Avoidance Responses to Dual Income Taxation: Income Shifting through Owner-Controlled Corporations

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This paper provides evidence on the strategic use of owner-controlled firms as a means of tax avoidance under dual personal income taxation. Taxpayers with sufficiently high income levels have incentives to shift income toward corporations, as the combined tax burden of corporate and capital income taxes is lower than that of labor income taxation. We exploit linked micro-data from personal income tax returns and various other sources, leveraging multiple tax reforms in Spain that introduced variation in these incentives across taxpayers and over time. This approach allows us to causally identify the magnitude of income shifting behavior. We find significant tax-motivated responses among business owners, with a semi-elasticity of 0.26 with respect to potential tax savings from incorporating. However, this number varies significantly between types of tax reforms and across tax payers, showing that substantial change of the tax code are more relevant than simple rate changes.

JEL codes: E21 · D31 · D63 · E62 · H21 · H24 · H25 · H26 · H31 · H32

Keywords: Income Shifting · Business Taxation · Corporate Taxation · Progressivity · Tax Avoidance

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1. Introduction

Beyond shaping economic activity, taxes can play a critical role in determining whether individuals running businesses operate as self-employed entrepreneurs or incorporate as corporations (Gordon and MacKie-Mason, 1994; Gordon and Slemrod, 1998). This occurs when tax liabilities are more favorable under one organizational form than under the other, as many countries apply different tax treatments to corporate and self-employment income. Although historically the average corporation faced a higher tax burden, two trends over the past decades have significantly reduced the effective taxation of corporate income, increasing the attractiveness of shifting income toward corporations as a means of tax avoidance.

First, dual income tax systems - characterized by progressive taxation of labor income and typically a lower flat taxation of capital income - have gained substantial prominence since their initial adoption in the Nordic countries in the late 1980s, and they are now standard in most high-income economies. Second, effective corporate tax rates have declined significantly, resulting in situations where the combined burden of corporate and capital gains taxes is lower than that of labor income taxation. This creates incentives for taxpayers facing high marginal labor income tax rates to shift income across tax bases, which in consequence limits the progressivity of the tax system. However, the magnitude of these tax incentives and the extent to which behavioral responses occur remain empirical questions. This paper sheds new light on this mechanism, the distortions it generates, and the equity implications of such tax avoidance behavior.

The nascent literature on income shifting started by empirically assessing the effects of changes in dividend taxation (Chetty and Saez, 2005; Harju and Matikka, 2016; Alstadsæter and Jacob, 2016). Prior studies on the U.S. include Gordon and MacKie-Mason (1994) and Gordon and Slemrod (1998), while Thoresen and Alstadsæter (2010) examines Norway. López-Laborda, Vallés-Giménez, and Zárate-Marco (2018) documents changes in the composition of the capital and savings tax base which followed the dualization in Spain, but does not go beyond this by delivering a more systematic analysis of the mechanism. More recently, Bergolo et al. (2022) examined a tax rate increase for top labor income earners in Uruguay and found substantial shifting from labor to corporate income. Recent evidence comes from linked individual-firm records in UK data. Closely related to our study, Tazhitdinova (2020) documents that a 10% increase in tax savings between organizational forms increases the probability of incorporation among the self-employed by up to 2.3%. Miller, Pope, and Smith (2024) show that business owners engage in intertemporal income shifting via their controlled corporations to smooth income streams, thereby reducing overall tax liabilities.

We provide novel evidence on income shifting by leveraging two decades of tax reforms in Spain, which altered incentives to incorporate in various ways, generating variation

across types of taxpayers, over time, and across regions. This rich institutional context allows us to exploit quasi-experimental variation to estimate shifting responses towards owner-controlled corporations. One of the most important reforms we analyze in this paper is the dualization of the personal income tax, which significantly increased shifting incentives around its introduction.

While the decision to incorporate a business activity may be driven by various factors, this study aims at identifying tax-saving motives and separate them from other incentives. For this purpose, we exploit rich administrative data that includes personal tax records and third-party reported information for a representative panel of the Spanish population. By applying a recursive scoring algorithm based on typical behavioral patterns of corporate owners and calibrated to match national aggregates on corporate units, we are able to trace individuals trajectories across different organizational forms, which allows us to precisely identify the moment an entrepreneur chooses to incorporate. Next, we make use of a tax calculator developed for this study that uses this information to simulate total direct tax liabilities under both organizational forms. Such tax liabilities encompasses not only personal income tax (PIT) and corporate income tax (CIT) liabilities, but also the wealth tax (WT) bill and the social security contributions (SSC). This allows us to link the tax savings associated with incorporation to actual transitions into corporate status.

We document several key findings. First, we show that across reforms, the average semi-elasticity of the incorporation probability with respect to tax savings is approximately 0.26. This suggests that a one percentage point increase in potential tax savings leads to a 0.26 percentage point increase in the probability of incorporation. However, we find substantial heterogeneity across reforms. In particular, some reforms that were characterized primarily by legal and institutional changes - rather than by widening tax differentials - played a crucial role in enabling income shifting. One prominent example is the dualization of the personal income tax, which significantly increased the incentive to incorporate by introducing preferential treatment for capital income. This reform alone is associated with an increase in the incorporation rate of approximately 6 percentage points, highlighting the importance of institutional design in shaping taxpayer behavior. Given this, a key result is that income shifting is not just a response to rate differentials, but also to legal/institutional access, emphasizing the mechanical enabling role of regulation, not just marginal incentives. This has implications for optimal taxation models, as the canonical model often treats income shifting as a smooth function of the tax wedge.

By isolating the causal effects of tax savings on incorporation, and by distinguishing between the role of legal reforms and marginal rate changes, our findings speak to current policy debates on tax base erosion, fairness, and the sustainability of progressive taxation. The evidence suggests that institutional access to income shifting, not only tax rates, is a critical determinant of avoidance behavior. As many countries continue to rely on dual income tax structures or move toward them, understanding these mechanisms becomes

essential. From a policy perspective, our findings highlight the need to align tax treatment across organizational forms and income types to preserve equity and minimize distortions, while maintaining a transparent and enforceable legal framework that limits avoidance opportunities.

The remainder of this paper is structured as follows. Section 2 describes the institutional setting and discusses briefly the tax reforms throughout our period of study. We furthermore introduce our data and conceptualize tax savings. Section 3 discuss the identification strategy used in our causal analysis. Section 4 presents the empirical results, and Section 5 concludes.

2. Data and Institutional Details

2.1. Data

We exploit Spanish administrative micro-data which links various sources of tax returns and third-party reported information in Spain ("*Panel de hogares, 2016-2022*", *Instituto de Estudios Fiscales* 2024). The data consists of a representative sample of the Spanish population across 17 regions, different household types, and 9 income brackets. This stratified sampling results in individual-level observations for 772,178 (4.57% of the Spanish total) households and 2.15 million (4.85%) individuals. The panel links various data sources from 1999 to 2022, includeing socio-demographics, PIT returns (at individual, asset or self-empl. activity level), third-party reported individual income, and the complete labor market history ("*MCVL*") with Social Security affiliations. Further, for the years 2016 to 2022, the data includes wealth tax returns and third-party reported personal wealth, including real estate properties.

This micro-data panel begins with socio-demographic information, which includes both static variables such as birthplace, sex, and household type, and dynamic ones like residence, education, civil status, or household composition and kinship relationship with other individuals in the panel. These are complemented by population weights to ensure representativeness. Personal income tax returns, available throughout the entire period, become more detailed from 2016 onward, capturing granular data on real estate income at the property level, self-employment income form each run activity, capital gains from each asset, and special tax regimes for posted workers. Third-party reported income data, available from 2008, provide income details reported by third parties - such as employers and financial institutions - regardless of whether individuals file taxes or not. This includes wages, severance, remunerations for administration/managerial tasks, etc. Wealth tax returns and third-party reported wealth data, available from 2016, offer insights into asset and corporate ownership, business control, real estate, bank accounts, investments, and liabilities, even non-filers of wealth tax. Finally, employment history records, derived from

Social Security data, span the full period and detail job types, contracts, self-employment, and firm characteristics. Together, these datasets enable robust longitudinal analysis of income, wealth, and labor dynamics.[1]

A limitation of the data is that we cannot link the panel to corporate-level data. We develop a recursive search algorithm that succeeds to find corporate-controlling in the micro-data in a precise way. We can perform a direct identification of corporate-controlling taxpayers based on explicit indicators such as Social Security registration as corporate self-employed, cooperative partners, family members of controlling partners, and ownership of corporate shares which are exempt from wealth taxation. But in some cases direct evidence is insufficient, as not all corporate owners are registered as so in the Social Security registries or not all owners have an administrator/manager salary from their controlled corporations. Here is where an indirect strategy for identyfing corporate-controlling individuals is employed, leveraging behavioral patterns typical of corporate controllers - such as fixed remuneration amounts, specific Social Security contribution profiles, PIT benefits linked to corporate ownership, or dividend, invoice or salary manipulation, among others. Individuals are scored and flagged if they meet at least three behavioral criteria in a given year. A recursive search algorithm then extends identification to adjacent years by analyzing consistency in financial patterns. The algorithm is calibrated to match the aggregate number of corporations in the Spanish economy, accounting for panel attrition. This multi-layered approach, combining direct, indirect, and recursive methods, enables accurate identification of corporate controllers and supports empirical research on ownership structures and economic power distribution using administrative data.[2] Figure B1 shows that our constructed series closely matches the actual number of corporations in the Spanish economy and replicates its overall shape and dynamics over time.

Finally, we are able to estimate the corporate profits from the valuation of the business in our wealth records, and making use of declared income and some linked-operation rules. Further, since we directly observe the characteristics of the corporations paying remuneration to individuals in our micro-data, we use aggregate CIT statistics (*Agencia Estatal de Administración Tributaria, AEAT*, 2024a) to perform a cell-level matching by region, legal form, turnover bracket, and number of employees. This allows us to estimate the effective CIT rate faced by each controlled corporation and their level of corporate profits.

2.2. Context and Reforms

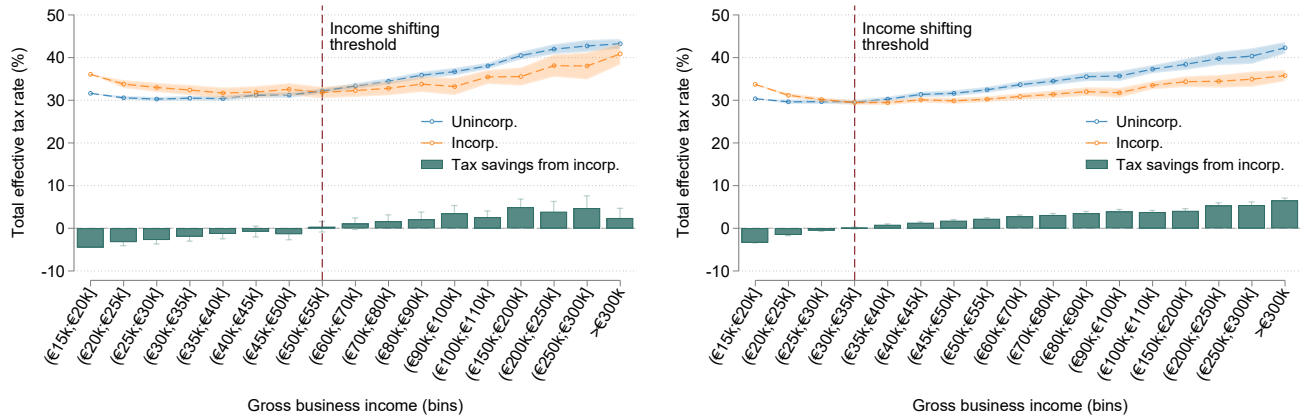
The mechanism analyzed in this paper is built around the discretion that a taxpayer who effectively controls a firm has in deciding how to report the firm's profits for tax purposes.

[1] Refer to the section B.1 of the appendix for deeper details on the data-set.

[2] Further details on the identification of the corporate-controlling taxpayers are detailed in the section B.2 of the appendix.

Depending on whether specific regulatory criteria are met, the taxpayer can choose to remain unincorporated and declare profits as self-employment income - subject to the progressive personal income tax (PIT) - or instead incorporate the business and pay taxes under the corporate income tax (CIT) regime. In the latter case, after-CIT profits can be distributed as dividends or paid out as carefully calibrated salaries, allowing the taxpayer to avoid high marginal PIT rates by optimizing the income mix.

Given the structure of the tax system, there exists a profit threshold beyond which incorporation becomes fiscally advantageous for an entrepreneur, as it reduces the total tax burden relative to remaining unincorporated. Figure 1 illustrates the average income-shifting threshold between 1999 and 2022 - i.e. the level of gross business income above which incorporation results in a lower overall tax liability. We simulate the total effective average tax rate under both reporting regimes: taxation as labor income (in blue) versus taxation through the corporate and capital income channels (in orange). Note that the two sub-figures differentiate the effect between economic activities which underlay different regulatory frameworks, which notably affects their specific threshold. Our results show that, on average, this threshold is around €45,000 in annual business profits.



(a) Professional-classified

(b) Corporate-classified

Note: This figure is constructed by regressing the total effective tax rate on bins of the gross business income, separately for the unincorporated and incorporated scenarios. Using our PIT + CIT + WT + SSC calculator, we compute - at the individual-year level - the total tax liability each taxpayer would face under both organizational forms, accounting for non-shiftable income and any applicable linked-operations restrictions. and that the company and the taxpayer justify it with proper documentation.] Each individual appears twice per fiscal year: once under the assumption of being unincorporated (represented by the blue line and confidence intervals) and once as incorporated (orange line and confidence intervals). Panel (a) presents results for individuals engaged in professional-classified activities, while panel (b) does the same for those in corporate-classified activities. The vertical red dotted line marks the gross business income shifting threshold, namely the average income level above which incorporating results in a lower total tax bill for the entrepreneur.

Figure 1: **Average Income Shifting Threshold**

The figure above presents the average threshold over the entire period of our data, but the individual-specific threshold varies substantially over time, across sectors, and with taxpayer characteristics like the potential wealth tax filing status or the type of linked-operations rule to which the individual is subjected to. We exploit the variation

in this threshold produced by annual changes in the fiscal scheme or regulations to identify behavioral responses of the taxpayers in terms of incorporation. Specifically, we leverage several major tax reforms implemented in Spain between 1999 and 2022 that affected the personal income tax (PIT), corporate income tax (CIT), wealth tax (WT), and linked-operations regulations.

With respect to the Spanish PIT, the most significant reform occurred in 2007, when a dual income tax scheme was introduced. Under this reform, capital income became subject to a separate, nearly flat-rate schedule with substantially lower rates than those applied to labor and self-employment income under the progressive PIT base. Another reform in 2015 sharply reduced marginal tax rates, with the largest cuts not only being concentrated on the capital income tax base, but also on the progressive PIT base.[3]

The Spanish CIT also underwent major reforms that directly affected the income-shifting mechanism. In 2005 (although the reform was introduced in 2003), corporations classified as professional, sports/arts-related, or asset-holding transitioned from the special PIT imputation regime (where all corporate profits where taxed under the general progressive PIT schedule) to the standard CIT regime. In 2007 (and specially as of 2008), the CIT rate was significantly reduced for small-sized corporations, which are typically easier to control for the purpose of income shifting, and a wide range of new tax credits and deductions were introduced. In 2015, a further reduction in CIT rates for small and newly created firms was coupled with a broadening of the taxable base, leaving almost invariant the actual final effective CIT.[4]

During the same period, corporate owners were also affected by reforms to the linked-operations regulations, which govern transactions between firms and their controlling individuals. Since the beginning of our period of analysis, salaries, invoices, and interest payments made by a corporation to its controlling shareholders have been required to comply with market valuation rules - for example, salaries must reflect what would be paid for comparable duties in an independent firm of the same sector. A key reform in 2009 mandated that professional-classified corporations allocate at least 85% (75 % as of 2015) of their pre-payroll-expenses profits to their controlling partners, and that these payments not fall below twice the average wage in the economy. Since 2015, however, payments for administrative or managerial duties have been excluded from these minimum market-valuation requirements under the linked-operations rules.[5]

The wealth tax (WT) was abolished in 2008 before its later regional reintroduction in 2011. Wealth taxation matters in our context, as for corporate assets to be exempt from WT, controlling owners had to pay themselves sufficiently high salaries - typically accounting for more than 50% of the total personal income of the controlling partner. However, with

[3] Appendix A.4.1 provides a complete overview of the personal income tax system and all reforms implemented over time.

[4] Appendix A.4.2 summarizes the functioning and reform of the corporate income tax.

[5] Appendix A.4.4 provides deeper detail on the linked-operations regulations.

the elimination of the WT in certain regions or for certain individuals, this requirement no longer applies, making incorporation more attractive even without high declared salaries. This significantly lowers the cost of shifting income into corporate form.[6]

2.3. Tax Savings due to Income Shifting

For each taxpayer, we use our self-constructed PIT + CIT + WT + SSC calculator to simulate total direct tax liabilities under both organizational forms. The simulation is very granular on individual-firm characteristics - e.g. family-specific features, region of fiscal residence, sub-sector and sub-type of economic activity, firm size, total net wealth subject to (or exempted from) wealth taxation, social security bases, income which cannot be shifted across bases due to legal restrictions or nature, etc. Based on these simulations, we calculate the total tax savings associated with incorporation relative to self-employment status. This, in turn, allows us to derive the individual-specific income threshold beyond which incorporation becomes financially advantageous. Variation in the effective tax rate under both organizational forms is generated by the tax and/or legal reforms outlined above.

As noted above, other elements of the tax code - primarily the linked-operations rules and the wealth tax exemption criteria for business assets - limit the share of income that can be shifted across tax bases. For the purpose of precisely calculating tax savings, we classify each taxpayers business income into a potentially shiftable and a non-shiftable component.

In order to calculate the aforementioned non-shiftable income, we firstly quantify the level of personal income that is purely non-business and therefore non-shiftable, such as pensions and public benefits, certain personal capital gains and losses, and profits from certain type of controlled corporations subject to special imputation regimes under the progressive PIT base (e.g. image rights corporations, entities residing in tax havens, professional and/or sports/arts corporations only in certain years, or entities declared of European economic interest by the regulator, among others).

Furthermore, to correctly depict the part of business income that is legally non-shiftable, it is crucial to consider that transactions between partners and corporations effectively controlled by them must be conducted at market prices, as stipulated by the regulation on linked operations. Accordingly to this law, a certain individual-specific portion of the business profits must be reported as salary or as income from invoicing/self-employment under the progressive PIT base. Consequently, the fraction of business profits that a partner can retain within the corporation varies over time and, notably, depends on whether the individuals activity is classified as corporate or professional under this regulation.

Additionally, if the taxpayer's net wealth and tax residency could trigger a wealth tax liability, and for corporate and business assets to be exempt or partially exempt from the mentioned wealth tax, the personal income derived from this type of business wealth must

[6] Appendix A.4.3 provides an overview of wealth taxation and reforms to this tax.

constitute a specific fraction of the individuals total personal income. This fraction also depends on whether the corporation is classified as professional or corporate under the relevant regulations.

3. Identification

The identification of income shifting behavior is based on the individual tax savings as outlined above. We exploit this variation in a difference-in-difference setting, where the legal changes throughout our period of analysis allow us to separate individuals into reform-specific treatment and control groups.

The definition of treated units is straightforward. For each individual, we simulate the amount of taxes due under the fiscal framework of year b, applying the rules for both self-employment (S) and incorporation (C) to the previous years income, Y_{b-1}. We define treated units as those for whom incorporation results in a lower tax burden, provided that the tax savings exceed a minimum threshold α, which accounts for potential incorporation costs. In our baseline estimations, we set $\alpha = 0.01$, meaning that in order to be treated, reform-induced tax savings should be at least 1% of gross income.

$$T_{i,t} = \mathbf{1}\left[(1+\alpha) \cdot TL_b^C(Y_{b-1}) < TL_b^P(Y_{b-1})\right] \tag{1}$$

We furthermore condition treatment on having positive firm's profits and to start in the window of analysis (in our baseline, 5 years pre-reform and 10 years post-reform) as a self-employee. In addition, we use only observations which appear at least two years before and after treatment, i.e. we require them to be at least 5 years in the panel micro-data. This leaves us with 269,508 observations for 13,476 treated units between 1999 and 2022. The years with more treated observations are 2005 (23% of the treated units), 2007 (12%), 2008 (47%), 2009 (3%) and 2015 (12%), as those are the years with major fiscal reforms. However, the intensity of the different reforms is not the same across years: While the average reform-induced tax savings from incorporation for the treated units accounted for 3-4% of gross income in 2005 or 2015, this magnitude accounted for 32% of gross income in 2007.

As control units, we use individuals who - under the same definition - would have been treated if their income in the pre-reform year had been within 5% of the threshold.[7] Following standard practice in the literature, these control units are close to the treated group but fall just short of qualifying for treatment, missing the threshold by a small

[7]The choice of this threshold comes with the trade-off that smaller values would provide more similar control units, but less observations in the control group. However, results are robust to perturbations in this parameter.

margin.

We then perform difference-in-difference estimations following Callaway and SantAnna (2021) as we deal with multiple time periods and variation in treatment timing across reforms and individuals. As baseline model, we estimate

$$\text{Prob}(C)_{i,t} = T_{i,t} \times \left[\sum_{y=-5}^{-1} \theta_b \cdot \mathbf{1}(y = t - b) + \sum_{y=1}^{10} \beta_b \cdot \mathbf{1}(y = t - b) \right] + \iota_i + \theta_t + \varepsilon \tag{2}$$

where $\text{Prob}(C)_{i,t}$ is the probability of being incorporated, $T_{i,t}$ the treatment indicator as defined above, and ι_i and θ_t are taxpayer and year fixed effects, respectively. We cluster standard error at the taxpayer level and at the year-sector level.

4. Results

4.1. Probability of Incorporating

Baseline. We begin our analysis by documenting the baseline probability of incorporating across all years in our sample. Figure 2 shows the staggered difference-in-difference estimates over time.

The average treatment effect on the treated in this setting is 1.9 percentage points. Applying the correction proposed by Callaway and SantAnna (2021) for the unequal distribution of treated units across cohorts yields a slightly larger estimate of 2.4 percentage points. Given that the average tax savings from incorporation in our sample is 7.3% of gross income, this implies a semi-elasticity of approximately 0.26. Besides the average effect, the event study result reveal interesting insights. First, we do not observe trends before treatment. Note that trends before the actual treatment could be explains by anticipation effects, which we do not observe. This reassures that the reform were mostly unexpected and changed the behavior of tax payers on impact. Furthermore, this also confirms that we are able to separate the reform effects from potential growth into treatment due to increasing business income. Treatment than changes the probability to incorporate after exposure, and is slightly trending upwards over time, which implies that some tax payer react not immediate but after a few periods to the changes introduced by the reforms.

Heterogeneity by income. Figure 5 explores the heterogeneity of responses along the income distribution by replicating the main analysis separately for different income groups. We find evidence of an upward gradient: higher income groups exhibit somewhat larger increases in incorporation rates in response to the reform. This pattern is consistent with the notion that the benefits from incorporation - particularly in terms of potential tax savings - are more substantial for individuals with higher business income. Since fixed costs of incorporating (both administrative and compliance-related) are largely invariant to income,

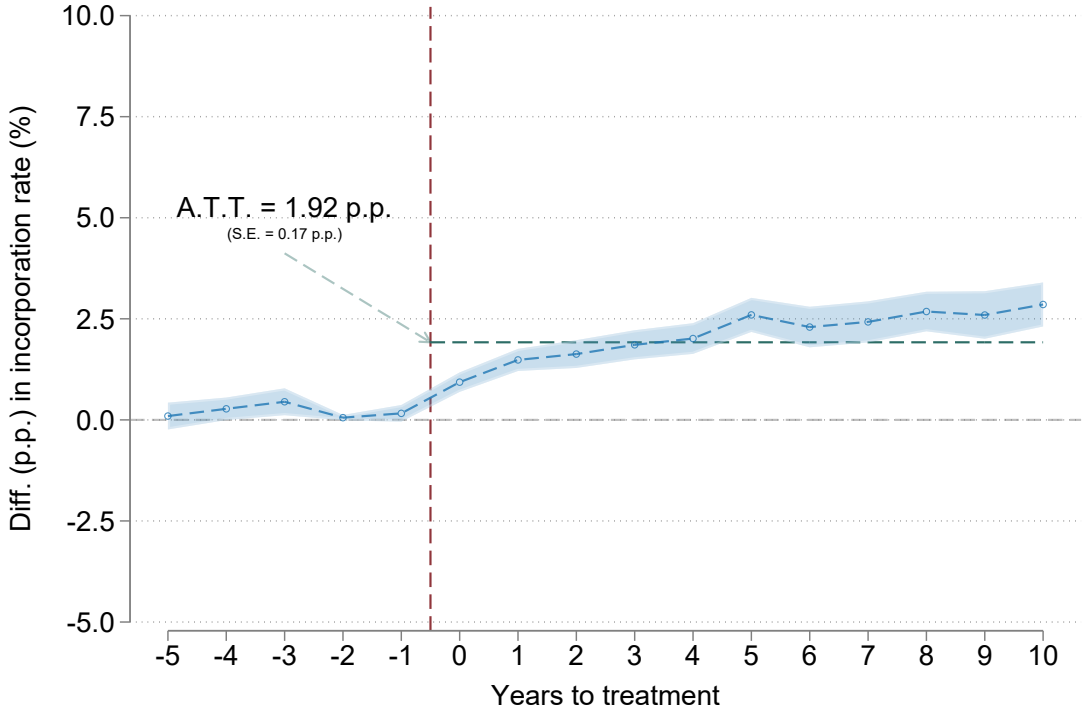
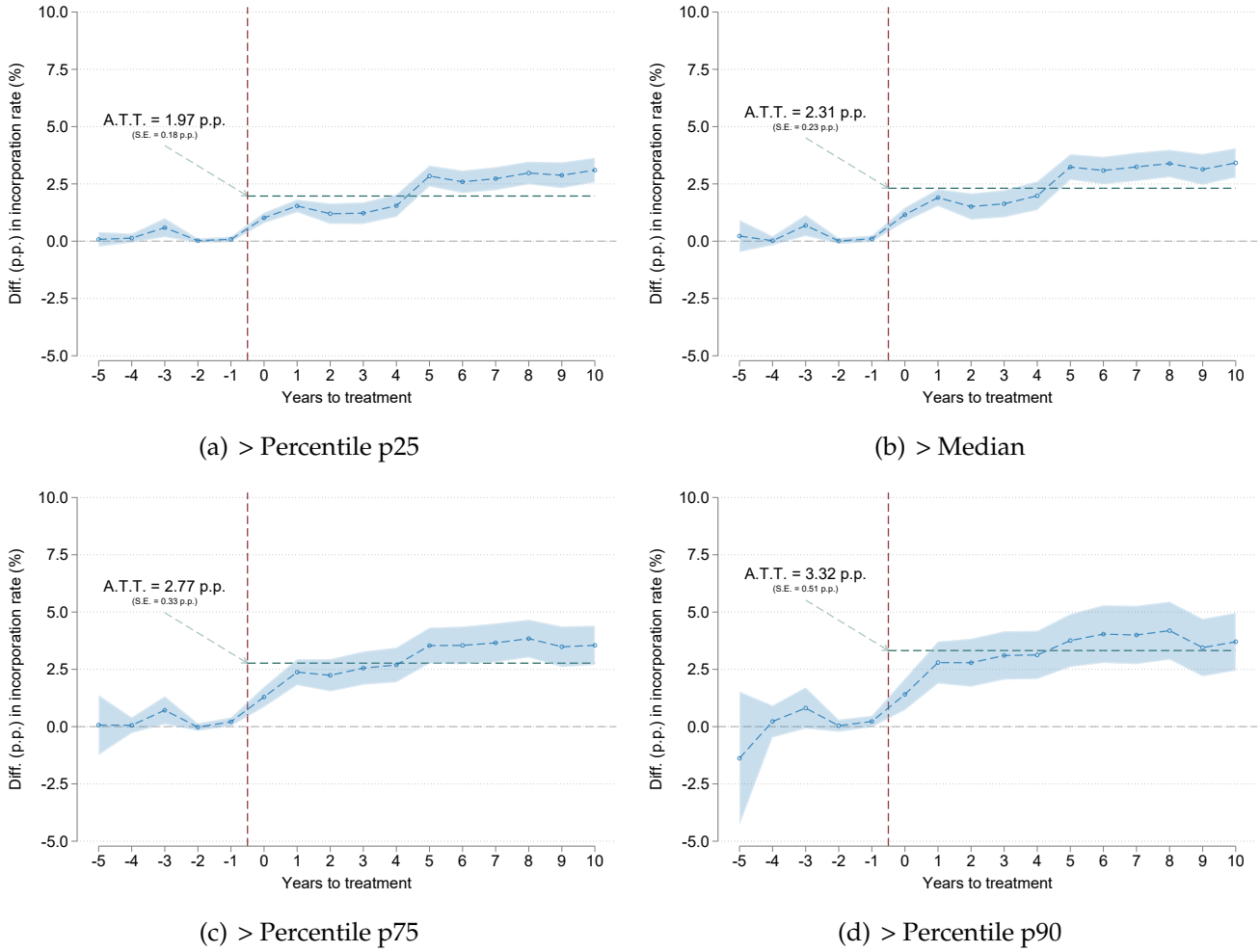


Figure 2: **Baseline Estimates: Probability of Incorporating across Reforms**

Note: The figure shows the results from a staggered differences-in-differences model Callaway and SantAnna (2021). Treated observations have a beneficial treatment of incorporating in the reform year $b = 0$ according to equation 1. The indicated ATT shows the average effect over the post-treatment period, not adjusted for unequal distribution of treated units across cohorts.

the relative net gain from incorporation is higher for wealthier individuals, making them more likely to respond. Moreover, higher-income individuals may have better access to tax advisors, who can help them navigate and implement incorporation, further amplifying their responsiveness.

