

# The extent and distribution of cash support for children in Spain for over a decade

**A. Hernández<sup>1</sup>, F. Picos<sup>2</sup>, O. Cantó<sup>3</sup>**

<sup>1</sup> *Universidade de Vigo*

<sup>2</sup> Joint Research Centre

<sup>3</sup> *Universidad de Alcalá*

9<sup>th</sup> Congress of the IMA – January 2024

Cash support for children serving, among other purposes, to promote vertical equity:

- Strong redistributive effects of family benefits; most progressive transfer in many OECD countries (Jourmad et al., 2013)
- Pro-child targeting proves high effectivity to reduce poverty in the EU (Bárcena-Martín et al., 2018; Leventi et al., 2019), considering large presence of children in low-income deciles

Spain as an intriguing case study in the EU:

- From a socioeconomic viewpoint: high child poverty [AROP rate = 27.8% vs EU avg = 19.3%]; high inequality [Gini = 0.32 vs EU avg = 0.29], low fertility [1.18 live births vs EU avg of 1.52]
- From a policy design viewpoint: targeted system (Van Lancker & Van Mechelen, 2015); structured on tax reliefs (Matsaganis et al., 2006); erratic evolution over time (Bianculli & Jordana, 2013)

We assess the extent, composition and distribution of Spain's cash support for children

- Using tax-ben microsimulation modelling for comprehensively measuring Child-Contingent Payments, including benefits and tax reliefs (Corak et al., 2005; Figari et al., 2011; Pezer, 2022)

We examine its redistributive effects, exploring the contribution of different Child-Contingent Payments

- Via *à la* Kakwani decomposition that allows us exploring the underlying levers of redistribution: the degree of progressivity and average transfer rate

We undertake this exercise over a relatively long period [2005-2022] of relevant policy and socioeconomic changes

- Assessing changes under the scope of automatic stabilization and discrete policy changes

# Computing Child-Contingent Payments [CCP]

- **Child-Contingent Payments [CCP]** defined as all tax-ben elements dependent upon having children, including:
  - **Child-related benefits [CB]**: only for families w/ children, at childbirth or until child reaches a specific age
  - **Non-child-related benefits [NCB]**: complementary amounts for children in unemployment, housing or SA
  - **Child-related tax reliefs [TR]**: tax allowances or credits decreasing families' tax burden
- [NCB] & [TR] typically not available in a disaggregated manner in survey income microdata
- Tax-ben microsimulation allows for a comprehensive measurement of CCP via its simulation as in legislation
  - Using EUROMOD, the EU static tax-ben microsimulation, we build alternative scenarios as if there were no children, thus deactivating the simulation of CCP, and compare against the status quo (Corak et al., 2005; Figari et al., 2011):
    - $y_i^F = f(p^F, z_i)$  disposable income of household  $i$ , including CCP
    - $y_i^I = f(p^I, z_i)$  disposable income of household  $i$ , excluding CCP

$$y_i^F - y_i^I = CB_i + NCB_i + TR_i$$

# Spain's CCP in the EU context

Spain's CCP are among the lowest in the EU, featuring low proportions of [CB] as opposed to [TR]

