

Dual Personal Income Taxation and Corporations Income Shifting and Implications for Progressivity

Darío Serrano-Puente & Dirk Foremny



Universitat de Barcelona School of Economics



Institut d'Economia de Barcelona (IEB)



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- **Context** → **Dual PIT (Personal Income Tax)** + **Lowered CIT (Corporate Income Tax) rates** → **Eroded progressivity**.
- **Background** → **Incentives** for entrepreneurs to become incorporated → **Combined CIT & PIT** (on corporation's profits and on dividends and convenient salaries) lower than **PIT** (on self-employment income).
- **Empirical question** → **Behavioural responses** of taxpayers to these incentives? Implications for **efficiency** and **progressivity** of the income tax scheme? Aggregate effects on **tax revenue** and **inequality** (concentration at the very-top)?
- **Data** → Very detailed **administrative micro-data from Spain** on income, wealth and many other socioeconomic characteristics.
- **Method** → *difference-in-difference* exploiting many quasi-experimental sources of **over-time** and **cross-regional** variation.
- **Preliminary results** → 5% of total taxpayers react to these incentives → Responses to taxation (measured as ETI) not completely "real", but include other dominant behavioral responses as **income shifting**.

Context

- **Income inequality** can harm societies^a → **Progressive redistribution**.
- **Economic efficiency** might suffer from **increasing tax progressivity**.
- Effectiveness of taxation in reducing inequalities → (i) **degree of progressivity** and (ii) **taxpayers' behavior**.
- **Dual PIT (Personal Income Tax)** + **lowered CIT (Corporate Income Tax) rates** → **eroded progressivity**.
- Incentives for **entrepreneurs** to become incorporated → **income shifting** (i) **between PIT bases** and (ii) **between PIT and CIT**.

^aSee Alesina and Perotti (1996), Stiglitz (2012), and Pástor and Veronesi (2021).

Background

- **Entrepreneurs** facing **PIT rate increase** might behave differently.
 1. **Output reduction** → **“real” response** → downwards in income distribution → moving to a corresponding lower average tax rate but same net resources remaining after tax bill → drop in economic efficiency.
 2. Transferring personal income into a corporation → **income shifting** → **same output** (real income constant) → sheltering income from taxation.

Income Shifting Mechanism - Entrepreneurs

- PIT as self-employed → transfer business income into corporation → CIT on corporate profits → transfer corporate after-tax income into personal income as dividends (financial capital income) and convenient salaries (labor income).
- Given dual PIT → dividends enter PIT in savings/special tax base (lower and less progressive PIT schedule than labor/general tax base) → **combined CIT and PIT burden can be lower than declaring all income as self-employment labor income.**

Contribution

- Literature on **income shifting** ➔ (1) choice of organizational form^a, (2) choice to remunerate business owners^b, (3) moving income between spouses within marriage^c, (4) timing to realize dividend payments or capital gains^d.
- Literature on **elasticity of taxable income (ETI)**, which is not only capturing “real” economic behavior^e ➔ **Update estimates of Almunia and Lopez-Rodriguez (2019) and depict ETI part driven by income shifting in Spain.**
- Crucial results for debate on optimal marginal tax rates ➔ **estimated effects of income shifting on relocation, welfare, economic activity, redistribution, tax revenue, inequality and loss of tax progressivity.**

^a See Gordon and MacKie-Mason (1994), Gordon and Slemrod (1998), and Thoresen and Alstadsæter (2010). In Spain, Domínguez Barrero and Laborda (1999), Domínguez Barrero et al. (2003), Domínguez Barrero and Laborda (1999), Laborda et al. (2014), and López-Laborda et al. (2018).

^b See Alstadsæter and Jacob (2016), and Harju and Matikka (2016).

^c See Stephens and Ward-Batts (2004).

^d See Alstadsæter and Jacob (2016), Chetty and Saez (2005), Kari et al. (2008), le Maire and Schjerving (2013), Auerbach et al. (1998), Jacob (2016), and Jacob (2018).

^e See Pirttilä and Selin (2011), Slemrod (2001), Gruber and Saez (2002), Chetty (2009), Saez et al. (2012), Harju and Matikka (2016), and Bergolo et al. (2022).

Spain as a case study

- Spanish public finance system **follows outlined global trends in PIT and CIT** → Also many **changes over time in PIT and CIT** schedules.
- **Tax decentralization** → Many different regional PIT and wealth tax schemes.
- Many **legal/statutory changes** different from changes in tax schemes.
- New **very rich administrative tax microdataset** on income and wealth, with very granular data on self-employment activities.
- Findings can be **extrapolated to other advanced economies**.