The observed differences across income groups are, however, relatively modest - especially when accounting for the variation in potential tax savings across the distribution. When normalizing the observed changes in incorporation rates by the expected tax gains for each group, the income gradient becomes less pronounced. A plausible explanation is that our estimates reflect average effects across several tax reforms, which may differ in both nature and intensity, as it will be shown in next subsection 4.2. Some reforms have primarily affected specific margins (e.g., top rates or thresholds), while other have induced more broad-based changes such as the lega acess to income shfting mechanisms. As such, the aggregation of heterogeneous reforms may mask differential behavioral responses across the income distribution. To disentangle these effects and better understand the underlying mechanisms, we next turn to an analysis of each individual reform separately.



(a) > Percentile p25

(b) > Median

(c) > Percentile p75

(d) > Percentile p90

Note: The figure shows the results from a staggered differences-in-differences model Callaway and SantAnna (2021). Treated observations have a beneficial treatment of incorporating in the reform year $b = 0$ according to equation 1. The indicated ATT shows the average effect over the post-treatment period, not adjusted for unequal distribution of treated units across cohorts. Panels include the respective part of the distribution of gross business income of the treated units measured in the year before treatment.

Figure 3: **Heterogeneity: Probability of Incorporating by Income**

4.2. Effects by Reform

Given the heterogeneous nature of the reforms under consideration, we seek to decompose the overall average effect into components attributable to each major change in the tax code. This disaggregated analysis allows us to assess whether particular reforms drive the observed patterns and to identify potentially distinct behavioral responses triggered by different types of legal changes.

Figure 4 shows the ATT for each cohort affected by a specific reform over time. Note that we cannot estimate effects in years without variation in the tax code. For the remaining years, some are characterized by precisely estimated zero effects. The years with the largest effects are 2005 and 2007, followed by smaller effects in 2008 and 2015.

The effect of 2005 is important for the income shifting mechanism, as the reform of this

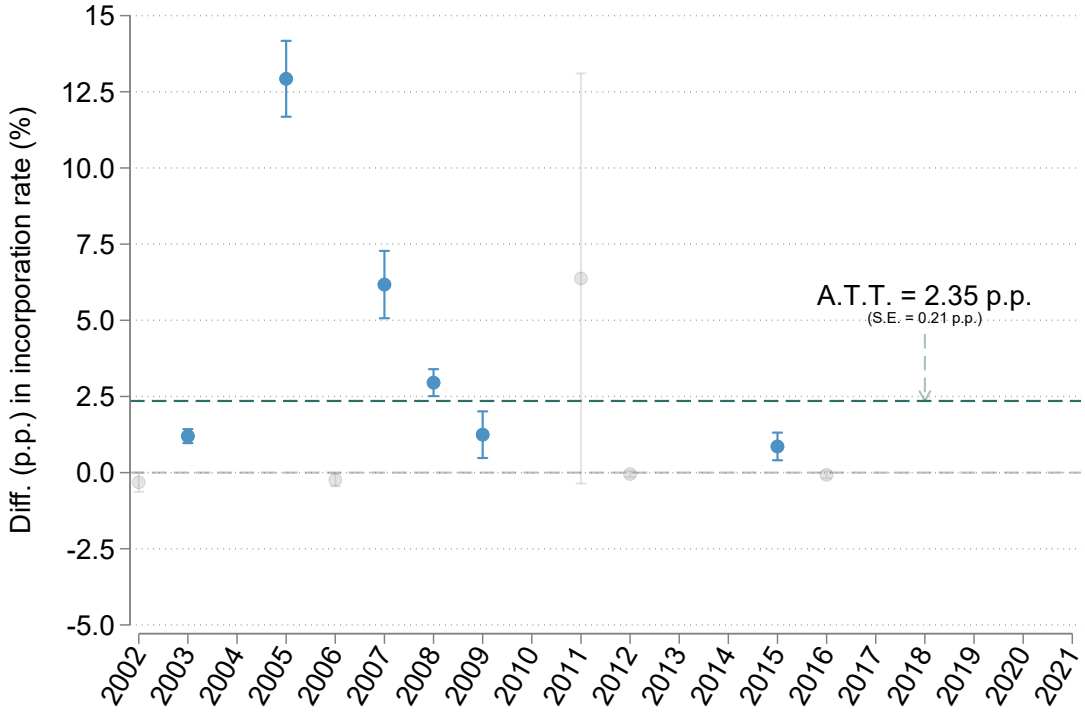
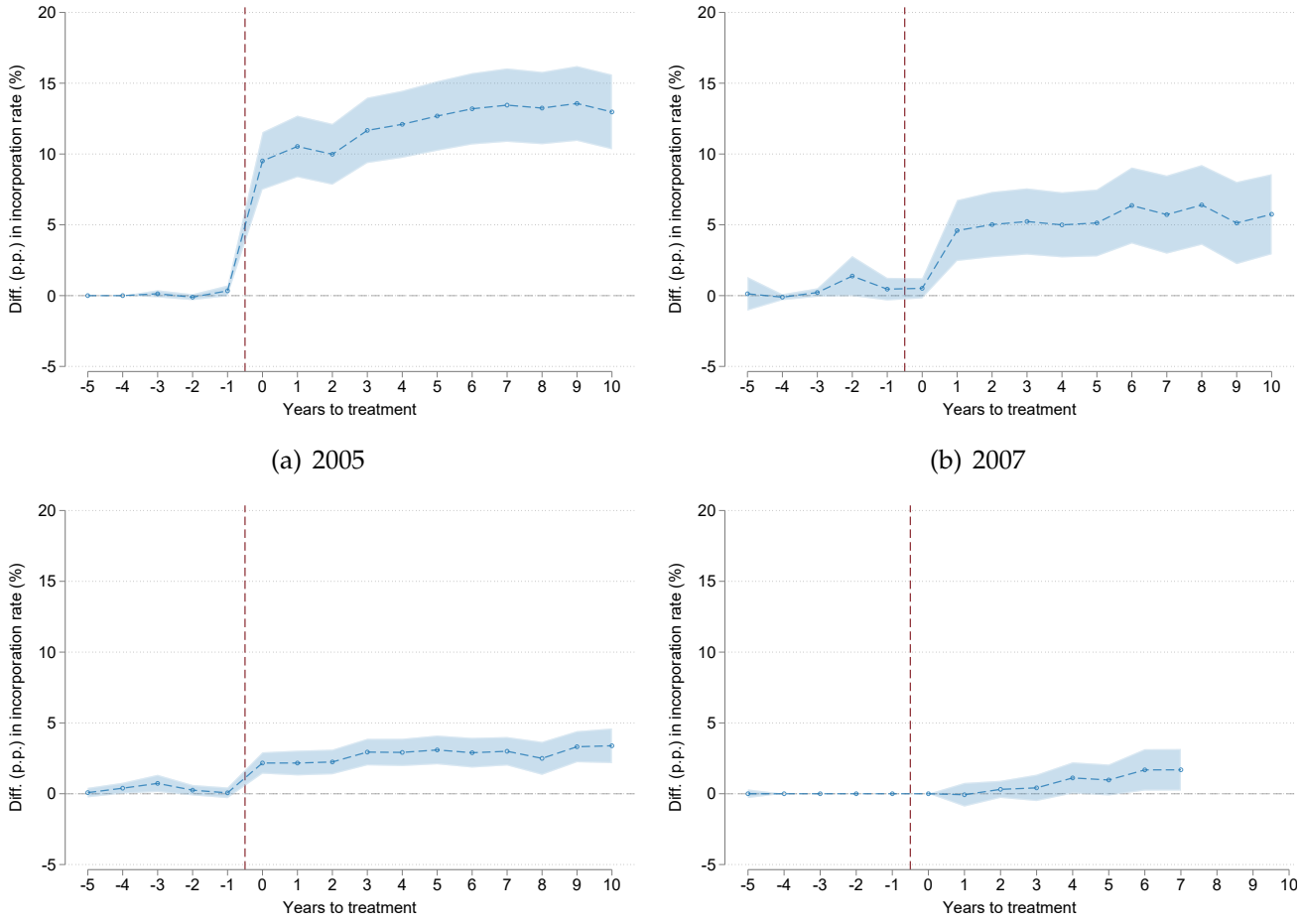


Figure 4: **Probability of Incorporating by Reform**

Note: The figure shows the results from a staggered differences-in-differences model Callaway and SantAnna (2021). Treated observations have a beneficial treatment of incorporating in the reform year $b = 0$ according to equation 1. The indicated ATT shows the average effect over the post-treatment period for each cohort in the sample. The horizontal dotted line stands for the average ATT of all reforms, adjusted for unequal distribution of treated units across cohorts. Years without estimates are those with non sufficient variation due to the absence of significant reforms. Non-significant estimates are shown in gray.

year allowed some professional-classified firms to be administered as a standard corporation subject to CIT, while these entities previously they were subject to the progressive PIT base irrespective of being incorporated or not. This explains the large effect, even though the average tax savings in this year of 4.2 are below the average over time. This implies that the response here is more due to the opening of the legal possibility to shift income, rather than tax savings per se. Figure 5(a) shows the annual coefficients for this year, documenting a sharp increase on impact, as income shifting prior to this year was legally limited. As of 2005, income shifting possibility is opened for every type of activity under similar regulations.

The dualization of the income tax introduced by the 2007 reform, together with the decline in effective CIT rates, further reinforced this effect. Figure 5(b) presents the event study results for this cohort. The average difference in total tax liability between being self-employed and incorporating - measured by the difference in average tax rates - is approximately 32% of gross income, representing a substantial incentive for taxpayers to incorporate. It is important to note, however, that such behavioral responses would not have been possible without the legal changes implemented in the earlier reform, which laid the institutional groundwork for incorporation as a viable tax planning strategy.

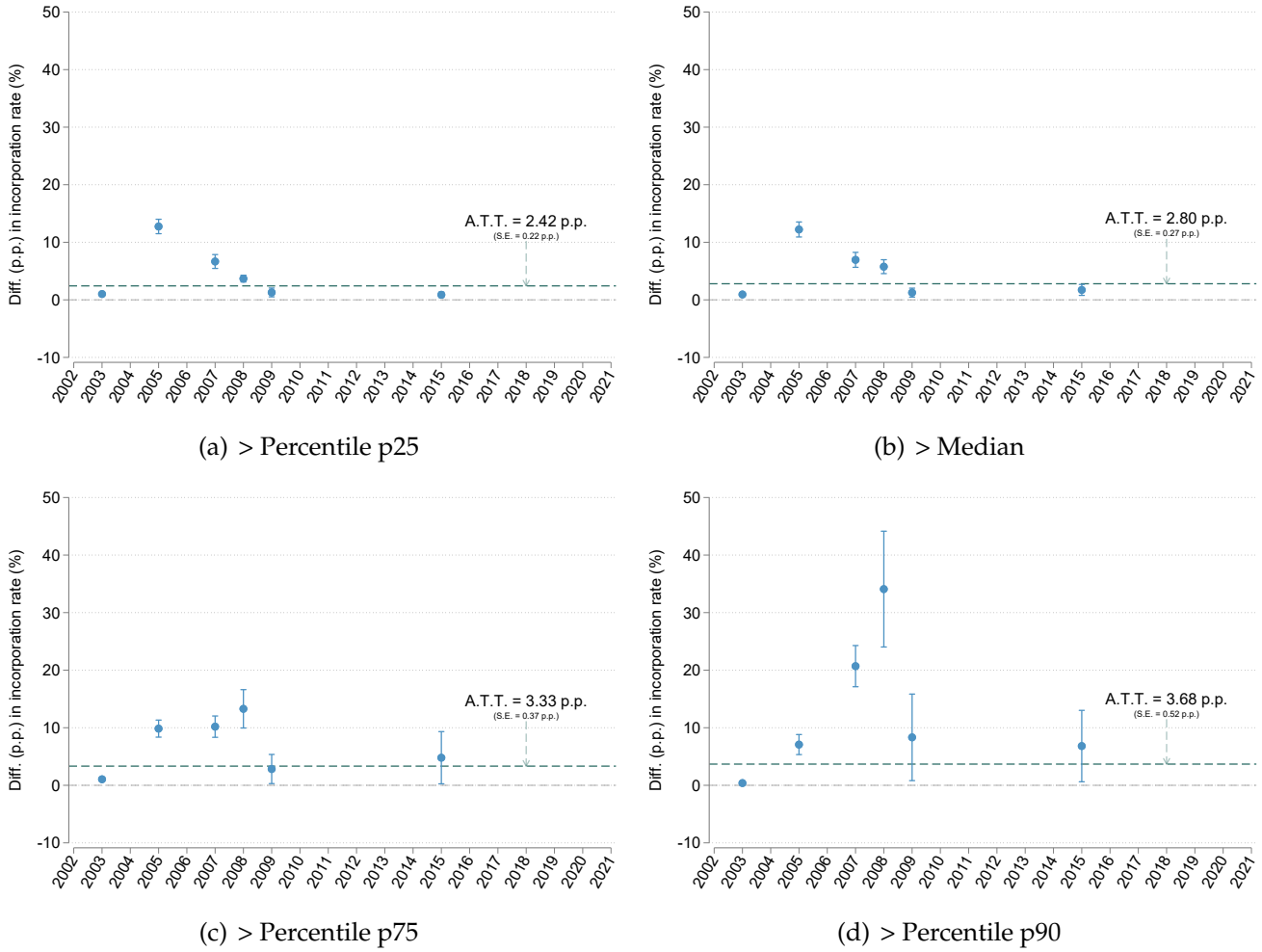


vspace4mm Note: The figure shows the results from a staggered differences-in-differences model Callaway and SantAnna (2021). Treated observations have a beneficial treatment of incorporating in the reform year $b = 0$ according to equation 1. The indicated ATT shows the average effect over the post-treatment period.

Figure 5: **Heterogeneity: Probability of Incorporating by Income**

The further reduction of the effective CIT rate and the abolition of the wealth tax in 2008 contributed to the overall incentive to incorporate, though its effect was noticeably smaller in magnitude. One possible explanation is that the wealth tax primarily affected individuals with substantial net assets, a narrower subset of the self-employed population, thereby limiting the scope of the behavioral response. Similarly, the PIT rate rebates introduced in 2015 (both in the progressive PIT schedule and in the special one for capital income and gains) led to only modest increases in the incorporation rate. These limited effects may reflect the relatively small adjustments in marginal tax rates, as well as the possibility that by this point, the most responsive individuals had already adjusted their legal form, reducing the pool of potential switchers.

The differences across reforms is explains the moderate heterogeneity across income levels, as different reforms had different impacts on the lower and upper end of the distribution. Figure 6 documents that each reform is characterized by different degrees



(a) > Percentile p25

(b) > Median

(c) > Percentile p75

(d) > Percentile p90

Note: The figure shows the results from a staggered differences-in-differences model Callaway and SantAnna (2021). Treated observations have a beneficial treatment of incorporating in the reform year $b = 0$ according to equation 1. The indicated ATT shows the average effect over the post-treatment period for each cohort in the sample. Panels include the respective part of the distribution of gross business income of the treated units measured in the year before treatment.

Figure 6: **Heterogeneity: Probability of Incorporating by Income and Reform**

of heterogeneity across the income distribution. The 2005 reform produced a relatively homogeneous effect across the income distribution, largely because it broadly enabled income shifting for many firms for the first time, while the personal income tax (PIT) system had not yet undergone dualization. In contrast, we observe a more pronounced response among higher-income taxpayers following the 2007 and 2008 reforms, as their tax savings are larger. The policy changes of those years significantly amplified the tax advantages of incorporation, particularly for individuals at the upper end of the income distribution. The evidence suggests that the tax savings from shifting income into controlled corporations - via incorporation - were especially salient for high-income individuals under the new dual PIT regime and the revised CIT structure.

4.3. Robustness

We made several choices to sepcify our baseline model, but results are largely insesetive to alternatives. Table 1 shows the point estimate for different specifications. Model (1) refers to the baseline case. Models (2) and (3) adjust the control group by including individuals which would have grown into treatment by a smaller margin. In model (4), we estimate the Callaway and SantAnna (2021) but use not-yet treated as the control group. The results resemble closely our estimates with the baseline control group, as the idea of lower-income individuals but close to the threshold is very similar to using not-yet treated. Model (5) does not create a minimum wedge between the incorporated and non-incorporated ETR to receive treatment status and model (6) doubles the baseline value of α, both specifications do not generate a statistically significant different estimate. The last two models modify the sample by dropping the requirement of having positive self-employment income in the pre-incorporation period, and lower balancing around the reform date. Results are robust to these specification choices.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
A.T.T.	2.35***	1.91***	2.22***	2.23***	2.35***	2.16***	2.22***	2.36***
	0.21	0.59	0.36	0.20	0.20	0.18	0.18	0.21
Obs.	269,580	253,819	257,050	249,625	282,869	343,018	363,642	272,860
Control	+ 5%	+ 1%	+ 2%	Not yet	+ 5%	+ 5%	+ 5%	+ 5%
α	0.01	0.01	0.01	-	0	0.02	0.01	0.01
$Y_{1,...,N} > 0$	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
Balanced	5	5	5	5	5	5	5	2

Note: The table shows the results from a staggered differences-in-differences model Callaway and SantAnna (2021). Treated observations have a beneficial treatment of incorporating in the reform year $b = 0$ according to equation 1. The indicated ATT (and standard error, whithin brackets below) shows the average effect (in p.p.) over the post-treatment period for each cohort in the sample, adjusted for unequal distribution of treated units across cohorts. Superscript asterisks denote significance of the estimated ATT at the 90% (*), 95% (**), and 99% (***) level, respectively. Columns show alternative specifications of the estimation model, with column (1) being the baseline estimation. Control row denote how the control group has been constructed. "+ X%" stands for cases where the control group gathers individuals that are not treated but would be treated if the would have earned and additional X% percentage of business income. "Not yet" indicates that the control group has been built uniquely with not yet treated units. Row with values refer to the minimum difference that must be reached between tax liabilities in case of incorporation or tax liabilities in the case of standard self-employee in order to consider the individual as a treated unit. This difference is measure as a fraction of gross business income. For example, a value of 0.01 for , depicts as treated units those whose total tax liabilities would be reduced in a 1% of gross business income in case of incorporation. That is, the effective tax rate if incorporated is at least 1 p.p. lower than the effective tax rate if unincorporated. Row with $Y_{1,...,N} > 0$ indicates whether we condition on showing always a positive business income within the estimation window. Balanced row reports how many balanced years at least would be needed to be selected for the estimation, with 5 indicating at least observations in [b-2;b+2] and 2 indicating at least observations in [b-1;b].

Table 1: **Robustness to Specification Choices**

5. Conclusion

This paper provides causal evidence on the role of tax incentives in driving incorporation decisions and income shifting behavior in Spain. Exploiting rich administrative micro-data

and a sequence of major tax reforms over two decades, we identify a semi-elasticity of approximately 0.26 with respect to tax savings, indicating that the probability of incorporation increases substantially in response to tax-motivated gains. However, our analysis reveals that average responses mask important heterogeneity: the strongest effects are not necessarily associated with the largest tax savings, but rather with reforms that either altered the legal and institutional feasibility of income shifting or amplified the incentive at the top of the income distribution. In particular, the dualization of the personal income tax, the lowering of the corporate income tax rates and reforms enabling professional activities to transition into corporate form stand out as key triggers.

These findings underscore the importance of legal and regulatory frameworks in shaping tax avoidance strategies. Income shifting does not simply respond to marginal tax rate differentials, but is contingent on the institutional access to such strategies. This has implications for the design of tax systems, particularly in dual income tax contexts, where differential treatment of labor and capital income may erode progressivity and weaken the intended redistributive capacity of personal income taxation.

Future research could aim at quantifying the fiscal costs of these behavioral responses and the broader distributional consequences, including their contribution to effective tax rate regressivity. Incorporating simulations of counterfactual tax structures using the developed tax calculator could inform the trade-offs between efficiency, equity, and administrability in tax policy design.

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A. Institutional Setting

A.1. Business legal form

The legal/statutory form in which the capital, workforce, operation rules, and ownership structure of a business/company (we use "business" and "company" interchangeably) are set is crucial to determine the accounting obligations to which the company will be subjected, the mandatory initial or start-up economic investment, the type of Social Security affiliation that its owners and workers will follow, the third-party liability that the company owners will face, and, above all, the taxation scheme under which they will be taxed. In this article we particularly focus on how the taxpayers' decision on the legal form of an owned company/business may be influenced by the taxation scheme that each of the possible legal or statutory company forms will come with.

The classification of the different legal forms of companies is similar worldwide. Firstly, **non-incorporated** businesses or **standard self-employment** refers to firms whose ownership and/or means of production corresponds 1-to-1 to a single taxpayer-person. The company's profits or business income (turnover less expenditure) will be considered as self-employment income and will be therefore taxed in the general base of the PIT, which is subject to a progressive tax rate. The taxpayer, and other collaborator family members, are obliged to be registered and contribute to the standard self-employees regime of the Social Security. There is no minimum investment amount to start running a non-incorporated business and the taxpayer-person is liable to third parties with all of his or her assets. Figure B1 shows how standard or non-incorporated self-employment is the most recurrent business legal form for no-employee firms and its use decreases as the company gets larger.

On the other hand, **incorporated** businesses or **corporations** are firms with a particular operating structure where the ownership and/or the means of production does correspond to a single taxpayer-person, but to a legal entity. There exist several ways to classify these corporate businesses. The first sub-classification of corporate companies relies on a number of key factors such us the ownership structure, the owners' third-party liability, the minimum start-up investment and other accounting or legal requirements. Following this first sub-classification, we encounter the following types of corporations.

1. Publicly-held or **listed corporation**. The value and ownership of each of the company shares is traded in organized stock markets. These are limited third-party liability corporations (in Spanish, "*Sociedad Anónima, S.A.*") for which a minimum start-up capital of €60,000 euros is needed.[8] Although listed corporations usually present a large number of shareholders due to the minimum start-up investment, only one partner is required at the time of incorporation.[9] Listed corporations are the most

[8] Only a 25% of the initial capital must be effectively disbursed.

[9] A **labor corporation** is a special case of unlisted or listed corporation in which the shareholding corresponds mainly (over 51%) to the workers, who must be remunerated personally and directly for their

recurrent business legal form of large companies, as depicted in Subfigure 1(c).

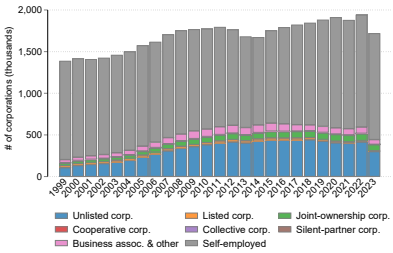
2. Closely-held or **unlisted corporation**. The company shares are typically not traded in organized stock markets. These are limited third-party liability corporations (in Spanish, "*Sociedad Limitada, S.L.*") for which only one partner and a minimum start-up capital of €1 euro is needed at the time of incorporation.[10] As shown in Figure B1, unlisted corporation is the most recurrent legal form of incorporated businesses with no or few employees.
3. **Collective corporation**. Closely-held corporation where partners directly manage the company and contribute capital and/or labor force. No minimum investment is required at incorporation, but at least two partners are needed. Irrespective of partners contributing capital or work force, all of them face full third-party liability.
4. Limited-partnership or **silent-partner corporation** (in Spanish, "*Sociedad Comanditaria*"). It is similar to the collective corporation, but with the possibility of incorporating non-working partners who do not manage directly the company and whose third-party liability is limited to the capital they contributed.
5. **Cooperative corporation**. A minimum of 3 limited-liability working partners is required and none of them may hold more than one third of the shares. Other partners can contribute only capital, but always holding a minority of the shares. Salaried non-partner workers cannot be more than 30% of the total number of working partners.[11]
6. **Civil** or **joint-ownership/community-of-property corporation**. It is a private contract, wherein two or more individuals, with no minimum incorporation capital requirement, pool their work and/or capital to engage in a business activity assuming unlimited third-party liability. It also encompasses scenarios in which the ownership of an asset, integral to the business activity, is indivisibly held by multiple individuals.
7. **Business association**. It delineates a temporary organization established for executing an administrative concession or contract, ceasing to exist once the contract has been fulfilled. It does not possess independent legal personality. Each taxpayer-person or incorporated entity comprising the consortium assumes joint and unlimited third-party liability.

Another sub-classification of incorporated businesses which is particularly relevant for us refers to the nature of taxation to which the company profits (earnings before taxes) are subject. According to this second sub-classification we find the following types of legal

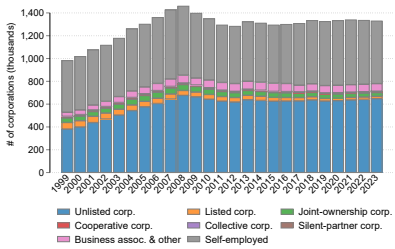
services to the corporation by means of a market-remunerated permanent labor contract. None of the partners can own individually more than 33% of the shares.

[10] The minimum start-up capital was €3,000 up to 2023, with a requirement of 100% of the initial capital being effectively disbursed. The minimum start-up capital of €3,000 remains to apply in cases of unlisted labor corporations.

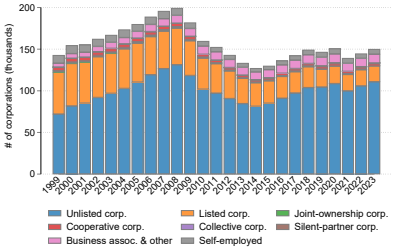
[11] It is not possible to transfer the ownership of the shares of a cooperative corporation, so the only way to exit the corporation's property is to deregister as a partner while the corporation continues to complying with legal requirements upon partner's departure, or by corporation dissolution.



(a) No employees



(b) 1-9 employees



(c) Over 10 employees

Source: *Instituto Nacional de Estadística, INE* (2024b).

Figure B1: ***Business legal form by number of employees***

entities.

1. **Small-size non-financial corporation**. Enterprises with turnover levels below a certain threshold (changing over time), whose profits are subject to the CIT scheme. They occasionally benefit from a reduced CIT rate and various additional CIT benefits. As illustrated in Figure B2, this represents the most prevalent type of corporation. In certain tax years, newly-created or protected corporations benefit from similar CIT rates and incentives to the ones applied for the small-size non-financial corporations.
2. **Other non-financial corporation**. These companies resemble the aforementioned ones but operate at higher revenue levels, thereby ineligible for certain tax incentives or reduced CIT rates designated for small-size corporations. Nonetheless, they can still utilize multiple CIT deductions and tax credits. Big consolidated corporate groups are censored in this category.
3. **Cooperative corporation**. Non-financial entities registered as cooperatives benefiting from fiscal protection. They are subject to a CIT scheme that results in a reduced marginal CIT.
4. **Financial corporation**. Banks, credit institutions, and rural savings banks whose profits are subject to CIT at a typically increased tax rate compared to the one applied to non-financial corporations.
5. **Exempt corporation**. These are special CIT regimes under which corporations are either fully exempt from taxation or subject to significantly reduced tax rates. Private

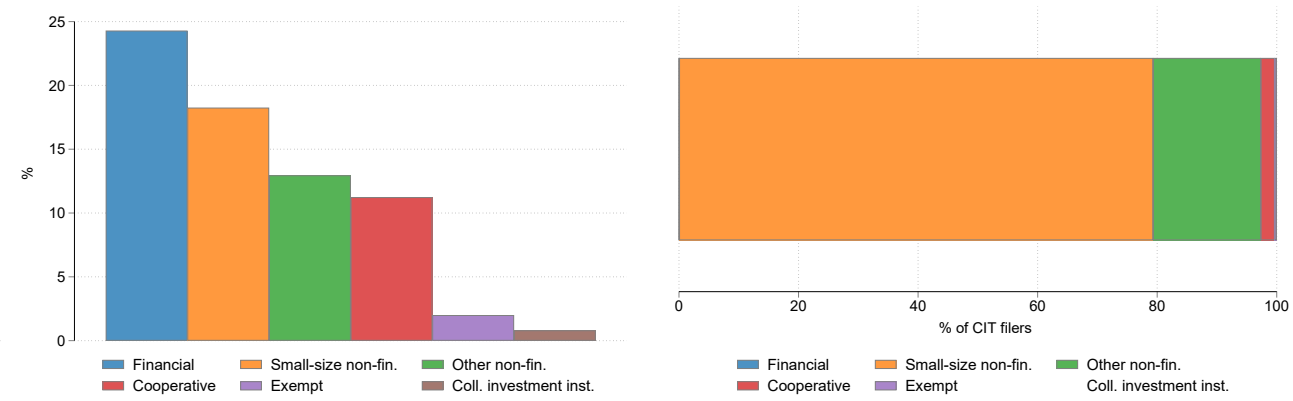
pension funds and similar entities, foundations, or non-profit corporations of special interest which are partially or totally exempted (or subject to a 0% tax rate) from CIT on their profits. **Collective investment vehicle corporations** face a 1% CIT rate. In some other cases, only after-tax distributed profits from these corporations are subject to CIT, while non-distributed profits remain untaxed.

