on fully centralizing the currently partially decentralized Personal Income Tax in Spain -including devolved regional taxation powers- and the Value Added Tax. Regarding this latter tax, (partial) decentralization currently operates only through formulaic revenue sharing. In these cases, the main motivations for citizens' rejection of (re)centralized tax powers are stronger regional identification-related variables, such as living in regions that first experienced devolution (the decentralization process in Spain was sequenced over time with some ACs taking the lead in fiscal devolution).

Given the aim of this paper, which combines tax policy and decentralization, the balance of this section is devoted to the growing trend in the literature that is based on a sociological perspective for analyzing citizen preferences for tax policy, and especially for tax structure⁷.

The literature on opinions on tax structure is highly connected to developments on the determinants of preferences for redistribution (Jaime and Sáez, 2016; Barnes, 2015; O'Brien, 2017; Ballard-Rosa, Martin and Scheve, 2017), and especially on inheritance taxation (Bischoff and Kusa, 2015; Gross, Lorek and Richter, 2017).

On the one hand, the empirical evidence on citizens' attitudes towards tax structure emphasizes the central role played by equality concerns -including partisanship - (Ballard-Rosa, Martin and Scheve, 2017), even beyond pure self-interest and efficiency motives, which are also relevant (Seidl and Traub, 2001; Ackert, Martínez-Vázquez and Rider, 2007). Higher income (status) individuals tend to prefer lower taxation levels, a sentiment shared by those facing higher tax burdens (Edlund, 2000; Jaime-Castillo and Saez-Lozano, 2014; O'Brien, 2017; Heinemann and Hennighausen, 2019); this result is also found in lab experiments where participants with a fixed assigned pre-tax income are asked about tax policy design (Ackert,

Martínez-Vázquez and Rider, 2007). In contrast, more left-wing and inequality-averse citizens tend to favor (as compared to more right-wing individuals) higher taxation levels and even progressive tax structures (Gemmel, Morrissey and Pinar, 2004; Jaime and Saez, 2016; Ballard- Rosa, Martin and Scheve, 2017).

In addition, individuals' beliefs and attitudes towards the economic-institutional framework, regarding not only the public sector, but also market economy fundamentals influence their preferences over tax structure (Bartels, 2005; Heinemann and Hennighausen, 2019). First, citizen opinions on market economy fairness (e.g., social mobility prospects or the role played by luck in economic success), as well as their risk aversion, have an influence on their views on taxation (Ballard-Rosa, Martin and Scheve, 2017; Spiegel and Kross, 2017). Second, perceptions of the fairness of the current tax system and high levels of political-institutional trust, such as positive views on the treasury (López-Laborda and Sanz-Arcega, 2016), are positively associated with supporting higher tax rates (Edlund, 2000; Barnes, 2015). Last, beneficiaries of public spending are more likely to support higher taxation levels (Mettler, 2011)⁸.

In addition, when specifically analyzing the factors shaping citizens' views on inheritance taxation, individual preferences are also formed by equality versus self-interest and efficiency concerns (Gross, Lorek and Richter, 2017; Cowell, Gaer and He, 2018), as well as by beliefs and attitudes regarding the economic-institutional framework, such as trust in government (Bischoff and Kusa, 2015)⁹. Interestingly, with respect to

⁷ Aside from examining citizen preferences for tax structure, other additional issues dealt with in the literature on Sociology of Taxation consider the analysis of: 1) determinants of citizens' attitudes regarding the assessment of the outcomes of a given tax structure, such as tax morale and compliance (Luttmer and Singhal, 2014); 2) taxation's redistributive aims (Jaime-Castillo and Sáez-Lozano, 2014); 3) citizens' willingness to pay more taxes in exchange for more public services and benefits (Calzada and Pino, 2013); or iv) the link between taxation and personal satisfaction (Novo-Cortí, Díaz-Roldán y Ruesga-Benito, 2020).

⁸ Given the connection between attitudes over progressive taxation and preferences for redistribution, it might be also expected that all the above-mentioned factors in both paragraphs also apply to the latter (illustratively, Alesina, Stantcheva and Teso, 2018).

⁹ Another example of this is citizens' misperceptions regarding the true distribution of wealth in society, which appears to lead to a decreased preference for inheritance taxation (Bastiani and Walderström, 2021).

inheritance taxation, those with children are more likely to oppose it (Chirvi and Schneider, 2020).

