

Inequality – measurement, trends, impacts, and policies
UNU-WIDER, Helsinki, 5–6 September 2014

**New methods for estimating the level and
trend of income and wealth inequality**

Anthony Shorrocks

5 September 2014

(Main) Collaborators

Jim Davies, Susanna Sandstrom, Ed Wolff

- “The world distribution of household wealth” in J.B. Davies (ed.) *Personal Wealth from a Global Perspective* (OUP, 2008)
- “The level and distribution of global household wealth”, *Economic Journal*, March 2011

Jim Davies, Rodrigo Lluberás

- Credit Suisse Global Wealth Report 2010, 2011, 2012, 2013, 2014
- Credit Suisse Global Wealth Databook 2010, 2011, 2012, 2013, 2014

Jim Davies, Cinar Baymul

- CIGI-INET project, “The World Distribution of Income and Wealth”

OXFORD

PERSONAL WEALTH

FROM A GLOBAL PERSPECTIVE



Edited by
James B. Davies

UNU-WIDER STUDIES IN DEVELOPMENT ECONOMICS

Research on global wealth and income

Good Advice !!!

- **be sceptical**
- **be resourceful/inventive**
- **be humble**

Objective

- outline methodology for estimating level and distribution of household wealth
- discuss solutions to various problems encountered
- offer alternative to Lorenz curve as method of capturing and analyzing data on inequality
- mention ongoing work on level and distribution of global income

Global wealth methodology

(1) **mean level of wealth for each country:** based on

- household balance sheets and wealth survey data where available
- extended by regression methods to most other countries
- region-income class averages imputed to remaining countries

(2) **distribution of wealth for each country:** based on

- wealth distribution data for c30 countries
- wealth dist estimated from income distribution for most other countries
- region-income class averages imputed to remaining countries

(3) **generate synthetic global wealth sample** (1.3 million observations)

- process for global results

Methodology issues I

(1) **resource concept**

- "marketable" wealth
- gross income vs net consumption

(2) **unit of analysis** (person, household, etc)

- we choose adult for global wealth
- adult, person, household for global income

(3) **exchange rate** (current USD, PPP)

Methodology issues II

(4) **Lorenz curve gaps**

- UNU-WIDER utility generates synthetic sample
- 1/10,000; 1/1,000; 1/100

(5) **residency** (eg non-doms in UK)

- important for inequality (eg share top 1%)

