



Pension-related Tax Expenditures in South Africa

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SA-TIED Seminar Series
May 3, 2021

Background. Population Aging

- Population aging is accelerating worldwide and has significant socioeconomic implications
- Not new for advanced economies, but has also been spreading in several low- and middle-income countries:
 - In historic first, the G20 has recently weighed aging as a global risk
 - East Asia and Pacific is aging faster – and on a larger scale – than any other region in history (*World Bank, 2016*)
 - **In SA: approximately 9% (5,3 million) of the population is > 60, and the share is increasing over time**

Background. Pension Systems

- Governments have been trying to shift the burden of providing retirement income out of the public sector by **boosting private saving for pensions**, e.g. shifting from “pay-as-you-go” (PAYG) to funded systems, cutting pension benefits and raising retirement ages
- Yet, there is still concern that people do not save enough for retirement (*Poterba, AER 2014*)
 - **Taxation** has been gaining momentum as a key policy instrument to influence behaviour
 - **Tax incentives or pension-related tax expenditures (PTEs)** to boost retirement savings

Background. Pension-Related Tax Expenditures (1/3)

- Preferential tax treatment of retirement savings: “*amount that an individual saves in taxes paid by contributing to a private pension plan [over her lifetime cycle] instead of putting the same amount into an alternative, benchmark saving vehicle*” (OECD, 2016)
 - This advantage can be as high as 37% in Australia, 46% in Hungary, 51% in Israel, and 281% for some pension plans in Mexico (OECD, 2016)
- Yet, PTEs are **costly** and often **ineffective** and **inefficient (highly regressive)** in reaching their stated goal

Background. Pension-Related Tax Expenditures (2/3)

- I. **Fiscal cost:** Tax benefits due the exclusion of pension contributions and earnings from retirement plans from PITs amounted to USD 190 billion (\approx 13% of total TEs) in 2018 (US Treasury, 2018)
 - PTEs in Australia amounted to > AUD 37 billion in 2018, i.e. 9% of total tax revenue (Australian Treasury, 2018)

- II. **Effectiveness:** PTEs are often **redundant**: Small fraction of investments are “new” saving, i.e. dead-weight loss due to “reshuffling” of existing savings is high (*Attanasio et al., IFS WP 2004*)
 - **Substitution effect** is likely to explain why PTEs are likely to change the composition of savings instead of increasing their overall level (*Carnot, European Commission WP 2013*)

Background. Pension-Related Tax Expenditures (3/3)

III. Efficiency – Distributive Impact: PTEs are often granted as deductions from taxable income

- Thus, their value is negligible (significant) for individuals with low (high) income, and hence facing low (high) marginal income tax rates (*Duflo et al., QJE 2006*)
 - *“...70% of the tax benefits for employer-based retirement savings and 65% of subsidies for individual retirement accounts accrue to the top 20% US filers, with the 4th quintile picking up much of the rest” (Harris et al., TPC WP 2014)*
 - In Australia, only AUD 1 in every AUD 200 of the cost of PTEs goes to the bottom 20% of income earners, whereas more than 50% is captured by the top 20% (*Australian Treasury 2014*)

The Case of South Africa

(1/3)

- By 2045, the share of South Africa's population that is over 60 is expected to double, from 8% to 16%
- The government has been trying to encourage private savings for retirement through several PTEs: tax deductible fund contributions, tax deferral on growth in the fund and preferential tax treatment when exiting the fund
 - This paper focuses on the **upfront tax deductions for retirement contributions**
 - PTEs in South Africa allow:
 1. employers to deduct a certain share of contributions to their employee's fund as a business expense, and
 2. employees to deduct a certain share of their own contributions to reduce their tax liability

The Case of South Africa

(2/3)

- **Fiscal Cost:** In 2016, total TEs in SA total were estimated at R 209,007 million (18.3% of tax revenue and 4.8% of GDP)
 - PTEs are the **largest TE provision**, amounting to R 72,991 million – 35% (68%) of total TEs (TEs granted through PITs), and **1.7% of GDP**
 - Also **ineffective and regressive**: “*The barriers to a more effective tax incentive regime are the complexity of the current regime (three different tax dispensations apply), as well as the fact that the regime is open to abuse through excessive contributions by employers and high-income earning individuals...the tax exemption has no nominal monetary cap in the case of higher-income employees, allowing them to make tax-exempt contributions way in excess of the amount required to maintain a reasonable standard of living in retirement*” (South African Treasury, 2012)

The Case of South Africa

(3/3)

- In March 2016, a comprehensive reform (**the Reform**) was implemented to simplify and harmonize the pension system hoping that this would, in turn, “**incentivize savings and increase the fairness of the whole system**”
- Among other modifications including, e.g. changes regarding whether funds must be taken as a lump sum or annuitized at retirement; **the Reform significantly affected PTEs**. How?
 1. *Simplification*: Harmonization of the limits (definition of the income base and thresholds) for tax-deductible contributions among the three funds
 2. *Fairness*: Introduction of a R 350,000 cap to the overall tax deductible of employees' contributions to any fund

Research Questions and Main Findings

- **Descriptive Analysis** of the effectiveness and distributive impact of PTEs in South Africa – No causal inference
 - Do PTEs have a positive impact on contributions to pension savings?
 - Besides this potential effect on contributions, are these tax benefits being disproportionately captured by the rich?
 - Particularly relevant in a context of high inequality such as the one in South Africa
- **Main findings:**
 - I. Positive effects of the Reform on the number of contributors to pension funds (extensive margin) and the average value of contributions (intensive margin)
 - II. No effect at mitigating the regressive effect of PTEs
 - More resources allocated to PTEs