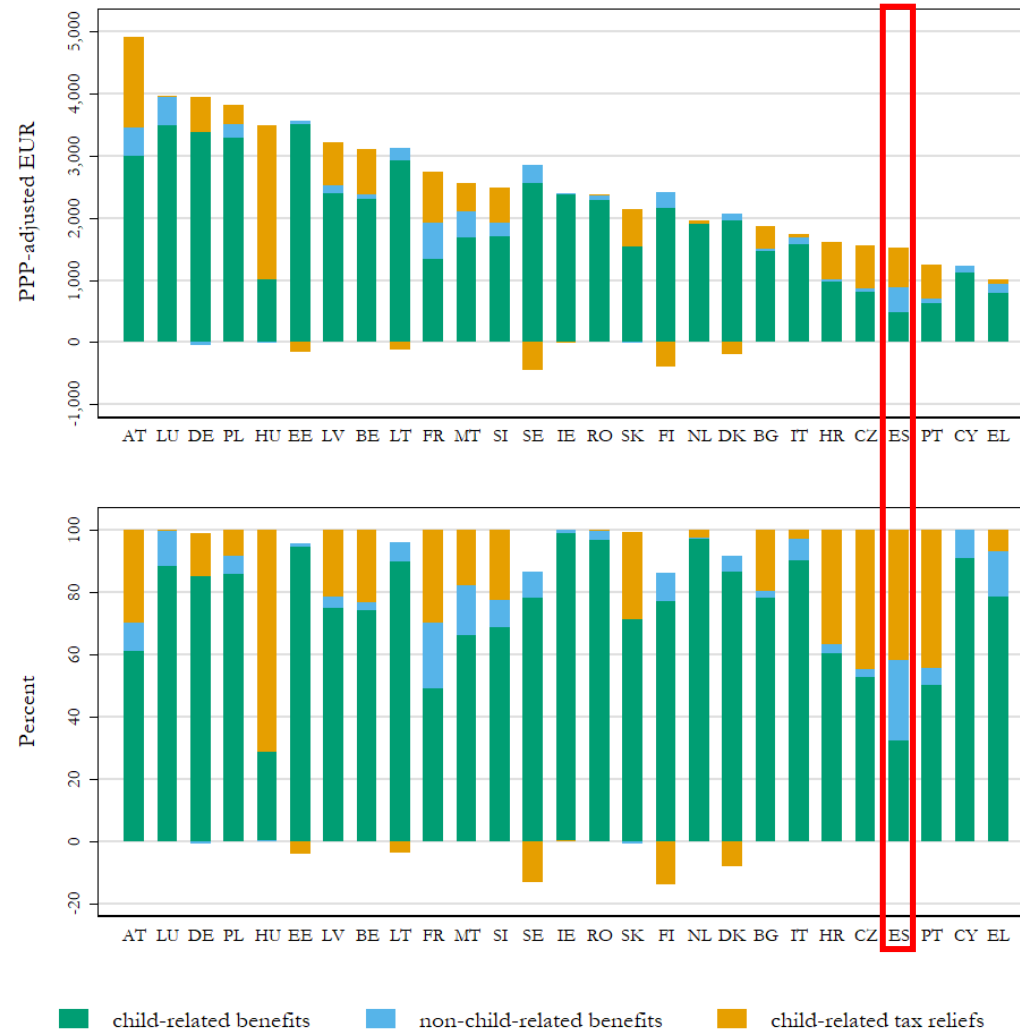
