

## Errata in “The Political Economy of the Kuznets Curve”

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In “The Political Economy of the Kuznets Curve” (2002), Daron Acemoglu and James A. Robinson (AR hereafter) develop a political economy theory of the Kuznets curve. The authors contend that, when capitalist industrialization increases economic inequality, political instability may induce changes in the political regime (i.e. democratization). Democratization then leads to a reduction in economic inequality through redistributive measures that accompany the institutional change. AR further suggest that development does not necessarily lead to a Kuznets curve. Accordingly, their theory also accommodates two non-democratic paths: the “autocratic disaster” and “East Asian Miracle.”

In this comment, we highlight two apparent errors in AR’s article. The errors in question are associated with their Conditions 1 and 5, and in what follows we describe these errors in turn. We find that correcting these errors does not substantively affect the results of the article.

### Condition 1

Condition 1 (page 193) pertains to the democratic case where the poor are unable to accumulate without transfers from the rich. AR state the condition as follows:

$$\gamma [B + (A - B)((1 - \lambda)h_{SS}^D + \lambda)] > 1. \quad (1)$$

If the condition holds, redistributive taxation is sufficient to ensure that the poor eventually accumulate. The condition evidently depends on  $h_{SS}^D$ , which is the steady-state level of assets of the rich. AR provide the following expression for  $h_{SS}^D$ :

$$h_{SS}^D = \gamma Z [(A(1 - \lambda) + \lambda B)h_{SS}^D + (A - B)\lambda]^\beta, \quad (2)$$

which appears incorrect.

The expression for  $h_{SS}^D$  is derived from their Eq. (4), which is as follows:

$$h_{t+1}^j = \max\{1, Z(\gamma[Bh_t^j + (A - B)H_t])^\beta\}. \quad (3)$$

Accordingly, we can write

$$h_{SS}^D = Z(\gamma[Bh_{SS}^D + (A - B)H_t])^\beta. \quad (4)$$

Where  $H_t = \lambda + (1 - \lambda)h_{SS}^D$ , the expression should then be rewritten as

$$h_{SS}^D = Z(\gamma[(A(1 - \lambda) + \lambda B)h_{SS}^D + (A - B)\lambda])^\beta. \quad (5)$$

Thus, AR’s expression for  $h_{SS}^D$  (i.e. our Eq. [2]) differs from our Eq. (5) in the exponentiation of  $\gamma$ , the omission of which appears to be an error.

## Condition 5

Condition 5 (page 196) ensures that, when the revolution constraint binds, extension of the franchise prevents a revolution through sufficient redistribution. AR state that the necessary condition for this is

$$(A - B)((1 - \lambda)h_t^r + \lambda h_t^p) + Bh_t^p \geq \frac{A\mu[(1 - \lambda)h_t^r + \lambda h_t^p]}{\lambda}. \quad (6)$$

AR are interested in the situation where the poor are not accumulating (i.e.  $h_t^p = 1$ ) and the revolution constraint binds, which implies  $h_t^r = [\lambda(1 - \mu)]/[\mu(1 - \lambda)]$ . They state that substituting these conditions into the above Eq. (6) and simplifying yields Condition 5:

$$A(\lambda - \mu) \geq B(1 - \mu), \quad (7)$$

which also appears incorrect.

When the poor are not accumulating (i.e.  $h_t^p = 1$ ), our Eq. (6) becomes

$$(A - B)((1 - \lambda)h_t^r + \lambda) + B \geq \frac{A\mu[(1 - \lambda)h_t^r + \lambda]}{\lambda}. \quad (8)$$

We can substitute  $h_t^r = [\lambda(1 - \mu)]/[\mu(1 - \lambda)]$  into this expression, which actually simplifies to

$$(A - B)\frac{\lambda}{\mu} + B \geq A \quad (9)$$

or

$$A(\lambda - \mu) \geq B(\lambda - \mu). \quad (10)$$

Thus, AR's expression for Condition 5 (i.e. our Eq [7]) differs from our Eq. (10) in that  $\lambda$  is mistakenly replaced by unity in the right-hand side of the expression.

## Implications

While we find that correcting these errors does not substantively affect the results of the article, the corrected Condition 5 requires further discussion. As AR assume  $A > B$  (see page 190), for Condition 5 to hold, it must be the case that  $\lambda \geq \mu$ . The corrected Condition 5 then states that, for franchise extension to prevent revolution, the fraction of poor agents (i.e.  $\lambda$ ) must be greater than or equal to the fraction of the capital stock remaining after revolution (i.e.  $\mu$ ). This is an intuitive result as a relatively high proportion of poor people makes revolution less profitable for each of them.

Correction of this error, as stated, does not have crucial implications for the results of the article. To see this, note that AR's Condition 5 can be written as

$$\lambda \geq \mu + \frac{B(1 - \mu)}{A} \quad (11)$$

where the second term on the right-hand side must be greater than or equal to zero due to assumptions placed on  $A$ ,  $B$ , and  $\mu$ . Comparing the above condition with the correct Condition 5 (i.e.  $\lambda \geq \mu$ ) demonstrates that their (incorrect) condition is simply more stringent than the corrected condition. The implication of this is that there could be some parameter choices for which their Condition 5 suggests that a revolution could not be prevented by extending the franchise, while in fact it could.

## References

- Acemoglu, D. and J.A. Robinson (2002). “The Political Economy of the Kuznets Curve.” *Review of Development Economics* 6(2), 183–203.