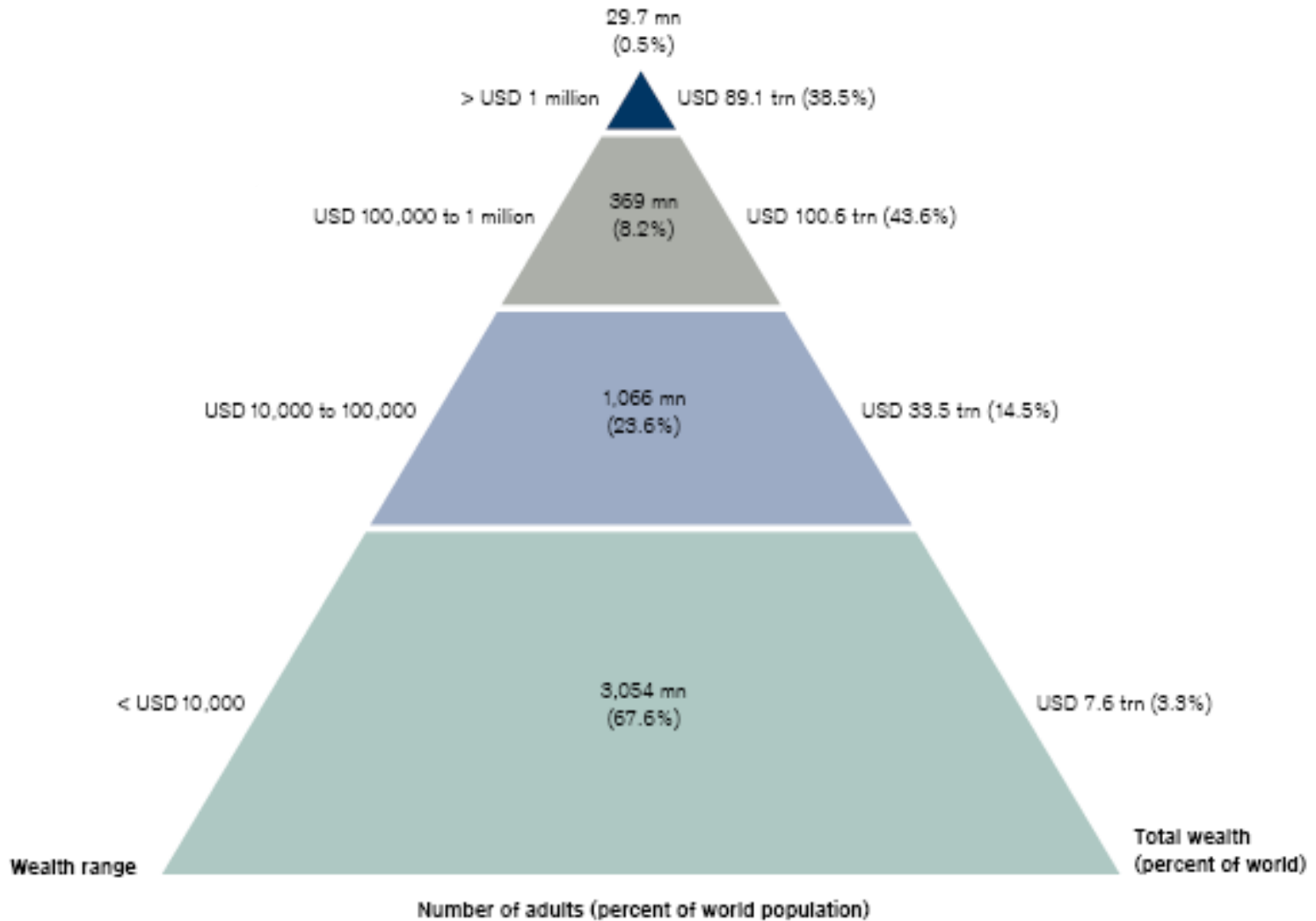
(6) **top tail adjustments**

- match information in "rich lists", esp Forbes billionaire data