Data

- **Individual Panel (IP):** created using administrative tax microdata as part of the SA-TIED programme (*Ebrahim and Axelson, 2018*)
 - The IP provides anonymized data from the combination of payroll or Employee Tax Certificate - IRP5/IT3(a) and PIT Returns (ITR12)
 - Does not take account of informal sector employees (estimated to account for roughly 20% the total, most of them earning wages < the tax free threshold)
 - Tax evasion and avoidance, which can be particularly relevant when it comes to high-income earners, may also be an issue (*Alstadsaeter et al. AER 2019*)
 - **No information on employer contributions to Pension Funds or Provident Funds before the 2016/17 tax year,** since it was not deemed a fringe benefit and not part of the individuals tax calculation

Results. Effectiveness (contributions)

- Overall, we observe a large behavioral response to the 2016 Reform **both on the extensive and intensive margins**:
 - Largest effects, where the Reform was more generous (PRFs and RAFs)
 - PrFs: From not deductible to 27.5%
 - RAFs: From 15% to 27.5%
 - PFs: Already at 27.5%
 - Contributions to PFs stayed on trend (intensive margin) and slightly decreased (extensive margin)
- Number of individuals contributing, in relation to the applicable limits for different funds (before Reform) and the single limit (after Reform)
 - Decisions on contributions to retirement funds before the Reform were more influenced by the design of the tax system

Results. Distributive Impact (Contributions)

- Already before the Reform, the number of contributors increased with income
 - The Reform accentuated this feature: the share of contributors in the top decile of the income distribution jumps from 70% to > 84%
- As expected, not only do more people contribute in higher deciles, but they also contribute larger amounts on average
 - Median contribution increases with income (although the median contribution decreases for the top decile, before and after the Reform)
 - There is hardly any difference before and after the Reform, indicating that most earners did not increase the proportion that they saved for retirement
 - Some action in the bottom and top deciles

Results. Distributive Impact (PTEs)

- The distribution of PTEs across income deciles is highly concentrated among the rich
 - Top 20% earners (those with taxable income > R 322,000) capture 83% of benefits, both before and after the Reform
 - Concentration of PTEs among top earners is constant across funds
 - PTEs implemented as a deduction from taxable income: those with income below the tax-free threshold cannot benefit (R 75,750 > the income of the bottom 40% earners)
 - Yet, 1.2 million individuals still contribute to a retirement fund even if they do not benefit from the deduction
 - More resources are allocated to PTEs after the Reform
 - Only fully comparable pre/post-Reform sample is the one for RAs

Conclusions and Policy Implications (1/2)

- PTEs are the largest TE in SA and amounted to R 77,4 billion in 2017, i.e. 1.7% of GDP and 36.8% of total TEs
- Are they effective at boosting pension savings? Lack of data on employers' contributions makes the comparison difficult, but preliminary evidence shows a large behavioural response
- Yet, the Reform was not effective at increasing the fairness of the system...if any, the overall distributive impact seems to have slightly worsened. Why?
 - Reduced target group – most of the effect is explained by the better-off:
 - No impact on informal workers (almost 1/5 of total employees)
 - No impact on filers in the bottom 5 deciles of the income distribution
 - The bulk of PTEs are captured by the very rich - > 80% (60%) of the benefits go to the top 20% (10%) earners
 - The R 350K has no effect – Roll-over and/or threshold too high?

Conclusions and Policy Implications (2/2)

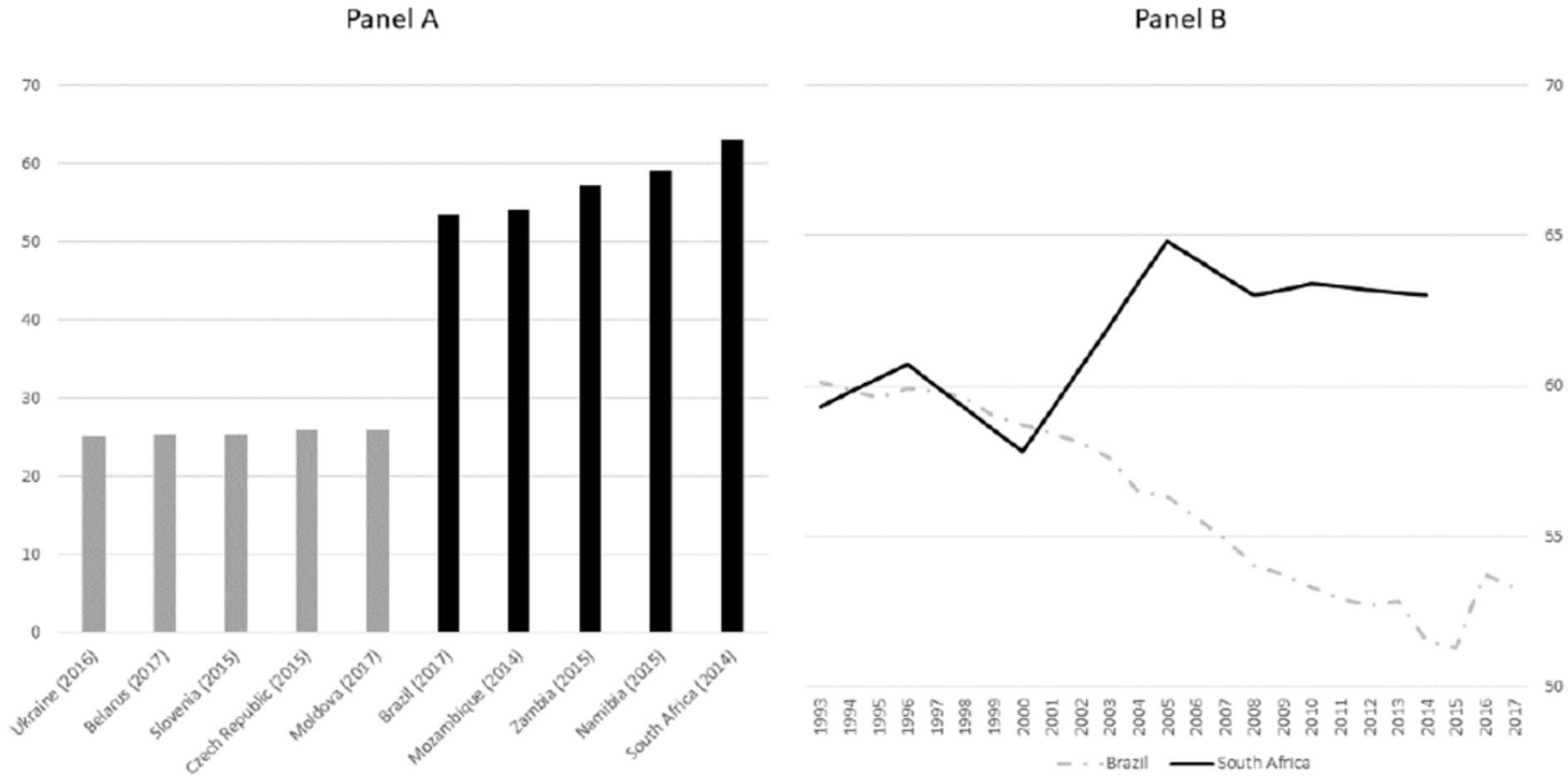
- Moving from deductions to tax credits may mitigate the distributional effect of PTEs and potentially increase their effectiveness
- Deductions are one of the most regressive TEs. Hence, moving to tax credits can mitigate this effect (Hümbelin and Farys, JID 2018)
 - The move from deductions to tax credits in the health systems is a case in point (*Nhamo and Mudimo, 2020*)
- Yet, to reach poor households, tax credits should be **fully-refundable**