Panel de hogares 2016-2020, Instituto de Estudios Fiscales (IEF) (2022)

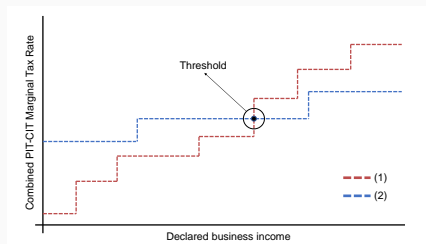
- 15 of 17 Spanish autonomous communities (+ Ceuta & Melilla).^a
- From **1998** to **2020**.
- **5% longitudinal sample** of the whole census provided by AEAT & INE with administrative information at the **individual level** (not only PIT filers, but whole population) on^b:
 - PIT returns + Administrative forms for PIT withholdings for each contractual or payment relationship + Special PIT returns for non-resident taxpayers
 - Wealth tax returns and every wealth registry at the tax agency
 - Very granular data on different types of owned wealth and business activities
 - Spouse matching and household composition (only as of 2016)
 - Other socio-economic characteristics

^a Only data for regions in the Common Fiscal Regime. Regional governments of Basque Country and Navarre do not disclose data.

^b A detailed description of the already published and open-access dataset is provided in Pérez López et al. (2022).

Difference-in-difference → treatment being the **individual specific threshold** at which entrepreneur is **indifferent** between:

1. Declaring all business income as self-employed in labor PIT base.
2. Incorporating + CIT on profits + dividends (special PIT schedule) and convenient salaries (labor PIT base) from corporation to owner.¹



¹Changes in wealth tax and inheritance tax exemptions for business-related assets and shares of family corporations are considered when computing the threshold. Changes in legal requirements allowing (or not allowing) certain business activities to become incorporated or invigilating connected transactions (payments from the corporation to their owners/managers) are also taken into account. Changes in the social security regime of corporations' owners/managers are also observed. It is also considered that creating a company has certain expenses (which might vary between regions and municipalities) and requires at the same time greater documentary and formal obligations than self-employment. It also takes into account whether or not the company provides greater legal coverage, mainly for the person's private assets. The threshold provided can also considerably vary depending on the personal characteristics of each individual or company.

3 Identification

Sources of variation

1. **Different PIT schemes across regions** (also changing over time) → Changing both taxable income brackets and marginal tax rates in both bases of the PIT scheme (labor/general and savings/special).
2. **Different wealth tax and inheritance tax exemptions across regions** (also changing over time) for business-related assets and shares of corporations in which taxpayer has effective control and/or which are taxpayer's principal income source.
3. **CIT scheme changing over time** → Changing both tax rate and deductions.
4. **Legal reforms over time** in PIT law on **connected transactions** (when individual pays herself from her own corporation) → Not all business activities can be constituted as a corporation where owner is paid in dividends, but in certain activities owner is obliged to declare **75% of corporation's profits as self-employment** income.
5. **Other legal changes** affecting the decision of incorporating → Changes in social security regime of corporations' owners/managers and varying (across regions and municipalities) expenses of creating a corporation (greater documentary and formal obligations than self-employment).

Controls

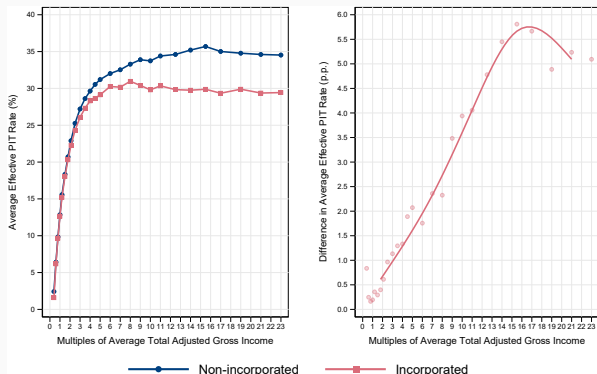
- Business activity(ies) (NACE code up to 4-digit).
- Detail of the self-employment business activity(ies).
- Personal wealth structure.
- Household composition: Spouse and other household members.
- Joint/single PIT filing.
- Country of birth and nationality in the tax year.
- Non-PIT-filers.
- Migration out of the panel or across regions.

What can we do?