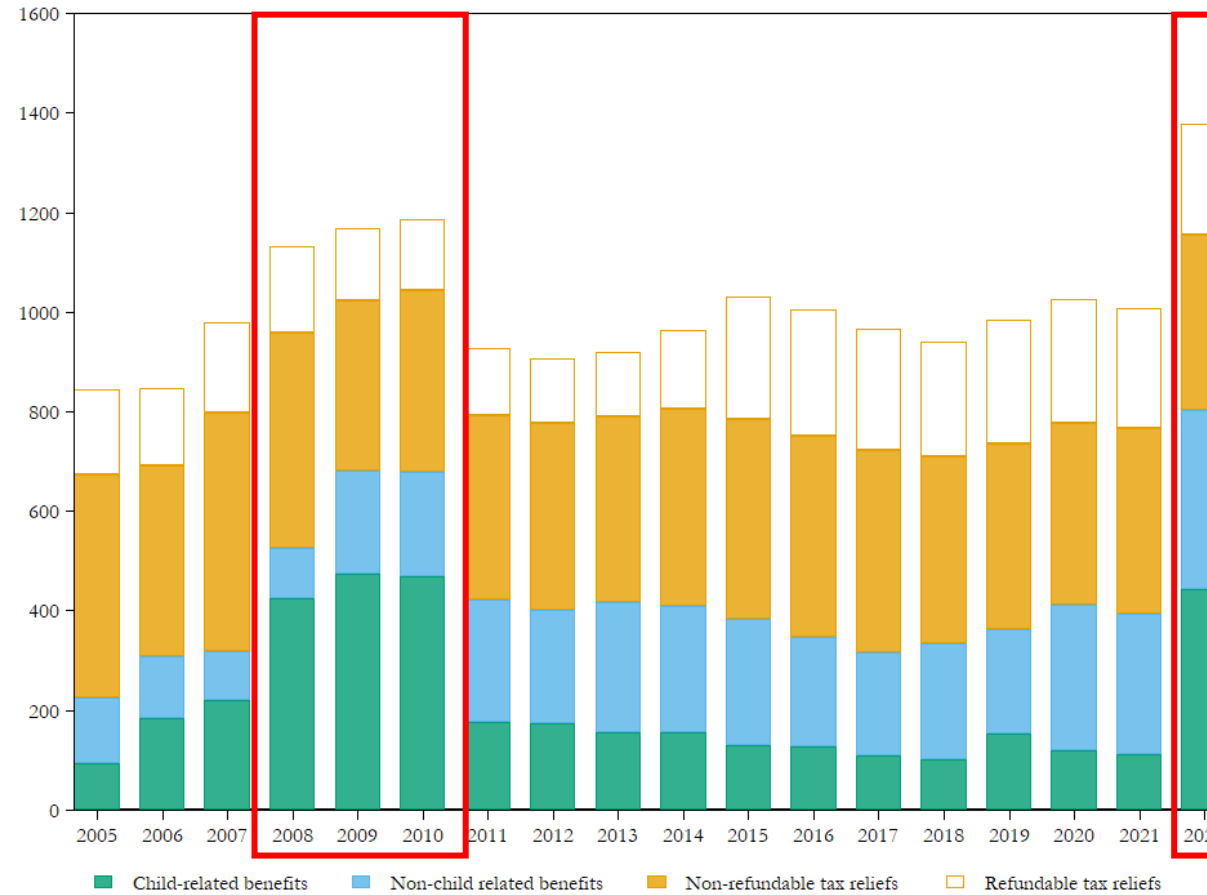