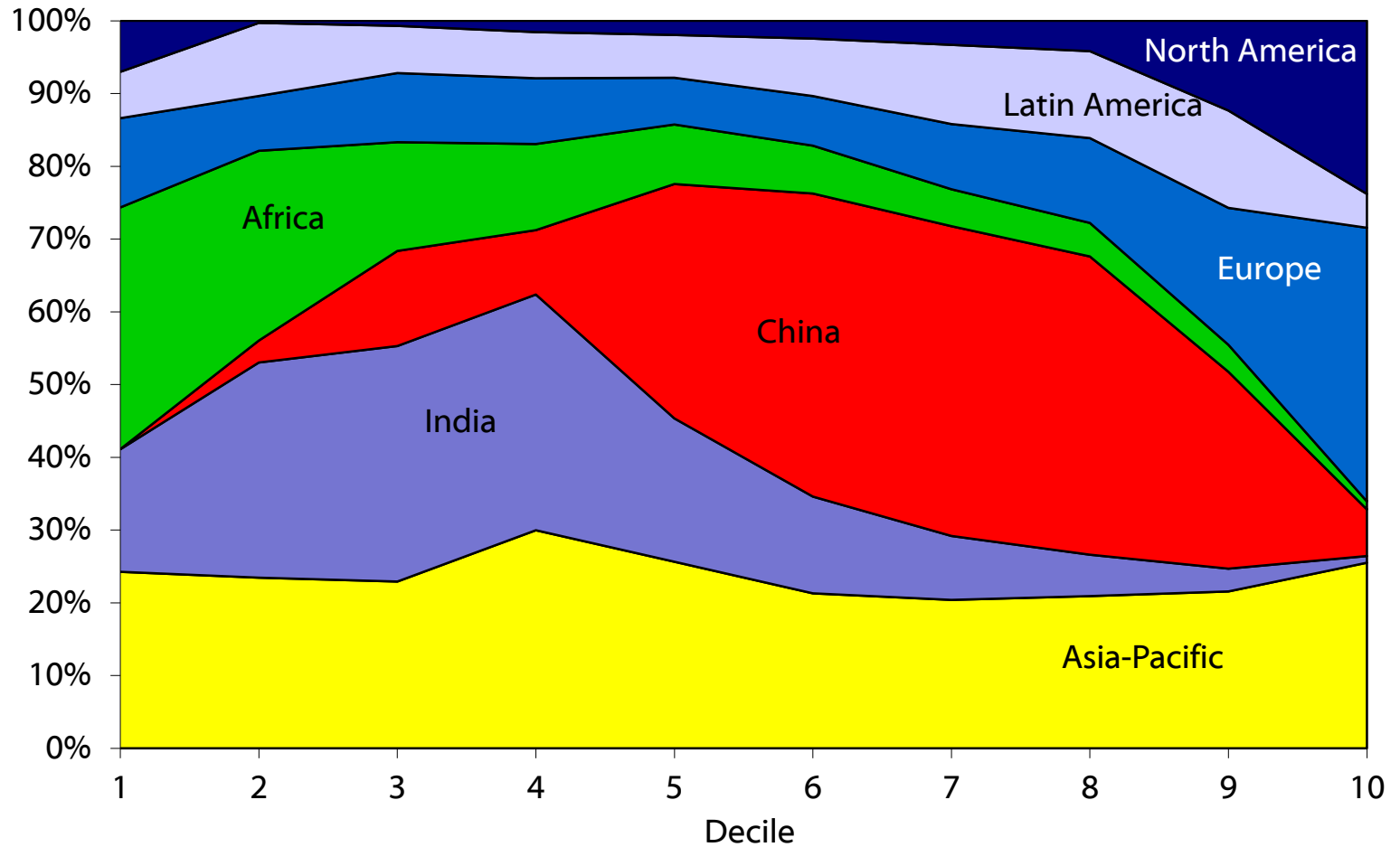
(7) **methods of presentation**

- pyramid, regional composition