As for preferences for tax structure in Spain, since the restoration of democracy in the late seventies, citizens tend to display significant concern for progressivity and redistribution through taxation (Jaime-Castillo and Sáez-Lozano, 2014; Torregrosa-Hetland, 2015). More recently however, and mainly based on surveys conducted by the CIS, more than half of all Spaniards feel that they pay too much in taxes for what they receive back from public services (Cicuéndez, 2018; Calzada and Pino, 2019). Nevertheless, Spaniards appear to continue to favor tax increases in exchange for upgrading the level of social public spending (Calzada and Pino, 2008 and 2013; Bremer and Bürgisser, 2020); they also tend to approve of taxation as a tool for improving the wellbeing of the worst-off in society (Jaime-Castillo and Sáez-Lozano, 2014).

Last, it is also worth noting that citizens who achieved tertiary education and older individuals tended to be more likely opposed to tax increases in a broad sense, but not in the case when additional revenues were earmarked to improve the Welfare State (Calzada and Pino, 2008), or combat climate change, or reduce public deficit (respectively, Loureiro, Labandeira and Hanemann, 2013; Lago-Peñas, 2022). Moreover, a recent work carried out in the midst of the COVID-19 pandemic finds that more educated and older Spaniards are more likely to favor tax increases in a broad sense (Sanz, 2022).

INSTITUTIONAL FRAMEWORK: THE DECENTRALIZATION OF REGIONAL TAX POWERS IN **S**PAIN

Since the democratic restoration in 1977, Spain has undergone a large (and asymmetric) fiscal devolution process that has

put the country at the forefront of decentralization worldwide (OECD, 2020). In a first stage, devolution took place asymmetrically because constituents accepted that preferences for decentralization were not homogenously distributed across what would be the ACs (illustratively, Arias-Salgado, 1978). Thus, some regions were granted a higher level of decentralization from the very start of the devolution process. Currently, however, with regard to spending powers, since the early twenty-first century, devolution has reached a substantial level of homogeneity -except for the asymmetric additional financial powers granted to the ACs, the Basque Country and Navarre- (Tudela, 2011). However, citizens' views on decentralization still differ across regions, especially in ACs in which regionalist or nationalist parties govern (Torcal and Mota, 2014)¹⁰.

From a general budgetary perspective, although the decentralization of regional spending powers primarily took place in accordance with fiscal federalism principles, from the revenue side, it has been a different story following an asymmetric path, since, as previously mentioned, two different financing systems continue to coexist. The first is the so-called foral or chartered regime, exclusively benefiting the regions of Navarre and the Basque Country. The second was coined the "common regime", applying to the remaining ACs. In the case of the chartered regime, most spending is self-financed, and these regional governments exert significantly greater taxation powers than those of the ACs under the common regime. For the latter group, as a whole, grants from the central government make up 20 % of their total revenues, in contrast to the foral ACs, where central

¹⁰ The main difference between regionalist and nationalist parties in Spain lies in their ultimate political goal, which for the nationalist parties, refers to the seeking (and eventually achieving) of independence.

grants tend to represent less than 3 % of their respective total revenues.

The specific case of the Inheritance and Gift Tax is no exception. While the chartered regions have full discretion to regulate this tax, ACs under the common regime have only some minor powers to change it. However, all ACs in the two groups administer and collect the Inheritance and Gift Tax in full. Notably, all of the regions, including those under the common regime, are also provided with the discretion to fully suspend the collection of the Inheritance and Gift Tax in their territories.

As for the consequences of the full exercising of those powers, and as the prior literature on fiscal federalism may have predicted, the full decentralization of the Inheritance and Gift Tax powers has led to an open race to the bottom across the ACs (IVIELab, 2020)¹¹. However, not all regional governments have done the same things with the same timing in this process, especially as they attempt to incentivize interregional mobility by top income taxpayers (López-Laborda and Rodrigo, 2022).

EMPIRICAL ANALYSIS

Data and formal testing hypotheses

Our empirical estimation utilizes survey data collected in the 2019 wave of the Spanish Institute for Fiscal Studies Fiscal Barometer, a yearly survey conducted by the Spanish Ministry of Finance since the early 1990s. The survey collects citizens' views regarding Public Sector intervention. The sample size is slightly over 3000 subjects and is regionally and nationally representative (Goenaga-Ruiz-de-Zuazu and Pérez, 2011; Área de Sociología Tributaria, 2020). The 2019 wave included a special questionnaire on several issues regarding wealth taxation, including two questions related to the harmonization of regional tax powers. To prevent potentially biased responses resulting from a lack of tax culture, the interviewer provided the following information:

The Inheritance and Gift Tax taxes any bequest or gift received from third parties. ACs do have full discretion to modulate the tax liability of taxpayers. Thus, the tax burden faced by taxpayers differs across ACs (direct translation from the Spanish document, Área de Sociología Tributaria, 2020: 79).

