Erratum to `The estimation of the growth and redistribution components of changes in poverty: a reassessment"

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Abstract

This erratum corrects some typos and misspecifications in Bresson (2008).

The published version of Bresson (2008) contains many small mistakes in sections 2.2 and 3. Though main propositions and remarks are not affected by these errors, we would like to indicate which corrections should be done:

1. The multiperiod procedure proposed by Datt and Ravallion (1992) is misspecified in equation (2.5). As presented in Bresson (2008), effects are estimated by applying observed mean income or inequality changes to the reference distribution, but the method descibed by the authors is simpler since the reference distribution is only used for the fixed element. Consequently, the right formulation is:

$$\Delta_{t,u}\Theta(\mu,\boldsymbol{\pi}) = \underbrace{\Theta\left(\mu_{u},\boldsymbol{\pi}_{0}\right) - \Theta(\mu_{t},\boldsymbol{\pi}_{0})}_{\mathscr{C}_{t,u} := C_{t,u}^{0}} + \underbrace{\Theta\left(\mu_{0},\boldsymbol{\pi}_{u}\right) - \Theta(\mu_{0},\boldsymbol{\pi}_{t})}_{\mathscr{I}_{t,u} := I_{t,u}^{0}} + R_{t,u}.$$

2. Concerning the solution suggested in Kakwani (2000), the sums of single-periods effects have be normalized by T+1 and not T. The correct version of equation (2.6) is then:

$$\Delta_{t,u}\Theta(\mu, \pi) = \underbrace{\frac{1}{T+1} \sum_{j=0}^{T} \left(C'_{t,j} + C'_{j,u} \right)}_{\mathcal{C}_{t,u} := \tilde{C}^{0,T}_{t,u}} + \underbrace{\frac{1}{T+1} \sum_{j=0}^{T} \left(I'_{t,j} + I'_{j,u} \right)}_{\mathcal{I}_{t,u} := \tilde{I}^{0,T}_{t,u}}.$$

- 3. A part of the first line of equation (2.7) is missing. The last term is $\frac{1}{12} (\Theta(\mu_0 + \Delta_{1,2}\mu, \boldsymbol{\pi}_1) \Theta(\mu_0, \boldsymbol{\pi}_1))$.
- 4. In equation (3.6), an element does not appear as a subscript on the second line. The right formulation is then:

$$\begin{split} &\mathcal{C}_{t,t+1} := \hat{C}_{t,t+1} \\ &\Delta_{t,t+1} \Theta(\mu, \pi) \simeq \sum_{j=1}^{s} \Theta\left(\mu_{t+\frac{j}{s}}, \pi_{t+\frac{j-1}{s}}\right) - \Theta\left(\mu_{t+\frac{j-1}{s}}, \pi_{t+\frac{j-1}{s}}\right) \\ &+ \sum_{j=1}^{s} \sum_{i=1}^{r} \Theta\left(\mu_{t+\frac{j-1}{s}}, \pi_{i,t+\frac{j}{s}}, \pi_{t+\frac{j-1}{s}}^{-i}\right) - \Theta\left(\mu_{t+\frac{j-1}{s}}, \pi_{t+\frac{j-1}{s}}\right) \\ &\mathcal{I}_{t,t+1} := \hat{I}_{t,t+1} \end{split}$$

5. In equation (3.7), the marginal inequality effects should be summed up with j = 1, 2...k and not j = 0, 1...k.

REFERENCES

Bresson, F. (2008): "The estimation of the growth and redistribution components of changes in poverty: a reassessment," *Economics Bulletin*, 9(14), 1–7.

DATT, G., AND M. RAVALLION (1992): "Growth and Redistribution Components of Changes in Poverty Measures: A Decomposition with Applications to Brazil and India in the 1980s," *Journal of Development Economics*, 38, 275–295.

KAKWANI, N. (2000): "On Measuring Growth and Inequality Components of Poverty with Application to Thailand," *Journal of Quantitative Economics*, 16(1), 67–79.