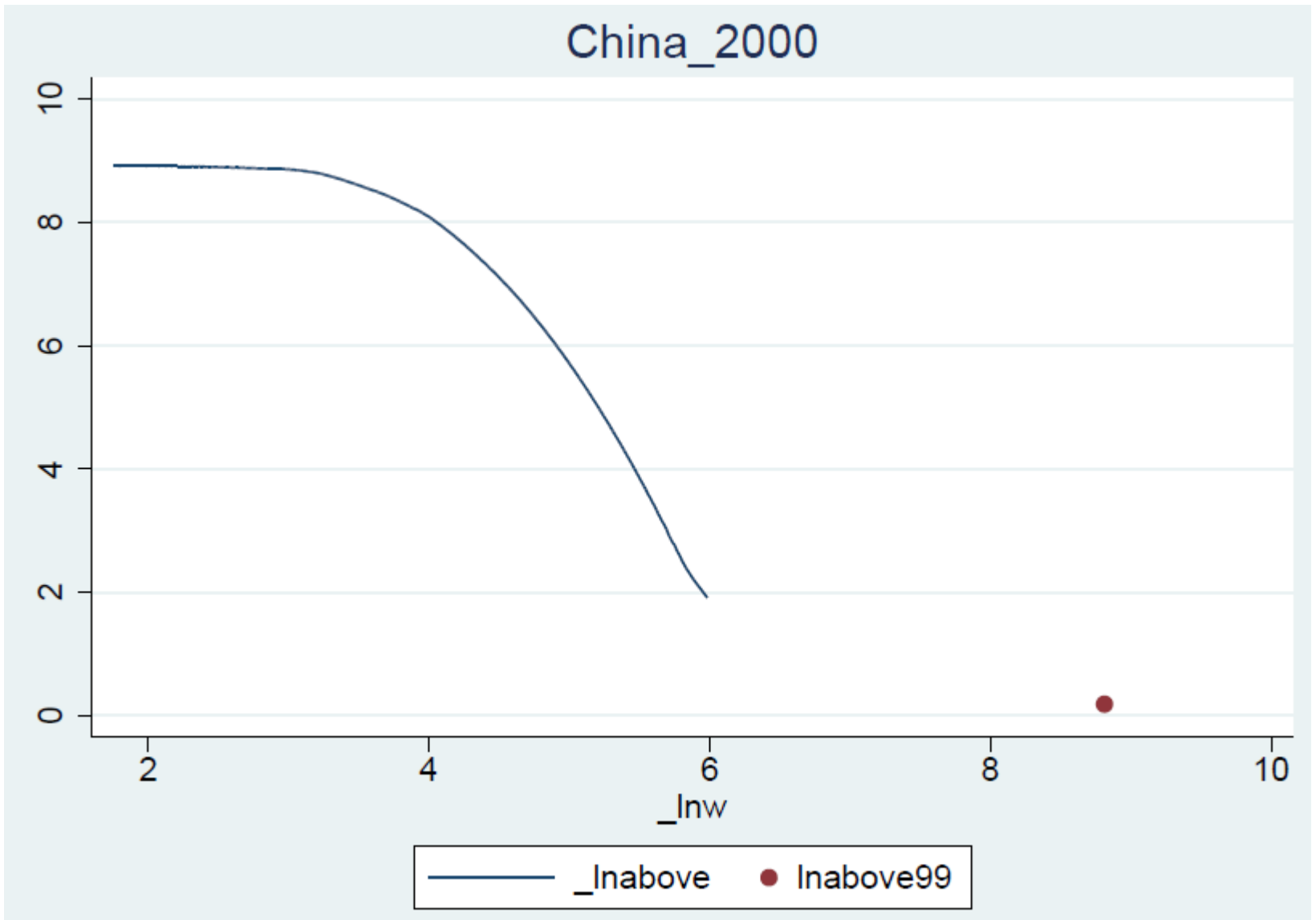
The global wealth pyramid



Regional Composition of Global Wealth

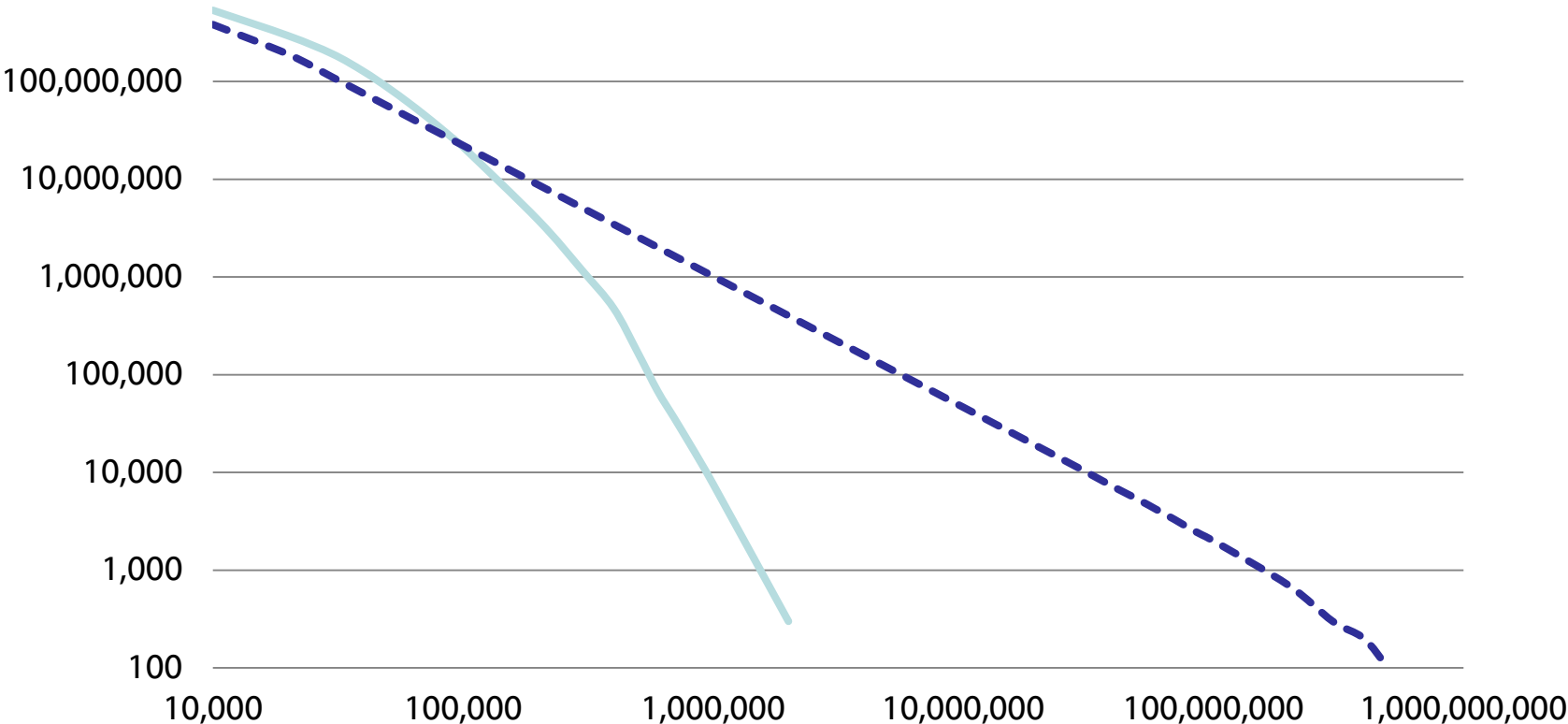