6. **Asset-holding corporation**. Non-financial corporations whose main purpose is (i) the mere possession of real estate, (ii) the leasing of real estate, or (iii) the holding of shares of other corporations. The tax scheme applied to these corporations' profits depends on whether they run an economic business activity or not.
    a) Inactive asset-holding corporation. More than 50% of their assets are not devoted to run an economic business activity.[12] An activity is typically classified as an economic business activity when it involves at least one employed individual and includes, on behalf of the corporation, the organized management of the material and human resources necessary to generate income. Depending on the tax year, the profits of this kind of inactive corporations will be taxed either (2) through an imputation regime assigning profits to the progressive PIT base of their person-partners, (2) through an special dualized CIT regime that replicates the PIT taxing at a different rate normal profits and capital gains, without right to apply tax benefits, or (3) through the normal CIT scheme without the right to apply certain tax benefits.
    b) Active asset-holding corporation. More than 50% of their assets are devoted to run an economic business activity. In such cases, at least one market-remunerated salaried person must be hired with a full-time contract and the corporation must provide an appropriate management of the material and human resources of the business. The profits of this type of active corporations will be taxed at the standard non-financial CIT scheme with the possibility to access not only standard tax incentives but also the ones assigned to small-size or newly-created corporations. Further, active real-estate corporations holding a large number of properties may apply important CIT deductions if they rent said properties for housing.
7. **PIT-attribution corporation**. Civil or joint-ownership corporations not subject to CIT and typically not performing a mercantile activity. Corporate profits from self-employment activities and renting of real estate are attributed to the PIT filings

[12]Some types of assets do not enter the calculation of corporation assets related to an economic business activity: (1) those held to comply with regulatory obligations, (2) those held as a consequence of the exercise of the activity that constitutes their object (asset-holding itself is a business activity classified in the NACE list), or (3) those that grant at least 5% of the shares of a certain corporation and are held for a minimum period of one year for the purpose of directing and managing said corporation, which cannot be itself performing a NACE-listed asset-holding business activity. The 50% threshold is checked taking into account all the corporations of the corporate group, irrespective of the residence of each of the subsidiary corporations and irrespective of the obligation to fulfill consolidated annual accounts.

of their partners though the progressive PIT base and profits from financial capital or capital gains are attributed though the special or less progressive PIT base.

8. **PIT-imputation corporation**. Depending on the tax year, the profits of these entities must face only CIT or may be directly imputed to their partners residing in Spain in the progressive base of their respective PIT returns. These can be professional corporations where more than 75% of the turnover comes from professional self-employment activities or corporations where more than 50% of the turnover comes from artistic or sport performances by non-corporate persons, and where the taxpayer-person has the right to receive a major part of the distributed after-tax profits. Under this regime we also encounter, among others, Spanish or European Economic Interest Groups (EIG), Temporary Business Associations (TBA), corporations under an special international tax transparency regime, collective investment institutions residing in tax havens, or image rights corporations.



(a) Effective CIT rate on profits

(b) Distribution

Source: *Agencia Estatal de Administración Tributaria, AEAT* (2024a).

Figure B2: ***Types of CIT-subject corporations, 2018***

Finally, an additional sub-classification is observed for firms, whether incorporated or unincorporated, based on whether the capital value of such firms is exempt from being taxed under the wealth tax of their owners or not.[13] This a sub-classification from the point of view of the taxpayer person, not from the perspective of the firm. According to this third classification, we identify the following four types of firms.

[13]The assets and liabilities associated with unincorporated firms are those held in the name of the taxpayer and utilized for conducting an economic activity as a self-employed individual. The net worth of self-employment businesses or unincorporated enterprises is determined as the difference between the real assets and liabilities recorded in the firm's accounts, provided that the accounting adheres to the requirements of the Spanish Commerce Code (in Spanish, "*Código de Comercio*"). If the firm's accounting does not comply with the Spanish Commerce Code, the valuation of assets and rights associated with the unincorporated firm must be conducted on an element-by-element basis, applying the valuation rules for wealth tax corresponding to the nature of each type of asset. Regardless of accounting compliance, the valuation of real estate properties

1. **WT-exempt self-employment firm**. These are unincorporated businesses whose net worth is excluded from the wealth tax base of their self-employed owner. For this exemption to apply, the economic activity of the firm must be carried out on a regular, personal, and direct basis by the wealth taxpayer and must serve as their primary source of income, representing at least 50% of the general and savings taxable base under his/her PIT filing.[14] Additionally, if the firm's activity involves the rental of real estate, it must qualify as a proper business economic activity to be eligible for the wealth tax exemption, which requires the hire of at least one full-time worker, compensated at market rates.
2. **Non-WT-exempt self-employment firm**. These are unincorporated firms that fail to meet one or more of the criteria outlined in the previous section to qualify for the exemption of their value from the owners WT base. For instance, this category would include a self-employed business engaged in real estate leasing without employing at least one individual, or an unincorporated business that does not constitute the principal source of income for its owner.
3. **WT-exempt corporation**. This category encompasses incorporated businesses in which the taxpayer directly or indirectly holds at least 5% of the equity (or 20% when combined with the holdings of their spouse or relatives up to the 2nd degree). Additionally, over half of the corporations assets must be allocated to conducting an economic business activity (it excludes real estate leasing activities unless they employ

used in self-employment economic activities is determined by applying the rules for valuing real estate under the wealth tax, as applied when the property is owned by the taxpayer but not used for economic activities.

In cases where the taxpayer's business is incorporated, the firm's assets and liabilities are not held in the taxpayer's name, as they would be in unincorporated self-employment firms, but are instead held directly by the corporation. For incorporated businesses, the taxable wealth corresponding to the taxpayer is derived from their shares or equity stakes in the corporation. If the corporation is a collective investment institution (e.g., mutual funds), the wealth value attributed to the shareholder is based on the net asset value (assets minus liabilities) of the shares as of the tax assessment date (December 31). For corporations traded on organized markets, excluding collective investment institutions, the wealth value that corresponds to each shareholder is calculated as the average trading price of their shares on the corporation during the fourth quarter of the year. For equity stakes in non-traded entities, excluding collective investment institutions, the valuation of such shares is determined using the theoretical value from the most recent approved balance sheet, provided this balance sheet has been audited with a favorable report. If the balance sheet has not been audited or the audit report is unfavorable, the valuation consists of selecting the highest of three values: (1) nominal value of the shares, (2) theoretical value of the shares from the most recent approved balance sheet, or (3) the capitalization value at a 20% rate of the average profits of the entity from the last three fiscal years prior to the wealth tax assessment date, including in the profits distributed dividends and allocations to reserves (except those for balance sheet regularization or revaluation).

[14]When checking the rule of self-employment income from the unincorporated firm being the principal source of income of the taxpayer (for the unincorporated self-employment firm to qualify for the wealth tax exemption), remunerations of the taxpayers derived from management functions within entities in which the taxpayer holds exempt shares under the WT are excluded (firms outlined in the third category of this sub-classification). In the case of lucrative transfers of family business shares, eligibility of the unincorporated firm wealth value for the WT exemption requires a comparison between the taxpayers remuneration and the algebraic sum of all net reduced income derived from employment, business activities, and professional activities. This condition ensures that the exemption applies only when the taxpayers income from the family business constitutes a substantial and significant component of their total income.

at least one individual compensated at market wages). Furthermore, the taxpayer must perform managerial functions within the incorporated entity and receive a remuneration for these functions amounting to at least 50% of his/her total regular employment and self-employment income.[15]

4. **Non-WT-exempt corporation**. This category encompasses incorporated firms that fail to meet one or more of the criteria outlined in the previous section to qualify for the exemption of their value from the owners WT base. For instance, this category would include inactive asset-holding corporations, incorporated business that does not constitute the principal source of income for its partner, or corporations over which the taxpayer do not possess effective control due to owning less than 5% of the shareholding.

A.2. Effective corporate control

In the case of unincorporated businesses, it is clear that the self-employed individual performs total effective control over his/her firm, as he/she (of his/her spouse) is the owner of the business-related assets. But when it comes to businesses established as a corporation, things become less direct or clear when determining whether the taxpayer possess effective control over such corporation or not. An individual can be related to an incorporated business through diverse channels: purchasing or consuming from a particular corporation, invoicing or selling goods/services to a certain incorporated firm, belonging to the shareholding of a corporation, granting credit to an incorporated enterprise, working for a particular corporate company, performing administration/management duties for a corporation, etc. Further, these incorporated businesses can adopt different legal forms, as discussed in Subsection A.1. But those possible relations of an individual with a corporation do not necessarily and directly imply that the individual exerts effective control over such corporation (e.g. owning some shares in a publicly listed corporation does not imply effective control over such company). We here assume that solely **taxpayer-people who have effective control over a incorporated business** are able to potentially accomplish through their controlled corporations the type of income or wealth shifting tax strategies that are in the scope of our research. For an individual taxpayer to be presumed to effectively control a corporation, one of the following conditions must be met. These conditions are not arbitrarily chosen by the authors, rather emerge from the Social Security legislations (the first three conditions), from the wealth tax legislation (fourth condition) of from the PIT rules (fifth condition).

1. Owning alone or at the cohabiting 2nd-degree family level more than 50% of the corporation's shares, independently of being administrator, manager or working

[15]For the purposes of calculating this percentage, self-employment income derived from unincorporated businesses whose associated assets and rights qualify for the WT exemption (firms outlined in the first category of this sub-classification) is excluded.

partner.

2. Owning more than 33% of the corporation's shares and either being (1) administrator (regardless of this administrator position being remunerated or not) or (2) working partner, irrespective of being manager/director or not.
3. Owning more than 25% of the corporation's shares while performing management and direction duties in the corporation and either being (1) administrator (regardless of this position being remunerated or not) or (2) working partner, that is a person rendering working or professional services his/her own corporation.
4. Owning individually more than 5% of the shares of a corporation or more than 20% when taking into account nd-degree relatives, performing direction duties in the corporation and the remuneration received for these tasks accounting for more than 50% of the partner's total sum personal regular labor and self-employment income. That is simply owning shares of a corporation while such shares are exempt from shareholder's wealth taxation.
5. Being partner of (1) an asset-holding corporation (see definition in Subsection A.1), (2) a legal entity where more than 75% of the turnover comes from professional self-employment activities, (3) a corporations where more than 50% of the turnover comes from artistic or sport performances by non-corporate persons and where the taxpayer-person has the right to receive a major part of the distributed after-tax profits, or (4) a corporation whose profits are directly imputed to the progressive base of the partner's PIT filing.
6. Owning shares of a corporation which is already effectively controlled by another family member up to the 3rd-degree.

There may also exist individuals not exerting control over a certain corporation while still owning shares, participating in an investment fund/vehicle, or working as a regular salaried manager, among other examples. In our work, those would be not considered as individuals with capacity to perform income/wealth shifting tax strategies through controlled businesses.

A.3. Remuneration of partners

While self-employment individuals running an unincorporated business directly generate self-employment income from their firm, partners who effectively control a corporation, irrespective of them being direct workers therein or merely managers or administrators, may compensate themselves from the controlled corporation or retain corporate profits within such owned legal entity. The decision of the partners on how they remunerate themselves from their controlled corporations may stem from various factors, including, among others, practical and legal limitations on performing (illegal) personal consumption through the firm, legal requirements that force professional partners to invoice their

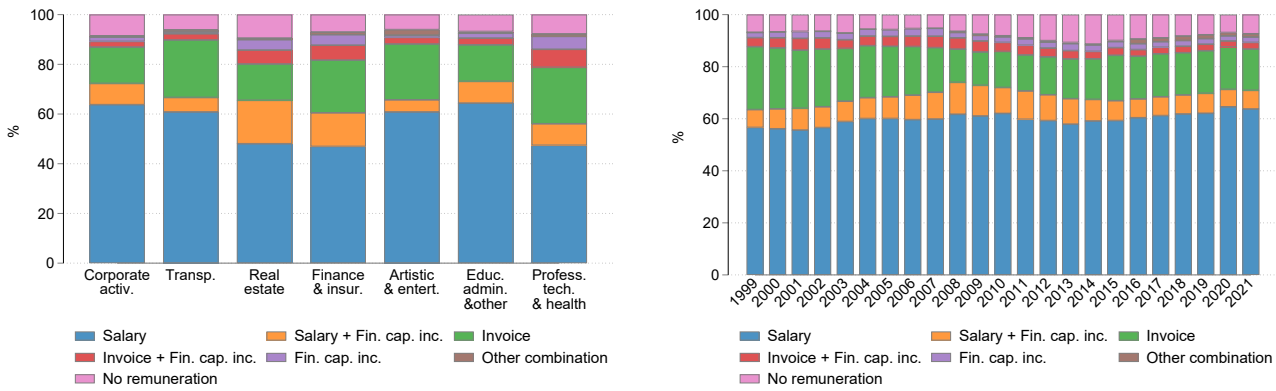
corporation for their professional services rendered in the corporation, the requirement to remunerate themselves from their own corporation in order to make such company eligible for different CIT incentives or WT exemptions, the joint personal and corporate tax planning strategy followed by the partners and the corporation, or the simple partners' will to transfer incomes generated by the corporation to themselves for whatever possible reason. Here, we categorize a number of recurrent channels for compensating corporate-controlling partners from their owned corporation depending on the type of personal income that each of them generates.

- Salary or other compensations considered general labor income. Partners may draw a salary for their roles as administrators or managers of their own corporation. In some cases, mainly in cases of business activities not registered as professional (see Subsection A.4.5 for further explanation of the law), partners may also compensate themselves through payroll for the work (different from the administrator/manager one) performed for their corporation. Additionally, corporations can pay the Social Security contributions owed by the partner to the Social Security Treasury or the fees for various medical mutual funds of the partner, constituting a form of in-kind general labor remuneration. Further, if the partner is using a real estate property or a car of the corporation, he/she is obliged to declare in his/her PIT return an in-kind labor remuneration.
- Invoicing or self-employment business income. In certain fiscal years and under specific circumstances (see Subsection A.4.5 for further explanation of the law), the invoicing mode of compensation may be legally mandated for professional working partners rendering professional services for their controlled corporation when such corporation is engaged in a professional economic activity. For instance, if the corporation is constituted and registered to operate in the medical services sector, partner doctors may invoice their own company for their rendered services to the corporation. Similarly, in cases where the company is engaged in a non-professional activity, such as IT services, but lacks a formal business structure (e.g., premises, employees, etc.), it may be also legally classified as a professional corporation from the partner's perspective. Consequently, partners may also have to invoice their own company in a manner similar to the first scenario. Only non-professional services of the partners rendered for their non-professional-registered controlled corporations can always be remunerated through payrolls or regular labor income.
- Financial capital income. Among the most significant strategies yielding this type of income are dividend distribution, interest payments on loans provided by the partner to the corporation, reductions in the corporation's capital share, and liquidation quotas for cases of entity dissolution. The tax year and the terms under which these strategies occur determine whether the financial capital remunerations fall within the partner's PIT filing under the general or progressive base, or the special or savings base, which

is less progressive.

- PIT-exempt income. Among others, attendance fees for shareholders' meetings, specific in-kind compensations in the form of shares of the corporation, and certain severance payments for salaried partners or administrators are exempt from PIT.

Each of these compensations to partners from their effectively controlled corporation entails a distinct expense for the company's accounts. For instance, while invoices or salaries paid to partners constitute deductible expenses that reduce the taxable base for CIT, dividends are distributed after the corporation has paid taxes on its profits. The manner in which partners compensate themselves from the company will depend on their tax strategy, particularly considering the implications of such compensations on the tax liabilities of PIT, CIT, and WT, as well as other taxes such as the appreciation tax on urban real estate or property transfer taxes. Subsection A.4 analyzes various tax and legal reforms that have taken place which may drive the decision of whether to incorporate, how to incorporate, and how to remunerate partners from their own controlled corporations.



(a) By NACE09 (b) By year

Note: The left y-axis denotes percentage of individuals effectively controlling a corporation. This Figure provides insights into the types of PIT-subject compensations received by said individual taxpayers (we here exclude PIT-exempt remunerations). It is computed from our primary micro-data, which do not provide a perfect match for identifying which payments precisely originate directly from their effectively controlled corporation. Consequently, we here include remunerations of corporate-controlling partners, but their compensations presented here might include remunerations that do not directly stem from their effectively controlled corporation. We are only able to exclude remunerations of the individual that emerge form pension or benefit payments, but among other labor remunerations, we cannot precisely disentangle which parts effectively comes from a controlled corporation and which part not. Nevertheless, this analysis offers a valuable measure to understand the nature of compensations received by the aforementioned corporate-controlling individuals. Each corporate-controlling partner is assigned to one of the categories of the plot: only salary, salary + financial capital income, invoicing, invoicing + financial capital income only financial capital income, other combination or no remuneration.

Figure B3: ***Distribution of corporate-controlling partners by type of perceived remuneration***

Figure B3 illustrates that approximately 60% of individuals who effectively control a corporation receive compensation through payroll, with this proportion reaching slightly higher values in sectors engaged in corporate activities rather than professional ones, and slightly lower magnitude in sectors related to professional, scientific, technical, or health activities. Particularly in the latter sectors, we encounter the highest fraction

of controlling partners remunerating themselves through invoicing. This finding may be influenced for the legal obligation of receiving remuneration through invoicing for certain types of professional partners rendering services for own controlled corporations engaged in professional activities during certain tax years. Additionally, in real estate and finance sectors, the proportion of partners that compensate themselves through financial capital income is higher than in other sectors. Notably, during the years 2012 to 2014, the proportion of partners receiving no compensation reaches its peak, coinciding with fiscal years featuring higher marginal rates of PIT, as it will be elaborated on in Subsection A.4, potentially indicating income retention within effectively controlled corporations. Finally, we also find notable that the percentage of corporate-controlling individuals that are remunerated through financial capital income peaks in 2008, following the implementation of a major PIT reform that lowered effective taxation for personal financial capital income.

A.4. Taxation and incorporation incentives: A decade of tax reforms

Our study examines how taxation and specific legal requirements influence the decision of a taxpayer-person (i) to conduct his/her business activity through an incorporated entity and shift their personal income to their controlled corporation or (ii) to transfer their personal wealth into a controlled corporation or self-employment firm. In this subsection, we outline the main tax figures and legal frameworks surrounding this incorporation or income/wealth shifting decision. While identifying cases where there is a clear incentive to incorporate or to shift wealth or income to controlled firms in order to reduce the overall tax liability of the taxpayer, we also explore the interplay among these tax figures and norms, as well as the major fiscal or legal reforms that may have altered this shifting mechanism or incentive to incorporate or transfer income or wealth to controlled businesses. These reforms introduced significant variability in such shifting incentives over time, regionally, and by sector of activity, which we leverage in our empirical analysis to compute incorporation margins or elasticities and assess the effects of said incorporation and wealth or income shifting events on various outcomes of interest.

A.4.1. Personal Income Tax

The Spanish PIT (in Spanish, "*Impuesto sobre la Renta de las Personas Físicas, IRPF*") levies taxes on income earned by individuals effectively residing in Spain during a fiscal year (from January 1st to December 31st).[16] The PIT legislative capacity and revenue collection responsibility is shared between national and regional governments, although the balance in this shared capacity has not been always the same, rather varied over time. Spain consists of

[16]For non-residents who earn certain income in Spain, there exists a non-resident PIT, which is broadly characterized by taxing all types of income at a much less progressive tax schedule. Additionally, the Law 62/2003 placed in rule an special PIT regime for posted workers who, although residents in Spain, are allowed to opt for the same PIT scheme reserved for non-residents for a few tax years.

19 regions, so-called "autonomous communities", which are comparable to states or regions in other countries. Regional governments receive a share of the PIT revenue as part of their revenues and partially decide on PIT schedules and tax credits that residents in their respective regions face.[17]

The Spanish PIT follows a withholding scheme whereby certain monetary amounts are withheld as PIT from each income or compensation received by individuals throughout the fiscal year. This statutory PIT withholding rate applied on each remuneration varies for each type of income earned and, in some cases such as regular payroll compensation, according to the remuneration level. Eventually, once the fiscal year ends, taxpayers may file a tax return to calculate their effective PIT due. PIT filing is voluntary in cases where none of the following requirements for mandatory declaration are met. Otherwise, PIT filing becomes statutorily mandatory.

- Total annual income over a certain threshold (3,500,000 pesetas in 1999 and 2000, €21,035.42 in 2001 and 2002, €22,000 as of 2003) or exceeding a lower sub-threshold (1,300,000 pesetas in 1999 and 2000, €7,813.16 in 2001 and 2002, €8,000 from 2003 to 2006, €10,000 in 2007, €11,200 from 2008 to 2014, €12,000 from 2015 to 2017, €12,643 in 2018, €14,000 as of 2019) when compensations come from more than one payer provided that the amount received from the second payer exceeds a minimum payment quantity (100,000 pesetas in 1999 and 2000, €601.01 in 2001 and 2002, €1,000 from 2003 to 2006, €1,500 as of 2007).
- Financial capital income or capital gains exceeding a certain threshold (250,000 pesetas in 1999 and 2000, €1,502.53 in 2001 and 2002, €1,600 as of 2003) or not having been subject to PIT withholding. Recall that there exist specific types of capital gains (from real estate transmissions, donations, inheritances, etc.) that are not taxed under the PIT scheme, rather are subject to other different regional or local tax figures (see Subsection A.4.3 for further detail).
- Imputed real estate income from properties (other than the main residence) which are at the full disposal of the taxpayer exceeding a certain threshold (€300.51 or the acquisition value of the property exceeding €54,639.10 in 2001 and 2002, €1,000 as of 2003) or real estate renting income over a minimum threshold (100,000 pesetas in 1999 and 2000, €1,000 as of 2001).
- Self-employment business income exceeding a minimum threshold (100,000 pesetas in 1999 and 2000, €1,000 as of 2001).
- Salaries as administrator or members of the direction board of a corporation.

[17] In our work, we focus on the 15 regions (Andalusia, Aragón, Asturias, Balearic Islands, Canary Islands, Cantabria, Castile and León, Castile La Mancha, Catalonia, Valencian Community, Extremadura, Galicia, Community of Madrid, Murcia, and La Rioja) and 2 autonomous cities (Ceuta and Melilla) that conform the Spanish Common Fiscal Regime. We abstract here from Basque Country and Navarre (which together account for six percent of Spain's population), as these regions are outside the Spanish Common Fiscal Regime, have complete autonomy to set and collect taxes, and do not disclose administrative micro-data for research purposes.

- Partner of asset-holding, professional or artistic/sports corporation subject to fiscal transparency PIT-imputation regime (in rule up to 2003).
- No PIT withheld on compensations through regular payrolls; right to apply taxable income deductions for contributions made to private pension plans, for investment in a primary residence, or for international double taxation; national minimum/guaranteed income program; compensatory spousal pensions or non-exempt child maintenance annuities; compensation for teaching courses, lectures, literary, artistic, or scientific works.

Based on these requirements, it becomes evident that individuals who are the central focus of our analysis are PIT filers. The vast majority of taxpayers with effective control over a corporation either receive salaries as administrators or managers of said corporation, invoice their own corporation generating self-employment business income, derive income from real estate through rentals or secondary properties at their full disposal, have a high volume of financial capital income or capital gains, are partners of set-holding, professional, or artistic/sports corporations subject to fiscal transparency PIT-imputation regime, or simply have a total income exceeding the principal monetary amount threshold for declaration. Therefore, even in years when our micro-data only covers PIT filers (1999 to 2007), we are certain to be always observing the key individual-taxpayers subject to analysis in our research

In general terms, the Spanish PIT involves a calculation scheme with five steps. Firstly, all non-exempt **gross incomes** entering each of the two bases are summed up. Recall that some types of earnings such as minimum income benefits, scholarships, per-diems, severance payments or one-time-payment unemployment benefits may be exempted from PIT. Secondly, this amount is reduced by subtracting **income-related deductible expenses** (expenditures which are considered to be required to earn said gross income). Resulting from this operation comes the **adjusted gross income**. Here we provide some examples on how adjusted gross income is computed depending on the original source of the earnings. For instance, adjusted gross regular labor income results from adding the gross remuneration earned by workers and subtracting income-related expenditures, such as Social Security contributions or other general income-related expenditures broadly applied to every labor-income earner. On the other hand, adjusted self-employment income is calculated by subtracting from turnover the quantities paid for input acquisitions, salaries and Social Security contributions (both for the self-employed person and for his/her salaried employees). This is known as "direct estimation" regime for taxing self-employment income. Additionally, self-employees engaged in certain activities (among others, agriculture and livestock, fisheries, newsstands, repair workshops, restaurants, bars, hostels, passenger and freight transport, hairdressing, beauty salons, driving schools, dry cleaners, or copy shops) with few employees and a volume of sales or deductible expenses below a certain threshold (around €300,000) may opt to apply a presumptive taxation

scheme on their business income. This is also known as "objective estimation" regime for taxing self-employment income. By this special scheme, adjusted gross self-employment income is imputed to the entrepreneur on a basis of many characteristics of the business (number of employees, non-employee personnel, installed electrical power, surface area of premises, etc.). Once calculated, it results in an almost constant PIT amount that must be effectively paid by the self-employee, regardless of the actual level of turnover and expenditure of the business. Furthermore, adjusted real estate rental income results from summing up imputed income for properties different from the main residence which are at full disposal for the taxpayer (which is not a personal income , but just consists of a tax on stock of inactive wealth that censored within the PIT scheme instead of in another tax return approaching the stock of wealth, as it is further explained in Subsection A.4.3) and renting gross revenues, and then subtracting housing expenses and real estate depreciation of landlords renting their properties. In addition, capital gains may be compensated with capital losses (or a negative financial capital income) from current or past years.

Subsequently, all **reductions** (also known as **deductions**) for which the taxpayer is eligible are subtracted from adjusted gross income, leading to the **taxable income** that must be subject to the PIT schedule. For example, there exist a general regular labor income deductions for just obtaining this type of income. Self-employees can opt to apply deductions when hiring personnel or for running certain type of activity. Landlords can apply considerable taxable income reductions in their renting income if they rent their properties for primary residence purposes. Taxable income from capital gains can be also reduced if such gains are reinvested in new created corporations or in the acquisition of another primary residence. In addition, all of these taxpayers can reduce their taxable income if they have made contributions to private pension plans or if they file the PIT return jointly with their spouses (to avoid the jump into a higher progressivity level in case of joint filing). Further, taxpayers can also subtract from taxable income, negative taxable income amounts from previous fiscal years. Fourthly, taxable income in each of the two bases is subject to the corresponding general or savings **tax schedule** (more progressive in the case of the general taxable income and a preferential or flat tax rate for the special taxable income), resulting in the **tax liability**. Finally, the taxpayer may be eligible to subtract from the mentioned tax liability some **tax credits** that once applied yield the final effective **tax due**. For instance, these PIT credits stand for personal and family circumstances, maternity, primary-dwelling mortgage interest costs, investment in shares of newly created corporations, tenants in housing-renting, double taxation of dividends, charitable donations, etc. The final PIT due is compared with the amount of PIT effectively withheld throughout the course of the fiscal year. Then, depending on the PIT **return differential**, the PIT filing result will either be owed or refunded.

From 1999 to 2022, the period analyzed in our paper, the Spanish PIT has been widely structured in two separate tax bases: a "general" tax base comprising a broad definition

of taxable income subject to a progressive tax schedule, and a "special" or "savings" tax base comprising specific financial capital income or certain capital gains subject a lower flatter-rate or less progressive tax schedule. But the precise type of incomes entering each base and the deductions and tax schedules applied to each of the bases has not been constant over time, rather experienced several major regulatory changes. The Spanish PIT has been a tax figure which has undergone significant reforms due to its high revenue capacity, redistributive nature, and shared legislative and revenue-raising responsibility between the national government and regional governments. Here we distinguish fourth major reforms that impacted the PIT figure over our period of analysis, and discuss the potential influence that they may have had on the tax incentive to incorporate throughout (i) time, (ii) across regions, and (iii) over different economic sectors.

The **first PIT regulation block** is in rule **from 1999 to 2002**. The PIT Law 40/1998 determines that incomes included in the general base of the PIT comprise [A] regular labor income (salaries, pensions, unemployment benefits, and employer contributions to private pension plans, among others); [B] income from real estate rentals or second dwellings at full disposal of the taxpayer (calculated as a 2% of the cadastral value of the property); [C] self-employment business income (with the possibility for some business activities with low number of employees and under a 75.000.000 pesetas - or €450,759.08 - turnover threshold to opt for presumptive taxation, also known as objective estimation self-employment fiscal regime); [D] financial capital income (bank account interests, bond yields, dividends, movable property rental income, or income from intellectual property, among others); [E] capital gains and losses not derived from asset transmissions (such as those from participation in games, contests, raffles, or random combinations, or receipt of certain subsidies or public assistance, among others) or derived from asset transmissions with a generation period (time between acquisition and transmission dates) shorter than two years. Staring from 2000, capital gains and losses entering the special tax base are extended to those generated in more than one year. Further, the general tax base encompasses a [F] special PIT-imputation fiscal transparency regime that assigns corporate profits to the general PIT base of their partners. PIT-imputation entities comprise (i) asset-holding corporations where more than 50% of the corporation capital is not devoted to run an economic business activity, (ii) professional corporations where more than 75% of the turnover comes from professional self-employment activities, (iii) corporations where more than 50% of the turnover comes from artistic or sport performances by a non-corporate individual provided that said taxpayer-person has the right to receive a major part of the distributed after-tax corporate profits, (iv) corporations under an special international tax transparency regime, (v) collective investment institutions residing in tax havens, or (vi) image-rights management corporations. The special base is only reserved for [G] capital gains and losses arising from asset transmissions with a generation period longer than two years.