Bearing this in mind, the questionnaire asked citizens about their support for a more harmonized Inheritance and Gift Tax across the entire country. Over 80 % of the interviewees supported a more harmonized Inheritance and Gift Tax. However, only 15 % of the interviewees agreed on a specific (and quite orthodox) measure to harmonize the Inheritance and Gift Tax, namely the limitation of regional tax powers, so that ACs could only increase (but not decrease) the Inheritance and Gift Tax.

This led us to wonder whether citizens living in regions that embrace major tax cuts for the IGT or those in regions that are more supportive of self-rule would be more likely to oppose this tax harmonization. Thus, the following two hypotheses were formulated, as previously mentioned:

- Citizen leader hypothesis, H1: citizens living in ACs where no Inheritance and Gift Tax is applicable to inheritances or gifts from close relatives will agree with this policy agenda and will therefore be more likely to oppose any tax harmonization related to the IGT.
- Pro-self-rule hypothesis, H2: citizens living in more pro-self-rule regions will be more likely to oppose harmonization related to the Inheritance and Gift Tax since it would erode regional self-governing powers.

¹¹ For a review of this process over the past two decades, see López-Laborda and Rodrigo (2022).

Specification, variables of interest, and empirical strategy

Based on our hypotheses, and given the discrete form of our variables of interest, we use a series of probit/logit models to test those two hypotheses as follows:

$$Y_{i} = X_{i}\beta + Z_{i}\gamma + u_{i} \tag{1},$$

where Y_i is the dependent variable; X_i is a vector variables of interest; Z_i is a vector of controls; and u_i is the error term. Below we offer a detailed description of the dependent and independent variables, whose operationalization, apart from variables resulting from the special questionnaire, are in line with past works on the sociology of taxation which also referred to data from the Fiscal Barometer (López-Laborda and Rodrigo, 2014; Martínez-Vázquez and Sanz-Arcega, 2020).

In the first empirical exercise, we estimate the general views of Spaniards on subnational tax harmonization. Thus, Y_i , the dependent variable, is "harmonization", a dummy variable taking a value of 1 if the interviewee agrees or strongly agrees with the following statement: "The Inheritance and Gift Tax should be more nationally uniform, regardless of where you live (i.e., the region where you live)" and will be 0 otherwise.

The second empirical exercise estimates determinants of citizens for a specific harmonization policy initiative, namely for tax harmonization that may give regions taxation powers permitting only the increasing (but not the decreasing) of the tax burden regarding the Inheritance and Gift Tax. Considering that for many Spaniards this would imply a significant tax increase (vis-à-vis the current tax burdens across the ACs) this is also of interest. Therefore, Y_i , the dependent variable, is "increasing tax burden harmonization", a dummy variable, will have a value of 1 if the interviewee agrees or strongly agrees with the following statement: "Re-

gions should be able to increase but not to decrease the Inheritance and Gift Tax", and will be 0 otherwise.

The vector of independent variables of interest, X_{μ} , consists of variables associated with the hypotheses formulated above. To test H1, namely if citizens living in ACs where no Inheritance and Gift Tax applies to inheritances or gifts from close relatives will be more likely to oppose any tax harmonization regarding the IGT, the following variable of interest was defined:

- "No Inheritance and Gift Tax": a dummy variable having a value of 1 if during 2019, the interviewee lived in an AC where no Inheritance and Gift Tax was collected for inheritances or gifts from close relatives, and a value of 0 otherwise. In 2019 these ACs were Andalusia, Cantabria, La Rioja, the Canary Islands and Madrid (Ministry of Finance, 2019)¹².

We are also interested in separately determining whether or not those citizens may be considered a homogeneous group. Therefore, we have defined the following variables of interest:

 "Andalusia", "Cantabria", "La Rioja", "Canary Islands" and "Madrid": dummy variables respectively having a value of 1 if the interviewee lives in one of these regions, and a value of 0 otherwise.

According to H1, the expected sign for all aforementioned variables is negative.

To test H2, namely if citizens living in more pro-self-rule regions are more likely to oppose harmonization since it would erode regional self-government, we proceed as follows. In line with the literature, we grasp the proself-rule effect from two alternatively perspec-

¹² According to López-Laborda and Rodrigo (2022), the difficulty in defining an indicator that discriminates between low and high-taxation ACs with regard to the Inheritance and Gift Tax led us to select the tax burden on close relatives as the AC tax burden proxy.

tives. On the one hand, we consider the effect of living in regions that first experienced devolution (León, 2012; López-Laborda and Rodrigo, 2014), and thus we have defined:

- "Early devolution": a dummy variable having a value of 1 if the interviewee lives in a region that was granted a higher level of self-government since the very onset of the decentralization process, and a value of 0 otherwise. These regions were Galicia, Catalonia, the Basque Country, Andalusia, Navarre, Valencia and the Canary Islands.