Wealth distribution China, 2000



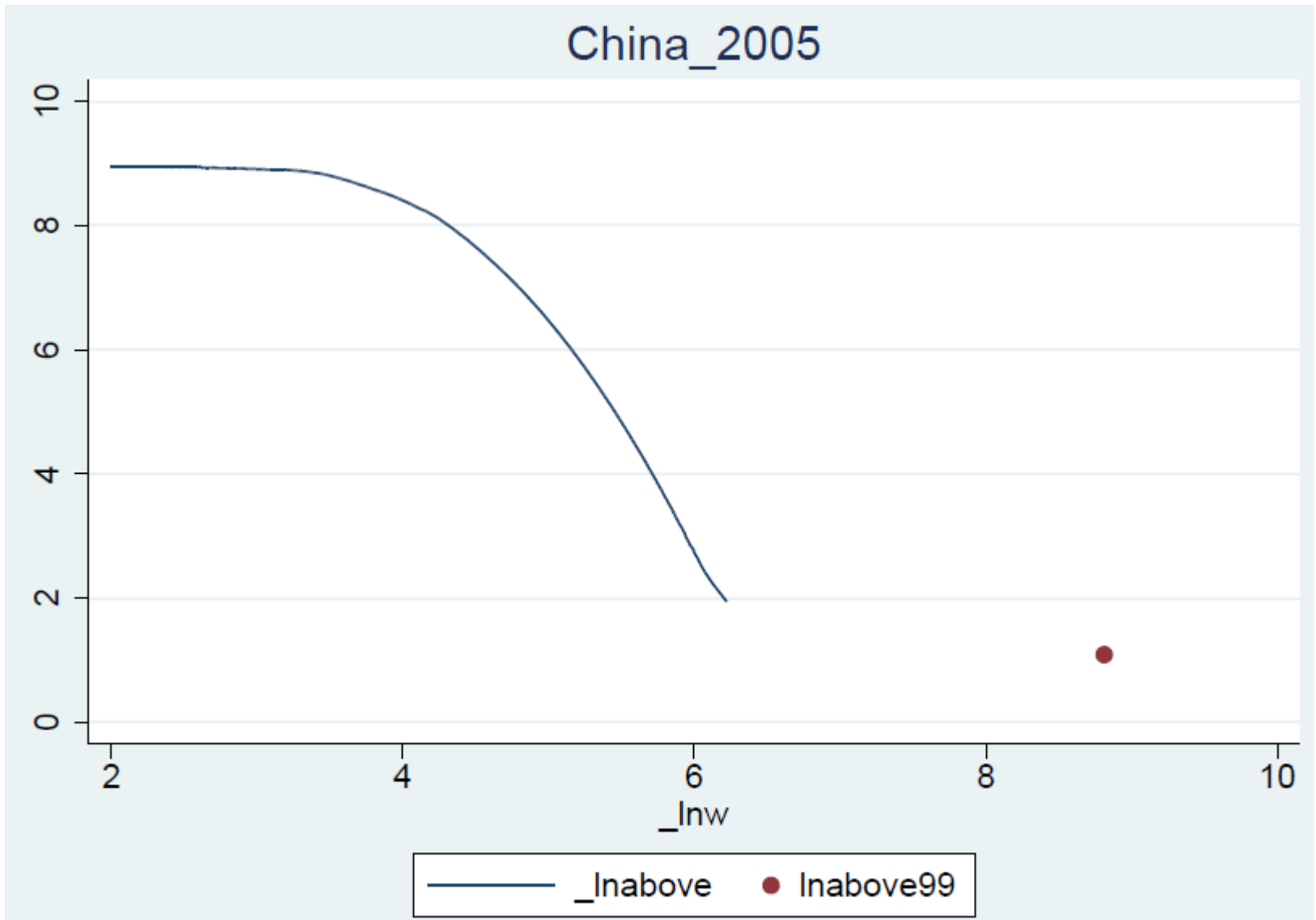
Unadjusted and adjusted wealth values for China