Thank you for your attention

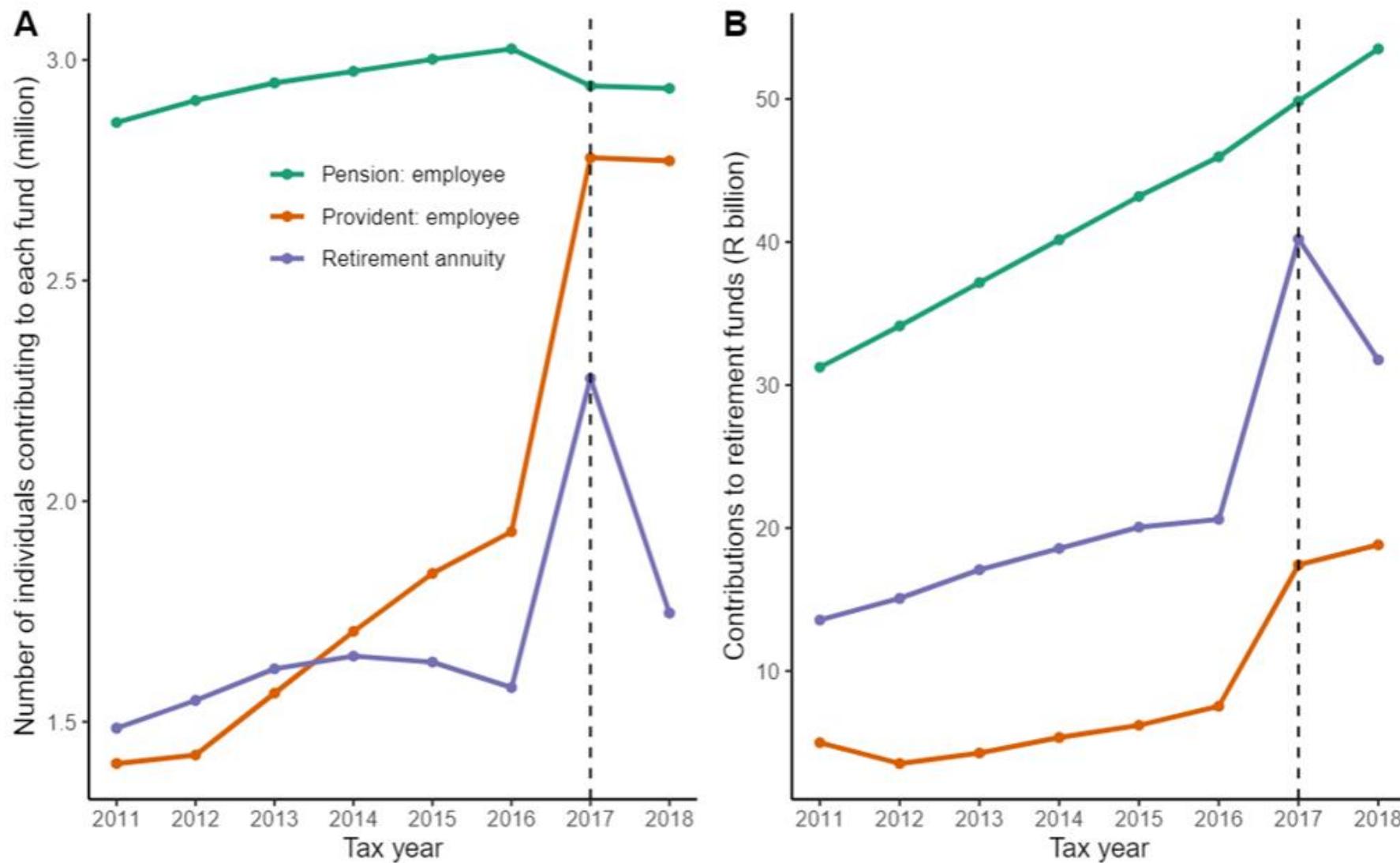
Contact details:
E-mail: ar@cepweb.org
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Figure 6: GINI Index, Across Countries and Over Time