- Estimate **intensive and extensive margin** in the income shifting behaviour.
- Explore **asymmetries in the behaviour** as there were tax changes with different signs.
- Quantify the **role of each tax change** (PIT, CIT, wealth tax or inheritance tax).
- Explore differences in behavior between **changes in tax schedules/schemes** vs. **changes in legal requirements**.
- Estimate part of **taxpayers' response to tax changes (ETI)** attributed to (1) **"real" economic-activity responses** and to (2) **income shifting**.
- Estimate **tax revenue loss** ➔ Counterfactual analysis.
- Quantify **tax progressivity loss** and effects on **income (and wealth) inequality (effect concentrated at the very top)**.

➔ **Incorporated** taxpayers face a considerable **lower PIT average effective tax rate** than those who are not incorporated.



Figure: Average effective PIT rate by multiples of average total adjusted gross PIT income













➔ As many as 5% of total taxpayers seem to react to these tax incentives.



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 Universitat de Barcelona School of Economics
 Institut d'Economia de Barcelona (IEB)

- | | |
|---|--|
|  Personal website |  Google Scholar |
|  dario.serrano@ub.edu |  ORCID |
|  @darioserranopue |  IDEAS/RePEc |
|  serranopuente |  Publons |
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- ALESINA, A. AND R. PEROTTI (1996): "Income distribution, political instability, and investment," *European Economic Review*, 40 (6), 1203–1228, [https://doi.org/10.1016/0014-2921\(95\)00030-5](https://doi.org/10.1016/0014-2921(95)00030-5).
- ALMUNIA, M. AND D. LOPEZ-RODRIGUEZ (2019): "The elasticity of taxable income in Spain: 1999–2014," *SERIEs*, 10 (3-4), 281–320, <https://link.springer.com/article/10.1007/s13209-019-00208-x>.
- ALSTADSÆTER, A. AND M. JACOB (2016): "Dividend Taxes and Income Shifting," *Scandinavian Journal of Economics*, 118 (4), 693–717, <https://onlinelibrary.wiley.com/doi/full/10.1111/sjoe.12148>.
- AUERBACH, A., L. E. BURMAN, AND J. M. SIEGEL (1998): "Capital Gains Taxation and Tax Avoidance: New Evidence from Panel Data," *National Bureau of Economic Research Working Papers*, n. 6399, <https://EconPapers.repec.org/RePEc:nbr:wp:6399>.
- BERGOLO, M., G. BURDIN, M. DE ROSA, M. GIACCOBASSO, M. LEITES, AND H. RUEDA (2022): "How do Top Earners Respond to Taxation? Evidence from a Tax Reform in Uruguay," *SSRN Papers*, <https://dx.doi.org/10.2139/ssrn.4007698>.
- CHETTY, R. (2009): "Sufficient Statistics for Welfare Analysis: A Bridge Between Structural and Reduced-Form Methods," *Annual Review of Economics*, 1, 451–488, <https://doi.org/10.1146/annurev.economics.050708.142910>.
- CHETTY, R. AND E. SAEZ (2005): "Dividend Taxes and Corporate Behavior: Evidence from the 2003 Dividend Tax Cut," *The Quarterly Journal of Economics*, 120 (3), 791–833, <https://academic.oup.com/qje/article/120/3/791/1841479>.
- DOMÍNGUEZ BARRERO, F., J. L. LABORDA, AND F. R. SAUCO (2003): "Incidencia del IRPF y el Impuesto sobre Sociedades en la elección de la forma de empresa: dos aproximaciones empíricas," *Universidad de Zaragoza*, <https://dialnet.unirioja.es/descarga/articulo/3134066.pdf>.
- DOMÍNGUEZ BARRERO, F. AND J. L. A. LABORDA (1999): "Efectos de la reforma del IRPF sobre las decisiones de financiación e inversión societaria y sobre la elección de la forma de la empresa," *Universidad de Zaragoza*.
- GORDON, R. AND J. SLEMROD (1998): "Are 'Real' Responses to Taxes Simply Income Shifting Between Corporate and Personal Tax Bases?" *National Bureau of Economic Research Working Paper*, n. 6576, <https://www.nber.org/papers/w6576>.
- GORDON, R. H. AND J. K. MACKIE-MASON (1994): "Tax distortions to the choice of organizational form," *Journal of Public Economics*, 55 (2), 279–306, [https://doi.org/10.1016/0047-2727\(94\)90055-8](https://doi.org/10.1016/0047-2727(94)90055-8).
- GRUBER, J. AND E. SAEZ (2002): "The Elasticity of Taxable Income: Evidence and Implications," *Journal of Public Economics*, 84 (1), 1–32, [https://doi.org/10.1016/S0047-2727\(01\)00085-8](https://doi.org/10.1016/S0047-2727(01)00085-8).
- HARJU, J. AND T. MATIKKA (2016): "Business owners and income-shifting: evidence from Finland," *Small Business Economics*, 46, 115–136.
- INSTITUTO DE ESTUDIOS FISCALES (IEF) (2022): "Panel de hogares 2016-2020," https://www.ief.es/Investigacion/Est_panelHogares.vbhtml.
- JACOB, M. (2016): "Cross-base tax elasticity of capital gains," *Applied Economics*, 48 (28), 2611–2624, <https://doi.org/10.1080/00036846.2015.1125438>.