Number of adults above wealth level

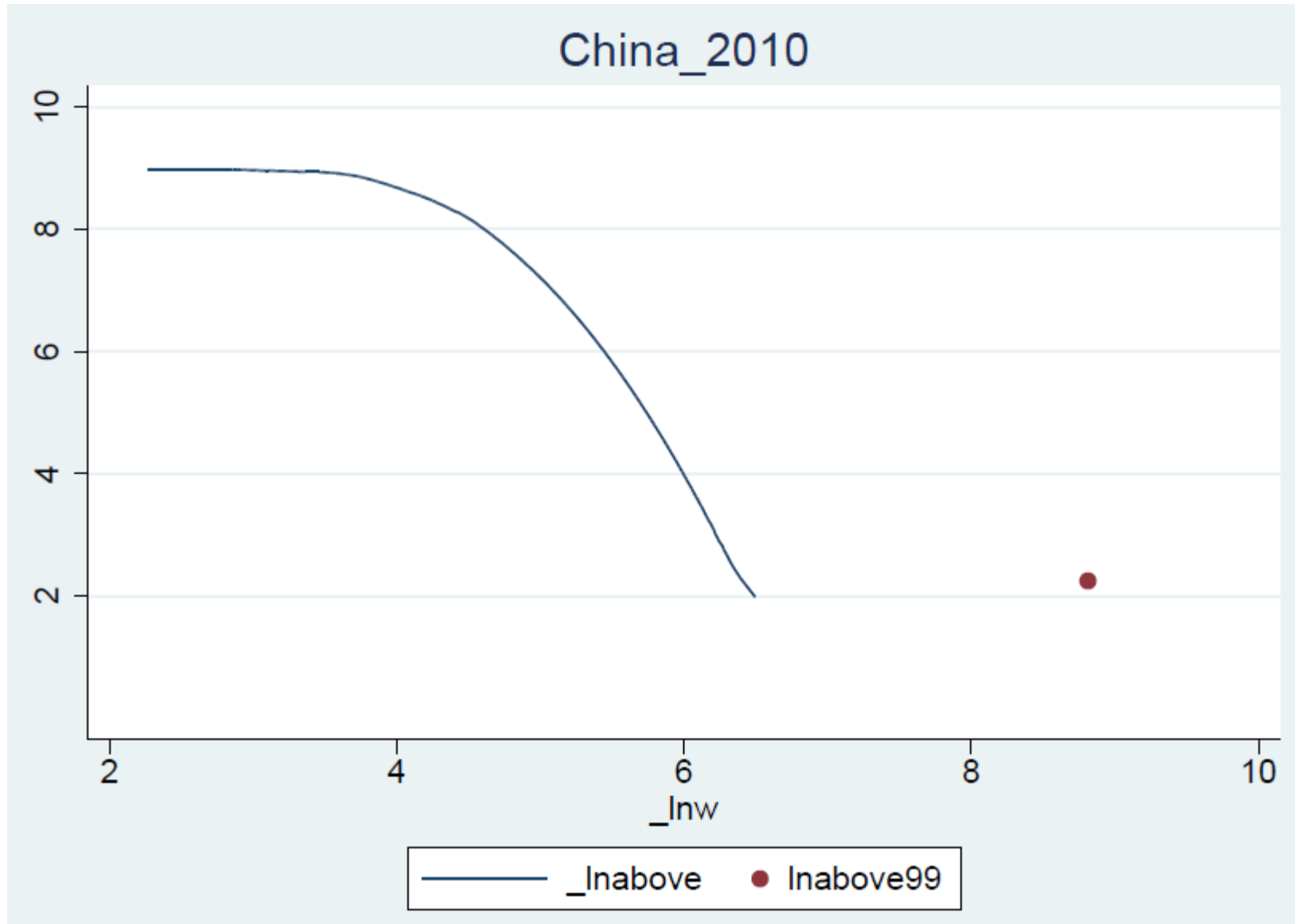


— unadjusted data - - - adjusted data