On the other hand, we take into account regions governed by regionalist and nationalist parties (Torcal and Mota, 2014), defining the two following variables:

- "Nationalist": dummy variable having a value of 1 if interviewee lives in a region whose President belongs to a nationalist party, and a value of 0 otherwise. In 2019, these regions were Catalonia, Navarre and the Basque Country.
- "Regionalist": dummy variable having a value of 1 if interviewee lives in a region whose President belongs to a regionalist party, and a value of 0 otherwise. In 2019, these regions were Cantabria and the Canary Islands.

As with H1, for each pro-self-rule approach we also define dummy variables that respectively have a value of 1 if the interviewee lives in one of these regions, and a value of 0 otherwise. Again, distinct estimations are performed to determine whether or not citizens living in those regions will display homogeneous attitudes regarding harmonization¹³.

Finally, given the limitations and possibilities of the dataset, we define a vector of controls, Z_i , which groups together two sets of variables. The first set intends to grasp citizens' attitudes towards the economicinstitutional framework, according to the literature review carried out previously. On the one hand, past literature has also found that those individuals who are more concerned with redistribution favor higher taxation level tax structures (Jaime and Saez, 2016). In Spain, this result is also found for those having positive views of the social function of the Treasury department (López-Laborda and Sanz-Arcega, 2016). On the other hand, those having negative views regarding the fairness of the tax system are more likely to oppose tax increases (Edlund, 2000; Barnes, 2015; regarding the Spanish case, Cicuéndez, 2018; Calzada and Pino, 2019).

Thus, we define the following variables, for which we expect a positive sign (bar the last one), given that tax harmonization generally implies a tax increase with redistributive effects:

- "Wealthy should pay more": a dummy variable having the value of 1 if the interviewee agrees or strongly agrees with the following statement: "with respect to wealth taxation, the wealthy should pay more", and a value of 0 otherwise.
- "Treasury necessary": a dummy variable having a value of 1 if interviewee agrees or strongly agrees with the following statement: "public finance plays a necessary social role", and a value of 0 otherwise.
- "Redistribution": a dummy variable having a value of 1 the interviewee agrees or strongly agrees with the following statement: "the functioning of public services and benefits positively contributes to redistribution", and a value of 0 otherwise.
- "Worse than Europe": a dummy variable having a value of 1 if the interviewee finds that the relationship between quality of public services and taxes paid is worse in Spain than in the rest of Europe, and a value of 0 otherwise.

¹³ Based on the described approach, the singularity that represents the foral financing system is already taken into account.

Variable	No. Obs.	Smallest	Largest	Mean	Std. Dev.	Skewness	Kurtosis
Harmonization	3,097	0	1	0.810	0.40	-1.55	3.40
Increasing tax burden harmonization	3,097	0	1	0.150	0.36	1.98	4.91
No Inheritance and Gift Tax	3,097	0	1	0.390	0.49	0.46	1.21
Andalusia	3,097	0	1	0.160	0.37	1.87	4.51
Cantabria	3,097	0	1	0.010	0.09	10.63	113.92
La Rioja	3,097	0	1	0.004	0.06	16.08	259.65
Canary Islands	3,097	0	1	0.030	0.17	5.51	31.34
Madrid	3,097	0	1	0.190	0.39	1.60	3.56
Early devolution	3,097	0	1	0.580	0.49	-0.30	1.09
Nationalist	3,097	0	1	0.220	0.41	1.38	2.91
Regionalist	3,097	0	1	0.040	0.19	4.79	23.92
Galicia	3,097	0	1	0.060	0.25	3.55	13.63
Valencia	3,097	0	1	0.110	0.31	2.53	7.38
Catalonia	3,097	0	1	0.160	0.37	1.81	4.29
Navarre	3,097	0	1	0.010	0.12	8.27	69.41
Basque Country	3,097	0	1	0.040	0.19	4.86	24.65
Wealthy should pay more	3,097	0	1	0.740	0.44	-1.09	2.18
Treasury necessary	3,097	0	1	0.900	0.30	-2.68	8.19
Redistribution	3,097	0	1	0.510	0.50	-0.03	1.00
Worse than Europe	3,097	0	1	0.570	0.50	-0.28	1.08
Age	3,097	18	85	49.240	16.50	-0.04	2.02
Age ²	3,097	324	7,225	2,696.790	1,636.48	0.46	2.27
Female	3,097	0	1	0.520	0.50	-0.06	1.00
Married	3,097	0	1	0.570	0.49	-0.30	1.09
Big city	3,097	0	1	0.340	0.22	0.68	1.46
Rural	3,097	0	1	0.190	0.39	1.58	3.50
Tertiary education	3,097	0	1	0.260	0.25	0.18	1.03
Secondary education	3,097	0	1	0.500	0.50	0.00	1.00
Salaried	3,097	0	1	0.300	0.46	0.87	1.76

TABLE 1. Descriptive statistics

Source: Authors' own elaboration.