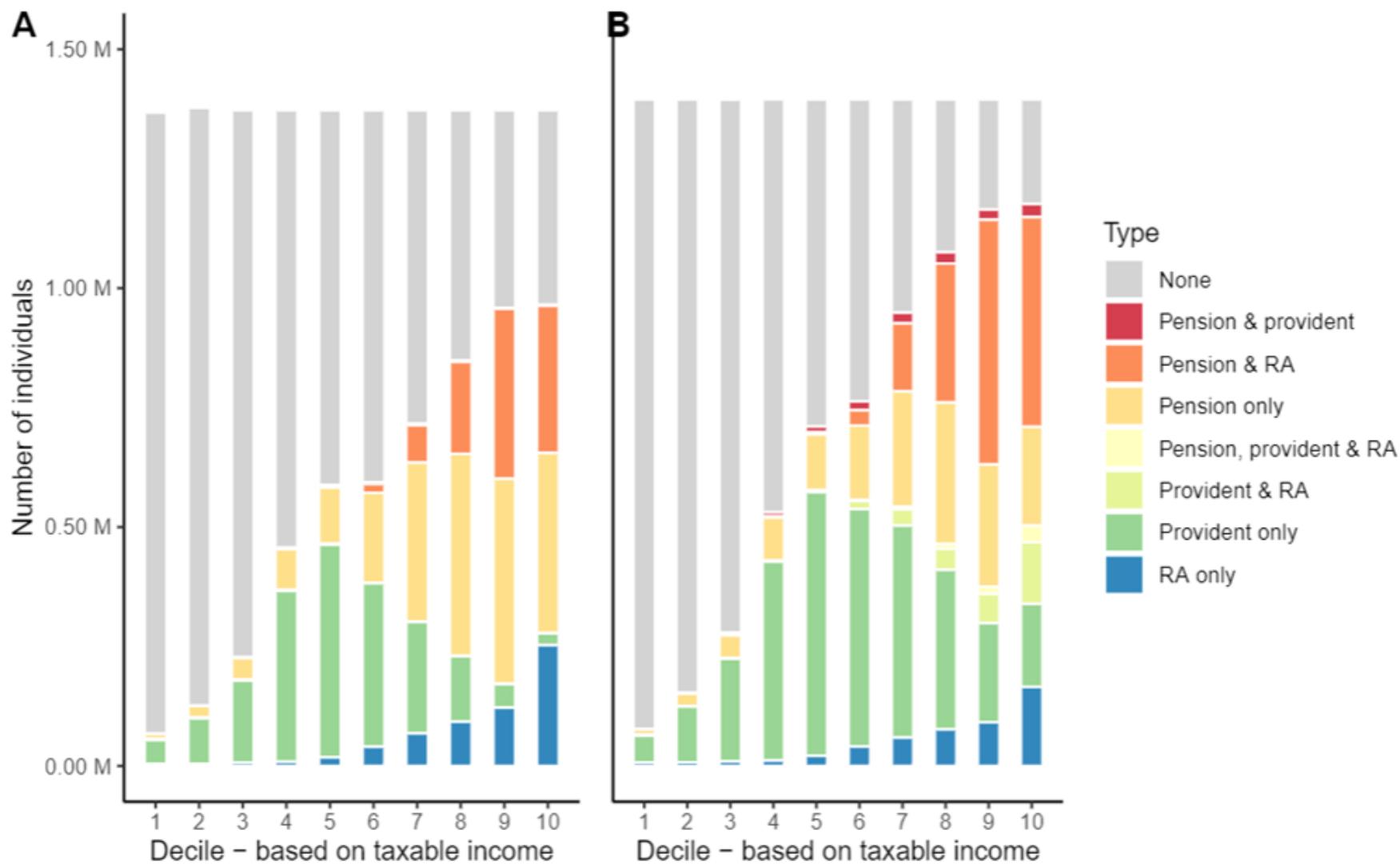
Source: authors' elaboration using World Bank data accessible here: <https://data.worldbank.org/indicator/si.pov.gini>.

Figure 1: Number of individuals contributing and amount contributed to retirement funds