This first regulation granted some tax benefits for direct-estimation self-employees which are considered to be small-sized businesses (those with turnover below an approximately 6 million euros threshold). This PIT law also established that personal and family circumstances qualified for certain deductions which reduce taxable income. There exist also some taxable income reductions for contributions made to private pension plans, with a deduction limit of 1.200.000 pesetas or 25% of the sum of adjusted gross labor and self-employment income, with the possibility of amplifying these limits up to 2.500.000 pesetas and 40% of the sum of adjusted gross labor and self-employment income for taxpayers over 52 years of age (extended in 2002 for an additional €1,202 for each year over that age of 52, up to a maximum of €22,838).

Already in this first analyzed PIT regulation, there exist some level of legislative capacity shared between the central and regional governments. Central government set the general and special tax schedules to be applied on 85% of the general or the special taxable incomes, respectively. Regional authorities had the possibility to set tax schedules different from the default ones on the remaining 15% of both general and savings taxable incomes. Given that the fraction of taxable income over which regional authorities might set a differentiated tax schedules was relatively small, no regional government modified the tax schedule and all of them applied the default one. Overall, a general tax schedule (taking into account both national and regional-default rates) starting at a minimum rate of 18% and ending at 48%, with six progressive brackets, was initially applied to the general tax base. On the other hand, the special base was subject to a flat rate of 20%. For the fiscal year 2000, Laws 54/1999 and 6/2000 reduce the flat PIT rate applied to the special taxable income from 20% to 18%.[18] For the fiscal year 2002, the Law 21/2001 maintains the same PIT scheme and total (national plus regional) tax schedules, but a new regional funding system is introduced. In 2002, regional-default tax schedules are applied to around 33% of the corresponding general or savings taxable income, in contrast to the previous 15%.

Finally, there were national tax credits for stimulating self-employment business activities, for avoiding double taxation of dividends (reaching a quantity at around 40% of dividend income), for CIT paid (in Spain or abroad) by PIT-imputation corporations. Regional governments did use here their regulatory capacity to introduce some regionally differentiated tax credits to be subtracted from regional tax liability for taxpayers effectively residing in their respective regions. These regional tax credits were mostly for housing and renting, for some personal circumstances such as ascendants, and also for running new self-employment businesses (especially for young individuals or women). It is worth mentioning that the Royal Legislative Decree 12/2001 lowered the PIT withholding rate from an initial 40% to a 35% for the fiscal year 2002.

The Law 46/2002 introduced the **first major PIT reform** in our period of analysis, which was in rule **from 2003 to 2006**. The total tax schedule (national plus regional-default) applied

[18]The Law 13/2000 keeps the same PIT scheme for the fiscal year 2001 as in the previous year.

to the general taxable income showed a reduction in the number of brackets from six to five and a three-point reduction in both the maximum marginal rate (from 48% to 45%) and the minimum marginal rate (from 18% to 15%). This reform of the general tax schedule was particularly beneficial for taxpayers with general taxable income between €40,460 and €45,000, as they experienced a 16.7 percent reduction in their marginal tax rate (from 45 to 37 percent). The special flat tax rate on special taxable income was also reduced from 18% to 15%.[19]. Further, financial income derived from corporation's capital reductions originating from undistributed profits started to be considered as a dividend and therefore began to be included in the general taxable base. In addition, a new allowance is introduced to reduce the adjusted gross real estate renting income by 50% for cases of properties rented out to serve as the tenant's main residence. Moreover, new monetary limits to qualify for the special regime of presumptive taxation for self-employees are included. As of 2003, to opt for this regime, (i) the total amount of purchases or total turnover of the self-employed activity must be lower than €300,000 (excluding fixed assets acquisitions), and (ii) the total adjusted gross self-employment income cannot exceed €450,000. Additionally, a new special PIT-attribution regime is introduced for civil and joint-ownership corporations, whereby the income of such entities started to be taxed as if it were directly income of their partners. Importantly, the national fiscal transparency regime for asset-holding and professional or sports/arts corporations is abolished, and said entities began to be taxed under a special CIT regime. The 2003 PIT reform increased the taxable income deduction for personal and family circumstances (for children, for children under three years of age, for ascendants, and for the disabled) and the general reduction for the mere receipt of regular labour income. When calculating the final PIT due, a tax credit of up to 15% of the amounts disbursed in a bank account for the creation of a new corporation is introduced. Also as of 2003, the in-kind compensation for corporation's employees through the distribution of the same corporation's shares (under equal conditions for all employees) started to be exempt from PIT, with an exemption limit of €12,000 per worker annually.

Additional modifications of the PIT regulation took place for subsequent fiscal years. In 2004, a number of tax benefits were implemented for self-employed individuals under the presumptive taxation regime enrolled in agriculture and transportation activities.[20] For the fiscal year 2005, the threshold for the turnover level determining whether a direct-estimation self-employee can qualify for additional small-size-firm PIT benefits was increased from 6 to 8 million euros. For the tax year 2006, the Law 30/2005 slightly updates (a 2 percent increase) the level of all brackets of the general tax schedule, maintaining the same marginal tax rates. The latter law also introduces a new tax credit of €2,500 for the birth or adoption of children, which can be received in advance and is charged to the national tax collection.

The **second major PIT reform** within our analytical time-frame unfolded in the fiscal year

[19]The Royal Legislative Decree 3/2004 and the Law 2/2004 maintain the same PIT scheme and the same general and savings tax schedules for the tax years 2004 and 2005

[20]These PIT benefits were initially aimed at compensating these sectors for the increase in diesel prices.

2007 through the enactment of Law 35/2006. It was in rule **from 2007 to 2011**. Until 2006, the special tax base only encompassed capital gains derived from asset transmissions with a generation period exceeding one year. As of 2007, this special base is rebranded as the "savings" tax base, broadening to include (i) a wider spectrum of financial capital income, including interest and dividends, and (ii) all capital gains derived from transmissions (irrespective of their generation period). This expanded savings base started to be taxed at a 18% flat rate. For the tax year 2010, the Law 39/2010 introduced some progressivity in the tax schedule applicable to savings taxable income, with marginal rates of 19% up to €6,000 and 21% for amounts exceeding €6,000. It represented a notable departure from the 45% maximum marginal tax rate that interest income, dividends and short-term capital gains were facing in 2006 as they were entering the general tax base. Only financial capital income for renting movable or intellectual property, interest income originating from leasing capital to a linked individual or corporation, and residual capital gains not associated to the transmission of assets (e.g., net changes in wealth due to prizes in lotteries or public subsidies) were still included in the general tax base as of 2007. Consequently, this expansion in the definition of taxable income under the flat rate scheme led to a substantial reduction in the marginal tax rate for medium and high-income taxpayers with high levels of financial capital income.[21]

Concurrently, the tax schedule applied to the general or progressive tax base underwent a compression. The number of tax brackets for general taxable income was reduced from five to four. There were adjustments in general taxable income thresholds and reductions in the top marginal tax rate, while the minimum marginal tax rate applied to the lowest general taxable income bracket was raised. For example, a small bracket with a 15% tax rate that applied to incomes up to €4,161.6 in 2006 was eliminated and replaced by a larger bracket for general taxable income up to €17,700 taxed at a 24% rate. The 2007 reform also expanded the tax bracket for middle general taxable income, reducing the marginal tax rate in the range €26,842.3-€32,360.6 from 37% to 28%. Similarly, general taxable income between €46,810 and €52,360.6 experienced a drop in its associated marginal tax rate from 45% to 37%. Finally, the top marginal rate was also reduced by from 45% to 43%. For the fiscal year 2008, the tax brackets of both the central and regional general tax schedules introduced by the 2007 PIT reform were adjusted downward by 2%. As for the year 2011, two new top brackets are constructed for individuals over €120,000 and over €175,000 of general taxable income, who would face a 1 p.p. and 2 p.p. increase respectively in those general taxable income brackets with respect to 2010.[22]

Regarding the shared responsibility in setting tax schedules between the central government and regional governments, the Community of Madrid (Law 4/2006) takes the

[21]The PIT special regime for posted workers was restricted as of 2010 to those expecting to earn incomes below €600,000.

[22]Prizes from lotteries, betting, and draws organized by public bodies or entities engaged in social activities are declared exempt from PIT in 2011.

lead by adjusting already in 2007 the regional tax credit applied to approximately 33% of the general taxable income in this fiscal year. Specifically, Madrid reduces the marginal tax rates applied to each general taxable income bracket compared to the default general tax schedule. Subsequently, La Rioja (Law 6/2007) and the Valencian Community (Law 14/2007) join Madrid in approving regional tax schedules for the fiscal year 2008, enhancing also lower marginal rates for all brackets than those determined by default for the regional general tax schedule. In 2009, Murcia (Law 7/2008) followed the latter regions in lowering marginal tax rates in its regional general tax schedule, but returned to the common federal scheme in 2010. In is precisely in 2010 when both state and regional tax schedules applied to the general base were adjusted to a new 50% allocation of PIT to the Spanish Autonomous Communities of the Common Fiscal Regime in 2010. Consequently, regional governments started to be able to establish their general tax schedules based on half of the general taxable income. In addition, regions were also given the right to introduce new tax brackets on top of those implemented by the central government. But none of the regional governments used this additional regulatory capacity. It is in 2011 when another major wave of new set regional tax schedules on 50% of the general taxable income took place. With both the ability to construct new brackets and marginal tax rates in hand along with added incentives to retain more of the tax revenue, several regions increased marginal tax rates substantially in 2011 (e.g. the total national plus regional top marginal rate on general taxable income reached 49% in Andalusia and Catalonia), while the ones which already decreased them previously further lowered their marginal rates on general taxable income.[23] In subsequent years, some further changes in regional top tax brackets were implemented, but the pattern of high versus low-tax regions as of 2011 generally persists to the end of our sample.

The 2007 PIT reform increased the adjusted gross labor income deduction for the mere receipt of regular labor income, inserting also the possibility to further augment it for mobility-related expenses if a new employment position is accepted outside the former individual's residence location. This general deduction for just obtaining labor income was limited to those not exceeding an adjusted gross labor income of €12,000 in 2010. The enhanced 2007 reform also came along with multiple exemptions for certain public benefits and other types of income such as the one-time-payment unemployment benefits used to set up a corporation raised, whose first €12,020 (€15,500 as of 2009) become exempt from PIT. Another example comes with the first €1,500 received in dividends becoming exempt from PIT.[24] By contrast, the tax credit for avoiding double taxation on dividends was

[23] Another potential reason for the immediate reaction of regional governments was that in 2011 the national government raised marginal tax rates substantially and regions used this event to increase simultaneously their own tax rates, or decrease them to counteract the central increase.

[24] Dividends distributed from profits or reserves by special unlisted corporations for investment in housing markets (known in Spanish as "*Sociedades Anónimas Cotizadas de Inversión en el Mercado Inmobiliario, SOCIMI*") were declared fully exempted from PIT as of 2009. Income derived from special collective investment corporations (in Spanish "*Sociedad de Inversión de Capital Variable ,SICAVs*") due to corporation's capital reduction or issuance premiums did not qualify for the €1,500 dividend exemption as of the fiscal year 2010.

eliminated. In the realm of real estate income, the existing 50% (60% as of 2011) reduction in the adjusted gross income declared by the landlord for leasing a real estate property for primary residence was increased in 2007 to 100% in cases of leasing to young individuals. The 40% reduction that was in force for irregularly generated (during several tax years) gross incomes in the general tax base (such as one-off payments from pension plans or severance payments) was limited to an additional maximum of the deduction of €300,000 as of 2011.[25]

Concerning self-employment business income, a new reduction in adjusted gross self-employment income was established in 2007 for specific economic activities under the direct estimation regime, akin to the reduction applicable in the adjusted gross labor income for the mere receipt of said regular labor income. This new reduction for self-employees turned to be incompatible with another introduced 5% reduction for provisions and expenses of difficult justification available to self-employed individuals under the direct estimation regime. The Law 26/2009 introduced, starting from 2009, another general reduction of 5% of the adjusted gross income from self-employment activities under the objective estimation regime and a new 20% reduction in the adjusted gross self-employment income (irrespective of the business income estimation method) as incentive for cases of maintaining or increasing the workforce. On the other hand, for the presumptive-taxation or objective-estimation self-employees, regime-exclusion thresholds started to be computed as of 2007 considering not only the individuals' registries but also those of their spouses and descendants or ascendants, along with those from civil or joint-ownership corporations subjected to the PIT attribution regime in which these individuals are partners. Furthermore, some specific tax benefits for agricultural self-employed individuals were slightly reduced in 2007. As for the fiscal year 2011, the turnover level that qualifies a business as small-sized and makes it eligible for certain tax incentives increased up 10 million euros and, at the same time, other deductions for adjusted gross self-employment income were eliminated.

When it comes to deductions from taxable income, the 2007 PIT legislation in rule established new limits for taxable income reductions for contributions to private pension plans, which started become bounded by a limit of €10,000 (€12,000 for those over the 50s) or 30% (50% for individuals over an age of 50) of the general taxable income coming from regular labor and from self-employment activities. In addition, personal and family taxable income deductions (with the exception of the deduction for joint filing and new deductions for affiliation to political parties and for professional sport associations) that were in rule up to 2006 were converted as of 2007 into a tax credit from the general tax liability. In this way, the new process to calculate the tax liability consisted of applying the progressive tax schedule to the general taxable income and the personal and to a personal-and-family

[25]Recall the 40% reduction for irregulary derived earnings was not applied for severance payments to managers or directors exceeding €1,000,000. The 40% reduction for irregular income could only be applied to severance payments to directors when such payments are less than €700,000. For severance payments to directors between €700,000 and €1,000,000, the deduction percentage progressively decreases from 30% to 0%.

tax credit base separately, and then subtracting the two resulting amounts. Notice that this change increased the progressivity of the tax schedule, since in the new system all taxpayers with the same personal and family characteristics obtain the same reduction in tax liability, while in the previous case of a deduction from the taxable income the tax liability decreased in proportion to each taxpayer's marginal tax rate. In the sphere of the tax credits, the Community of Madrid took the lead in 2010 and used its regulatory capacity to slightly increase the base amounts for calculating said tax credit for residents in its territory. Also starting in 2010, other regional governments such as Andalusia, Catalonia, or Madrid, established regional tax credits for the creation of new corporations or acquisition of shares in them, being followed by the rest of regions in subsequent years. Regarding the national tax credits, the Royal Legislative Decree 2/2008 introduced a tax credit of €400 for employees, pensioners, and self-employed individuals starting from the fiscal year 2008, which was limited to taxpayers with a total adjusted gross income over €12,000 as of 2010 by the Royal Decree 2004/2009. Also for the fiscal year 2008, Law 51/2007 introduced a tax credit of 10% of the national tax liability for rental payments made up to a maximum of €9,015, which is gradually reduced for taxpayers with taxable incomes between €12,000 and €24,000. The Law 39/2010 eliminates the tax credit for baby birth or adoption as of 2011.

The year 2012 represents another relevant turning point with the **third major PIT reform** within our analysis period. The main strcutre of this reform was in force **from 2012 to 2014**. A general and sizeable increase of marginal tax rates for all taxpayers was introduced with the placement in rule in 2012 of the Law 39/2010 and the Royal Legislative Decree 20/2011. The 2012 PIT reform increased the progressivity of the PIT schedule in both the general and savings tax bases. The marginal tax rates went up for all brackets of the general taxable income: by 3.1% for the first bracket, 7.1% for the second, 8.1% for the third, 9.3% for the fourth, 11.4% for the fifth, 13.3% for the sixth, and 15.6% for the newly-created seventh bracket (for general taxable income above €300,000). The reform also incremented the tax rates and the tax progressivity on financial capital income and capital gains entering the savings tax base. Savings taxable income up to €6,000 started to be taxed at 21% rate, a second bracket up to €24,000 at a 25%, and any savings taxable income above that at a 27%.[26] Further, the Royal Legislative Decree 12/2012 introduced for the year 2012 a fiscal amnesty allowing PIT taxpayers to regularize their situation by reporting previously undeclared assets for 10% of their value.[27]

The 2012 PIT reform also introduced a 50% exemption for capital gains derived from the transmission of urban properties that took place in 2012. Deductions that can be applied

[26] Public lottery or gambling winnings were subject to a special 20% tax in the PIT as of 2013, with a full PIT exemption only for prize amounts equal to or less than €2,500.The threshold for full exemption increased to €10,000 in 2018, €20,000 in 2019, and €40,000 in 2020.

[27] 31,500 beneficiaries (including non-residents) regularized their undeclared assets through this tax amnesty and this brought to light €40 billion that were hidden from the tax authorities. The beneficiaries ended up paying an average of 3% of the regularised amount, which collected around €1.2 billion.

from direct-estimation self-employment income for net financial expenses were limited at 30% of the operating profit of the self-employment business activity for cases of net financial expenses exceeding one million euros. The reduction of 20% of adjusted gross self-employment income for incentives to job maintenance and creation was extended until 2014.

With the Law 14/2013, starting in the fiscal year 2013, new self-employed individuals under the direct estimation regime experienced a new reduction of 20% of their adjusted gross self-employment income to be applied in the two years following the firm creation. Another general reduction was introduced in this year for reinvestment of adjusted gross self-employment income in new tangible fixed assets or real estate investments related to economic activity with the limit of 10% of its value. In addition, a tax credit of 20% of the amounts paid for the purchase of shares of newly created or recently established corporations (also known as "business angel" tax credit) was introduced in 2013, with a maximum tax credit base of €50,000. The 2013 modifications granted total PIT exemption to unemployment benefits in the one-time-payment modality when used to create a new corporation. The tax credit for mortgage interest for the acquisition of a primary residence that was in force was eliminated by the 2013 legal changes for dwellings acquired as of January 1st, 2013. Importantly, capital gains from asset transmission with a generation period shorter than one year were temporarily reintroduced into the general tax base solely for the fiscal years 2013 and 2014. Additionally, the negative taxable income amounts from previous years that can be offset was limited to 10% (previously 25%) of current-year positive taxable income.

In 2014, the Law 39/2010 and the Royal Legislative Decree 20/2011 limited the PIT exemption for severance payments to quantities not exceeding €180,000. Also as of 2014, capital gains from the transmission of shares that benefited in previous years from the tax credit for investment in newly created corporations started to be fully exempted from PIT if they are reinvested in other corporations that keep meeting eligibility criteria for said tax credit. In addition, Cantabria and Castile La Mancha follow in 2014 the Community of Madrid in establishing regional incremented amounts for the base on which the regional tax schedules are applied to compute the personal and family circumstances tax credit. Also as of 2014, the PIT withholding rate applicable to remuneration received by directors and members of the board of directors increased from 35% to 42%.

The fiscal year 2015 comes with the **fourth and last major PIT reform**, as this legislation remained in rule **from 2015 until the end** of our period of analysis. The Law 26/2014 and the Royal Legislative Decree 1/2015 introduced a profound reform of the PIT starting in 2015. The first major change in 2015 came with the tax schedules, as both of them experienced a broad rebate and decrease in progressivity. The number of brackets of the general tax schedule reduces from seven to five, with the marginal tax rate applicable to the first bracket dropping from 24.75% to 19.5% and the top marginal tax rate to be applied for taxable

income levels over €60,000 significantly decreasing from 52% to 46%. On the other hand, marginal tax rates to be applied on the savings base dropped from 21% to 19.5% for savings taxable income levels under €6,000, from 27% to 23.5% for levels exceeding €50,000, and stood at 21.5% for the intermediate savings taxable income bracket.

The 2015 PIT reform also introduced important changes in the PIT that resulted in a broadening of the taxable income quantities.[28] Dividends experience an elimination of their €1,500 deduction. Deductions for gross income derived irregularly over time (e.g. non-exempt severance payments or benefits received in the form of capital derived from public complementary social security schemes) are reduced from 40% to 30%. The general taxable income deduction for the mere receipt of regular labor income was eliminated in 2015. In contrast, the 2015 legislation introduced a personal €2,000 general deduction from adjusted gross general labor income and direct-estimation self-employment income (at the concept of expenses which are difficult to justify for self-employees with net self-employment profits under €40,000). In addition, a new adjusted gross income deduction is created for those taxpayers with for lower levels of adjusted gross labor or self-employment income. The impact from these two combined measures general deductions generated a tax rebate for those taxpayers earning an adjusted gross income under €14,450 (€12,000 for the case of self-employees) and a tax increase for those earning over said threshold. The general taxable income deduction for landlords who derive real estate income by renting properties for primary residence was kept at 60%, but the previous 100% exemption for leases to individuals under 30 years old was eliminated. Self-employment income deductions for arts and entertainment activities and for job creation were introduced by the 2015 reform.

The 2015 PIT legislation stipulated that partners of professional corporations rendering professional services for said corporations (cases where partners must be registered under the special regime of corporate self-employees of the Social Security) must compensate themselves from their own corporation through invoicing and declare personal self-employment income for the services provided to their controlled entity. In such cases, they started to not be allowed anymore to compensate themselves through regular payroll. Furthermore, the requirement of having at least one premises exclusively dedicated to carrying out the management of the activity was eliminated in order to consider the leasing of properties as an economic business activity. As of 2015, it is only be necessary to prove that there is a person employed full-time to demonstrate that a business activity of leasing

[28]Residence changes to outside Spain started in 2015 to be taxed as capital gains that must be imputed to corporate owners and taxed in PIT (exit tax) when the shares of the corporations of the exiting taxpayer are valued at more than 4 million euros or when his/her ownership percentage in the corporation exceeds 25% and the shares are valued at more than 1 million euros. Professional sport taxpayers were excluded from the special PIT regime for posted workers as of 2015. Administrators coming to Spain who own no shares on the corporation that they will manage were given the option to enter the posted-workers special regime as of 2015. Posted-worker taxpayers faced a 24% flat marginal tax rate under the 2015 legislation, which turned to 45% for taxable income exceeding €600,000.

properties is being conducted.

When it comes to capital gains, the 2015 legislation established that there exist no capital gain in the reduction of capital of a corporation with the return to the partners of contributed non-listed shares. The 2015 PIT reform also brought multiple important changes in the way to compensate capital losses or negative taxable bases, both current and carried forward from previous years. The percentage of capital losses not derived from asset transmissions that can be compensated with positive general taxable income increased from 10% to 25% of said positive general taxable income quantity. Capital gains derived from asset transfers with a generation period longer than one year turned to be taxed at the preferential tax schedule for savings income. Negative financial capital income in the savings base was given the possibility be compensated with up to 10% of the positive capital gains entering the savings tax base. In a similar fashion, capital losses entering the savings taxable income could be compensated with up to 10% of the positive financial capital income in the savings base. When it still results in a positive either general or savings taxable income, such taxable incomes could be further compensated with negative general or savings taxable incomes carried forward from previous years respectively.

As of 2015, taxable income income reductions for contributions to private pension plans experienced were limited to €8,000 (in contrast to the previous €10,000) or 30% (50% for those over the 50s) of the sum of adjusted gross labor and self-employment incomes. The taxable income reduction for affiliation to political parties also disappeared in 2015. The base amount for the computation of tax credits for family and personal characteristics (applying the tax schedule over the base) was increased by an approximate 25%. Further, a number of €1,200 tax credits for disabled ascendants or descendants, large family, single-parent family with two children (with no right to perceive child annuities) were introduced. Tax credits granted for quantities disbursed into a bank account for setting up a corporation were eliminated in 2015, but at the same time the tax credit for investment in shares of newly created corporations was maintained. Tax credits for donations to charitable entities were increased. Also, the tax credit for tenants renting a house was suppressed. Lastly, the PIT withholding rate applicable to administrator or manager remunerations throughout the 2015 fiscal year dropped from 42% to 37% in 2015, being further reduced up to 20% in cases of corporations with turnover level under €100,000.

The fiscal reform that came into effect on January 1st, 2015, was designed for gradual implementation in two phases, 2015 and 2016. However, due to the improved economic forecasts, the fiscal year 2016 witnessed a further deepening of the spirit of the 2015 reform. For instance, the PIT withholding rate applicable to administrator or manager remunerations dropped from 37% to 35% in 2016, being further reduced up to 19% in cases of corporations with turnover level under €100,000.[29] In 2016, the limits for a self-employee to be eligible to be taxed under the objective estimation regime are lowered. Specifically,

[29]These withholding rates are maintained until the end of our period of analysis.

neither adjusted gross self-employment income nor turnover or expenditure level could exceed €250.000 in order to qualify for the presumptive-taxation self-employment regime. In addition, if the self-employee invoices other self-employed taxpayers or corporations obligated to invoice as well, the exclusion limit further lowered until €125.000. Further, no kind of manufacturing or construction engaged self-employees can enroll in said presumptive taxation regime.

In 2016, civil mercantile corporations are excluded from the special PIT-attribution regime and they start to be taxed under the regular CIT scheme. For the fiscal year 2016, the negative balance of financial capital income from the savings taxable base for the current tax year was given the possibility be be offset by the positive balance of capital gains obtained in the same tax period from asset transfers integrated into the savings taxable base, up to a limit of 15% (20% in 2017 and 25% as of 2019) of said positive financial capital income. Similarly, the negative balance of gains and losses from assets in the savings taxable base could be offset by the positive balance of financial capital income from the savings base, obtained in the same tax period, up to a limit of 15% (20% in 2017 and 25% as of 2019) of said positive balance. In 2016, the tax schedules applied to both general and savings bases showed another rebate and progressivity decline. For instance, the top marginal tax rate of the general tax schedule dropped from 46% to 45% and the marginal tax rate to be applied to the first bracket of the general tax schedule decreased from 19.5% to 19%. On the other hand, each of the marginal tax rates applied to each of the three savings taxable income brackets experienced a 0.5 p.p. decrease.

For the fiscal year 2018, a new obligation is introduced making mandatory to declare cases where the taxpayer is renting their real estate properties for touristic or holiday dwellings, as said renting income could not benefit from the 60% deduction reserved for lease of real estate properties for primary-residence purposes. A significant reform introduced in 2019 required all taxpayers to validate the cadastral reference of their primary residence. Until 2018, individuals could choose whether or not to include the exact cadastral reference of their main residence when filing the PIT return, along with their ownership status of such main residence, whether as an owner, tenant, or other circumstances. Starting in 2019, it became unnecessary to specify the exact ownership regime of the primary residence. However, the cadastral reference had to be provided compulsorily. This change enabled the National Tax Agency to precisely identify the occupants of each property owned by landlords, significantly reducing tax evasion and increasing reported rental income.

Also for the tax year 2018, the taxable income reduction for low-pay earners of adjusted gross regular labor or self-employment income was extended to taxpayers with adjusted gross income levels below €16,825 (instead of the previous €14,450). Additionally, the percentage of tax credit for investment in newly created corporations was raised from 20% to 30% of the invested amounts, and the maximum tax credit base was expanded from €50,000 to €60,000. New tax credits were also introduced in 2018 for cases of non-legally-divorced

spouses who suffer from a certain disability. The PIT scheme for the fiscal year 2020 presented an extension of the one existing in 2018 and 2019, with the incorporation of new peculiarities tailored to adapt the tax to the emergency situation of the COVID-19 pandemic. For instance, it included full exemptions for minimum or guaranteed income programs, increasing deductions from adjusted self-employment income (particularly for sectors like accommodation and food and beverage services), and deductible expenses for landlords for doubtful balances. Additionally, in 2020, the tax credit for donations to charitable foundations was increased.

The Law 11/2020 introduced some changes in the PIT scheme starting in 2021, which is the year last year of our period of analysis. The general tax schedule presented a new top general taxable income bracket starting from €300,000 with an applicable marginal tax rate of 47% (2 p.p. higher than the previous top general marginal PIT rate). Additionally, the tax schedule for the savings taxable income showed a new top bracket starting from €200,000 with an applicable marginal tax rate of 26%.[30] Also for 2021, the limit for the reduction in the taxable income due to contributions to individual private pension plans was reduced from €8,000 to €2,000 (€1,500 as of 2022) annually. However, this new limit may increase to €10,000 if the employer contributes up to €8,000 (€8,500 as of 2022) to an employer-employee private pension plan. When it comes to self-employment activities under the objective estimation regime, starting from 2022, the general reduction of 5% of the adjusted gross self-employment increased up to 20% (35% for retail trade, tourism, and beverage/food services). Further, tax credits are given as of 2022 for regular or self-employment activities carried out in La Palma, as well as some extra deductions are granted for agriculture to alleviate the increase in fossil fuel prices. Also, some tax credits are introduced for improvements in the energy efficiency of housing dwellings. The deduction limit for donations was increased in 5 p.p..

Regarding the minimum deduction for personal and family circumstances, the regions of Andalusia, Galicia, and the Valencian Community regulated for the first time in 2022 amounts corresponding to the taxpayer's minimum deduction, as well as those for dependents, ascendants, and disability, which were different from the default amounts previously regulated. Similarly, the Community of Madrid, which had established amounts for the minimum deduction for dependents, expanded its regulations in 2022 to include the full set of amounts for the taxpayers minimum, as well as those for dependents, ascendants, and disability.

Regarding the Non-Residents PIT, since 2021, dividends and income from profits distributed by Spanish resident subsidiary companies to their parent companies located in other European member states no longer benefit from exemption if the parent companies hold more than 20 million euros but less than 5% of the share capital. Additionally, since

[30]The top marginal tax rate of the posted-workers special PIT regime was raised to 46% in 2021, and a new bracket between €200,000 and €600,000 at 26% was introduced.