Fig 1. Annual CCP (in PPP-adjusted EUR) per child in the EU, 2022

# Spain's CCP over a decade – level

**Spain's CCP maintained relative stability over time, with two exceptions: 2008-10 (temporary childbirth benefit) and 2022 (new child benefit)**



*Fig 2. Spain's annual CCP (in real terms) per child over time, 2005-2022*

# Spain's CCP over a decade - distribution

Spain's CCP traditional pro-rich design (through non-refundable tax reliefs) is gradually shifting towards a pro-poor design

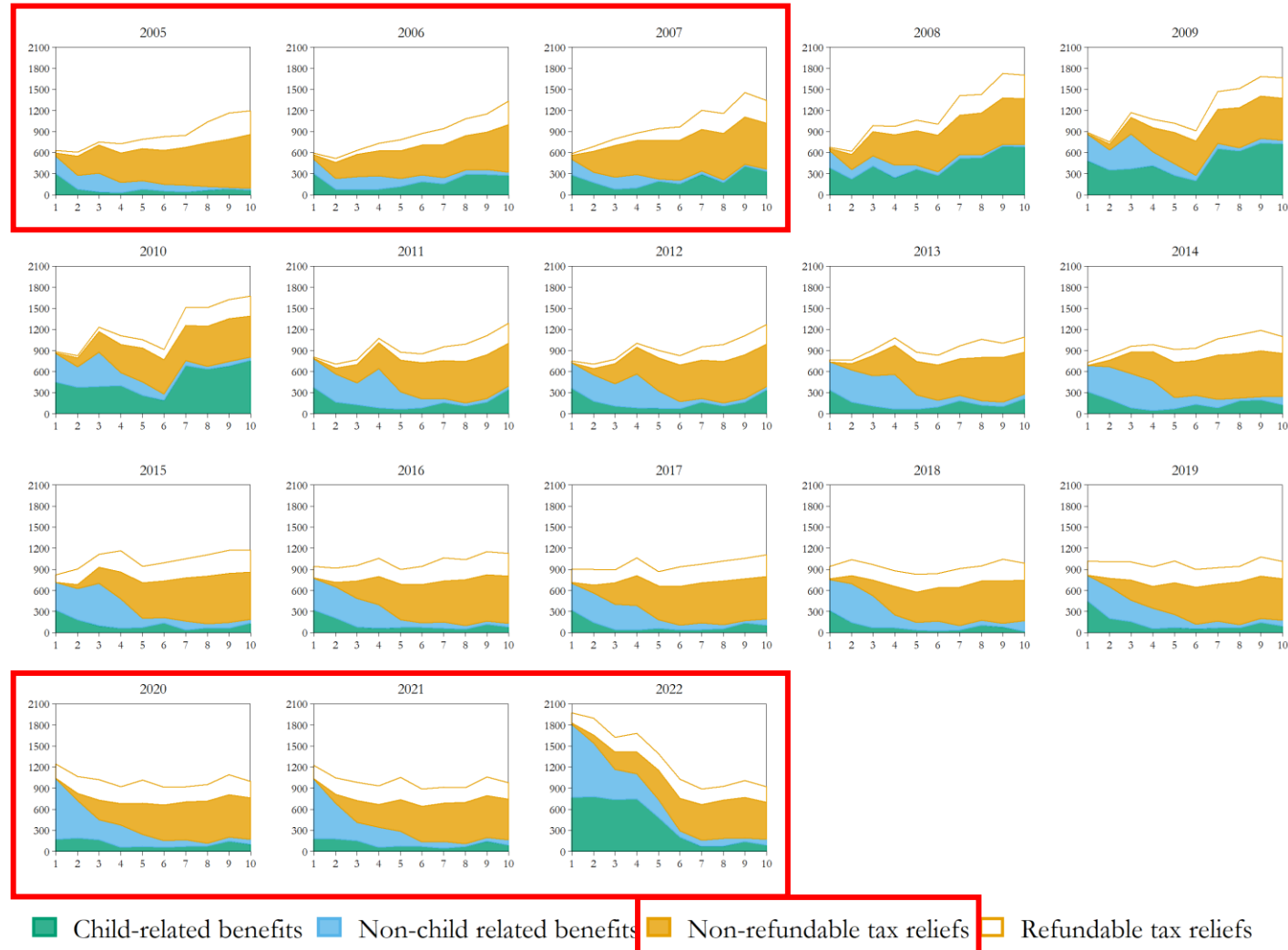


Fig 3. Spain's annual CCP (in real terms) per child by income deciles, 2005-2022

# Measuring Spain's CCP (relative) redistributive effects

So far visual representation of Spain's CCP. We formalize this further into a single indicator of their (relative) redistributive impact