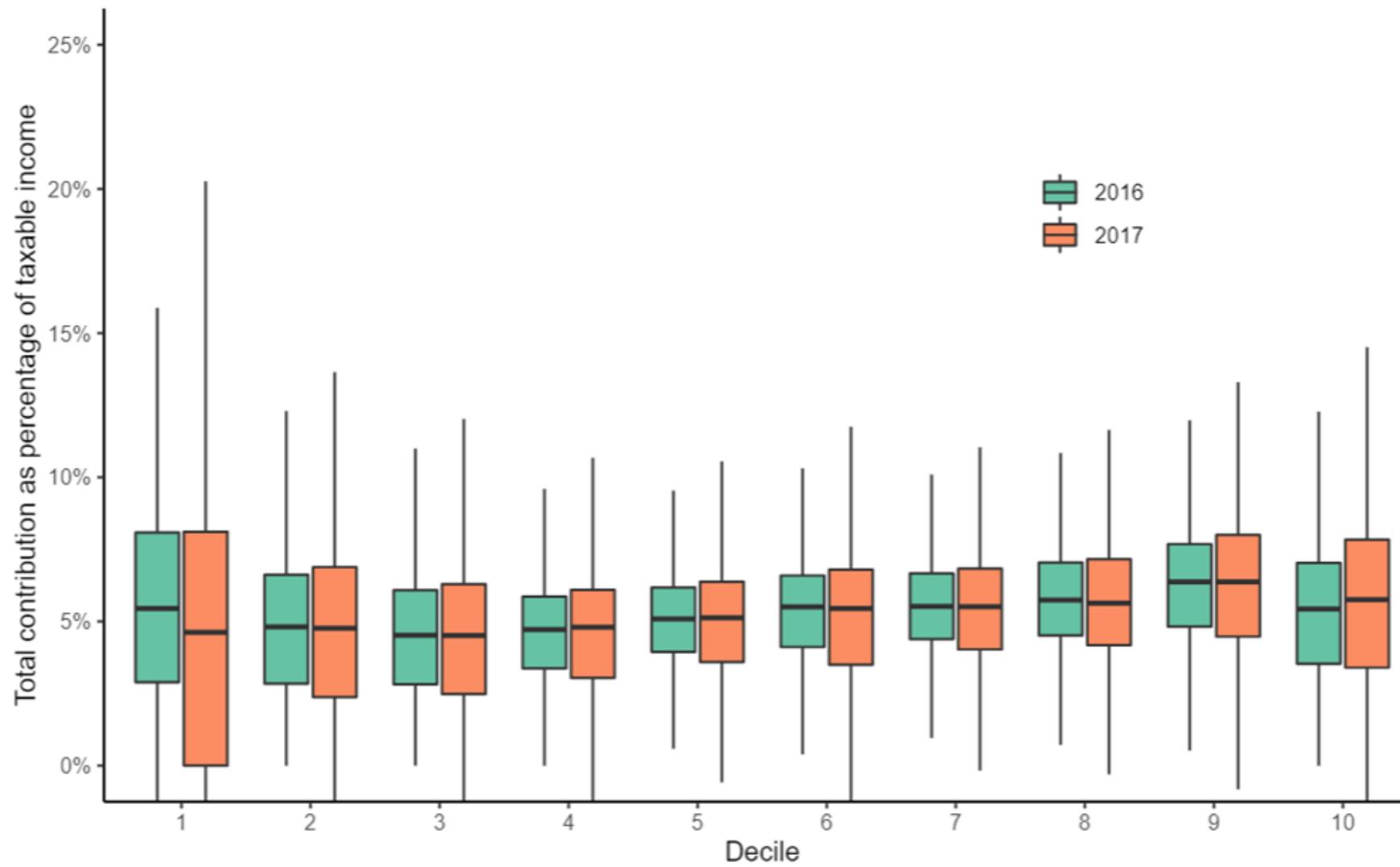
Source: authors' elaboration based on tax microdata made available through the SA-TIED programme.

Figure 2: Individuals contributing to a retirement fund, per taxable income decile



Source: authors' elaboration based on tax micro-data made available through the SA-TIED programme.

Figure 3: Contribution as a percentage of taxable income, per taxable income decile



Source: authors' elaboration based on tax micro-data made available through the SA-TIED programme.