2021, under the special posted workers regime, the marginal tax rate on non-capital income exceeding €600,000 was increased by 2 p.p., and the marginal rate on capital income exceeding €200,000 was also been raised by 3 p.p.. Furthermore, since 2022, non-resident PIT taxpayers earning income through a permanent establishment will be subject to a minimum tax of 15% on the taxable base, provided their net turnover equals or exceeds 20 million euros.

It is noteworthy that after the last major PIT reform in 2015, regional governments continued to use their legislative capacity, in a manner consistent with past practices and following their already induced regional taxation trends, in adjusting general tax schedules, modifying the base amounts for calculating tax credits for family and personal circumstances, and introducing a number of regional tax credits to be subtracted from their respective regional tax liabilities in the the PIT filing.

A.4.2. Corporate Income Tax

The Spanish CIT (in Spanish, "*Impuesto sobre Sociedades, IS*") levies taxes on the profits earned during a fiscal year (from January 1st to December 31st) by corporations residing in Spain.[31] This tax figure is entirely centralized, with the legislative capacity resting entirely at the national government and the revenue collection being directly managed by the national State Agency for Fiscal Administration.[32] Similar to the PIT, the CIT operates on a system of withholdings or estimated advanced CIT payments. At the end of the fiscal year, all corporations file a tax return and determine whether they are owed a refund or must pay additional taxes based on the CIT payments made throughout the year.

The CIT scheme can be divided into five steps. Firstly, the **pre-tax accounting result** (the difference between income and expenses, i.e. earnings before taxes) is calculated according to the standardized accounting rules in force at the time. Secondly, certain **non-accounting adjustments** are made to translate from the accounting result to the fiscal result to be considered. These adjustments may result in an increase or a decrease of the CIT taxable income. Adjustments often resulting in a higher taxable base for the corporation include, among others, excess provisions for depreciation in accounting, non-deductible expenses such as traffic fines or gifts, expenses accounted for in periods subsequent to their accrual, corrections to the accounting result resulting from the effects of replacing the accounting

[31] Entities with legal personality subject to CIT include listed and unlisted corporations, collective corporations, silent-partner corporations, cooperative corporations, civil mercantile corporations or joint-ownership corporations not taxed under the special PIT-attribution regime, public corporations, Economic Interest Groups, temporary business associations, private pension funds, collective investment institutions, banks, financial cooperatives, etc. Certain public sector corporations are fully exempt and are not obliged to file the CIT form. Trade unions, political parties, or foundations, among others, are obliged to declare CIT but with partial exemption.

[32] Corporations residing in Navarre and the Basque Country are excluded as they have separate and distinct fiscal authorities. Our focus is solely on corporations residing in the 15 regions and 2 autonomous cities that conform the Spanish Common Fiscal Regime.

value with the normal market value when valuing certain operations or assets, or the CIT amounts paid by the corporation. Examples of adjustments that decrease the taxable base of the corporation include expenses accounted for before their accrual, a more generous fiscal depreciation policy, CIT exemptions to avoid international double taxation, corporate expenses for social works, and the corporation's profits imputations assigned to its partners in their respective individual income taxes through the special PIT-imputation regime.

Thirdly, for fiscal years in which it is permitted, negative taxable incomes from previous years can be offset with positive current-year taxable income. The resulting figure is the **taxable income subject to taxation**. Fourthly, the applicable **tax rate** (which may vary depending on the type of corporation) is applied to the taxable income subject to taxation to determine the **tax liability**. Finally, any eligible tax credits or deductions (typically those for avoiding international double taxation, for cooperative status, for renting dwellings, for research and development investment, or for film or artistic productions) are subtracted from the tax liability to arrive at the final **tax due**. Finally, this tax due is compared with the amount the company has already paid during the fiscal year, resulting in the **differential tax return result**.

Due to the substantial number of national and international rules associated with the CIT and its interconnectedness with other tax figures, the Spanish CIT has undergone several significant reforms from 1999 to 2022. The following lines outline the main changes introduced in the Spanish CIT during our period of analysis in order to examine how they have shaped taxpayers' incentives to incorporate over time and across sectors.

The **initial CIT regulatory sub-period** of analysis in our study spans **from 1999 to 2002**. The first comprehensive legislation of the CIT analyzed here was established by the Law 43/1995. Initially, civil corporations or joint-ownership entities (regardless of whether they had a mercantile nature or not) were not included in the scope of application of the CIT, rather were entirely taxed as through the special PIT-attribution regime (or regular self-employment income) of each of their partners. Booked depreciation of corporate assets was fully accepted as deductible expense for the computation of CIT taxable income irrespective from the asset acquisition date. Financial expenses, including interests paid for leasing certain (real estate or financial) assets, were fully deductible as long as the lessee corporation or taxpayer resides in Spain or as the financial-expenses-to-equity ratio did not exceed 3 in case of leasing from non-resident corporations or individuals. Amounts exceeding this limit were classified as dividends for the corporation entering its taxable income.[33] In this starting setup, dividends were 100% exempt as long as the dividend-receiving corporation held more than 5% of the total shareholding of the respective dividend-issuing corporation, when the latter was a non-resident entity. Already in this initial CIT law we encounter the requirement for which transactions carried out by a

[33]This was intended to prevent the shifting of taxable incomes to foreign related entities through irregular financing.

corporation with other linked corporations or individuals must be always valued at their normal market value. This CIT legislation allowed for the offsetting of negative taxable bases for up to 10 previous years (15 years as of 2002).

The general tax rate applied to the taxable base was 35% in the starting CIT regulation, although this rate dropped to 30% for the first €90,151.81 of CIT taxable income, provided that the corporation is classified as small-sized. In order to be considered as small-sized corporation, turnover could not exceed an approximately 1.5 million euros threshold in 1999, a 3 million in 2000 and 2001, and 5 million in 2002. Several tax credits were established to reduce the final effective tax rate faced by eligible corporations: for film production, environmental protection, R&D investment, foreign business establishment, vocational training, etc. Other specific tax credits were additionally granted for small-sized corporations. This law also encompassed certain special CIT regimes. For instance, cooperative corporations were subject to a tax rate of 20%, with some of them additionally benefiting from a 50% tax credit in tax liability. Corporate groups composed by parent and subsidiary entities could constitute as entire fiscal consolidation groups and hence be taxed as a whole while benefiting from the consolidation or integration of their respective balance sheets (e.g. compensating intra-group profits and losses). Further, certain corporations enhanced for holding equity securities were fully exempt from their tax due, while collective investment institutions were taxed at a 1% rate. Furthermore, as mentioned in Section A.4.1, a PIT-imputation regime was established for temporary business associations, corporations under international tax transparency, inactive asset-holding corporations, or professional and sports/arts corporations, whereby the profits of such entities were fully taxed in the general taxable income of the PIT filing of their respective partners. Additionally, a voluntary fiscal regime was established for specific few-partner corporations which offered them the possibility to opt for a PIT-imputation regime.

The **second CIT legislative sub-period** under analysis for CIT spans **from 2003 to 2006**. Undertaken reforms in these years were particularly affecting real-estate-related operations. One of the most relevant changes of this time-frame was introduced by Law 46/2002. This regulation eliminated, effective from 2003, the special PIT-imputation regime for inactive asset-holding corporations and professional and arts/sports entities. Instead, a new special CIT regime was inaugurated in 2003 to bring inactive asset-holding corporations into the CIT scheme.[34] In this particular regime, corporate income was valuated according to PIT rules, divided into general taxable income taxed at a 40% rate and special taxable income taxed at a 15% rate.[35] In addition, the Royal Legislative Decree 2/2003 introduced in 2003 a new special CIT regime for corporations engaged in residential renting, providing for them

[34]Professional corporations and sports/artistic-performance entities were not included in this new special CIT regime, rather turned to enter the standard CIT scheme.

[35]After the introduction of the special CIT regime for inactive asset-holding corporations, while corporate capital gains or financial earnings were subject to a 35% CIT rate for standard corporations, such gains and financial returns were taxed at a 15% rate for inactive asset-holding entities. This unbalanced situation was attempted to be corrected by the introduction of a reduced tax rate at 15% (from a 35% rate in 2001 and a 18%

tax credit ranging from 85% to 97% of the portion of tax liability derived from residential leasing income. This special regime applied to corporations with a minimum of ten leased or offered-for-lease properties, with at least one-third of these properties incorporating a purchase option for the tenant in the lease contract.[36]

These 2003-2006 period also presented a significant increase in the deductions and tax credits that could be applied by many corporations in their CIT filing. For example, the maximum coefficients for calculating deductible expenses from depreciation of assets were increased by 10% as of 2003. Moreover, the taxable income deduction for donations to non-profit entities was raised to 35% (with the limit of 10% of the taxable income). In addition, for the fiscal year 2003, the threshold for the portion of taxable income taxed at a 30% rate for small-sized entities was raised to €120,202.41. The turnover threshold determining eligibility for additional small-size-firm PIT benefits was also increased up to 6 million euros in 2003. The mentioned threshold was further increased 8 million euros in 2005. Furthermore, since 2005, the limit for freedom of deductibility of depreciation for small-sized entities was also raised, with a limit of 10% of the taxable base. Also within this sub-period of time in the CIT legislation, the Law 35/2003 increased the tax credit limit for R&D investments. Moreover, the Law 63/2003 posed no limit at all for deductible financial expenses derived from interest payments to non-resident related entities.[37] On the contrary, the 2004 in-force legislation established a minimum of one hundred shareholders for collective investment institutions in order to make them eligible to benefit from the 1% tax rate.

The **third CIT legislative sub-period** covered the tax years **from 2007 to 2010**. These fiscal years were broadly characterized by lowering the effective tax rate faced by corporations, specially those considered as small-sized, through the reduction of tax rates. At the same time, the 2007 CIT reform was accompanied by a timetabled suppression of certain CIT benefits. The Law 35/2006 introduced a progressive reduction of tax rates for 2007 and subsequent years. The standard tax rate was lowered to 32.5% in 2007 (from a 35% rate in 2006) and to 30% as of 2008. Particularly relevant is that the tax rate for small-sized entities was reduced from 30% to 25% for taxable incomes up to €120,202.41, and from 35% to 30% for the remaining quantities. Still within this sub-period of CIT legislation, starting from the fiscal year 2009, an additional fiscal tax-rate reduction was introduced for small and medium firms provided that they maintained or created job positions. It consisted of the application

in 2002) for capital gains declared by standard corporations provided that such capital gains were about to be reinvested in the subsequent four years.

[36]This regime is compatible with corporate real estate investment for commercial premises and parking spaces for lease, provided that their combined book value does not exceed 20% of the total book value of the corporation's housing investments.

[37]This, combined with the existing exemption for dividends from non-resident entities, opened the door to tax-base erosion operations by multinational subsidiary entities through debt-financed acquisitions of other intra-group holdings. The Spanish State Agency for Fiscal Administration could only combat these operations primarily through anti-abuse prosecutions or by invoking conflicts in the application of tax regulations, arguing their lack of economic substance and purely fiscal purpose.

of a reduced tax rate of 20% for taxable income up to €120,204.41 and 25% for the remaining taxable income. This reduced tax rate lasted for fiscal years from 2009 to 2014.

On the contrary, this CIT reform was accompanied by the progressive tightening of multiple tax benefits. For instance, there was a significant reduction of the tax-liability percentage limits applicable to tax credits for reinvestment of extraordinary profits, for export activities, or for R&D activities. Other tax credits such as the one for foreign business establishment were directly abolished. When it comes to special CIT regimes, the differentiated CIT scheme for inactive asset-holding corporations was eliminated, with these corporations transitioning to be taxed under the standard CIT scheme.[38] The main non-restrictive measure of the 2007 in the field of tax credits was the introduction of the so-called "patent box". This tax benefit allowed corporations to benefit from a 50% reduction of the incomes derived from leasing intangible assets associated with R&D activities (like patents, registered software or similar intellectual-property assets).

Finally, some additional tax benefits were introduced in 2009 regarding certain activities related to real estate. For instance, freedom to reduce taxable income with deductible expenses coming from depreciation of real estate assets was introduced, conditioned on maintaining the average workforce of the corporation for two years.[39]. Furthermore, in 2009, a new special CIT regime was created for listed real-estate investment corporations (in Spanish, "Sociedades Anónimas Cotizadas de Inversión en el Mercado Inmobiliario, *SOCIMI*"). These special corporations paid no CIT while only facing a reduced tax rate of 18% on the amount of dividends distributed to shareholders holding 5% or more of the entity's share capital, when those dividends, in the hands of the shareholders, are either exempt or taxed at a rate lower than 10%. This regime allowed non-resident real estate investors not to be taxed in Spain on rental income derived from properties (or to be taxed only under the non-resident PIT, mitigated by bilateral agreements to eliminate international double taxation). On the contrary, income derived in the form of reductions in corporation's capital or share issuance premia from special collective security-investment corporations (in Spanish "*Sociedad de Inversión de Capital Variable ,SICAVs*") began to be taxed in the CIT scheme.

The **fourth CIT legislative sub-period**, which comprises fiscal years **from 2011 to 2014**, was marked by a clear dichotomy in its approach. On the one hand, tax rates for small companies were lowered or applied to a larger share of the taxable income, but on the other hand, many tax incentives that eroded the CIT tax base or caused the effective rate to be considerably reduced were strongly withdrawn. The Royal Legislative Decree 13/2010, in force as of the 2011, extended the small-size-firm entitlement limit up to 10 million euros

[38] A transitional regime was established to facilitate the dissolution of these entities with minimal tax cost for individuals, who otherwise would have been deriving personal income from capital gains resulting from the dissolution of the corporation.

[39] This workforce-maintaining requirement was eliminated in 2011, granting for said fiscal year full freedom to use depreciation deductible expenses

of turnover. Further, the part of the taxable income of these small-sized corporations that was taxed at the reduced rate increased up to €300,000. Also in the spirit of the 2011 CIT reform, the Royal Legislative Decree 4/2013 ruled for the 2013 tax year a new reduced tax rate for newly-created corporations. During their first running year, these new or emerging corporations could benefit from a 15% tax rate for taxable income quantities up to €300,000, and from a 20% rate for the remaining taxable income.

The CIT sub-period started in 2011 brought a considerable tightening of the CIT benefits. For instance, the offsetting of negative taxable bases from previous fiscal years was limited to a 75% (50% as of 2012) of the current-year taxable income for companies exceeding a 20 million euros turnover threshold, and to 50% (25% as of 2012) for corporations showing more than 60 million euros in turnover.[40] In the tax credits sphere, the fiscal year 2011 experienced the suppression of tax credits for information and communication technologies, for export activities, for environmental care, for vocational training, or for contributions to private pension plans, among others. Further, the free inclusion of deductible expenses for depreciation of real estate assets was repealed with effect from 2012. Moreover, deductible financial expenses are limited to a maximum of 30% of the profits. In addition, financial expenses arising from debts owed to entities of the same corporate group for the acquisition of shares of other intra-group corporations are excluded from being deductible. Also for fiscal year 2013, the allowance for severance payments granted to administrators or managers is limited to 1 million euro.

Despite this significant reduction in tax incentives in this sub-period of analysis, certain tax credits were retained: those for cinematography, for investment in cultural heritage assets, reinvestment deductions. Further, most of the tax incentives for small-sized firms were also kept in force.[41] The main tax credit that survived the planned repeal of tax incentives started in 2011 was that granted for R&D investments. In addtion, the "patent box" mechanism increased up to 60% (from the previous 50%) the deduction granted for income derived from leasing of intellectual property or patents. Furthermore, an option is introduced in 2012 for foreign-source dividends and capital gains to be subject to special taxation at 8% or 10% rate without being included in the taxable income.

Lastly, the **fifth and final CIT legislative sub-period** discussed in this article encompasses the years **from 2015 to 2022**, which marks the end of our period of analysis. It was ruled by the Law 27/2014. With this regulation, as of 2016, civil and joint-ownership corporations of mercantile nature started to be taxed in the PIT scheme (they were previously subject to a PIT-attribution regime). This 2015 CIT regulation was marked by a reduction in general tax rates, the elimination of the reduced rate for small-sized corporations, the limitation of

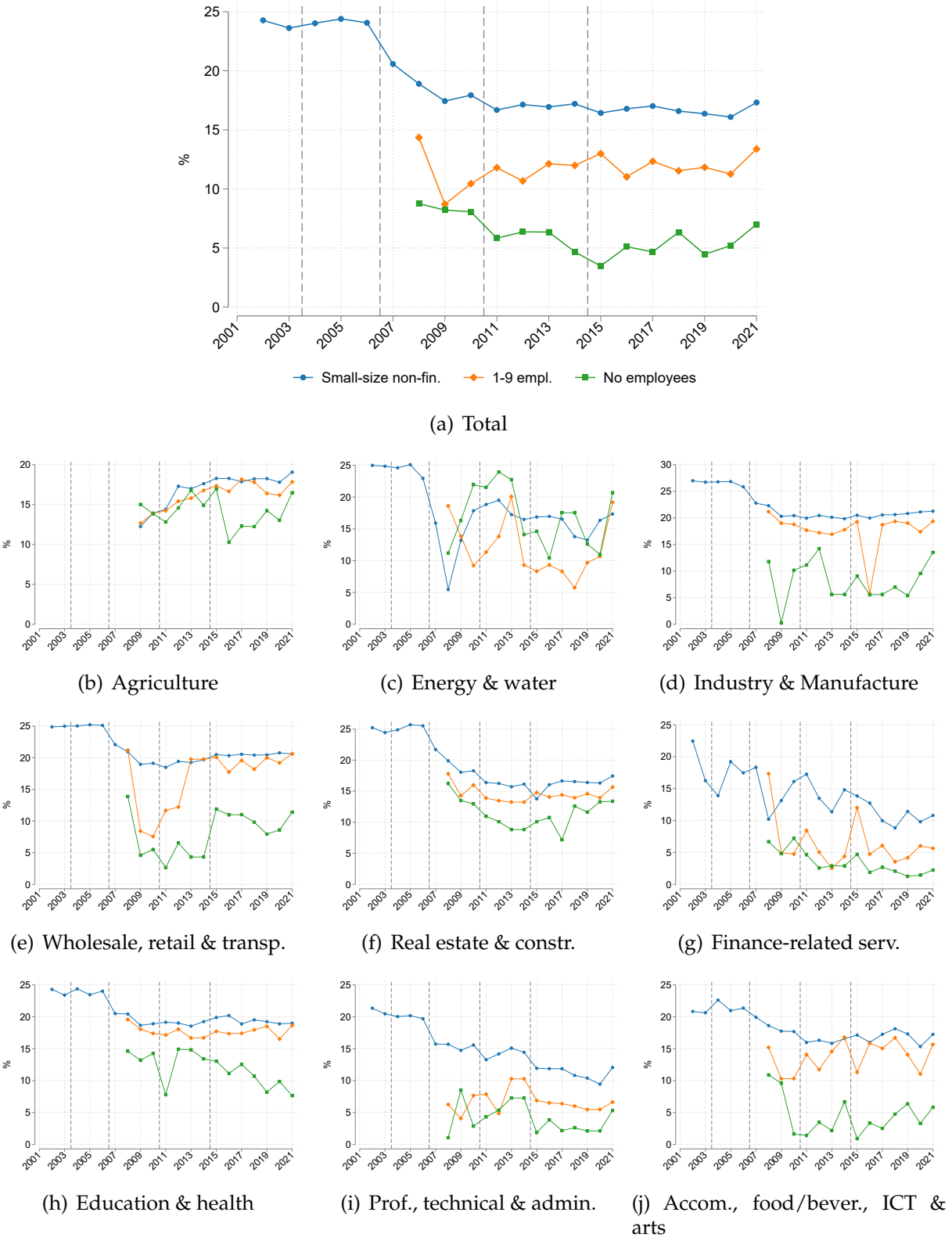
[40]The 2008 economic crisis led to a significant increase in compensable carried-forward negative taxable bases. The limitation on the offsetting of carried-forward negative taxable incomes was attempted to limit the potential attractiveness of trading with shares in loss-making corporations.

[41]For example, a tax credit of up to 10% of tax liability is granted to small-size entities if they use their profits to acquire real estate assets.

[42]The special CIT regime collective investment corporations (in Spanish, "*SICAV*") underwent significant legislative changes effective from 2022. Previously, these entities were subject to a preferential 1% CIT rate, contingent solely on having a minimum of 100 shareholders, with no minimum investment requirement per shareholder. This framework often resulted in a single dominant shareholder (or a small group of principal shareholders) controlling the corporation, while the remaining shareholders typically holding only one share each. From 2022 onward, a new requirement mandates that each shareholder contribute a minimum of €2,500 to the corporation's capital to qualify for the 1% special CIT regime. Corporations failing to meet this condition are taxed at the general CIT rate. This reform aims to preserve the genuine collective investment nature of these entities and prevent their misuse by high-net-worth individuals for tax avoidance purposes.

[43]Financial corporations were kept to be taxed at a 30% tax rate after the 2015 CIT reform.

[44]This new minimum tax regulation introduced in 2022 does not apply to corporations subject to special CIT rates of 10%, 1%, or 0%, nor to special unlisted corporations for investment in housing markets (known in Spanish as "*SOCIMI*"). For newly established corporations, which are subject to a general CIT rate of 15%, the minimum CIT rate is reduced to 10%. Similarly, for credit institutions and entities taxed at the general 30% CIT rate, the minimum CIT rate is set at 18%.



(a) Total

(b) Agriculture

(c) Energy & water

(d) Industry & Manufacture

(e) Wholesale, retail & transp.

(f) Real estate & constr.

(g) Finance-related serv.

(h) Education & health

(i) Prof., technical & admin.

(j) Accom., food/bever., ICT & arts

Source: *Agencia Estatal de Administración Tributaria, AEAT* (2024a).
Note: The left y-axis denotes effective CIT rate, calculated as CIT final tax due over corporate profits (earnings before taxes). Dotted lines stand for years with CIT major reform. Data coverage starts in 2002 for small-size classified corporations (blue line). Data provides a full breakdown of corporations by number of employees only as of 2009. In particular, we depict here the evolution for corporations with no employees (green line) and with a number of employees ranging from 1 to 9 (yellow line). Sectoral disaggregation is provided in this way in the aggregate statistics.

Figure B4: ***Evolution of effective CIT by sector***

certain tax incentives, and the introduction of some new ones. Since 2015, the general tax rate has been set at 28% (from a previous general tax rate of 30%). This general tax rate is further reduced to 25% starting in 2016. In addition, specifically as of 2022, corporations presenting less than 1 million euro can apply a reduced 23% tax rate on their taxable bases.[42][43] The reduced tax rate for small-sized companies was abolished, maintaining only the reduced tax rate of 15% for emerging or newly established corporations during their two first fiscal years (three first fiscal years for emerginf corporation as of 2022) with operation resulting in positive taxable CIT bases. Further, since 2022, Spain has implemented measures to align with the OECDs *Base Erosion and Profit Shifting, BEPS* framework, which establishes a global minimum CIT rate of 15% for large multinational enterprises. Specifically, a minimum effective CIT rate of 15% (calculated on the adjusted taxable base after applying tax offsets and deductions) was introduced for consolidated groups and large corporations with net turnover exceeding 20 million euros.[44]

The 2015 CIT reform continued to disregard asset depreciation for tax purposes, not only for tangible assets, but also by limiting the deductibility of intangible asset depreciation. This reform also added to the non-deductible financial expenses those derived from financial assistance in the acquisition of shares in the event of a merger or inclusion in a fiscal corporate group. In the chapter of compensation of negative taxable incomes, new limits were introduced for corporations under the turnover threshold of 20 million euros. With the enactment of this law, negative taxable incomes from previous years of these corporations could be offset up to 70% (60% as of 2016, provided that negative taxable incomes exceeded 1 million euro) of the current taxable income before applying certain taxable income deductions.

Regarding tax incentives, the latest legislation retained only the "patent box", the tax credit for R&D investment (whose deduction limit is further increased), and the tax credit for cinematography-related activities (amounting to 50%-70% of production expenses, capped at 20%-30% of tax liability), along with some tax credits for job creation and hiring people with disabilities. The taxable income deduction for reinvestment of capital gains was eliminated. In its place, the legislation introduced the capitalization reserve, reducing the taxable base by 10% for profits used to increase the corporation's equity without requiring further specific justification. For small-sized enterprises, a new tax incentive called the leveling reserve was introduced. This involved allocating undistributed profits to equity to automatically offset future losses, with the limit of 10% of the current-year taxable income. The leveling reserve allowed for taxable income deductions for the reserved amounts for five years. If no negative taxable bases were later generated during this five-year period, the taxation of the reserve will be then deferred in the following tax years, with a cap of 1 million euro. In addition, as of 2016, the tax rate could be further reduced to 20.25% for corporations using capitalization or leveling reserve tax incentives. Further, a 100% (95%, as of 2021) tax credit was introduced for avoiding domestic double taxation on dividends

and capital gains for resident corporations with more than 5% of the shareholdings of the issuing entity (previously available only for non-resident issuing corporations). This tax credit is fully abolished as of 2021 in cases where the receiving corporation possess less than 5% of the shareholding of the issuing corporation, even if the shares held in the issuing corporation exceed 20 million euros. As of 2016, this tax credit for avoiding double taxation is capped at 50% of the tax liability. Starting in 2021, a three-fiscal-years full exemption was granted by the Law 11/2020 to dividends emerging from newly created corporations which is 100% owned by the receiving corporation, provided that said recipient entity presented less than 40 million euros of turnover, did not belong to a fiscal-consolidation group, and was neither an inactive asset-holing corporation nor a holding corporations controlling other different legal entities. Furthermore, starting in 2019, a new tax benefit is introduced amounting to 10% of the remuneration of new female administrators or managers. Moreover, as of 2022, the tax credit on the portion of tax liability derived from residential leasing income for entities subject to the special CIT regime for corporations engaged in residential renting was reduced from 85% to 40%.

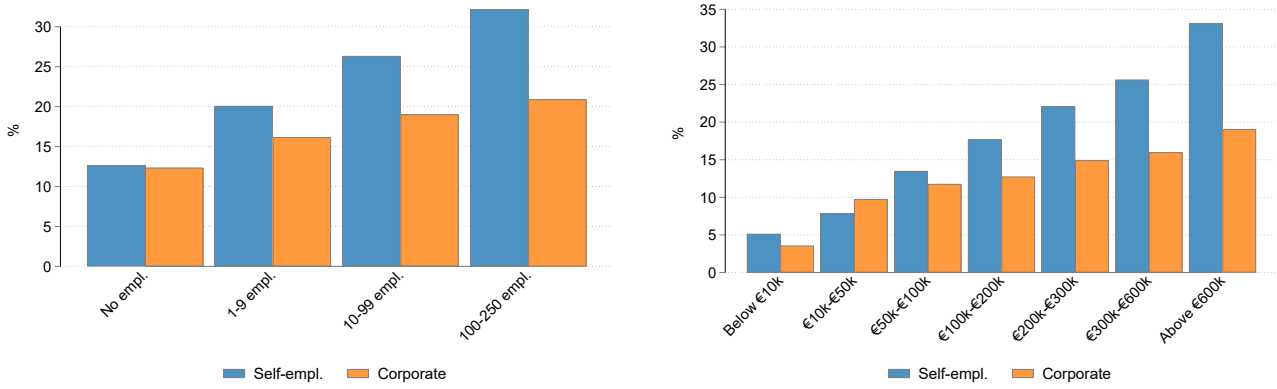
During the final period of our analysis, particularly in its later years after the pandemic-induced economic crisis, several new corporate taxes were introduced targeting specific sectors. In the fiscal year 2021, a new tax called the Digital Services Tax was introduced, which imposes a tax rate of 3 percent on certain digital services provided in Spain that exceed 3 million euros annually, for companies with a worldwide turnover of more than 750 million euros. In 2021, a new Financial Transaction Tax was introduced, imposing a 0.2% rate on acquisitions of shares in publicly listed companies with a market capitalization exceeding 1 billion euros. Also, effective from 2022, an additional levy was introduced on corporations operating in banking/credit and energy sectors. Specifically, a 4.8% surcharge was applied to the net interest and fee margins of financial entities whose interest and fee income exceeded 800 million euros. Similarly, for corporations in the energy sector, a 1.2% levy was imposed on net turnover (excluding revenues derived from foreign activities). Notably, these additional taxes were non-deductible in the CIT filings of the affected corporations.

After describing all the main aspects of the CIT reforms and the time-frames covered by each of legislation, using Figure B4 illustrates the evolution over time of the CIT effective tax rate (CIT due over corporate earnings before taxes) faced by small-sized corporations and those legal entities with no employees or very few employees. We focus on these specific corporations as they are the most common type of legal entity effectively controlled by taxpayers and utilized for implementing income and wealth shifting strategies for tax sheltering.

We observe that the 2007 CIT reform introduced a significant decrease in the effective tax rate faced by these corporations. This downward trend continued progressively until 2010. While the major reforms in 2011 and 2015 introduced significant changes in nominal tax

rates and tax benefits, they did not result in significant changes in the effective tax rate faced by these corporations. Moreover, corporations with few or no employees experience even lower effective CIT rates compared to those classified as small-sized corporations (based on their turnover volume). When examining by sector, non-financial corporations engaged in professional, technical, administrative activities, and those providing complementary services to finance face the lowest effective CIT rates. Furthermore, this downward trend in the effective rate extends over time in these sectors, while other sectors show an stabilized effective CIT rate after 2011.

Thus far, we have analyzed the effective tax rate paid by corporations under the CIT. Figure B5 compares, for the fiscal year 2017, this effective CIT rate with the PIT effective tax rate that the same type of business activities would face if they were established as regular unincorporated self-employed individuals, differentiating by number of employees and turnover level of the business.