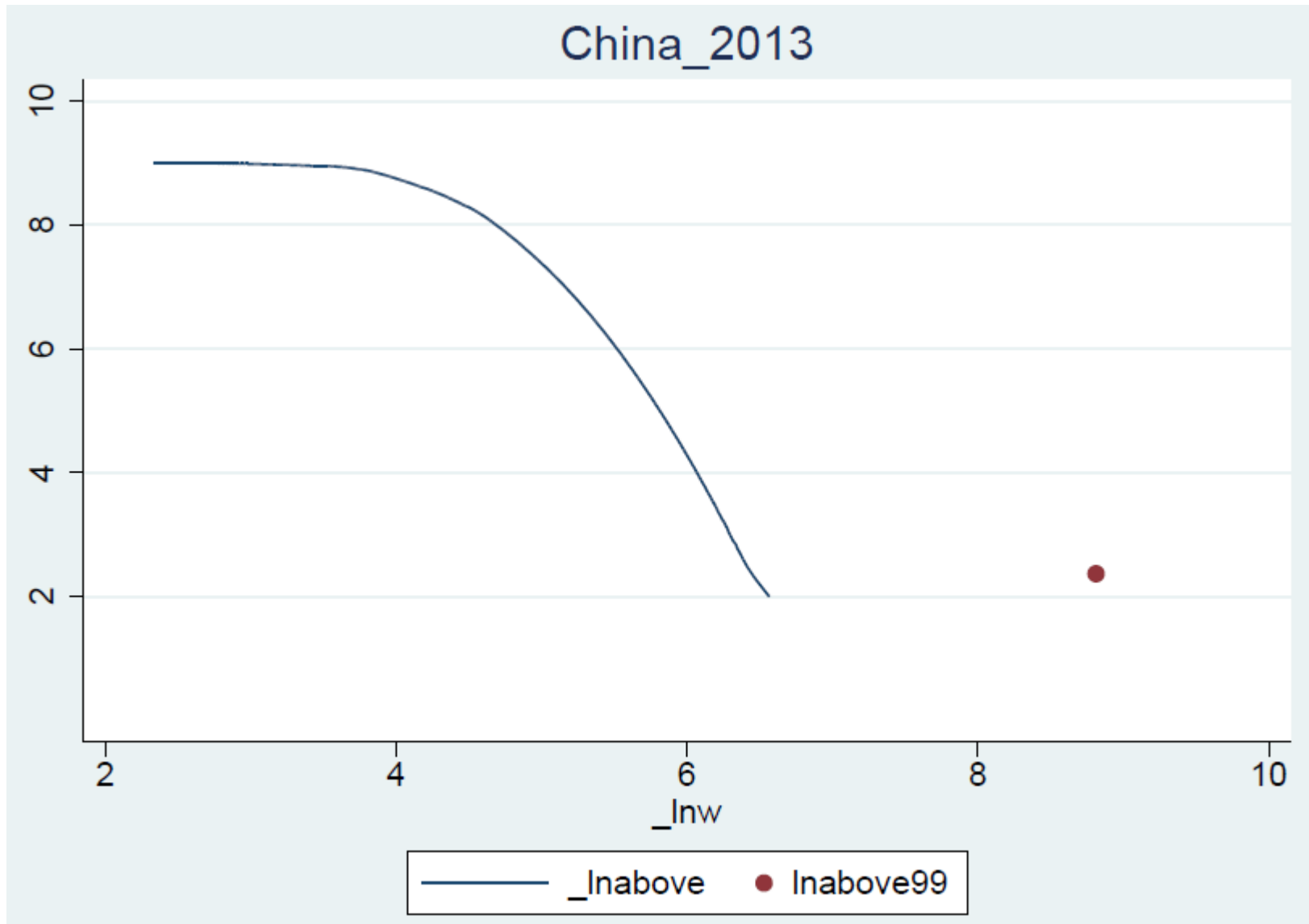
Wealth distribution China, 2005



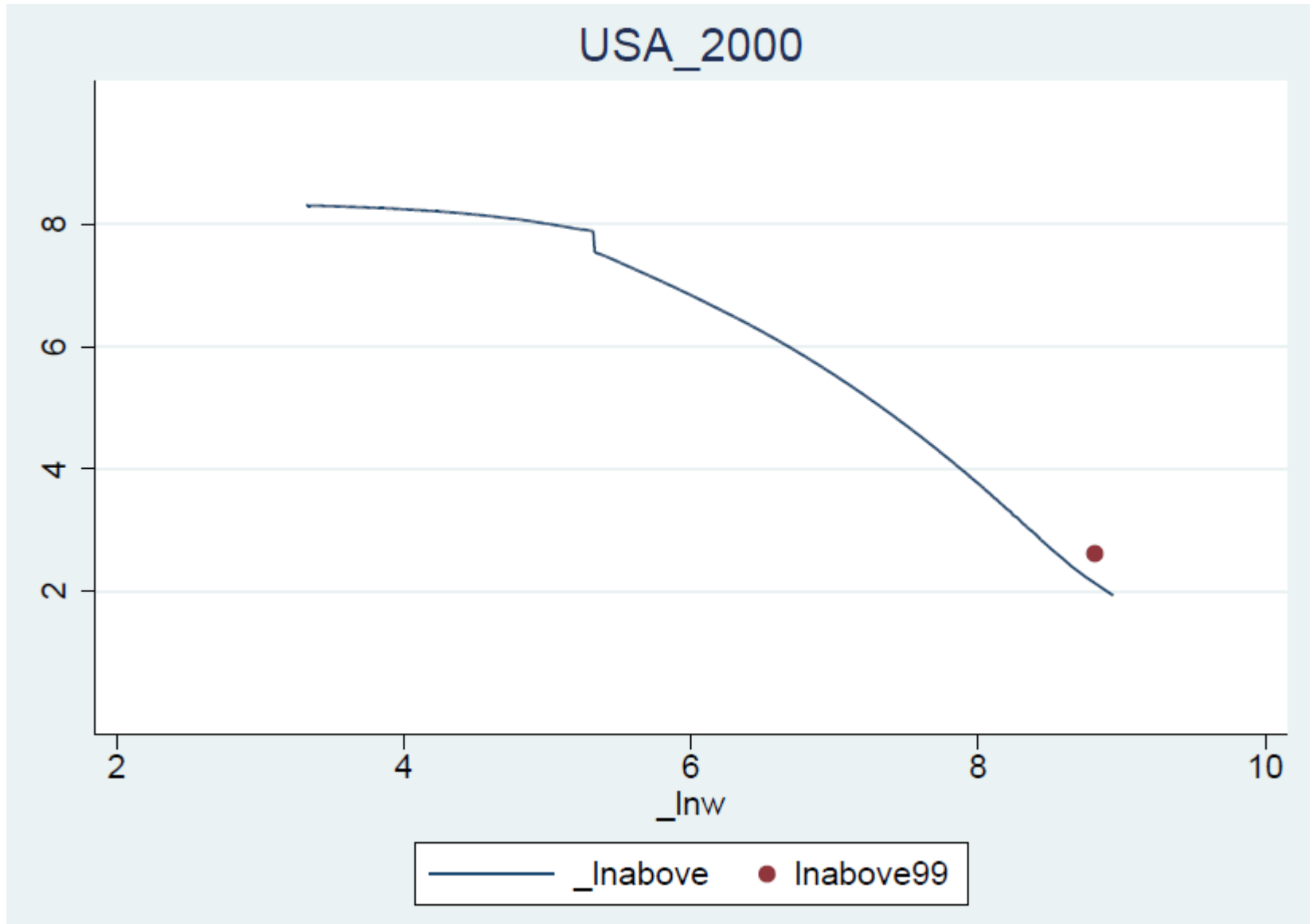