Figure 3: Retirement Fund Contributions as a Proportion of Income

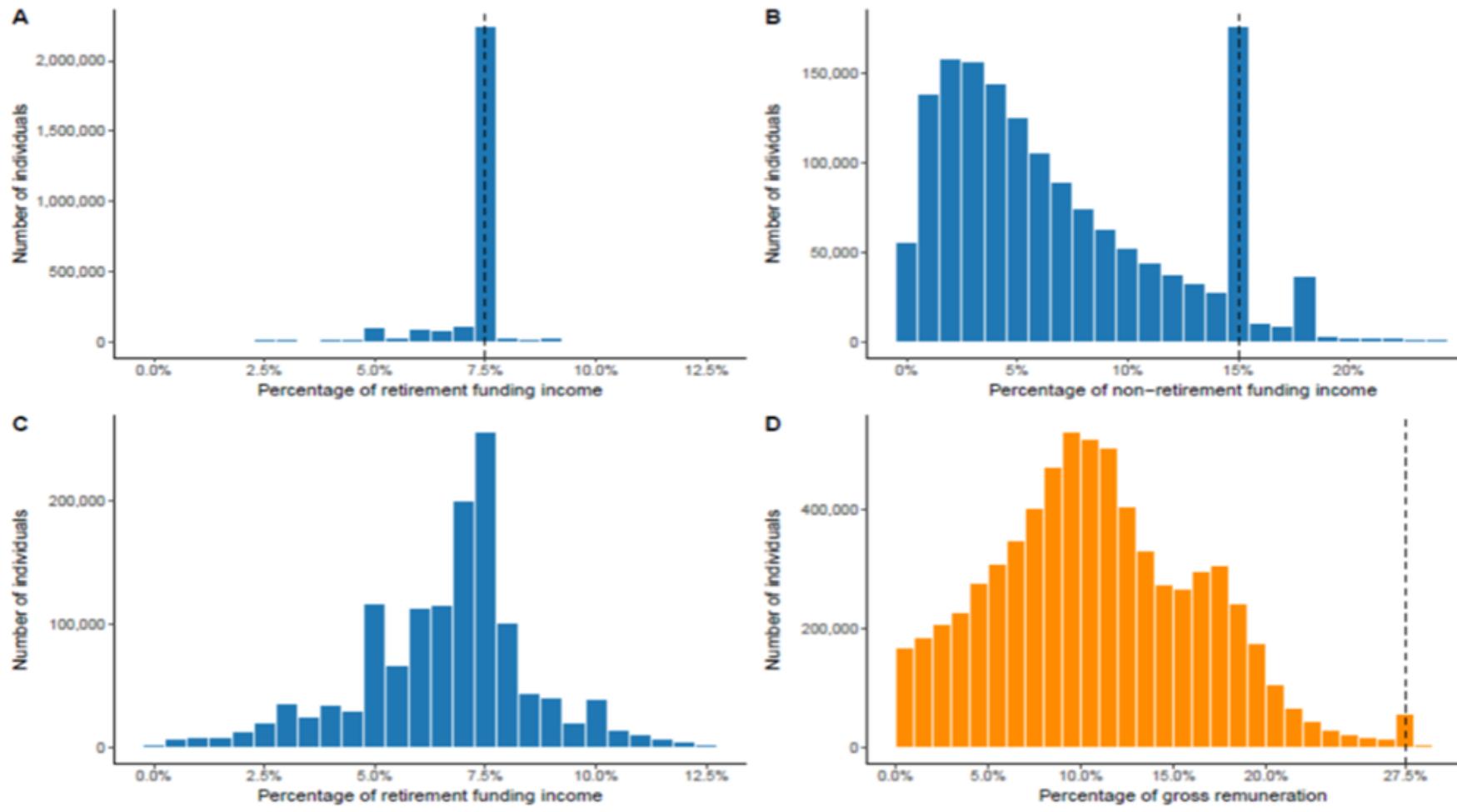
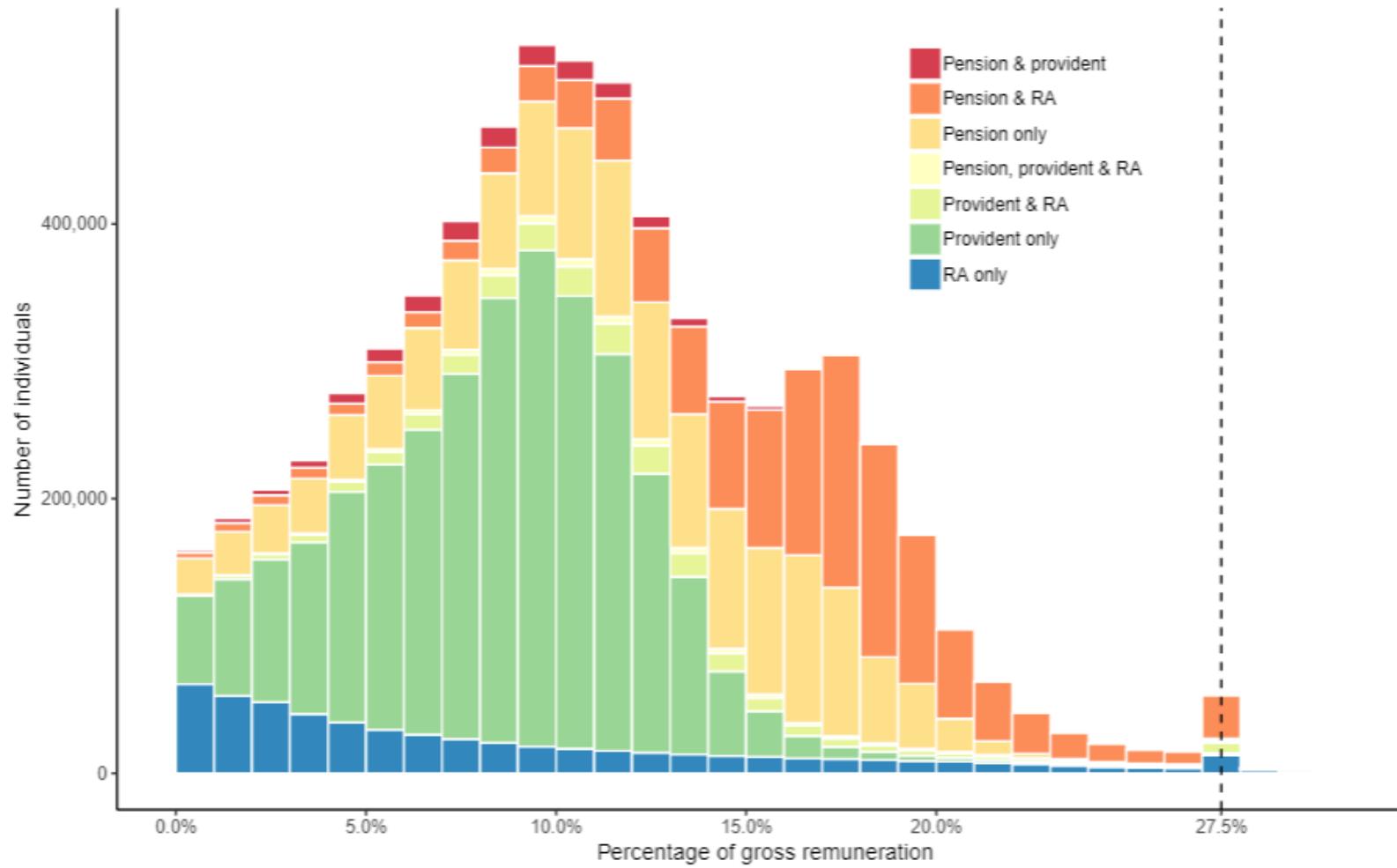
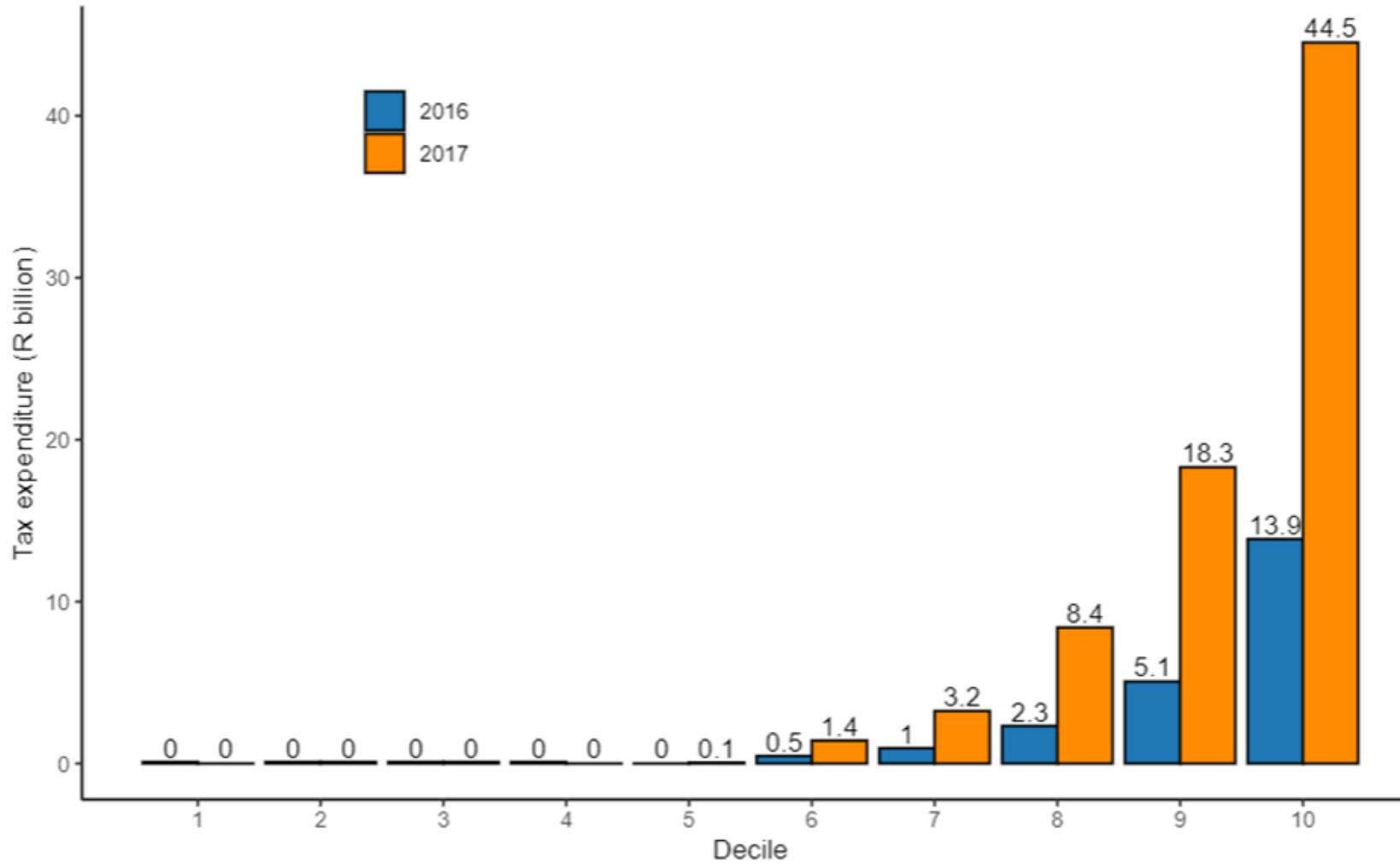