(a) By number of employees

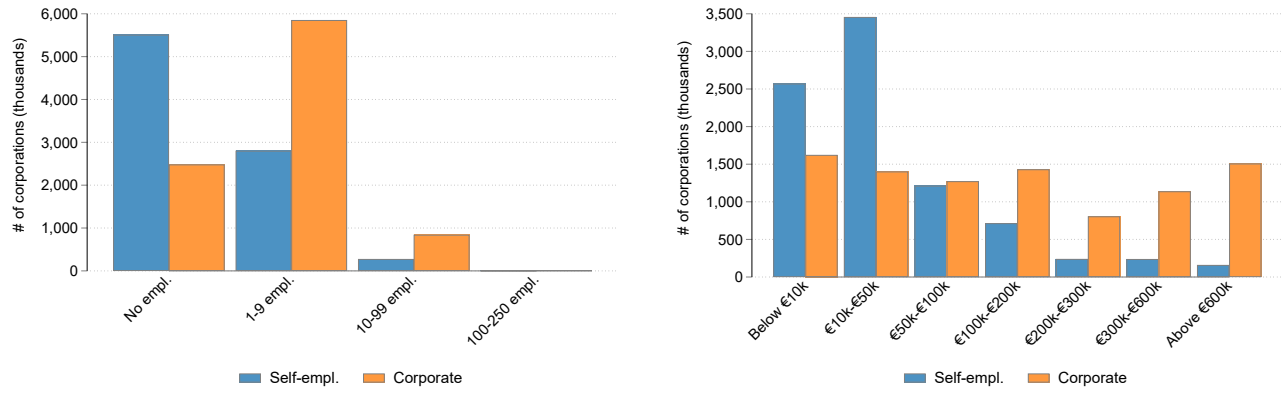
(b) By turnover level

Source: *Agencia Estatal de Administración Tributaria, AEAT* (2024c).
Note: The left y-axis denotes effective CIT or PIT rate, calculated as CIT or PIT final tax due over business profits (earnings before taxes). Orange bars stand for business activities run by corporate legal entities. Blue bars depict self-employment unincorporated business activities. These aggregate statistics emerging from the universe of Spanish firms are disclosed in this way by the Spanish State Agency for Fiscal Administration just for years starting in 2016.

Figure B5: ***Effective tax rate on business profits by legal form, 2017***

Business activities structured as unincorporated self-employment face a slightly lower effective tax rate in very small-scale cases with no employees and turnover not exceeding €50,000. In contrast, incorporated businesses experience a lower effective tax rate in cases of larger-scale enterprises with turnover exceeding €50,000, and this difference grows with the size of the business. These variations in tax rates translate into a significant incentive to incorporate as the size of the business increases.

This incentive leads to a decline in the proportion of unincorporated businesses relative to the total number of enterprises as the business size increases. For instance, Figure B6 illustrates that for turnover levels below €50,000, there are nearly twice as



(a) By number of employees

(b) By turnover level

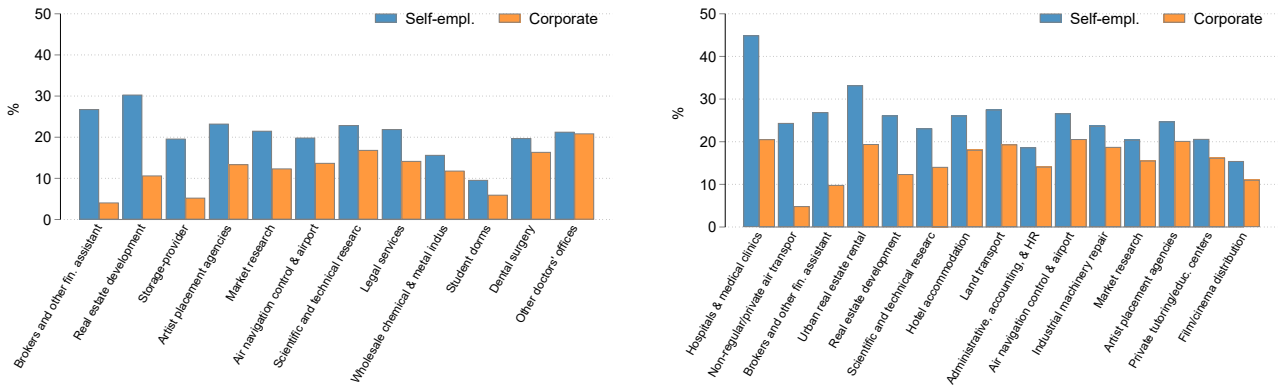
Source: *Agencia Estatal de Administración Tributaria, AEAT* (2024c).
Note: The left y-axis denotes total number of firms (scaled by 1,000 units). Orange bars stand for business activities run by corporate legal entities. Blue bars depict self-employment unincorporated business activities. These aggregate statistics emerging from the universe of Spanish firms are disclosed in this way by the Spanish State Agency for Fiscal Administration just for years starting in 2016.

Figure B6: ***Number of firms by legal form, 2017***

many unincorporated businesses as there are corporations. This ratio becomes 50-50 for businesses with turnover ranging between €50,000 and €100,000. However, for turnover volumes exceeding €300,000, there are eight times more firms established as corporations than as unincorporated regular self-employment businesses.

As previously discussed, both CIT and PIT regulations create a scenario with significant differences in the taxation of business profits between incorporated and unincorporated firms. These differences can also vary considerably depending on the sector of activity, as the tax treatment of business activities in different sectors may vary significantly. Additionally, the typical operational structure (turnover volumes, employees, deductible expenses, and investments) of certain activities can lead to a greater disparity in taxation between unincorporated and incorporated firms in some sectors compared to others.

Among the sub-sectors where over 60% of firms are incorporated, Figure B7 presents the ranking for the year 2017 with the sub-sectors showing the greatest difference in business profit taxation between being incorporated or unincorporated. The figure distinguishes between businesses with employees and those without. These aggregate statistics reveal significant differences in these sub-sectors. Said differences in the effective taxation of business profits between operating as a self-employed individual or as a corporation can reach up to more than 20 p.p. of effective tax rate. This gives us a sense that the tax incentive to incorporate also varies by sector, being very strong in some sectors and less strong or non-existent in others depending on the specific tax regulation and the operational characteristics of the sector concerned.



(a) Firms without employees

(b) Firms with employees

Source: *Agencia Estatal de Administración Tributaria, AEAT* (2024c).
Note: The left y-axis denotes effective CIT or PIT rate, calculated as CIT or PIT final tax due over business profits (earnings before taxes). Orange bars stand for business activities run by corporate legal entities. Blue bars depict self-employment unincorporated business activities. Only activity sub-sectors with over 60% of companies constituted as corporate legal entities are presented here. They are ordered along the x-axis by the greatest difference in profit taxation between unincorporated and incorporated businesses. These aggregate statistics emerging from the universe of Spanish firms are disclosed in this way by the Spanish State Agency for Fiscal Administration just for years starting in 2016.

Figure B7: ***Effective business profit taxation by sub-sector, 2017***

A.4.3. Wealth taxation

In Spain, multiple taxes are imposed on wealth. The entire stock of wealth is subject to a progressive wealth tax levied either regionally or nationally. The stock of real estate properties is further taxed through various proportional (non-progressive) local taxes and fees based on property value. Additionally, the wealth value of secondary real estate properties (those distinct from the primary residence) which are fully at the owner's disposal (neither rented out nor utilized in a business economic activity by the self-employed owner) are taxed through the PIT. While this constitutes a tax on specific forms of wealth stock, it is include in the PIT and is affected by the progressivity of such tax figure, as its rate depends on the owners marginal tax rate as determined by their overall income. Moreover, certain wealth transfers, including sales, donations, and inheritances, are not classified as capital gains taxable under the PIT. Instead, these are subject to regional and local progressive wealth transfer taxes. This Subsection provides an overview of the most significant wealth tax figures within the Spanish tax system.

The Spanish WT (in Spanish, "*Impuesto sobre el Patrimonio, IP*") is a direct and personal tax levied on the net wealth (assets net of debts) of individuals residing in Spain or, even if not having their habitual residence in Spain, who own assets or rights located in Spanish territory.[45] This tax figure is entirely decentralized, with regional governments having full regulatory authority to adjust tax schedules, minimum overall exemptions, or tax credits to

[45]The WT declaration for non-residents pertains exclusively to the assets or rights owned by those individuals which are situated in Spanish territory. All Spanish regions of the Spanish Common Fiscal Regime

be applied on tax liability. Further, regional governments collect the entire tax revenue. The national government only establishes a default tax scheme that applies in the absence of specific regional regulations that modify it. Additionally, the central government defines which type of assets are exempt from WT, the asset-valuation rules, and the total asset volume threshold above which it is mandatory to file the WT return. Taxpayers are obliged to file WT return when they experience one of the two following circumstances: (i) when their net wealth generate a non-zero wealth tax due; or (ii) when, regardless of the resulting tax due (if any), the total volume of their assets (including also WT-exempt assets) exceeds a certain amount set by the national government. The WT is declared jointly with the PIT return, sharing the taxpayer the same tax residence for both tax figures. Similar to the PIT filing, it can be declared jointly by combining the values of spouses and then dividing the total value by two.

The WT calculation involves five steps. First, the **taxable base** is determined as the sum of all non-exempt assets minus any debts that the individual has. **Exempt assets** not entering the taxable base include real estate properties in the form of legally protected historical and artistic monuments, certain artworks of cultural importance, main dwellings up to a certain value, and household items. Assets in private pension plans or life insurance are also WT-exempt. Moreover, there is an WT exemption for intellectual property rights not related to self-employment activities and owned entirely by the taxpayer. The most significant WT exemption applies to business assets and corporation shares (except from shares in collective investment companies). In order for the business-related assets to be considered WT-exempted, the self-employment business activity carried out with such assets must constitute the taxpayers primary source of income, accounting for at least 50% of his/her total PIT taxable income (including both the general and the special PIT bases). Additionally, the taxpayer must conduct the self-employment business activity independently and regularly. For corporation shares to qualify for the WT exemption, the individual's ownership stake in the corporation must be substantial, and he/she must act as an administrator or manager of said corporation. Furthermore, at least 50% of the individual's total PIT adjusted gross income derived from self-employment and regular labor must result from his/her managerial duties within the legal entity. It is also required that the entity is not classified as an inactive asset-holding corporation.[46]

Secondly, a reduction from the net non-exempt wealth is applied due to the **minimum**

are subject to this tax. Basque Country and Navarre, which are out of the scope of our analysis, have a different fiscal status within Spain and manage their taxes independently. But they also regulate a wealth tax similar to the Spanish one.

[46]If the corporation's wealth include assets that are not involved in the development of any economic business activity, the exemption will only apply to the value of the corporate shares in the proportion of net worth corresponding to the assets allocated to the exercise of an economic activity, reduced by the amount of the debts arising from said activity. Specifically, corporate assets exclusively hold for the personal use of the controlling individual taxpayer or any member of the family group cannot be considered as assets involved in an economic business activity, nor can those that are transferred for an under-market price to persons or entities classified as linked to the corporation.

exemption. Regions have the legislative authority to establish a specific magnitude of assets which is exempt from WT taxation. After applying this regional minimum exemption (or the default national one, in the absence of specific regional legislation on it), the taxpayer arrives to his/her **taxable base**. Thirdly, the **tax schedule** is applied to the said taxable base to calculate the tax liability. The tax schedule, determined entirely at the regional level (or at the default national level, in the absence of specific regional legislation on it), consists of eight taxable base brackets with a progressive marginal rate for each of them ranging from 0.18%-0.2% for the first bracket to 2.5%-3.75% for the last bracket. Fourthly, **tax credits** are applied to reduce the tax liability. This tax liability can be reduced by a **combined cap of PIT and WT liability**. Specifically, the sum of the PIT and WT tax liabilities of the taxpayer cannot exceed 60%-70% of his/her PIT taxable income (including both general and special PIT bases).[47] If the sum of the WT and PIT tax liabilities exceeds the set threshold, the WT liability is reduced until it reaches the joint cap over the considered PIT taxable income, with this reduction not allowed to surpass certain percentage of the originally calculated WT liability. Further, a tax credit is applied for compensation amounts paid abroad for WT or an analogous tax figures. Lastly, before reaching the final effective WT **tax due**, Spanish autonomous communities may grant a **regional bonus** or tax credit on the tax due. Indeed, some regions provide a 100% bonus on the tax due, granting an effective full WT exemption.

The Law 19/1991, still in force at the moment, governs the Spanish WT scheme. Nonetheless, during our analysis period, the Spanish WT underwent two clearly distinct legislative stages with major modifications in said WT-ruling law. One from 1999 to 2007, and another from 2011 onwards, with the WT being completely suppressed between 2008 and 2010. In the following lines, we examine the main reforms that this regional tax figure experienced, aiming to understand how they may have modified the incentive to incorporate and shift wealth from personal to corporate accounts in order to benefit from the WT exemption for certain corporate shares.

The **first WT sub-period** of legislation spanned **from 1999 to 2007**. It was mainly characterized by a broader coverage of taxpayers, relative to the WT legislation ruling the second WT sub-period. Approximately 2.7% of the total adult population was filing the WT return in 2007, while only 0.3% of the total adult population was declaring this the WT form in 2011. In 1999, the minimum exemption threshold was €103,975 and the total volume of assets over which it is mandatory to file a WT return was established at 100,000,000 pesetas (€601,012). The minimum exemption threshold was updated by the Law 54/1999 up to €108,182 as of 2000. During this first sub-period of WT regulation, only a few regions changed the default minimum exemption threshold. In particular, some regions ruled

[47]The portion of income derived from capital gains generated over one year must be subtracted from the computation of the PIT taxable income over which the joint limit of PIT and WT tax liabilities is calculated. Assets that, by their nature or purpose, are not capable of generating income subject to PIT will not be taken into account in the considered PIT taxable income over which the joint cap is calculated. However, dividends from inactive asset-holding corporations that were exempt from taxation under certain special regimes of the CIT will be added to said base magnitude over which the joint cap is determined.

an increase of said minimum exemption threshold for taxpayers cohabiting with children under 25 or disabled. In the chapter of WT-exempt shares in corporations, in order to qualify for such exemption the taxpayer's participation in the entity's capital had to be at least 15%, computed individually, or 20% jointly with his or her spouse, ascendants, descendants or 2nd-degree collaterals. The Law 51/2002 reduced the individual corporate ownership requirement to 5%, with effect as of 2003. Further, as of 2000, a new WT-exemption was granted by the Royal Legislative Decree 3/2000 for the primary residence asset up to a maximum exemption amount of 25,000,000 pesetas (€150,253).[48] When it comes to the wealth tax schedule, it consisted of 8 brackets of taxable base progressively subjected to a marginal tax rate ranging from a 0.2% for the first bracket (up to €163,847 of taxable base) to 2.5% for amounts above €10,486,266. The bracket bounds were slightly upward modified in 2000, 2001, and 2002. Only the region of Cantabria exercised its legislative capacity and modified the default WT tax schedule in 2006. The joint cap on tax liabilities from PIT and WT was set at 70% (60% as of 2002, ruled by the Law 46/2002) of the PIT taxable income. Reductions in WT liability coming said joint cap could not be larger than 80% of the originally calculated tax liability.

The **second WT sub-period** of legislation covered **from 2008 to 2010**. This period was characterized by a complete abolition of the Spanish wealth tax (by the Law 4/2008), that was introduced with the aim of converting in a permanent elimination of the WT.

The **third WT sub-period** of legislation covered **from 2011 to 2021**. After the suppression of the WT in 2008, a reintroduction of the wealth tax was authorized in 2011 by the Royal Legislative Decree 13/2011 for a temporary period of two tax years. However, it was prolonged year by year until the last year of our analysis, and is still in force. This sub-period of legislation was characterized by a smaller coverage of WT than in the previous period and by a very important introduction of differentiated autonomous legislation that generated a great variety of WT effective tax rates across regions. Since 2011, the WT default minimum exemption threshold of net wealth was raised up to €700,000 (approximately the top 0.3% of the total adult population in 2011). In addition, obligation to declare existed as well for taxpayers with a total volume of assets (including WT-exempt assets) of 2 million euros. Meanwhile, several regions lowered the default minimum exemption. For instance, Madrid regulated a €112,000 minimum exemption threshold for the year 2011 (only for filing purposes, as this region introduced a 100% tax credit on the tax liability) and returned again to the €700,000 default one as of 2012. Catalonia set this minimum threshold at

[48]For a property to be qualified as the primary residence, the wealth taxpayer needed to have lived continuously there over at least three years. Moreover, the taxpayer could benefit from the WT-exemption in the primary residence in cases of death, marriage, divorce, first job, labor mobility or any other analogous circumstance (Law 40/1998). Wealth taxpayers were obliged to report their primary residence and any other urban real estate property using the highest of the following three values: the assessed value, the purchasing value or any other administrative value (e.g., value reported in inheritance taxes). According to the Spanish State Agency of Fiscal Administration, most WT taxpayers report assessed values as this is the value that the Tax Agency already has and can be directly filled in the tax form without self-reporting.

€500,000 as of 2012. Aragon followed Catalonia in establishing a minimum threshold of €500,000 in 2014, lowering it further to €400,000 in 2016. Extremadura joined these regions in 2016 by regulating a minimum threshold of €500,000. Lastly, the Valencian Community set this threshold at €600,000 in 2017, lowering it further to €500,000 in 2021.

With regard to WT exemption for certain assets, the 2011 strictly followed the 2007 rules, with the only change of updating the exemption on primary residence up to €300,000. When it comes to the WT schedule, the 2011 default taxable base brackets over which the tax rates were applied experienced an upward adjustment with respect to the 2007 ones. For instance, the upper bound of the first bracket was extended up to €167,129 and the lower bound of the top bracket was raised up to €10,695,996. In the regional sphere, Madrid decided to reduce all the marginal tax rates of the default WT schedule (from a 0.2 p.p. reduction in the tax rate applied to the first bracket to a 1 p.p. reduction in the top marginal tax rate). On the contrary, several regions ruled marginal tax rates over the default ones: Andalusia in 2011; Catalonia, Asturias, and Extremadura in 2012; Murcia in 2014; and the Valencian Community in 2016. These upward-updating regions reached marginal tax rates of up to 2.75%-3.75% for the top taxable-base bracket (in comparison to the default 2.5% top marginal tax rate).[49] Finally, the largest regional disparity in the WT came in 2011 in the chapter of tax credits. Madrid decided to keep as of 2011 the wealth tax effectively suppressed by granting a 100% tax-liability bonus or tax credit. The Valencian Community and Balearic Islands followed Madrid in the full effective exemption of the WT, but only for 2011. They started again to collect WT with no regional tax credit as of 2012. The only region that granted some regional tax credit was La Rioja by introducing a 50% tax-liability bonus in 2014 and further updating it up to 75% in 2018. La Rioja suppressed said regional tax credit in 2020.[50]

The **last legislation sub-period for the wealth tax** begins in the 2022 fiscal year, the last year of our analysis. The Law 38/2022 introduced a significant reform to wealth taxation in Spain. Effective from the 2022 fiscal year, the Spanish central government implemented a new temporary tax on large fortunes (in Spanish, "*Impuesto temporal de Solidaridad de las Grandes Fortunas, ITSGF*"). Initially designed to apply for a two-year period, the tax figure has been made permanent. This new tax closely mimics the pre-existing regionally decentralized WT but with some differences. Notably, while the traditional WT is managed and regulated by regional governments, the new tax is administered entirely by the central government, which also retains all resulting revenues. Importantly, any amount paid under the regional WT is deductible from the liability under the new tax on large fortunes. Thus, the central tax effectively collects the revenue not generated by the WT in regions offering full exemptions, such as Madrid. Consequently, the new tax ensures a minimum wealth tax liability for some individuals who otherwise benefit from full WT credits.

[49] Cantabria returned to the default tax schedule with the 2011 reintroduction of the WT.

[50] During this second sub-period of WT legislation, other five regions, namely Aragón, Asturias, the Canary Islands, Castile and León and Catalonia, have opted to establish tax-liability bonuses or tax credits for assets and rights of economic content integrated in a protected estate of disabled individuals.

The new tax on large fortunes follows the same structural and procedural framework as the regional WT. Tax base calculations, exemptions, and allowances remain identical, including the general allowance of €700,000. However, while the WT applies progressive rates starting from the first euro of taxable base (subject to regional adjustments), the new tax only applies to taxable bases exceeding €3 million. The rate schedule for 2022 was as follows: 0% for taxable bases up to 3 million euros, 1.7% for the bracket between 3 million euros and €5,347,998.03, 2.1% for the bracket between €5,347,998.03 and €10,695,996.06, and 3.5% for amounts exceeding €10,695,996.06. From the 2022 fiscal year onwards, individuals with a taxable wealth exceeding 3 million euros are therefore required to file a return under the new tax on large fortunes, guaranteeing a minimum wealth taxation regardless of their region of residence. Taxpayers with a taxable wealth below this threshold remain subject only to the regionally administered WT. Another essential feature of this new tax is its inclusion in the combined cap on personal income tax (PIT) and wealth tax liabilities. The cap, as of 2022, which limits the sum of tax liabilities from PIT, WT, and the new tax on large fortunes to no more than 60% of a taxpayer's PIT taxable income (covering both general and special PIT bases).

Regionally, 2022 also witnessed changes in the regional WT rates and credits. For instance, Catalonia introduced a new top marginal WT rate of 3.48%up from 2.7%on taxable wealth exceeding €20 million. Andalusia implemented a full WT credit, effectively abolishing the tax (except for filing requirements), similar to the longstanding policy in Madrid. Galicia, meanwhile, adopted a 25% credit on WT liabilities. As the new tax on large fortunes was legislated in December 2022, retroactively applying to the entire fiscal year, regional governments did not have sufficient time to adjust their WT frameworks for that tax year. It was only as of 2023 that some regions modified their WT policies to retain more revenue locally, counteracting the centralization of tax receipts under the new framework.

In summary, the new tax on large fortunes introduced a pivotal shift in Spains wealth tax system starting in 2022, ensuring a baseline taxation level for some high-net-worth individuals, standardizing taxation for wealthier taxpayers across regions, and reshaping fiscal dynamics between the central and regional governments.

In addition to the WT, there are other taxes in Spain levied on the stock of wealth, the net wealth or on transmissions of assets between individuals or corporations. The Spanish Inheritance and Gift Tax (in Spanish, "*Impuesto sobre Sucesiones y Donaciones*") is a tax figure applied to the no-priced transfer of assets between individuals. In the case of inheritances or legacies, the tax applies to the increase in wealth obtained by the heirs as a result of inheritance. For gifts or donations, the tax is imposed on inter-vivos wealth increases obtained by individuals through non-onerous transfers. Like the WT, this tax is entirely managed at the regional level. Transmissions between close family members below a certain threshold are exempted, with the tax primarily applying to transfers between individuals with a lower degree of kinship or on significantly high amounts transferred. In cases where

no major or complete exemption is applicable, the tax rates are progressive by brackets, ranging from 7.65% to 34%. Inheritance tax is paid in the region where the deceased person, the transferor, resided, while gift tax is paid in the region where the recipient of the transferred assets resides. Just in case of gifted real estate assets, the gift tax is due in the region where the property is located. The valuation rules for assets are the same as those for the WT. Specifically, there is exactly the same exemption from this tax as the one existing in the WT for certain business-related assets and corporation shares. Additionally, similar to the WT, Madrid introduced a tax credit of 99% for close relatives as of 2007. Other regions like Andalusia, Murcia or La Rioja followed Madrid in the late 2010's. In this way, no additional incentive is created by this tax figure.

There also exists a regional onerous asset transmission and legal documentation tax (in Spanish, "*Impuesto sobre Transmisiones Patrimoniales y Actos Jurídicos Documentados*") which levies taxes on certain onerous asset transfers (neither inheritances nor donations) between individuals or corporations, such as the sale or purchase of real estate, the incorporation of assets for the establishment of corporations, asset transmissions occurring when increasing or reducing the capital of a corporation, as well as on expeditions of administrative and mercantile legal documents. Regarding our analysis, asset transfers related to the establishment of a corporation, increase or decrease of corporation's capital, or the merger, split or dissolution of legal entities are exempt (or taxed at a rate of 1%), which means that this tax figure does not alter the incentives of taxpayers to incorporate. Lastly, there are other taxes that may be involved in the moment of incorporation. Assets can be contributed to the corporation in the form of money/cash or assets. For example, a real estate property can be contributed to the corporation. This may result in a capital gain (difference in the asset value between acquisition and transmission) for the taxpayer who contributes a real estate asset to the corporation. If any, the generated capital gain will be taxed under the PIT of the taxpayer if the contributor is a person, or under the CIT if the contributor is a different legal entity or corporation. Further, the contributor may be taxed under a 10-15% effective-rate local tax levied on the value appreciation of a real estate asset between the time of acquisition and the time of its transfer, sale or incorporation (in Spanish, "*Impuesto sobre el Incremento de Valor de los Terrenos de Naturaleza Urbana, IIVTNU*"). These additional taxes on certain asset transfers may generate some additional cost to incorporate in cases of contributing real estate to the legal entity, but there are no significant differences over time, across regions or across sectors that could result in substantial changes in the incentive for taxpayers to incorporate.

Further, there are other local taxes in Spain which target the stock of real estate wealth owned by both individuals and legal entities. The local property tax (in Spanish, "*Impuesto sobre Bienes Inmuebles, IBI*") is a local tax levied on the ownership of real estate assets. The tax base is determined by an administrative valuation of the property (combining cadastral values of the soil and the construction values, corrected or adjusted for scaling factors which

local governments ask the central government for). The tax liability is calculated by applying a tax rate set by local councils (within the limits set by national legislation). Some tax credits are granted for properties that constitute the primary residence of a large family or for properties which experienced a collective reassessment procedure (conducted by the central cadastral office) in recent years (up to 10 years prior to the local property tax annual bill).

Other local taxes or fees which are also based on cadastral property values include the waste collection fee (which may also vary depending on district waste generation indices or the propertys use) and the fees on construction, installations, and works. The latter are levied on the estimated cost of new construction or renovations of real estate properties, effectively functioning as a tax on property value or its enhancement. Additionally, certain municipalities or provincial governments impose extra property taxes on empty dwellings or on large commercial premises, calculated similarly based on cadastral or administrative values and with tax rates set by provincial or local governments.

These local taxes on real estate properties may also shape the incorporation or income or asset shifting behavior of landlords, as self-employed taxpayers or incorporated legal entities may deduct such local property taxes from their PIT or CIT returns, provided that the properties are used and linked to a business economic activity. In this case, incorporated properties which are leased for corporation's owner use cannot deduct these local property taxes in the CIT filing. Recall also that housing leasing is only considered an active economic activity (and property taxes can consequently be deducted from PIT or CIT) if at least one employee is hired at market rates. An individual taxpayer may deduct these local property taxes as an expense on their PIT return only if the property is rented out directly by the individual, and not through a self-employment or incorporated firm.

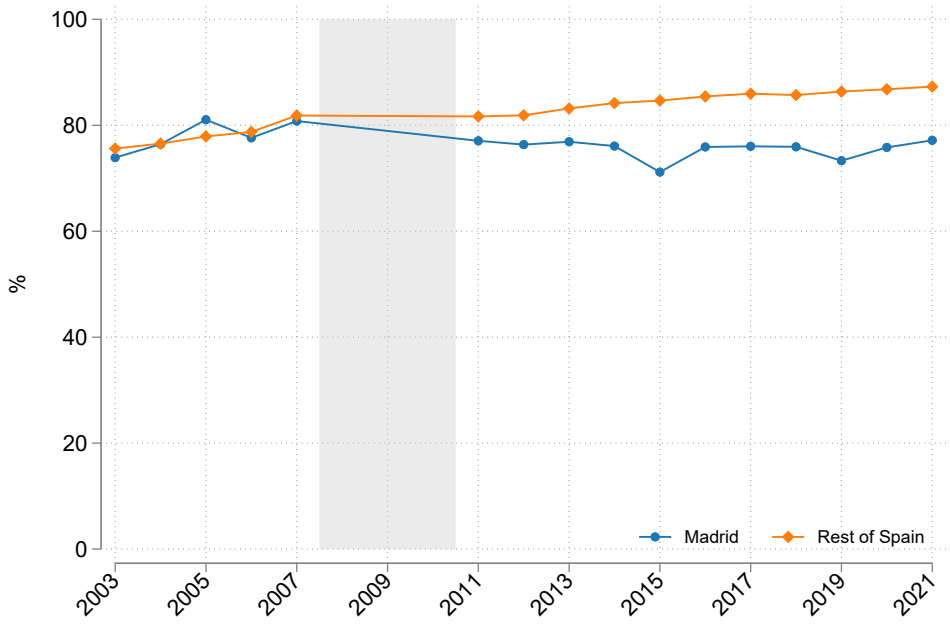
Lastly, the Spanish tax system includes an additional levy on the stock of secondary real estate properties at the taxpayer's full disposal, notable for its integration into the PIT filing system despite functioning as a wealth tax targeting a specific type of asset. This mechanism, referred to as imputed real estate income under the PIT framework, applies to urban properties that do not serve as the taxpayers primary residence, are not rented out (or rented out to relatives at a rental price under market rates), and are not used in any economic business activity as a self-employed individual. Imputed real estate income consist of a presumed theoretical income included in the progressive general tax base of the PIT, although the property does not generate actual revenue. In practice, this tax acts as a mechanism to levy wealth held in the form of second dwellings which are fully available to the taxpayer. Its progressivity is determined by the overall structure of the taxpayer's general PIT base, which aggregates other income sources (regular labor income, self-employment income, etc.). The imputed income is calculated as 2% of the administrative value of the property. The administrative value is derived combining assessments for the value of the soil and the construction of the property (established by the central cadastral office) and adjustments using scaling factors requested by local

governments to the central government. If the property has undergone a collective reassessment procedure by the central cadastral office within the ten years preceding the PIT filing, the imputed income rate is reduced to 1.1% of the administrative value instead of 2%. This imputed income mechanism effectively embeds a progressive wealth tax within the PIT structure, targeting a specific subset of real estate wealth. It is compulsory to file this tax if the taxpayer is obliged to file PIT return due to his/her income circumstances or if the calculated imputed real estate income alone exceeds a certain threshold (€300.51 of imputed real estate income or the acquisition value of the property exceeding €54,639.10 in 2001 and 2002, and €1,000 of imputed real estate income as of 2003).