- (2018): "Tax Regimes and Capital Gains Realizations," *European Accounting Review*, 27 (1), 1–21, <https://doi.org/10.1080/09638180.2016.1203811>.
- KARI, S., H. KARIKALLIO, AND J. PIRTILÄ (2008): "Anticipating Tax Changes: Evidence from the Finnish Corporate Income Tax Reform of 2005*," *Fiscal Studies*, 29 (2), 167–196, <https://doi.org/10.1111/J.1475-5890.2008.00072.X>.
- LABORDA, J. L., J. VALLÉS-GIMÉNEZ, AND A. Z. MARCO (2014): "IRPF dual y transformación de rentas generales en rentas del ahorro," *Fedea - Estudios sobre la Economía Española*, 14, <https://ideas.repec.org/p/fda/fdaeee/eee2014-11.html>.
- LE MAIRE, D. AND B. SCHJERNING (2013): "Tax bunching, income shifting and self-employment," *Journal of Public Economics*, 107, 1–18, <https://doi.org/10.1016/J.JPUBECO.2013.08.002>.
- LÓPEZ-LABORDA, J., J. VALLÉS-GIMÉNEZ, AND A. ZÁRATE-MARCO (2018): "Income Shifting in the Spanish Dual Income Tax," *Fiscal Studies*, 39 (1), 95–120, <https://doi.org/10.1111/j.1475-5890.2017.12147>.
- PIRTILÄ, J. AND H. SELIN (2011): "Income Shifting within a Dual Income Tax System: Evidence from the Finnish Tax Reform of 1993," *Scandinavian Journal of Economics*, 113 (1), 120–144, <https://doi.org/10.1111/J.1467-9442.2010.01635.X>.
- PÁSTOR, L. AND P. VERONESI (2021): "Inequality Aversion, Populism, and the Backlash against Globalization," *Journal of Finance*, 76 (6), 2857–2906, <https://doi.org/10.1111/jofi.13081>.
- PÉREZ LÓPEZ, C., J. VILLANUEVA GARCÍA, I. MOLINERO MUÑOZ, AND C. VEGA MARTÍNEZ (2022): "Panel de hogares: ejercicios 2016 a 2020," *Documentos de Trabajo - Instituto de Estudios Fiscales (IEF)*, 2/2023, https://www.ief.es/docs/destacados/publicaciones/documentos_trabajo/2023_02.pdf.
- SAEZ, E., J. SLEMROD, AND S. H. GIERTZ (2012): "The Elasticity of Taxable Income with Respect to Marginal Tax Rates: A Critical Review," *Journal of Economic Literature*, 50 (1), 3–50, <https://doi.org/10.1257/jel.50.1.3>.
- SLEMROD, J. (2001): "A General Model of the Behavioral Response to Taxation," *International Tax and Public Finance*, 8, 119–128, <https://doi.org/10.1023/A:1011204301325>.
- STEPHENS, M. AND J. WARD-BATTS (2004): "The impact of separate taxation on the intra-household allocation of assets: evidence from the UK," *Journal of Public Economics*, 88 (9–10), 1989–2007, [https://doi.org/10.1016/S0047-2727\(03\)00067-7](https://doi.org/10.1016/S0047-2727(03)00067-7).
- STIGLITZ, J. E. (2012): "*The price of inequality*", published by W. W. Norton & Company, New York.
- THORESEN, T. O. AND A. ALSTADSÆTER (2010): "Shifts in Organizational Form under a Dual Income Tax System," *FinanzArchiv / Public Finance Analysis*, 66 (4), 384–418, <https://www.jstor.org/stable/20839200>.