Figure 4: Individuals with different types of contributions to retirement funds



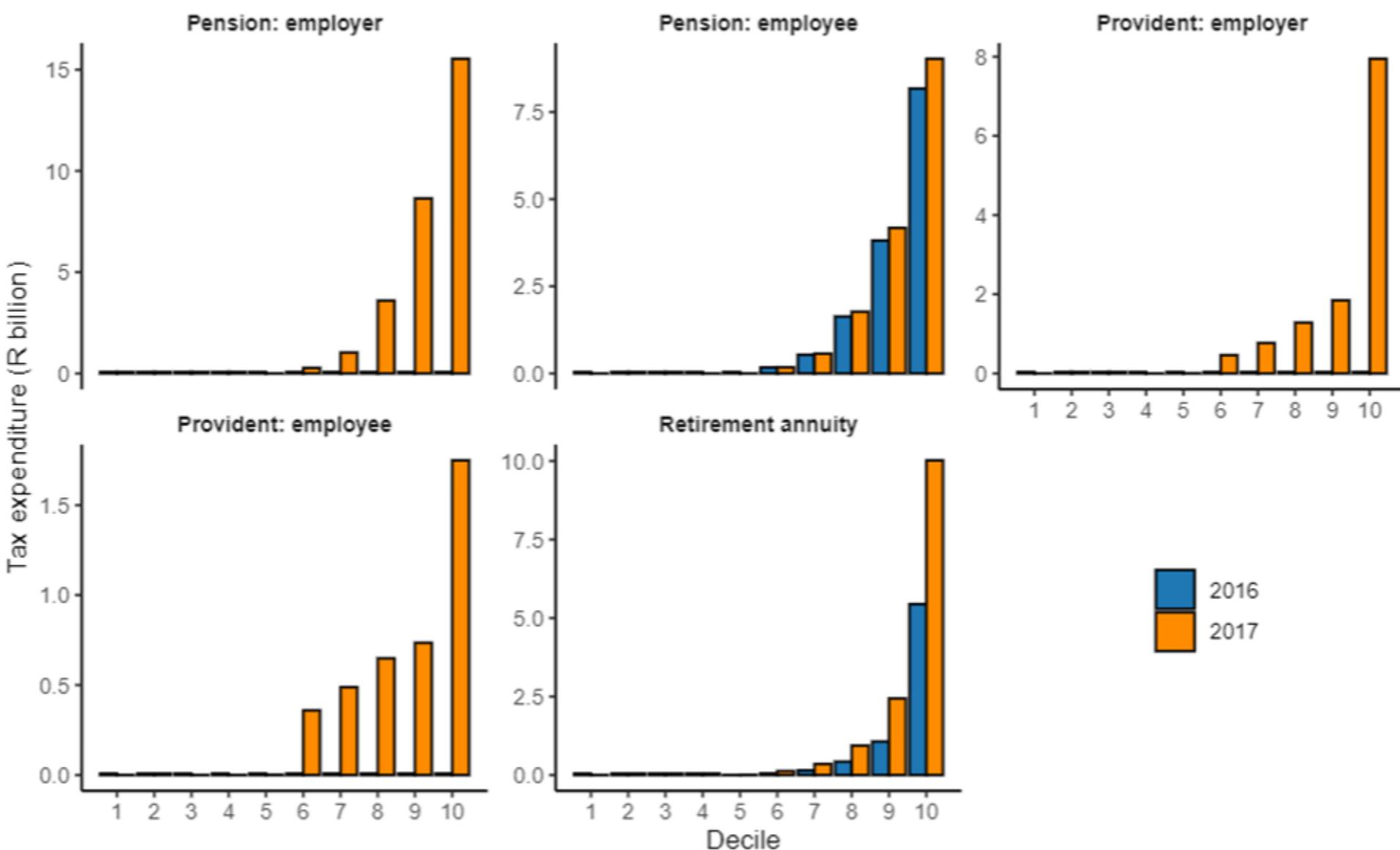
Source: authors' elaboration based on tax microdata made available through the SA-TIED programme.