The second set of controls includes variables that are commonly considered to be potential determinants of citizens' views toward taxation, such as individual characteristics related to sociodemographic and socioeconomic self-interest motivations (Gutiérrez, López-Rodríguez and Tejero, 2023), but for which the evidence on outcomes in Spain remains ambiguous (Calzada and Pino, 2008 and 2019; Cicuéndez, 2018; Sanz, 2022):

- "Age": the age of the interviewee.

- "Age²": age squared.
- "Female": a dummy variable having a value of 1 if the interviewee is a female, and a value of 0 otherwise.
- "Married" (or cohabiting): a dummy variable having a value of 1 if the interviewee is married or lives with a stable partner, and a value of 0 otherwise.
- "Big city": a dummy variable having a value of 1 if the interviewee lives in a city with more than 200 000 inhabitants, and a value of 0 otherwise.

- "Rural": a dummy variable having a value of 1 if the interviewee lives in a town with less than 10 000 inhabitants, and a value of 0 otherwise.
- "Tertiary education": a dummy variable having a value of 1 if the interviewee's highest level of education is tertiary (university) education, and a value of 0 otherwise¹⁴.
- "Salaried": a dummy variable having a value of 1 if the interviewee is a salaried worker, and a value of 0 otherwise.

The descriptive statistics of all of the dependent and independent variables are shown in Table 1.

In our empirical approach, we first contrast whether the variables of interest display an empirical causal relationship between living in those regions and tax harmonization. Second, we will add the control variables sequentially to contrast whether the territorial effects continue to exist.

Results

As mentioned in the previous section, first estimations that only include the variables of interest are carried out. Then, we sequentially add the control variables. Given that the explanatory capacity of all of the extended models is higher, we will explain these estimations shown in Table 2 in detail. Furthermore, we will provide the estimates of the reduced models in the Annex, from which it may be derived that those living in proself-rule or low-taxation regions do not display homogeneous preferences for tax harmonization (Tables A1 and A2). Moreover, it is relevant to note that in all of the estimates shown in Table 2, a *backward stepwise re*-

¹⁴ Not found to be significant for this variable or another for which we exchanged the former, which identifies subjects whose highest education level is secondary (high school) education. *gression* procedure was used to obtain a reduced and more stylized model¹⁵, choosing the probit/logit model that maximizes the log-likelihood function for each estimation.

In the absence of collinearity¹⁶, it is relevant to mention that the results obtained tend to reject both of our hypotheses. First, the citizen leader hypothesis is (mainly) rejected in both empirical exercises. Individuals living in regions that embraced a race to the bottom with regard to the IGT are not more likely to oppose harmonization (the exception here are citizens living in the Canary Islands; however, this region also belongs to the pro-self-rule set of regions). Quite to the contrary, while these individuals do not tend to oppose harmonization in a broad sense (without involving policy details about how to achieve it), those living in Madrid are even more likely to favor harmonization when this policy would imply a significant tax increase.

Second, the pro-self-rule hypothesis is partially rejected. Citizens living in some of the regions that are more concerned with self-government - Galicia, the Basque Country, and, as mentioned previously, the Canary Islands- are more likely to display negative general views regarding harmonization. Surprisingly, however, these same citizens do not display a significant preference when harmonization would only consist of permitting ACs to increase rates (and not to decrease a minimum, centrally determined common tax rate for all Spaniards). Moreover, this second reinforced type of harmonization is more likely to be favored by citizens living in two other proself-rule regions governed by nationalist parties, Navarre and Catalonia.

¹⁵ We wish to thank a reviewer for this suggestion.

¹⁶ As a general statistical rule, if a given independent variable entering a regression presents a Variance Inflation Factor greater than 5, the variable may be considered a linear combination of others also present in the estimation. According to this statistical criterion, multicollinearity may be discarded for all of our empirical exercises.

	Harmonization	Increasing tax burden harmonization
Variable	Marginal Effects (p-value)	Marginal Effects (p-value)
Andalusia		
Cantabria		
La Rioja		
Canary Islands	-0.11 (0.03**)	
Madrid		0.05 (0.021***)
Galicia	-0.08 (0.05**)	
Valencia		
Catalonia		0.05 (0.05*)
Navarre		0.20 (0.02**)
Basque Country	-0.17 (0.00***)	
Wealthy should pay more	0.05 (0.01**)	0.12 (0.00***)
Treasury necessary	0.10 (0.00***)	
Redistribution		0.04 (0.01***)
Worse than Europe		-0.04 (0.02**)
Age	0.01 (0.02**)	-0.01 (0.01**)
Age ²	-0.00 (0.02**)	0.00 (0.02**)
Female		-0.05 (0.00***)
Married		
Rural	-0.06 (0.01***)	0.03 (0.10*)
Salaried		
Ν	3.097.00	3.097.00
Log pseudolikelihood	-1.481.80	-1.204.01
Wald chi ²	(8) 54.38	(10) 94.30
Prob > Chi ²	0.000	0.000
Pseudo R ²	0.030	0.080
% correctly classified	80.14 %	87.21 %

TABLE 2. Estimation results. Logit models

*** Significant at 1 %; ** significant at 5 %; * significant at 10 %.

Source: Authors' own elaboration.