## Relative Redistributive Effect (RRE)

$$RRE = G_I - G_F$$

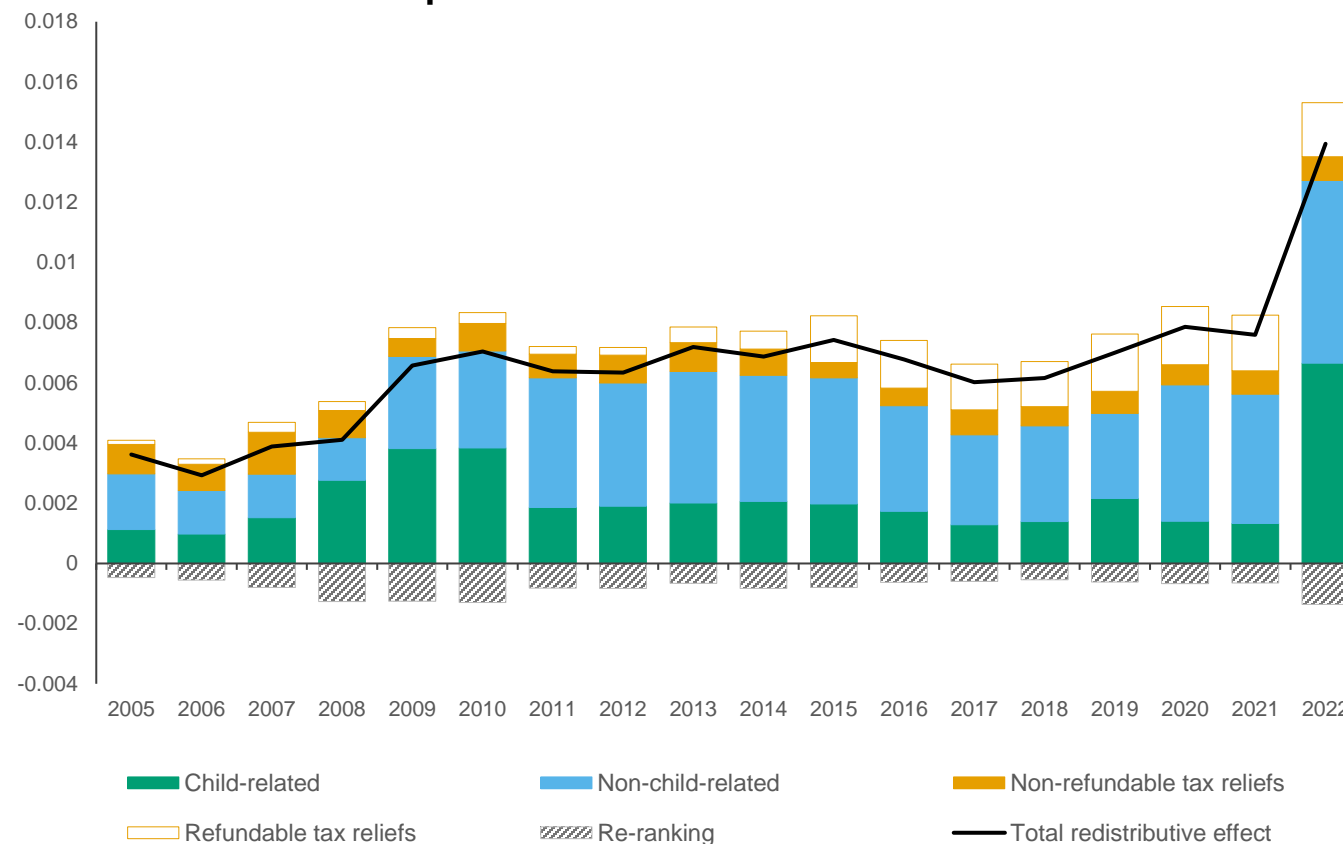
$$RRE = G_I - G_F = - \underbrace{\sum_{i=1}^m \frac{\bar{C}_i}{\bar{Y}_F}}_{\text{Avg. transfer rate}} \underbrace{\prod_{Y_I, Y_I + C_i}^K}_{\text{Progressivity}} - R$$

- 0 if CCP are distributed proportionally to initial incomes
- $> 0$  ( $< 0$ ) if low-income (high-income) households receive a higher proportion of CCP as compared to high-income (low-income) households