Figure 7: Total tax expenditure by taxable income decile



Source: authors' elaboration based on tax microdata made available through the SA-TIED programme.

Figure 8: Tax expenditure by type of retirement fund



Source: authors' elaboration based on tax microdata made available through the SA-TIED programme.

PTEs, Retirement Annuity Funds

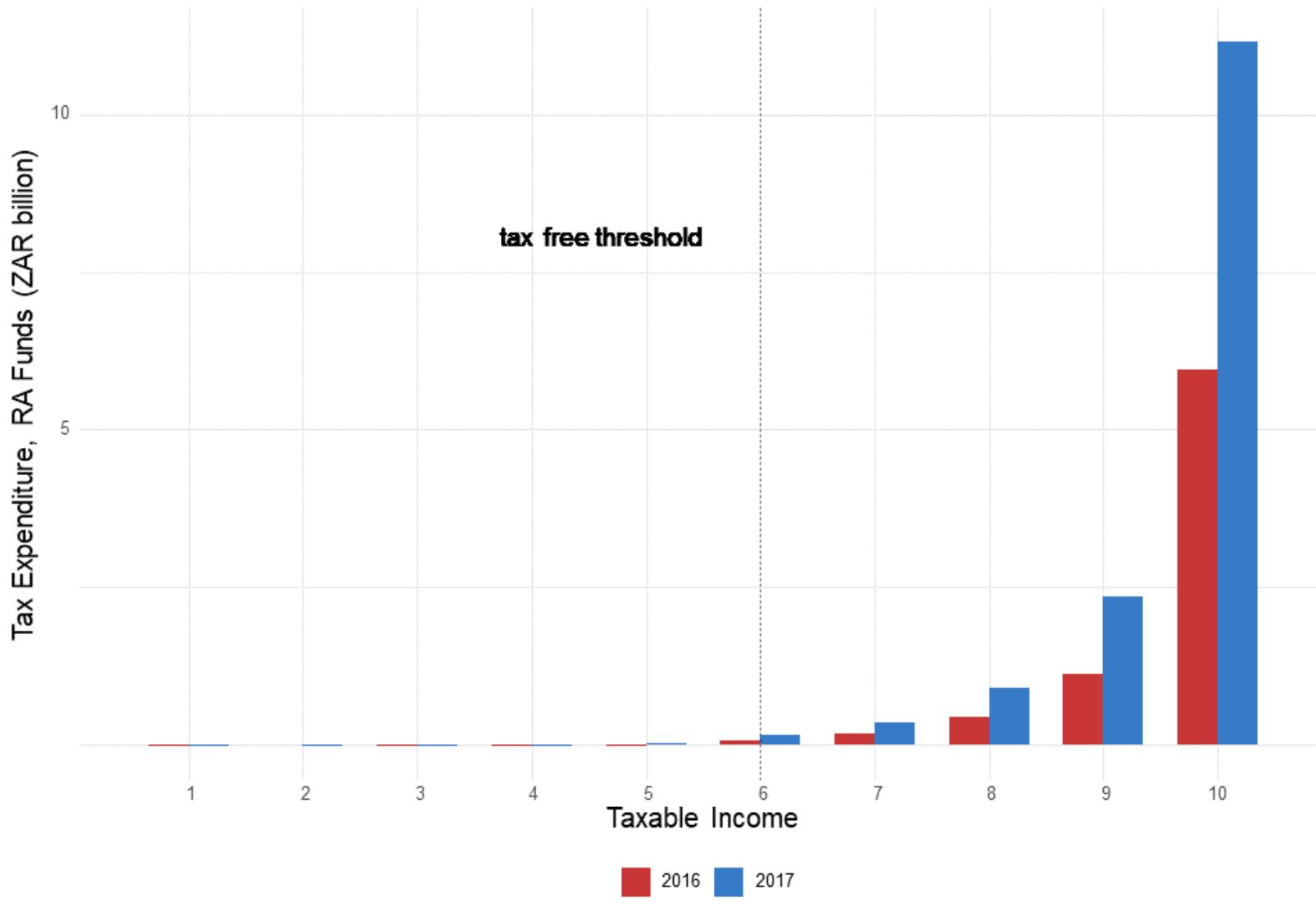


Table 8: Gini index with and without ALL retirement fund deductions

Year	Disposable income with no deduction	Disposable income	Difference
2016	57.8	58.0	0.2
2017	58.1	58.9	0.8

Table 9: Gini index with and without RA deductions

Year	Disposable income with no RA deduction	Disposable income	Difference
2016	57.9	58.0	0.1
2017	58.7	58.9	0.2