As for the economic-institutional control variables, in line with the findings in the previous literature, a positive view of the Treasury and the belief that the wealthy should have higher tax burdens in terms of wealth taxation, leads to the support of harmonization in a broad sense. In addition, and also coherent with the empirical evidence on Spain, those believing that the wealthy should have a higher tax burden or having favorable views of the redistributive intervention of the Public Sector are more likely to support harmonization when it would only permit ACs to increase a minimum, centrally determined common tax rate. As expected, this specific policy is more likely to be rejected by those believing that the relationship between the quality of public services and taxes paid is worse in Spain than in the rest of Europe.

Finally, regarding the sociodemographic set of control variables, while living in rural areas increases the probability of opposing harmonization in a vague sense, older individuals tend to agree with a more nationally uniform Inheritance and Gift Tax. This result changes when harmonization would straightforwardly imply a tax increase. In this latter case, older people and women are more likely to oppose restricting AC taxation powers to only increase a minimum, centrally determined common tax rate, while individuals living in large cities would support this policy. In line with the literature, it appears that sociodemographic characteristics do not have unambiguous effects on tax policy issues.

CONCLUSION

The eventual disconnection between voter preferences and the (efficient) decentralization of taxation powers policy is of special concern in decentralized countries, since it directly affects the degree of financial subnational autonomy. Despite considerable past theoretical and empirical work on the efficient decentralization of taxation powers, research on citizens´ views and preferences is almost non-existent. The main aim of this work was to help fill this void in the literature.

The focus of the paper was Spain's Inheritance and Gift Tax, a tax which was fully decentralized to the regional governments several decades ago, sidestepping basic fiscal federalism principles of revenue assignments, by permitting regions to fully suspend its application in their territories. Consequently, over time subnational tax competition has led to a race to the bottom, resulting in huge tax burden differences amongst taxpayers having the same economic conditions.

In contrast to that policy design and its practical consequences, according to the special questionnaire of the 2019 wave of the Spanish Institute for Fiscal Studies Fiscal Barometer, Spanish citizens overwhelmingly support a more harmonized Inheritance and Gift Tax across regional governments. In this paper, we rely on data from this special questionnaire to empirically contrast two hypotheses. First, we determine whether citizens living in ACs that embraced significant tax cuts regarding the IGT agree with this policy agenda and are therefore more likely to disagree with harmonizing this tax. And second, we contrast whether citizens living in more pro-self-rule regions are also less supportive of a policy that would clearly erode self-government.

Two empirical exercises were conducted. The first analyzed whether citizens living in both groups of ACs are more likely than other Spaniards to agree with a more nationally uniform Inheritance and Gift Tax. The second aims to identify whether these citizens are also more likely to oppose a specific harmonization policy measure (very standard in the theory of revenue assignments) which would restrict the regional governments' taxation powers to potentially increase rates from a uniform centrally established minimum rate for the whole country.

In line with the literature review and the limitations posed by the data, the following were our main empirical findings. First, citizens living in ACs that led a race to the bottom with respect to the IGT are not more likely to disagree with the harmonization of this tax (especially citizens living in the region of Madrid, who favor harmonization to a greater extent when the latter would imply a significant tax increase). Second, citizens living in certain, pro-self-rule ACs - Galicia, the Basque Country and the Canary Islands - are more likely to disagree with harmonization in a broad sense, but this pro-self-government effect vanishes when the harmonization results in a minimum centrally-set tax burden. In fact, this latter type of harmonization is even more likely to be supported by those living in other pro-self-government regions, Navarre and Catalonia.

As widely recognized, political bargaining may easily lead to inefficient decentralization arrangements, as was the case with the Spanish Inheritance and Gift Tax, where full decentralization of taxation powers led to harmful interregional tax competition and a race to the bottom. This practice may counter Spain citizens' preferences for a more regionally harmonized tax, a policy preference that is fully supported by fiscal federalism principles and most international practices, as well as by the recent recommendations of the Committee of Experts on the reform of the Spanish tax system (*Comité de Personas Expertas*, 2022).