Imputed real estate income on secondary dwellings at the taxpayers disposal can significantly influence decisions regarding the incorporation of real estate properties into a corporation or their transfer to a self-employment business. Real estate properties owned by a corporation do not generate imputed income under either the CIT or the PIT frameworks with respect to the corporation's owner. However, the owner would need to report an in-kind remuneration (at market prices) if they utilize the corporation-owned property for personal purposes. Or the corporation must declare a theoretical income (at market prices) from this property in the CIT when leased to the owner. Similarly, if the real estate property is transferred to a self-employment economic activity, it would not generate imputed real estate income for the self-employed owner. Additionally, properties within both incorporated and unincorporated firms benefit from the ability to deduct a wide range of expensessuch as those related to renovations, promotion, or marketing provided the property generates some form of income for the firm (it's valid for the deduction to impute a theoretical income in the CIT for properties leased to owners) or is tied to an active economic business activity. These considerations highlight the nuanced tax implications of property ownership structures, particularly in balancing imputed income liabilities with the potential deductibility of associated costs.

After examining the legislation surrounding all wealth taxes pertaining to the incorporation process and how wealth in the form of corporate shares is taxed, it becomes evident that the regional dimension is of particular significance, as certain regions impose higher taxes on wealth than others. In particular, the largest difference arose between the Community of Madrid and the rest of the Spanish regions with the reintroduction of the WT, which began in the year 2011 and extended until the end of our period of analysis. Madrid regulated the WT by offering a complete effective exemption on any type of wealth, while in the rest of the regions, only assets that met certain characteristics were exempt from WT. As far as our analysis is concerned, starting from the year 2011, there was a significant incentive in certain regions (those that reintroduced a positive wealth tax) to incorporate by meeting the requirements that grant exemption from WT for corporate shares.

Figure B8 depicts aggregated data for the universe of wealth taxpayers, indicating that 80% of corporate shares were exempt from the WT in 2007 when all regions had the same

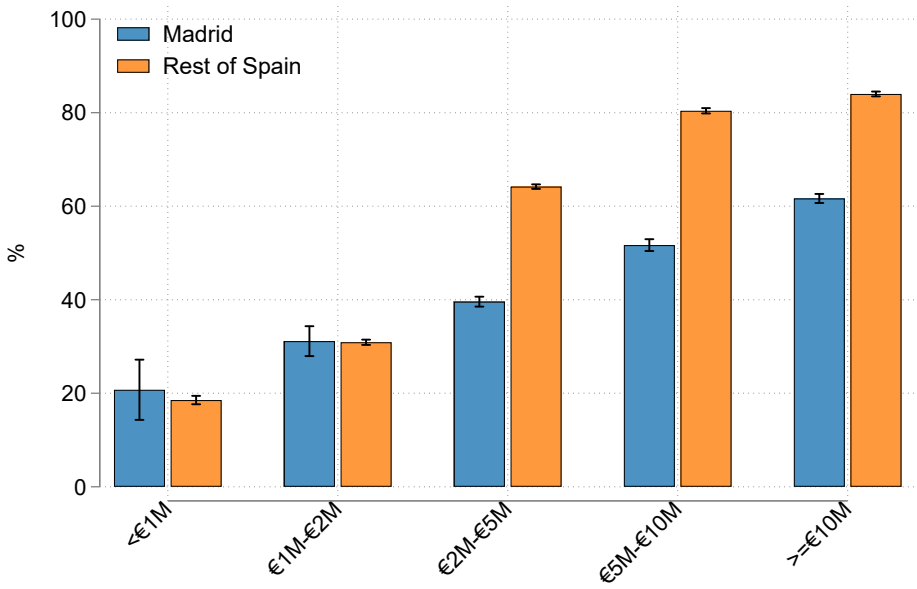


Source: *Agencia Estatal de Administración Tributaria, AEAT* (2024b).
Note: The left y-axis denotes percentage of total unlisted corporate shares of all WT filers that qualifies for the WT exemption for certain corporate shares. Blue line depicts Madrid, while orange line stands for the rest of regions of Spain. There was no WT in rule in the period 2008-2010, which is shadowed in the plot.

Figure B8: ***Unlisted corporate shares benefiting from WT exemption***

WT. However, since 2011, wealth taxpayers in Madrid no longer worried about being incorporated in a certain way that entitles them to exemption of corporate shares, as Madrid effectively abolishes the WT. Consequently, the percentage of corporate shares qualifying for WT exemption decreased for Madrid in the years following 2011. In contrast, in the rest of the regions, the percentage of corporate shares enjoying WT exemption increased, as there was a clear incentive to meet all the requirements guaranteeing exemption of corporate shares and thus reduce the tax bill faced in those regions where a positive WT was reintroduced.

Based on all our micro-data on WT spanning from 2016 to 2022, we can discern in Figure B9 that the incentive to be incorporated in a precise manner that grants the right to WT exemption of corporate shares becomes relevant once total asset volumes exceed 2 million euros (including all assets, regardless of whether they are exempt or not). Specifically, we observe how WT filers with over 10 million euros in total assets in regions other than Madrid qualified, on average, 80% of their total corporate shares for exemption. This represents a 20 p.p. positive differential over the average percentage of corporate shares that qualified for exemption in Madrid for WT filers between 2016 and 2022. For total asset volumes below 2 million euros, there was not yet a very clear incentive to organize the structure of unlisted corporations in a particular way because the WT liability is minimal at those levels of total wealth.

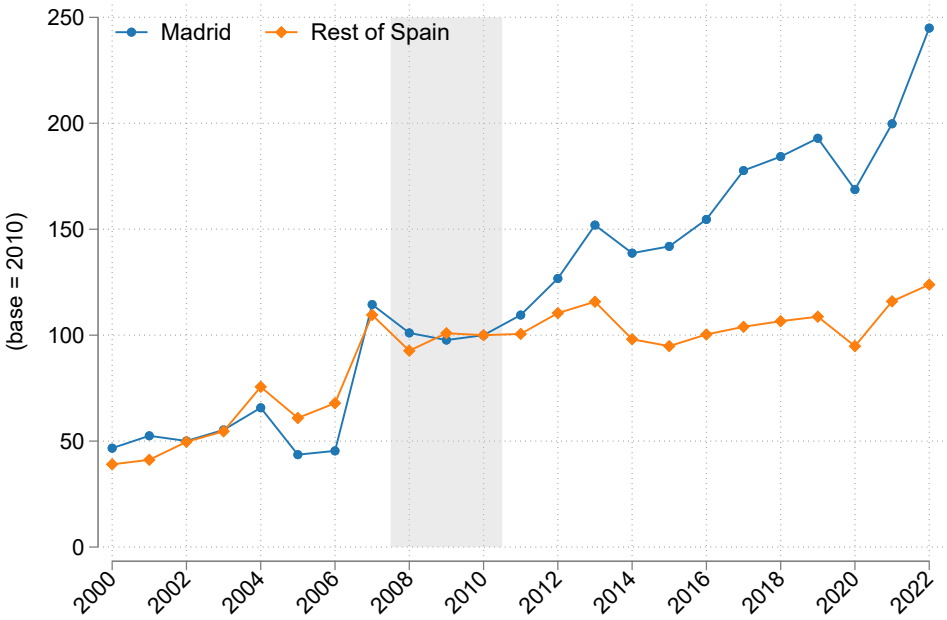


Note: The left y-axis denotes the average percentage of unlisted corporate shares of WT filers in our panel micro-data that qualified for the WT exemption. Blue bars depict Madrid, while orange bars stand for the rest of regions of Spain. This plot computed using all registries for WT filers reporting unlisted shares in our WT micro-data between 2016 and 2022.

Figure B9: ***Unlisted corporate shares benefiting from WT exemption by total gross wealth level***

Therefore, in Madrid, there is no longer an incentive from 2011 onwards to maintain certain corporations solely for the purpose of performing wealth shifting towards the corporation and thus being able to shelter certain parts of income from WT through exempt corporate shares. With data from the universe of Spanish corporations from the Spanish Mercantile Registry, we observe in Figure B10 how the dynamics of corporate dissolution started diverging between Madrid and the rest of Spain as of 2011. The dissolution pace kept increasing in Madrid as of 2011, while remained constant in the rest of the regions of Spain that regulated a positive effective WT. In these regions, there was a larger incentive to maintain certain corporations in order to benefit from a certain exemption in the WT, resulting in a slower pace of corporations' dissolution compared to Madrid since 2011.

Besides benefiting from the exemption of certain corporate shares, incorporated wealth taxpayers can also pay themselves lower salaries from their controlled corporation, thus making their taxable income in the PIT lower, thereby reducing the WT tax due by the application of the joint cap of PIT and WT tax liabilities. All these mechanisms result in incorporated WT filers experiencing a lower effective WT rate than unincorporated filers, as shown in Figure **??** of the paper. This differential is increasing over net wealth.



Source: *Instituto Nacional de Estadística, INE* (2024a).
Note: The left y-axis denotes the total number of voluntary (no bankrupt) dissolution of corporations (scaled to 2010 = 100). Blue line depicts Madrid, while orange line stands for the rest of regions of Spain. There was no WT in rule in the period 2008-2010, which is shadowed in the plot.

Figure B10: ***Voluntary dissolution of corporations***

A.4.4. "Linked" individual-corporation operations

So far, we have reviewed all the tax legislation surrounding the process of incorporation (PIT, CIT, CIT, and other wealth transfer taxes). However, there is also another body of legislation establishing that "linked" operations must be valued at normal market prices. This linked-operations regulation is imposed over remunerations, compensations, salaries, invoices, loans, asset transmissions, and any type of in-kind or monetary transfer conducted between individuals or legal entities among which certain commercial or family relationships exist. For instance, transactions between legal entities belonging to the same business group, or between a corporation and its shareholders, its administrators, or direct family members of the controlling partners or administrators. This type of operations began to be monitored by the Law 61/1978 to prevent potential tax fraud occurring when reducing the cost of linked operations, precisely taking advantage of the relationship between the parties involved. It was established by law that these operations should adhere to a normal market price, understood as the cost that would be agreed upon, typically, with other non-linked individuals or entities, under conditions of free competition. During our period of analysis, three main linked-operations rules were in force: the Law 43/1995, with effects from the beginning of our analysis period until 2006; the Law 36/2006, in force from 2007 to 2014; and the Law 27/2014, in rule since 2015 to the present day.

Specifically, the law considered that a linked operation occurred when a transaction

involved the following parties: (i) a corporation and its significant-shareholding partners; (ii) a corporation and its directors, managers, or administrators; (iii) a corporation and spouses or up-to-3rd-degree relatives of the shareholders, partners, directors, or administrators; (iv) two corporations belonging to the same corporate group; (v) a corporation and the directors or administrators of another legal entity belonging to the same corporate group; (vi) a corporation and another legal entity in which the former holds a significant part of the share capital; (vii) two corporations in which the same shareholders, partners, or their spouses or up-to-3rd-degree relatives hold a significant fraction of the share capital; (viii) a corporation fiscally residing in Spain and its permanent establishments abroad. In the particular case that relates to our analysis (i.e. linked operations between corporations and their controlling partners), the significant fraction or proportion of the corporation's shareholding that must be hold by an individual in a corporation in order for them to be classified as a linked parties was established at a 5% (1% in case of listed corporations). This ownership percentage threshold was extended up to 25% as of 2015, limiting so the scope of application of the linked-operations regulation.

Any remuneration received by partners from their linked corporations had to be proven to have been realized at normal market rates. Several linked-operation valuation methods, voluntarily chosen by the reporting individual or entity, were accepted by the legislator to measure whether operations between linked individuals and corporations were realized at a normal market value: comparable uncontrolled price method, incremented cost method, resale price method, profit splitting method, operating net margin method, etc.[51] Further, during some fiscal years, an additional special linked-operations valuation method

[51]The comparable uncontrolled price method, the most commonly employed valuation methodology, involved comparing the price intended for the good or service subject to the transaction with the cost of that same good or service, or similar ones, in a transaction between unrelated parties under comparable circumstances. For example, if an individual acted as a lawyer and decided to handle a legal procedure for the corporation controlled by their brother, they must have charged a fee similar to what they would have charged any other client. (ii) The incremented cost method required a more detailed calculation than the first presented method. It involved adding to the acquisition cost or production cost of the good or service subject to the transaction, the standard margin applied in identical or similar transactions with unrelated parties. If this standard margin was not available, the margin applied by unrelated parties to the type of transaction the individual intends to carry out was to be applied. For example, an individual or entity that manufactured and sold furniture and furnished the office of the corporation controlled by a sibling. With this method, the cost of manufacturing the furniture was to be added to the commercial margin of its sale to the public. (iii) The resale price method, recommended for commercial retail and wholesale activities, was based on the margin of the price that a reseller would have obtained in an identical or similar transaction to the one the individual or legal entity intended to carry out with non-linked parties. For example, an individual or corporation that purchased office supplies from China and intended to sell them to the corporation controlled by a sibling. To determine if this transaction was valued at market price, the same profit margin applied to the resale of the supplies to a third party was to be applied. (iv) The profit splitting method was recommended when linked operations were highly interrelated and could not be valued separately. It involved two different, complex calculations to determine the total profit of the operation and what portion of the profit belonged to each operation. Each linked person or entity that jointly conducted one or more operations was assigned a portion of the common profit derived from said operation(s), based on a criterion that accurately reflected the conditions that independent parties would have agreed to under similar circumstances. (v) The operating net margin method used the market price at which linked individuals or entities should have valued operations to determine a market net margin. This net margin was calculated on costs, turnover, or the most appropriate

was accepted by the tax authorities for assessing whether remunerations received by professional partners for the professional rendered services to their professional-classified linked corporations were valued at a normal market price.[52] By professional corporations we refer specifically to those legal entities whose statutory registered purpose falls within the second section of the classification of economic activities established by the legislation of the special local tax on certain economic activities (in Spanish, "*Impuesto sobre Actividades Económicas, IAE*").

Linked corporate owners may receive different transactions from their own controlled corporations. As listed in Subsection A.3, these linked transactions could take the form of regular salaries or payrolls, payments through invoicing, compensations for the administration/managing tasks, dividends, interest income from credits loaned to the corporation, in-kind compensations in the form of per-diems or corporate shares, etc. All these remunerations are subject to the linked-operations regulations and need to be proven to have been realized at normal market values. However, the legal treatment received by some of these remunerations by the linked-operations regulation was changing throughout our period of analysis depending on the type of remuneration and the type of issuing corporation. Specifically, we analyze how remunerations from professional-classified corporations, corporate-classified corporations, and compensations for the administration/managing tasks had to be set by the linked individuals in other for said remunerations to be proven to have been realized at normal market prices for the authorities during our period of analysis.

With regard to the remunerations received by professional partners for the professional rendered services to their professional-classified linked corporations, different governing linked-operations rules were in force throughout our period of analysis. Up to 2003 the profits of these professional corporations were taxed under the special PIT-imputation regime of their controlling linked partners. With the abolition of this special PIT-imputation regime in 2004, these professional-classified corporations started to be taxed under the standard CIT scheme and began to remunerate their professional partners (through payroll or invoicing prior to 2015 and, by law, solely by invoicing as of 2015) for the rendered professional services. Therefore, said remunerations started to be monitored as of 2004 under the linked-operations legal framework. These linked operations were not only offered to apply the standard valuation methods to assess whether they had been done at normal market rates. Instead, remunerations received by professional partners for the

magnitude based on the characteristics of similar operations conducted between independent parties. It was a method quite similar to the incremented cost and resale price methods.

[52] It should be noted that this special valuation method for assessing whether remunerations for professional services have been realized at market prices can be freely chosen or not by the reporting corporation or individual. What happens in practice is that subjected taxpayers tend to opt for this special valuation method because of the difficulty involved in using the standard valuation methods for linked-party transactions, as well as the fear of the tax authorities initiating verification proceedings if they do not follow this special valuation method for these specific transactions.

professional services that they rendered to their controlled linked professional corporations were directly considered to be complying with the linked-operations valuation rules when more than 50% of the turnover of the corporations originated from professional activities, provided that said corporations hold enough personnel, infrastructure and materials to carry out their corresponding professional economic business activity. If this were not the case, the State Agency for Fiscal Administration might consider the legal entity to be a shell corporation established for the sole purpose of tax fraud and impose the penalties prescribed for such illegal entities.[53] With the 2007 CIT reform, this special market-price valuation proof for remunerations received by professional partners for the professional services rendered to their controlled professional corporations was suppressed. In this way, as of 2007, said remunerations needed to be proven to have realized at normal market prices using the same standard valuation rules as the ones that any other type of linked operation chose. It is at the end of 2008 when an alternative valuation method is again offered to assess whether said remunerations from professional corporations were made at normal rates. Specifically, as of 2009, compensations received by professional partners for the professional rendered services to their linked corporations started again to be considered as normal-market-price valuated operations when: (i) the corporation was classified as small-sized by its turnover level (this particular requirement was suppressed as of 2015); (ii) more than 75% of the turnover of the corporation originated from professional activities; (iii) the corporation hold enough personnel, infrastructure and materials to carry out its corresponding professional economic business activity; (iv) the corporation presented a positive earnings-before-taxes result; (v) the remuneration to the professional partners for the professional services rendered to their corporation (irrespective of made by regular payroll or by invoicing) amounted to more than 85% (75%, as of 2015) of the corporation's profits (turnover less expenses), excluding from the profit calculation the expense that would represent this remuneration itself; (vi) said remuneration could not be priced at less than 2 times (1.5 times, as of 2015) the average remuneration of salaried or waged employees performing analogous tasks in the corporation; and (vii), when the previous

[53] Some professional partners invoiced and derived income form their controlled professional corporations not directly, but through an additional intermediary shell corporation with limited or zero assets or infrastructure and no human resources, thus avoiding compliance with the specific regulations for valuing linked operations at normal market prices. In this way, they might be able to employ tax-avoidance mechanisms such as income retention within the corporation, corporate profit splitting among family-member partners, or incorrect deduction of expenses not related to business activities. In these cases, professional partners established their own corporations through which they participated in another broader professional corporation, which was the one interacting with the end clients of the professional service. The tax authority stated that although Spanish law allowed for the provision of professional services through mercantile corporations, it did not support the use of an additional intermediary shell corporation without human and material resources to invoice for professional services actually rendered by a taxpayer-person. The tax authority considered that this additional intermediary shell corporation did not intervene in any way in the provision of the final professional service but it was merely constituted with the sole purpose of reducing the direct taxation of the individual professional. This interposition of corporations was considered illegal and fraudulent and entailed very severe penalties, not only administrative but also criminal or penal, for the offender.

requirement could not be checked, said remuneration could not be valued in any case at less than 2 times the average wage of all salaried workers, prior to 2015, or less than 5 times a publicly set indicator of income used as a reference for different public procedures and benefits (in Spanish, "*Indicador Público de Renta de Efectos Múltiples, IPREM*"), as of 2015.

A different case is that of the remuneration received by the linked partners from their linked corporations when such corporations are engaged in corporate business economic activities and not in professional activities. By corporate-classified corporations we refer specifically to those legal entities whose statutory registered purpose falls within the first section of the classification of economic activities established by the legislation of the special tax on certain economic activities (in Spanish, "*Impuesto sobre Actividades Económicas, IAE*"). Contrary to what occurred in the case of professional-classified corporations, the salaries received by a controlling linked partner through regular payroll for tasks performed in the linked corporate-classified corporation other than those of an administrator were not subject to any special valuation method to be considered as made at normal market prices but rather adhered to standard linked-operations valuation methods. In this regard, some parameters that might help to determine that the salary received by the linked partner was adjusted to normal market prices could be the following ones: (i) a salary similar to that received by another non-linked employee within the same corporation (or in another comparable company in the same sector, in case that the first comparison were not feasible) for performing the same type of work; (ii) a salary adjusted to what is mandatory under the collective bargaining agreement of the sector; (iii) a salary similar to that received by another individual with similar technical expertise, training, language skills, etc.

A particular case is that related to the specific remuneration received by the administrators and managers of corporations for their effective duties of administration and management of the company, irrespective of the legal entity being classified as corporate or professional. Said administrator compensations were subject to the standard valuation rules of linked operations, as if there were normal payrolls (like in aforementioned case of salaries received by a controlling linked partner through regular payroll for tasks performed in the linked corporate-classified corporation other than those of an administrator), only until 2014. With effect from 2015, although being a director or manager of a corporation continued to be a situation proving the existence of a link between the corporation and the individual, the remuneration obtained for the exercise of the duties of administrator or manager in the corporation, regardless of the percentage of the individual's link with the controlled corporation and irrespective of the corporation being classified as corporate or professional, started to no longer be considered subject to the market-price valuation rules for linked operations. Other compensations or transactions received by the administrators or managers kept under the previously mentioned market-rate valuation rules for linked operations as of 2015, but not the remunerations issued for specific managing or administration tasks. Thus, administrators were free to set their salary for

their administration/managing functions since 2015. However, in cases of potential WT filers, linking with Subsection secA2d3, such salary for administration or managing duties had to amount to more than 50% of the total personal adjusted gross regular labor and self-employment income obtained by the taxpayer in the tax year, for such taxpayer to were able to benefit from the WT exemption on his/her wealth in the form of corporate assets.

Finally, it is worth mentioning that while all linked-classified operations were obliged to comply with the standard or specific market-price valuation rules, an additional obligation to declare and report to the Tax Agency the execution of these operations was introduced in 2008 for cases meeting one of the following requirements: (i) the set of linked operations in the same fiscal year, with the same linked individual or entity and under the same valuation method, exceeded 50% of the total turnover volume of the entity; (ii) a transaction subject to special scrutiny (operations between a corporation and an presumptive-taxation unincorporated self-employee when this individual or their relatives hold more than 25% of the corporate shares; transmission of unlisted corporate shares; or transmissions of real estate properties or intangible assets) exceeded €100,000; (iii) transactions conducted in the same tax year with the same individual or entity exceeded €250,000 in market value; or (iv) transactions were conducted with corporations domiciled in tax havens. The consequences of not properly valuing these linked transactions at market rates, failing to report documentary evidence of these operations, or not filing the informative linked-operations model, could entail severe consequences for the offender.

A.4.5. Social Security contributions and other incorporation costs

In addition to all the tax figures and regulations already analyzed, there exist other economic costs incurred by those who carry out business activities through corporations or as regular unincorporated self-employed individuals.

Firstly, among these additional costs, we encounter the one derived from facing the special tax on certain economic activities (in Spanish, "*Impuesto sobre Actividades Económicas, IAE*"). This is a tax figure with shared management between the national Tax Agency, provincial governments, and municipal authorities, which levies taxes on any business economic activity taking place in Spain, regardless of the sector to which it belongs and irrespective of whether the activity is carried out through a corporation or as a regular unincorporated self-employed individual. All those running businesses are exempt from paying this tax during the first two years of business activity. Once this period has passed, from the third year of economic activity onwards, corporations or self-employed individuals face the effective payment of such special tax on certain economic activities if their activity's turnover exceeded 1 million euro in the penultimate year prior to the tax accrual. Upon registration, corporations or self-employed individuals must enroll into a specific activity category from a list of economic activities provided by this tax figure. It is worth noting that the headings of this list of economic activities are divided into three main sections: section

#1 for corporate activities (independent livestock, mining, manufacturing, construction, commerce and services); section #2 for professional activities (numerous self-employed and freelance workers, services to companies and individuals, health, education, legal, financial, rental and insurance services, architects, engineers, etc.); and section #3 for artistic activities (cinema, TV, theatre and circus, dance, music, sport and bullfighting.). The tax payment is annual and is calculated based on official rates or tariffs that vary according to the heading of the classification of economic activities in which the subject has registered, with such official rates being further weighted by corrective coefficients based on the turnover level of the activity and the geographical location where the business is physically set. This tax did not represent a modification of the incentive to incorporate throughout our period of analysis since it was paid both by regular self-employed individuals and corporations. The only differentiation or differential cost occurred in the case of real estate property leasing. While an individual person obtaining real-estate rental income did not face this special tax, leasing activities carried out through a corporation or a self-employed individual whose registered economic activity is property leasing itself did face such special tax on certain economic activities.

The second of these additional economic costs pertains to the Social Security contributions paid by taxpayers. In Spain, there exist different affiliation regimes to the Social Security, each with varying contribution burdens for the affiliate. On one hand, standard salaried workers not linked to any corporation are enrolled in the general regime of the Social Security. On the other hand, self-employed individuals must enroll in the special regime for self-employed workers. The Spanish Social Security system also considers as self-employed individuals those who run their business activity trough a effectively controlled corporation. They are also known as corporate self-employees. Specifically, taxpayers meeting one of the first three requirements for effectively controlling a corporation listed in Subsection A.2 are classified as corporate self-employees and are obliged to enroll and contribute to the self-employment Social Security regime.

In general terms, while Social Security contributions for salaried workers in the general regime are spited and paid 80% from the employer and 20% from the employee, Social Security contributions from self-employed individuals are entirely borne by them. Although the Spanish Social Security setup has many nuances, we can condense it to self-employed individuals paying approximately 30% of a freely chosen contribution base to the Social Security Treasury throughout our analysis period. Approximately 2 out of every 3 self-employed individuals opted for the minimum contribution base. For example, those self-employees subject to the minimum contribution base paid from €2313.29 annually in 1999 to €3,527.40 in 2022. Self-employed individuals who freely opted to contribute to social security based on the maximum contribution base paid from €8,159.67 annually in 1999 to €15,199.80 in 2022.

Until the year 2013, all self-employed individuals contributed equally to the Social

Security Treasury. However, a new regulation came into force starting in 2014, legally raising the minimum Social Security contribution base for those classified as corporate self-employed individuals. The latter, from 2014 onwards, faced a minimum contribution base 20%-30% higher than that of regular self-employed individuals (the maximum base remained the same for both types of self-employed individuals). Specifically, the minimum annual Social Security contribution amount is set for corporate self-employed individuals at €3,772.80 annually in 2014, compared to €3,142.08 for regular self-employed individuals. In 2022, while the minimum base for those classified as corporate was €4,534.08 annually, that of those classified as regular remained at €3,527.40. This indicates that, from 2014 onwards, the act of incorporating might incur in an increase in paid Social Security contributions for those individuals who had been previously engaged in business activities as a regular self-employed persons.

A third additional and differential economic cost was introduced starting in 2012 and, especially, from 2015 onwards, for certain types of incorporated taxpayers who carry out activities classified as professional. These professional incorporated taxpayers saw how their fiscal and bureaucratic obligations, as well as the legal channels to remunerate themselves from their controlled professional corporation, were modified compared to those faced by incorporated taxpayers in legal entities classified not as professional but as corporate.

Prior to the year 2012, it was not very clear in the tax legislation how professional partners should be remunerated from their controlled corporations for the professional services rendered to such corporations, whether through regular payroll or by invoicing the corporation itself. In practice, before 2012, it was common and widely practiced in professional corporations for partners to also be employees of their companies, receiving their corresponding salary through a payroll for the professional services provided in the corporation (not for those derived from administrator and managerial functions, which were always realized through payroll throughout our analysis period). Already in 2012, the Spanish State Agency for Fiscal Administration issued the Informative Note #1/12 (of a non-binding nature, but establishing practical guidelines to avoid potential litigation initiated by the tax authority) trying to clarify in which instances professional partners of professional corporations should be paid through payroll for the professional services provided and in which cases this should be done by the professional partners invoicing the corporation itself and applying VAT (in Spanish, "*Impuesto sobre el Valor Añadido, IVA*") and a certain PIT withholding on these invoices. Issuing invoices with VAT to their own corporation implied an additional cost for these professional partners, as they would additionally have to keep statutory books of accounting, enroll at the Tax Agency as VAT-registered operators, and declare these amounts of output and input VAT through quarterly-basis VAT filings to the Tax Agency.

In the informative note published in 2012, the Spanish Tax Agency established that the

obligation to issue invoices for the professional services provided in controlled corporations would depend on the type of relationship between the corporation and the taxpayer in the following terms. If there was (i) dependence in the taxpayer-corporation relationship (attendance at the corporation's workplace, submission to schedules set by the corporation), (ii) alienation (decisions about clientele or pricing directly made by the corporation, etc.), and (iii) main production factors were owned or provided by the corporation, such relationship was about to be classified as a regular labor one, and the partner could be paid through regular payroll for such professional services. Otherwise, in the absence of one of the three aforementioned keys, the professional partner would have to issue invoices with VAT and PIT withholdings to their corporation to charge for the services provided. In practical terms, the Tax agency further informed that professional partners holding more than 50% of the shares of the professional corporation would have to be remunerated through VAT-subject invoicing. However, although many taxpayers followed these guidelines, there was still a lot of legal uncertainty regarding this matter, specially for those professional partners holding less than half of the corporation's shares, and it was not entirely clear in which specific cases payroll payment was permissible and in which cases it was not. That is why a new regulation on this issue came in force with the PIT and CIT policy reforms accomplished in 2015.