# Spain's CCP (relative) redistributive effects (I)

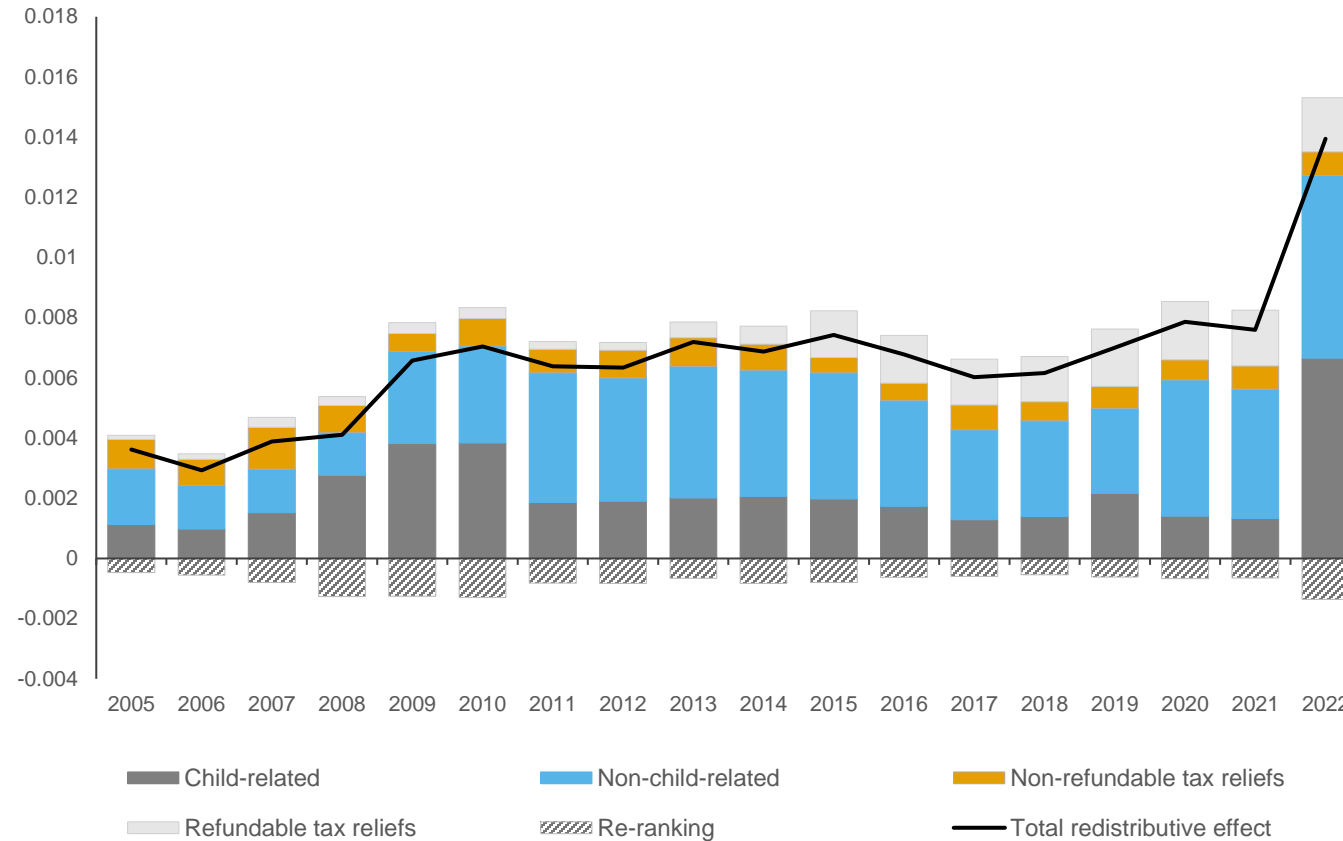
**Spain's CCP are redistributive in relative terms, showing a modest positive trend over time, with a pronounced increase in 2022**



*Fig 4. Spain's CCP relative redistributive effects, 2005-2022*

# Spain's CCP (relative) redistributive effects (II)

**Most of the redistributive effect over the 2005-2022 period is driven by complements for children in UB & SA, as opposed to tax reliefs, especially non-refundable ones**



*Fig 4. Spain's CCP relative redistributive effects, 2005-2022*

# Spain's CCP (relative) redistributive effects (III)

Spain's child-contingent benefits (tax reliefs) are typically characterized by high (low) progressivity but modest (high) levels