Based on our empirical findings, it appears plausible to push for a policy agenda that defends harmonization of the IGT in Spain. And in order for it to be successful, the eventual reform of the assignment of the Inheritance and Gift Tax should not be limited to the substance of decentralization but rather, to how its efficiency may be improved according to well-established fiscal decentralization principles.

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Variable	Marginal Effects (p-value)										
No IGT	0,02 (0,41)	Andalusia	0.01 (0.80)	Early devolution	-0.05 (0.01***)	Galicia	-0.11 (0.01**)	Nationalist	-0.05 (0.02**)	Catalonia	-0.18 (0.25)
		Cantabria	-1.02 (0.36)			Catalonia	-0.05 (0.12)	Regionalist	-0.11 (0.02**)	Navarre	-0.38 (0.36)
		La Rioja	0.08 (0.47)			Basque Country	-0.18 (0.00***)			Basque Country	-0.86 (0.00***)
		Canary Islands	-0.08 (0.10*)			Andalusia	-0.01 (0.28)			Cantabria	-0.70 (0.19)
		Madrid	0.04 (0.07*)			Navarre	-0.08 (0.32)			Canary Islands	-0.58 (0.02**)
						Canary Islands	-0.12 (0.02**)				
						Valencia	0.00 (0.95)				
z	3,097										
Log pseudo- likelihood	-1,522.13	Log pseudo- likelihood	-1,516.77	Log pseudo- likelihood	-1,516.52	Log pseudo- likelihood	-1,505.25	Log pseudo- likelihood	-1,515.03	Log pseudo- likelihood	-1,510.57
Wald chi ²	(1) 0.61	Wald chi ²	(5) 8.32	Wald chi ²	(1) 7.78	Wald chi ²	(7) 23.50	Wald chi ²	(2) 10.95	Wald chi ²	(5) 16.87
Prob > Chi ²	0.41	Prob > Chi ²	0.14	Prob > Chi ²	0.01	Prob > Chi ²	0.00	Prob > Chi ²	0.00	Prob > Chi ²	0.00
Pseudo R ²	0.00	Pseudo R ²	0.01								
% correctly classified	80.14 %										
*** Significant at	1 %; ** signif	icant at 5 %; * sig	Inificant at 10) %.							

TABLE A1. Tax harmonization estimations. Probit models

ANNEX

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Source: Authors' own elaboration.