With effect from 2015, in an attempt to clarify this issue, the tax law stipulated that partners could receive regular payroll for services provided to their controlled corporation (other than those of an administrator or manager) only if the corporation was enrolled under the heading #1 of the list of business activities provided when registering for the special tax on certain business activities. That is, only if the corporation was classified as corporate. Otherwise, if the corporation was classified under the heading #2 of the list of business activities of the special tax on certain business activities, that is, if the corporation was classified as professional, the professional partner controlling said corporation (this effective control requirement is proven when the taxpayer had the obligation to be affiliated to the corporate self-employment Social Security regime because of meeting one of the first three requirements listed in Subsection A.2) had to be always remunerated through the issuance of invoices to his/her own controlled legal entity.

While it was already established that since 2015 all professional partners must be remunerated from their controlled professional corporation (for services other than those of an administrator or manager) through invoices subject to a 15% PIT withholding rate (7% in the first three years of economic activity), VAT might not always have to be charged on these invoices and therefore had to be declared quarterly to the Tax Agency. These particular invoicing by professional partners to their controlled corporations just had to be subject to VAT in cases of no labor relationship between the professional partner and the corporation. That is, in cases where it could not be proven that the professional partner was subject to the organizational criteria of the corporation (location of service provision, opening hours,

commercial strategies and clientele, pricing, etc.), the partner did not receive significant compensations related to the corporate profitability, or the production means were entirely provided by the corporation.

Finally, we also encounter some economic costs associated with the incorporation process and the maintenance of a corporation. An original naming for the corporation must be registered (ensuring that there is no identical one) in the Central Mercantile Registry (approximate cost of €15-€20). Additionally, a business bank account must be opened where the minimum share capital in the form of money should be disbursed by the partners. As seen in Subsection A.1, each type of corporation requires a minimum initial capital. This minimum set-up capital can be committed and not necessarily fully disbursed at the time of incorporation. In the latter case, the profits generated by the corporation in the subsequent years will firstly go towards effectively disbursing the committed share capital. This disbursed minimum initial capital remains untouched from the moment it is effectively disbursed until the point at which the corporation is finally registered and active for running its business activity. Therefore, at least the minimum initial capital to be effectively disbursed must be considered in the chapter of economic costs of incorporation. There is also an option of contributing initial capital not in the form of money, but by providing an asset that can be economically valued, such as, for example, computer equipment, a car, a website or software program, a registered brand, or a real estate property. In such cases, the economic value of contributed assets will be the amount contributed by the partner to the corporation. These non-monetary contributions to the corporation's capital must be registered so (signed by a notary and having to file regional taxes on onerous asset transfers) with their identifying or details, the euro valuation attributed to them, and the number of corporate shares attributed to the contributing partner in exchange of them. In short, the cost of setting up a corporation by contributing non-cash assets is higher than contributing cash in a bank account.

Afterwards, the corporate bylaws must be drafted, that is, the set of rules that will govern the corporation. These bylaws must establish, among others, the following aspects: activity that the corporation will carry out, its registered office or location within Spain, the shareholding system, how it will be managed and administered, the salaries, remunerations and severance payments of the administrator (if any), and after-tax profit or dividend distribution system. This drafting task is usually delegated to a lawyer, legal advisor, or directly to a notary. They may offer standard bylaws to which the corporation can adhere to. However, when specific corporate bylaws are desired, the cost of this drafting may increase (prices starting in €500). These bylaws will later be embodied into a public deed of incorporation, which will be sealed by a notary (cost according to the notary's fees ranging from €300 to €1000, which also raises up as the subscribed share capital increases). After signing the deed, the corporation must be registered with the Tax Agency and said corporation should apply to obtain a tax identification number that will accompany the

corporation for its lifetime. It is also necessary to obtain an official electronic signature for the corporation's administrator (approximate cost of €25). Additionally, the corporation must be registered in the census of entrepreneurs who collect VAT, derived from the invoices that said corporation issues to final customers. Furthermore, the corporation must be registered in the special tax on certain business activities, being enrolled in the specific heading corresponding to the actual corporation's activity. A form for the regional tax on property transfers and documented legal acts must be also filed. This specific figure levies taxes on initial subscribed capital at a rate of 1% (full exemption for newly created small-sized entities since 2010). Additionally, if the corporation has regular employees, it must be registered with the Social Security Treasury as an employer contributing to the Social Security for its salaried workers. With all this, the corporation must be registered in the corresponding Provincial Mercantile Registry (approximate cost of €150-€200, depending on the province). Finally, some business activities may require obtaining a local license to carry them out, which will increase the cost of incorporation.

In total, the minimum costs of establishing a new corporation ranged between 300€and 500€throughout our period of analysis, but they were typically higher because in most cases advisory or management services are hired to carry the incorporation process out. These basic advisory services for the incorporation of a standard unlisted corporation start from €500. It usually took about 20-30 days to complete this entire incorporation process. Although there exist a public assistance channel (in Spanish, "*Punto de Atención al Emprendedor, PAE*") that allows for much faster processing (2-4 days) in cases of using official default simplified bylaws, as long as the corporation has no additional specificity (which is rarely the case for corporations formed purely for tax reduction purposes) and the subscribed share capital does not exceed €30,000. Additionally, each year, the corporation must submit its official accounting books to the Mercantile Registry, and in cases of higher turnover, further hire audit services. Moreover, official inventory, annual-accounts, and partners' books must be maintained, incurring additional costs for the corporation.

In addition to all these extra economic costs, there may be other costs such as informational costs (the taxpayer is unaware that incorporating as a legal entity may greatly alleviate their tax bill), those associated with the taxpayer's tax morale (it may be morally costly for a taxpayer to incorporate and thus pay less taxes than what he/she considers fair), or those arising from uncertainty, risk aversion, or non-well-calibrated business growth expectations (the taxpayer may think that the upcoming tax year will generate high revenue, but may not see it worthwhile to incorporate because he/she do not precisely know how long such high profits will continue in the future).

These extra economic costs did not varied significantly over time, potentially altering the incentive to incorporate. However, they must be considered as an additional cost that taxpayers deciding to incorporate would face. In our empirical work, utilizing micro-data, we can observe the effective taxation by PIT, WT faced by each taxpayer, and estimate the

CIT taxation experienced by their controlled corporation in case of incorporation. These are the main tax figures that determined how the incentive to incorporate evolved over time, across regions, and across sectors. However, as we have seen, there were other tax figures surrounding the incorporation process (inheritance and gift tax, taxes on onerous asset transfers and documented legal acts, taxes on the appreciation in the value of urban assets, special tax on certain business activities, etc.), obligations to contribute to Social Security, legal frameworks regulating how and partners should be remunerated from their controlled corporations, legal and bureaucratic costs of incorporating and maintaining a corporation, licenses, and other informational, moral, or uncertainty-derived costs. All these additional costs, legal requirements, and minor tax figures are not directly observable in our used micro-data. However, we are able to estimate the effective cost of all these extra costs together. To do this, we compute with in micro-data the income or wealth threshold from which the combined main effective tax rate (PIT, CIT, and WT) were lower in case of incorporation. Then, we compare this threshold with the income or wealth level at which the taxpayer actually incorporated. The difference between these two magnitudes is the magnitude of the other extra costs surrounding the incorporation process for each taxpayer.

B. Data

Our methodological approach relies upon the utilization of a rigorously curated and large sample of detailed administrative micro-data for Spain, as detailed in Subsections B.1 and B.2.

Moreover, we make use of aggregate-data constructs circulated by certain Spanish public institutions that help us conducting robust analyses of aggregate trends and behaviors at a whole-population level. In this sense, our descriptive methodological framework incorporates aggregate data sourced from the State Agency of Fiscal Administration, comprising (i) Annual Corporate Accounts from Corporate Income Tax and (ii) Statistics of Corporate vs. Non-corporate Small-sized Firms. We also exploit aggregated data from the National Institute of Statistics, such as the (iii) Central Directory of Companies (in Spanish, "*Directorio Central de Empresas, DIRCE*"), the (iv) Statistics of Mercantile Corporations, and the (v) Statistics of Real Estate Property Transfers. Additionally, we make use of the (vi) Distributional Wealth Accounts published by the European Central Bank based on survey data and the Quarterly Sector Accounts. Finally, we compute some aggregate statistics by exploiting survey micro-data from the (vii) Spanish Survey of Household Finances conducted by the Banco de España.

B.1. Micro-data

For our empirical analysis, we use administrative panel micro-data ("*Panel de hogares, 2020-2022*") for Spain. These data-set is open for researchers upon scientific-project request and emerge from the collaboration of a number of Spanish public institutions, namely the State Agency of Fiscal Administration, the National Institute of Statistics, and the Social Security Treasury.[54] It comprises records of income, wealth, Social Security contributions and labor contractual relationships, along with multiple socio-economic and geographical characteristics for a representative sample of Spanish households. The sampling procedure follows a triple stratification strategy for (i) 17 regions (also referred as "autonomous communities"), (ii) 10 household typologies based on different types of members and (iii) 9 household income brackets. This results in a total of 1,530 strata for which the selected observations are representative of the Spanish universe at the 99% level.[55] The stratified random sampling of observations is performed at the base year 2016 and results in 772,178 households and 2.15 million individuals being selected to conform the panel. This accounts for 4.57% of the total number of households and 4.85% of all individuals with fiscal residence in Spain.[56]. All income, wealth, labor and socio-demographic records from 1999 to 2022 available to individuals and households selected by the sampling are provided in the micro-data according to the following information structure.

- **Socio-demographics** are available from 1999 to 2022. It encompasses features which are constant over time like date and province/country of birth, sex, household type and household income in the sampling year and population weights. It further includes time-varying characteristics: city, district and province of residence, nationality, civil status, education level, number/type of ascendants/descendants in charge, household ID, and spouse/kinship connection with other individuals belonging to this panel.
- **Personal income tax returns**, whether individual or joint-filing (together with spouse), are provided from 1999 to 2022. Starting in 2016, the level of detail provided for each PIT return increases by including: (i) a breakdown of all the revenues and expenses from each real estate property; (ii) the revenue, expenses and other register characteristics such as the activity sector for each of the self-employed business run by the individuals, (iii) details of each of the realized capital gains (or losses) at the asset level, and (iv) the special-PIT returns for those residents who opt for the (less progressive) special regime for posted workers.
- **Third-reported individual income** data are available from 2008 to 2022. It

[54]The original Spanish names of these institutions are *Agencia Estatal de Administración Tributaria* (AEAT), *Instituto Nacional de Estadística* (INE), and *Seguridad Social* (DGOSS), respectively.

[55]Regions available in the panel are 15 autonomous communities together with Ceuta and Melilla. The Basque Country and Navarre regions do not disclose data, so they are not included in the panel.

[56]For a deeper explanation of the stratified random sampling procedure and the contents of the micro-data, please refer to the original methodological document in *Instituto de Estudios Fiscales* (2024).

encompasses all the information held by the State Agency of Fiscal Administration as a result of various informational forms that must be recorded by law when executing different types of payments or financial transactions between individuals or legal entities. This information module is accessible to both PIT-filers and non-filers alike. It delineates the precise sources of income, enabling to access to very detailed data on remuneration for corporation managers or administrators, exemptions for severance payments or one-time-payment unemployment benefits to constitute a corporation, or for the transfer of shares as part of labor salary or compensation. It also covers income derived from work abroad, various contributory or non-contributory public benefits received, as well as public or private pensions, diverse tax allowances, and a detailed breakdown of all financial capital realized yields. Additionally, through these records, we can ascertain the type of company or institution that disburses income to individuals, along with its sector of activity. At an individual level, this information allows for the distinction of each individual's share within the PIT return, particularly in the event of joint-filing.

- **Wealth tax returns** are available from 2016 onwards, providing a detailed account of WT filers' whole wealth and type of owned assets (and total debts). Particularly, it furnishes information on assets that individuals hold in the form of self-employment businesses, shares in privately held companies or companies listed in stock markets effectively controlled by the individuals. Additionally, we supplement these WT declarations from 2016 to 2022 with those from 2012 to 2015 from individuals selected our main micro-data panel who are also included in an alternative micro-data source ("*Wealth Tax Panel Sample, 2012-2016*") published by the Spanish national tax agency.[57]
- **Third-reported personal wealth** data, available from 2016 onwards, offers a breakdown of personal wealth and liabilities for all households and individuals, regardless of their WT filing status. These data originate from banking and cadastral records, along with other mandatory informational forms submitted to the State Agency of Fiscal Administration by various entities. It comprises real estate holdings, bank accounts and deposits, collective investment institutions, pension funds, and shares traded in stock markets. Additionally, it provides cadastral details for each real estate property and the ownership regime of the primary residence. It does not encompass registries for wealth in the form of businesses or privately held companies.
- **Employment history records** spanning from 1999 to 2022. They offer a comprehensive dataset derived from Social Security Treasury databases, mirroring the structure of the Employment History Report Sample ("*Muestra Continua de Vidas Laborales, MCVL*")

[57] These supplementary data are not available for all WT filers from 2012 to 2016 who are included in our main panel micro-data. Approximately, we manage to match in the alternative WT micro-data source to about one-third of the WT filers selected by the sampling of our main panel data in 2016. Even though WT records are not available in this alternative micro-data for all WT filers in those years, it is worth incorporating them to our main used panel to help us in identifying individuals with effective control over a corporation in more years than just 2016 to 2022. It will be detailed in the following section.

regularly published by said institution. These micro-data provide very detailed insights into each individual's affiliations with Social Security, encompassing regular employment, self-employment activities, periods of unemployment, and other special circumstances. Crucially, it furnishes essential information such as labor contract type, whether it pertains to corporate administration or managerial roles, self-employment specifics including familial involvement or the run of the business through privately held entities. It also provides info about the legal structure of incorporated entities (listed, unlisted, silent-partner, joint-ownership, etc.) paying each individual. Additionally, it includes details regarding the specific sector of activity or the corporation, its location, its age, and its number of employees.

B.2. Identifying taxpayers with effective corporate control

An ideal strategy to identify all individuals with effective corporate control within our administrative micro-data panel might involve linking these records with corporate-level CIT micro-data. Unfortunately, this task is unattainable due to the absence of corporate-level data allowing us to connect partners in our micro-data to firms. Nevertheless, we propose a search algorithm fuelled by the micro-data outlined in Subsection B.1 that succeeds to pinpoint taxpayers exercising effective control over a corporation in the terms presented in Subsection A.2 without the necessity to link our main micro-data with other corporate-level data-set. Furthermore, taking advantage of the loads of information within our primary panel and its granularity level, we can also identify corporation characteristics as the legal form, the corporation's age, its economic sector of activity, and its size by number of employees.

Raw micro-data that we use comprise self-reported tax returns and third-party reported information. These information sources might present varying valuation methods for the same item. Further, self-reported PIT returns might be referring to two taxpayers in case of joint filing level instead of a single taxpayer. Additionally, wealth in the form of closely-held or controlled entities is fully disclosed for WT filers, whereas WT non-filers do not show such information and only present personal wealth. Further, raw data availability may differ for different years. That is why we must initially conform a whole homogeneous income and wealth micro-database for the entire analysis period, spanning from 1999 to 2022.

Regarding income, we are firstly able to depict which part of the joint PIT return income corresponds to each taxpayer by observing third-party reported records when available or by assuming a splitting fraction similar to the one present in years when we can certainly distinguish it. In terms of income data time availability, we achieve full coverage of the population from 2008 to 2022 at the individual level, while coverage for the period from 1999 to 2007 is limited to PIT filers. Yet this limitation is not very relevant for our panel-data exercise as corporate managers or administrators and taxpayers with significant dividend yielding are obliged to file PIT returns by the legal requirement regardless of their income

level. In this way, there is no probability of corporate-controlling taxpayers to be out of the scope of our income data.

When it comes to wealth, from 2016 onwards we have full coverage of all types of wealth for WT filers, while we have only personal wealth coverage for WT non-filers. To enhance the effectiveness of our corporate-control identification algorithm, we undertake two additional actions. Firstly, we integrate WT records from 2012 to 2016 for individuals in our panel who also appear in an alternative "*Wealth Tax Panel Sample, 2012-2016*" published by the Spanish national tax agency. Secondly, by accessing PIT micro-data from 2016 onwards detailing each individual's capital gains at the asset level, we can ascertain asset acquisition dates and values and impute them to the individuals of our sample in case of no other wealth data on the asset available, thereby enriching our wealth micro-dataset with comprehensive business and corporate ownership information. The asymmetry in data coverage for certain assets or years that we introduce with the mentioned extra wealth data poses no hindrance, as asymmetrically covered data are solely used to enhance the predictive capacity of our search algorithm and will not be considered for our latter empirical analysis.

This approach enables us to create the broadest possible homogenized income and wealth database from the raw micro-data that we have access to. Subsequent lines elucidate how the corporate-control identification routine operates fuelled by our homogenized panel micro-data.

First, we undertake a direct strategy as we can depict taxpayers with effective control over a corporation if any of the following conditions are met.

- Registered at the Social Security Treasury as a corporate self-employee. This is a special Social Security affiliation regime placed in rule in 2014 for individuals who operate their self-employed business activity through a corporation controlled by them in one of the first three terms of the list outlined in Subsection A.2.
- Registered at the Social Security Treasury as a family member (up to 2nd-degree) of a partner of a corporation over which they as a family unit exert effective control.
- Registered at the Social Security Treasury as a cooperative corporation partner.
- Wealth tax exempt shares in corporations. It would imply that the fourth requirement in the list presented in Subsection A.2 is met.
- Shares in asset-holding, professional or artistic/sports corporation subject to fiscal transparency PIT-imputation regime in rule up to 2003. The fifth requirement in the list presented in Subsection A.2 is met.

However, due to micro-data availability not every direct strategy can be tested equally in every year of the analysis, nor in every individual of the sample. For instance, not all individuals are WT filers and have their associated micro-data coverage, nor are they accurately registered under the special Social Security regime for corporate controllers, which might cause imbalances in the search routine. In case the individual has not been

identified as a corporate controller through direct strategies, he/she may still be assigned control over certain corporation through an **indirect strategy** based on typical behaviors exhibited by these corporate-controlling individuals regarding their set salaries or payrolls, their Social Security contributions, the PIT benefits they avail, their labor contracts, the types of shares they possess, or the legal form and size of the companies they own, etc. In this sense, individuals must score positively on at least 3 of the following dummy variables in the same year in order to be appointed as taxpayers with effective control over a corporation through this indirect identification strategy.

- Administrator or member of management board of a corporation. Depicted from the type of contract recorded in the Social Security Treasury registries or in third-party reported income data. If not, we can compute the PIT withholding rate applied to the labor compensation received by the individual and check whether said rate coincides with the typical one assigned for administrators and managers. It is a fix rate that do not vary with wage level (while for regular salaries it does vary). We additionally test whether the PIT withholding rate shown by the individual replicates the change path induced by several reforms at some years in the statutory PIT withholding rate that must be applied to administrator/manager compensations.
- Corporate self-employment Social Security contributions in PIT data. For corporations, salaries are also deductible expenses lowering the CIT taxable base. In is recurrent that corporations pay their partners a regular payroll or invoiced amounts and additionally cover the Social Security contributions that these individuals must pay to the Social Security Treasury when registered as standard or corporate self-employees. This constitutes an in-kind remuneration for those partners, but the already paid contributions to the Social Security Treasury constitute deductible expenses lowering their total gross remuneration subject to PIT. Therefore, we can identify individuals who declare Social Security deductible expenses or receive an in-kind remuneration equal to the minimum or maximum Social Security self-employment contribution (which changes over time). We also identify those for whom the Social Security contributions lowering gross labor remuneration in the PIT return are equal to (or lower than) the in-kind remuneration that they receive, provided that these contributions exceed the minimum statutory Social Security self-employment contribution, which in any case is higher than the maximum contribution paid by regular employees registered under the general Social Security regime. Thus, if we observe this behavior in the data, it is a sign that the individual has effective control over a corporation.[58] In some cases, showing zero Social Security contributions may also indicate ownership of a corporation, as in certain asset-holding corporations,

[58]We ensure not to include PIT taxpayers who do not have control over the corporation but receive in-kind compensations equal to their Social Security deductible expenses, either due to being enrolled in special Social Security agreements or receiving payments from a professional mutual insurance company during a period of sick leave or temporary incapacity.

there is no obligation to contribute to Social Security as long as the corporation is inactive (do not run business activity, as explained in Subsection A.1). Likewise, it is possible to receive remuneration as an administrator while being retired and not having an obligation to contribute to Social Security, provided that the individual do not accomplish management functions within the company (a different person is appointed as manager). These cases of zero Social Security contributions could also indicate effective control over a corporation.

- Manipulation or manual adjustment of remunerations. It is common for individuals with effective control over a corporation to pay themselves in round monetary amounts, typically ending in several zeros, or in amounts that repeat significantly over the years. And they do so across multiple remuneration channels (detailed in Subsection A.3): salary payroll, invoices reported as self-employment business income in individuals' PIT returns, PIT-exempt per diems or severance payments, in-kind compensations by issuance of PIT-exempt shares, dividends, corporation's capital reductions, interest on loans provided by the individuals to their corporation, etc. A potential manipulation of monetary amounts along these different incomes may indicate that individuals are compensating themselves from a corporation which they themselves control.
- Fulfilling one of the aforementioned requirements along with (i) having been previously identified as an individual with effective control over a corporation in any other year, (ii) owning shares in corporations that have benefited from PIT tax available for newly established corporations, or (iii) having benefited from PIT exemption for receiving unemployment benefits in a one-time payment for using them to establish a corporation. We also consider the case of meeting two of the requirements from the previous bullet points and having a spouse, household member, or up to fourth-degree kinship relation with an individual who has been already pinpointed to hold effective corporate control.
- Being paid from certain types of corporations such as cooperatives, collective entities, silent-partner arrangements, civil corporations, joint-ownership entities. Also, receiving compensation from a corporation with the same legal form as the corporation in which an individual holds shares. For instance, owning shares in an unlisted corporation and receiving remuneration from an unlisted entity, or being compensated from a corporation classified as of national or European economic interest or as a temporary business association and holding shares in the same type of corporations. Additionally, we consider receiving compensation from corporations with no employees, with one employee, or with fewer than ten employees as indicative factors. We also take into account here whether the individual possess shares in entities for the management of image rights or in collective investment institutions residing in tax havens.

Finally, after implementing both direct and indirect identification strategies, we initiate a **recursive search** algorithm that assigns a positive value to the corporation control dummy for observations one year prior and one year after a previously identified instance of corporate control, provided that the records of Social Security contributions and remunerations through payroll, invoices, exempt income, dividends, and other financial capital income show a similar magnitude to that of the observation already identified as having corporate control. This recursive algorithm runs indefinitely through all previously mentioned indirect strategies until the number of individuals with effective control over a corporation stabilizes and matches the actual aggregate evolution observed, taking into account for that purpose the loss of observations in our micro-data out of the panel base year.

Our identification of individuals exerting effective control over a corporation fuelled by income, wealth, and Social Security administrative micro-data yields very accurate results, as shown in Figure B1. Our panel micro-data is not refreshed each year out of the base year of the panel, resulting in a loss of observations forward and backward from the base year of the panel. Once we take into account such loss of observations, we find that our algorithm matches perfectly the aggregate number of corporations, as it is calibrated properly to act so. This ensures us that the number individuals in our panel micro-data identified as corporate controllers perfectly reflects the reality of the Spanish economy.

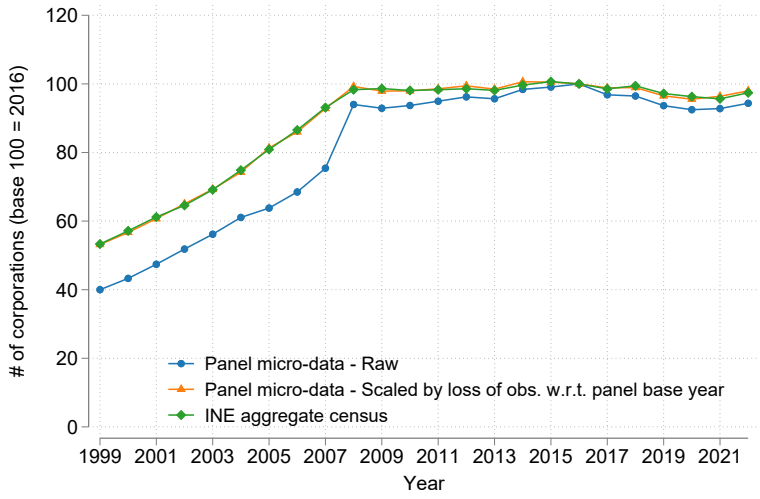
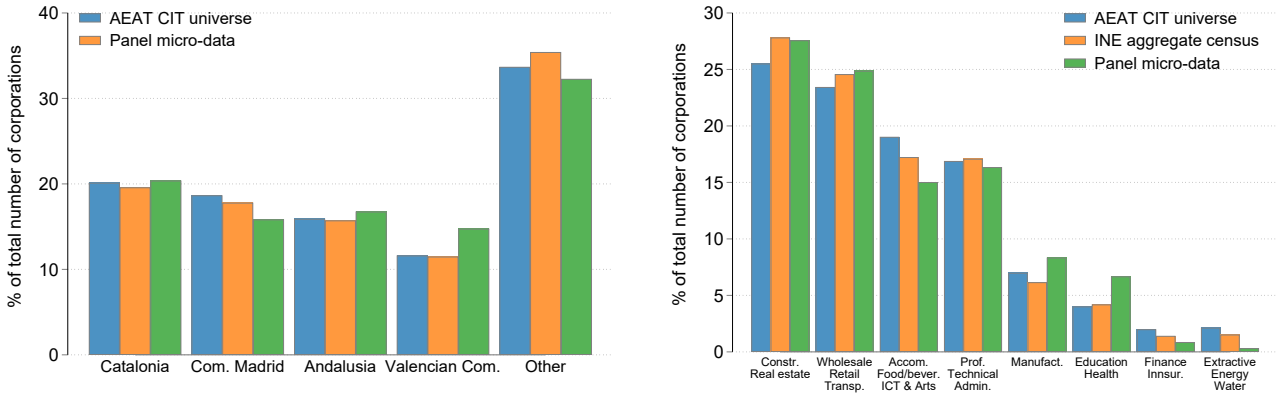


Figure B1: ***Total Number of Effectively Controlled Corporations***

Note: The blue line in this figure stands for the total number of effectively controlled corporations estimated by using our panel micro-data and the recursive search algorithm presented in Subsection B.2 of the Appendix. The yellow line adjusts observations to changes in the observational power panel over time (no refresh). The green line in this figure denotes the actual number of effectively controlled corporations, which is computed using census-data statistics of incorporated businesses without employees or with fewer than 5 employees published by the *Instituto Nacional de Estadística, INE* (2024b) using the Central Directory of Companies.

For the base sampling year 2016, we observe how the total number of corporations identified from our micro-data fully aligns with the actual total number of corporations. Nonetheless, the magnitude of corporations estimated from micro-data exhibits a growing

discrepancy with actual corporate-universe data as we move away from the sampling base year. This is logical, as the micro-data we employ are entirely representative of the sampling strata in the base year 2016. Since we only have records over time of individuals selected in the base year 2016, as we depart from the sampling year, the likelihood of individuals falling out of the panel increases, hence the discrepancy between total corporation estimates derived from our micro-data and actual number of corporations may also increase. However, this does not seem to pose any critical issue on our empirical analysis, as the time evolution of this estimated figure from our micro-data resembles the actual trend. Thus, incorporation events can be cleanly analyzed using the micro-data.



(a) By region of taxpayer

(b) By sector of activity

Note: The blue bar is computed using statistics of the census of CIT filers published by the *Agencia Estatal de Administración Tributaria, AEAT* (2024a). The orange bar is computed using census-data statistics published by the *Instituto Nacional de Estadística, INE* (2024b) using the Central Directory of Companies. Both blue and orange bars are calculated taking into account incorporated businesses without employees or with fewer than 5 employees. Differences between those two aggregate magnitudes come from not all incorporated businesses filing the same standard CIT form to the National Tax Agency. The green bar is computed through the algorithm for identifying individuals with effective control over a corporation using our primary micro-data described in Subsection B.1 and the corresponding population elevation factors. In Subfigure 2(b), we adopt the most disaggregated grouping of economic sectors allowing us to compare the three sources of information. Agriculture is excluded due to insufficient aggregated census data.

Figure B2: ***Distribution of effectively controlled corporations, 2016***

In Subfigure 2(a), we present the outcomes of the algorithm that we propose for identifying individuals with effective control over a corporation, showcasing comparable aggregate regional estimated values as those directly observed from the company census or from the universe of CIT returns. In Subfigure 2(b), we also show how we achieve a commendable level of accuracy in estimating the sectoral distribution of corporations under effective control by taxpayers using micro-data. Since the sampling design of the 2016 micro-data is representative of various strata unrelated to sectors of activity, our algorithm for finding corporate controllers in the micro-data may underestimate corporations in construction and real estate sectors while overestimate those in other sectors. We attribute this discrepancy to the ownership structure of corporations in real estate and construction, where individuals who often hold control are typically outside the top and bottom income brackets as they use said entities to shift personal income and personal wealth due to

tax-minimizing strategies. And top and bottom brackets are those over-triggered by the sampling design of the micro-data that we use here. Despite these nuances, our empirical findings offer an estimated sectoral distribution of corporations derived from micro-data that remains highly reflective of reality.