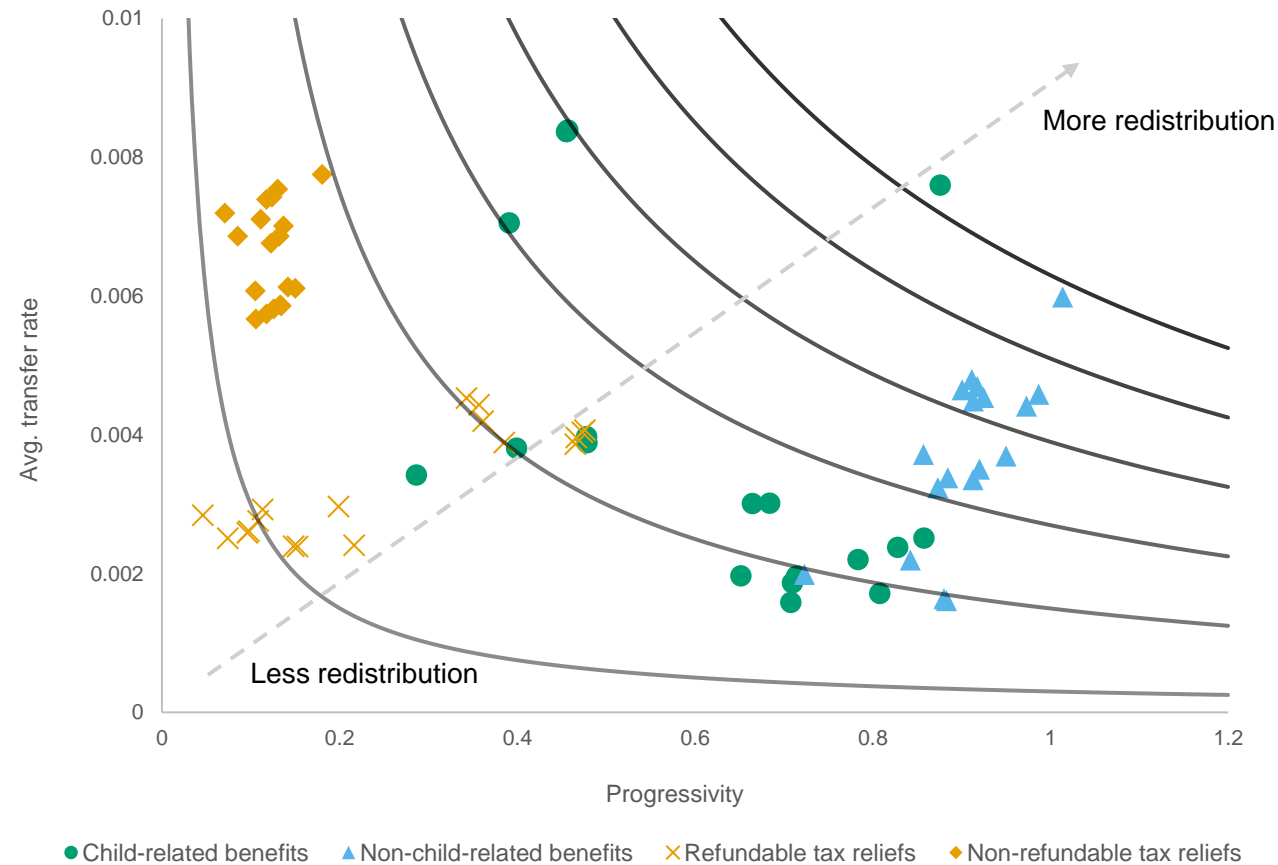


Fig 5. Spain's CCP progressivity and average transfer rates, 2005-2022

Each curve represents combinations of progressivity and avg. transfer rates leading to the same redistributive effect

Spain's CCP are deemed redistributive in relative terms:

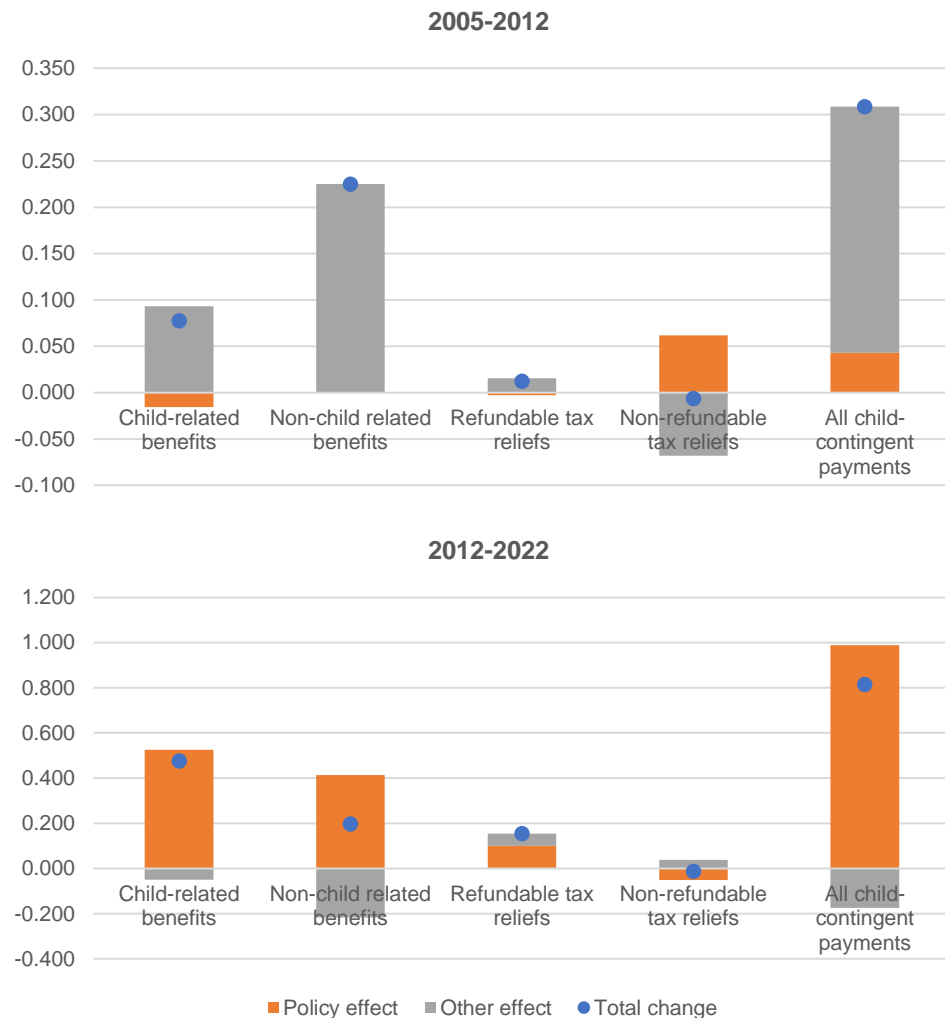
- Mostly driven by complements for children in UB & SA, which show high progressivity although modest average transfer rates;
- As opposed to (non-refundable) tax reliefs, which show low progressivity but high average transfer rates
- The redistributive outcomes modestly increased since 2005, with a marked increase in 2022

Are changes over time due to discrete policy changes or attributable to other factors (e.g., changes in unemployment -> automatic stabilization)?

- Bargain & Callan (2010) decomposition of Spain's CCP relative redistributive effect. Assuming linear homogeneity of tax-ben systems, time changes in relative inequality indexes can be decomposed as:

$$\Delta RRE = RRE[d_1(p^1, y^1)] - RRE[d_0(p^0, y^0)] = \underbrace{\{RRE[d_1(p^1, y^1)] - RRE[d_0(\alpha^1 p^0, y^1)]\}}_{\text{Policy effect}} + \underbrace{\{RRE[d_0(\alpha^1 p^0, y^1)] - RRE[d_0(p^0, y^0)]\}}_{\text{Other effects}}$$

# Redistribution driven by automatic stabilization or discrete policy changes?



- In absence of significant policy changes, the 2012 rise in unemployment triggered the automatic stabilization features of Spain's CCP (especially through child complements in UB and SA)
- On the contrary, the redistributive impact of Spain's CCP in 2022, when compared to 2012, is predominantly influenced by discrete policy changes, particularly the introduction of a new child benefit in 2022

Fig 6. Decomposition of Spain's CCP redistributive effects, 2005-2022

# Conclusions

Spain's CCP are modest, as compared to other EU countries, and traditionally benefited high-income households via non-refundable tax reliefs

Their evolution for over more than a decade is characterized by:

- Relative stability in the extent of support since 2005, with two exceptions: 2008-10 and 2022
- Slightly increasing (relative) redistributive outcomes, mainly driven by complements for children in UB and SA
- The influence of both automatic stabilization (e.g., 2005-2012), as well as discrete policy changes (e.g., 2012-2022)

Some limitations/future work:

- Partial assessment not considering in-kind support (early childhood education, healthcare & others)
- Redistributive effects measured only in relative terms, yet redistribution might be evaluated (leading to different conclusions) under other normative considerations of inequality (Urban, 2019)

# Thank you

[adrian.hernandez@uvigo.gal](mailto:adrian.hernandez@uvigo.gal)