No ISD 0.00 (0.87)Andalusia -0.04 (0.09°)Early devolutionCantabria 0.00 (0.80) -0.02 (0.80) -0.02 (0.80)La Rioja 0.02 (0.27) -0.01 (0.27)Canary Islands 0.04 (0.77) 0.04 (0.77)N 3.097 N 3.097 (0.11)N 3.097 N $-1,294.36$ (10.03N $-1,200.51$ (BrelihoodLog pseudo- $-1,300.51$ $-1,294.36$ (BrelihoodN 0.087 N $-1,294.36$ (BrelihoodNald chi2 Prob > Chi2 0.07 0.01 0.01 Pseudo R2	Variable	Marginal Effects (p-value)										
Cantabria -0.02 La Rioja -0.08 La Rioja (0.27) Canary Islands -0.01 0.27 -0.01 Canary Islands -0.01 0.27 -0.01 Canary Islands -0.01 0.27 -0.01 Madrid 0.04 N 3,097 N 3,097 N 3,097 N -1,200.51 Log pseudo- -1,200.51 Likelihood -1,24.36 Mald chi2 (5) 7.88 Prob > Chi2 0.03 Pseudo R2 0.01 Pseudo R2 0.01 Pseudo R2 0.01	No ISD	0.00 (0.87)	Andalusia	-0.04 (0.09*)	Early devolution	0.02 (0.36)	Galicia	0.04 (0.26)	Nationalist	0.06 (0.01***)	Catalonia	0.05 (0.05*)
La Rioja -0.08 Canary Islands 0.27) Canary Islands 0.77) Madrid 0.71 N 0.04 N 3,097 N 3,097 Log pseudo- -1,300.51 Likelihood -1,294.36 Mald chi2 (5) 7.88 Prob > Chi2 0.87 Pseudo R2 0.001 Pseudo R2 0.01 Pseudo R2 0.01			Cantabria	-0.02 (0.80)			Catalonia	0.04 (0.10*)	Regionalist	-0.00 (0.84)	Navarre	0.18 (0.04**)
$\begin{tabular}{ c c c c c c } \hline Canary Islands & -0.01 & 0.77 & 0.77 & 0.77 & 0.77 & 0.04 & 0.71 & 0.04 & 0.11 & 0.04 & 0.11 & 0.04 & 0.04 & 0.11 & 0.04 & 0.04 & 0.01 & 0.04 & 0.04 & 0.01 & 0.04 & 0.04 & 0.01 & 0.04 & 0.01 & 0.04 & 0.02 & 0.02 & 0.01 & 0.02 & 0.02 & 0.01 & 0.05 & 0.01 & 0.05 & 0.01 & 0.05 & 0.01 & 0.05 & 0.01 & 0.05 & 0.01 & 0.05 & 0.01 & 0.05 & 0.01 & 0.05 & 0.01 & 0.05 & 0.01 & 0.00 & 0.00 & 0.0			La Rioja	-0.08 (0.27)			Basque Country	0.06 (0.23)			Basque Country	0.07 (0.19)
$\begin{tabular}{cccc} Madrid & 0.04 \\ (0.11) & 0.01 \\ \textbf{N} & 3,097 & \textbf{N} & 3,097 & \textbf{N} \\ \begin{tabular}{cccc} Log pseudo- & -1,300.51 \\ likelihood & -1,300.51 & likelihood \\ likelihood & (1) 0.03 & wald chi^2 & (5) 7.88 & wald chi^2 \\ \berob > Chi^2 & 0.03 & Prob > Chi^2 & 0.16 & Prob > Chi^2 \\ \berudo R^2 & 0.00 & Pseudo R^2 & 0.01 & Pseudo R^2 \\ \end{tabular}$			Canary Islands	-0.01 (0.77)			Andalusia	-0.03 (0.20)			Cantabria	-0.01 (0.92)
N 3,097 N 3,097 N Log pseudo- likelihood -1,300.51 Log pseudo- likelihood -1,294.36 Log pseudo- likelihood Wald chi2 (1) 0.03 Wald chi2 (5) 7.88 Wald chi2 Chi2 O.16 Prob > Chi2 D.12 Pseudo R2 0.00 Pseudo R2 0.01 Pseudo R2 D.01 Pseudo R2			Madrid	0.04 (0.11)			Navarre	0.17 (0.05*)			Canary Islands	-0.00 (79.0)
N 3,097 N 3,097 N Log pseudo- Log pseudo- likelihood -1,300.51 Log pseudo- likelihood Log pseudo- -1,294.36 Log pseudo- likelihood Wald chi2 (1) 0.03 Wald chi2 (5) 7.88 Wald chi2 Prob > Chi2 0.87 Prob > Chi2 0.16 Prob > Chi2 Pseudo R2 0.00 Pseudo R2 0.01 Pseudo R2							Canary Islands	-0.01 (0.91)				
N 3,097 N 3,097 N Log pseudo- Log pseudo- likelihood -1,300.51 Log pseudo- likelihood -1,294.36 Log pseudo- likelihood Wald chi2 (1) 0.03 Wald chi2 (5) 7.88 Wald chi2 Prob > Chi2 0.87 Prob > Chi2 0.16 Prob > Chi2 Pseudo R2 0.00 Pseudo R2 0.01 Pseudo R2							Valencia	-0.01 (0.60)				
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	z	3,097										
Wald chi2 (1) 0.03 Wald chi2 (5) 7.88 Wald chi2 Prob > Chi2 0.87 Prob > Chi2 0.16 Prob > Chi2 Pseudo R ² 0.00 Pseudo R ² 0.01 Pseudo R ²	Log pseudo- likelihood	-1,300.51	Log pseudo- likelihood	-1,294.36	Log pseudo- likelihood	-1,299.84	Log pseudo- likelihood	-1,288.77	Log pseudo- likelihood	-1,293.80	Log pseudo- likelihood	-1,291.88
Prob > Chi2 0.87 Prob > Chi2 0.16 Prob > Chi2 0.16 Prob > Chi2 0.01 Pseudo R2 0.01 Pseudo R3 0.01 0.01 0.01<	Wald chi ²	(1) 0.03	Wald chi ²	(5) 7.88	Wald chi ²	(1) 0.82	Wald chi ²	(7) 14.97	Wald chi ²	(2) 8.08	Wald chi ²	(5) 10.95
Pseudo R ² 0.00 Pseudo R ² 0.01 Pseudo R ²	Prob > Chi ²	0.87	Prob > Chi ²	0.16	Prob > Chi ²	0.37	Prob > Chi ²	0.04	Prob > Chi ²	0.02	Prob > Chi ²	0.05
	Pseudo R ²	0.00	Pseudo R ²	0.01	Pseudo R ²	0.00	Pseudo R ²	0.01	Pseudo R ²	0.01	Pseudo R ²	0.01
% correctly 87.12 % correctly 87.12 % correctl classified classified	% correctly classified	87.12 %										

*** Significant at 1 %; ** significant at 5 %; * significant at 10 %.

Source: Authors' own elaboration.

TABLE A2. Increasing tax burden harmonization estimations. Probit models

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