Wealth distribution China, 2010



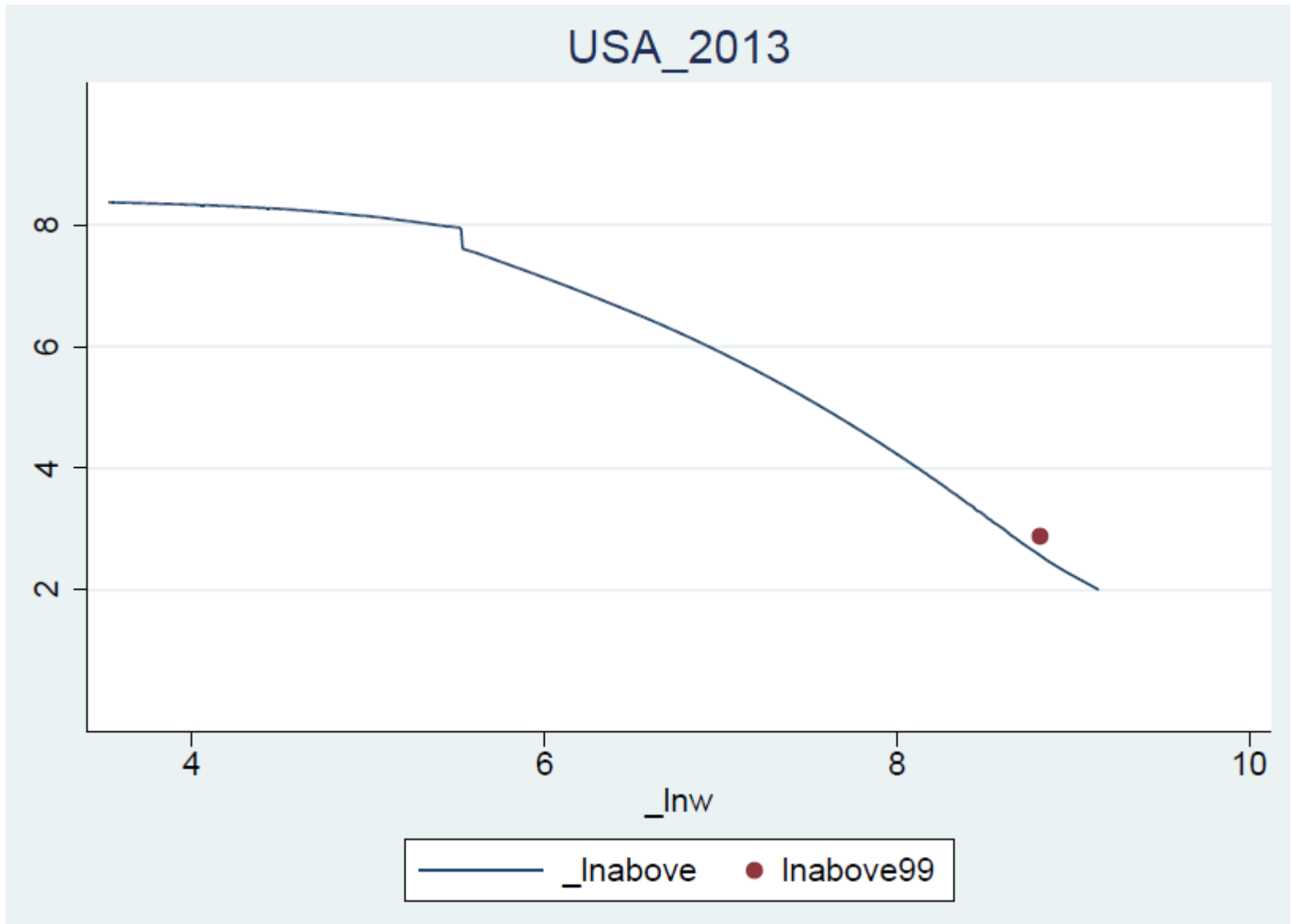
Wealth distribution China, 2013



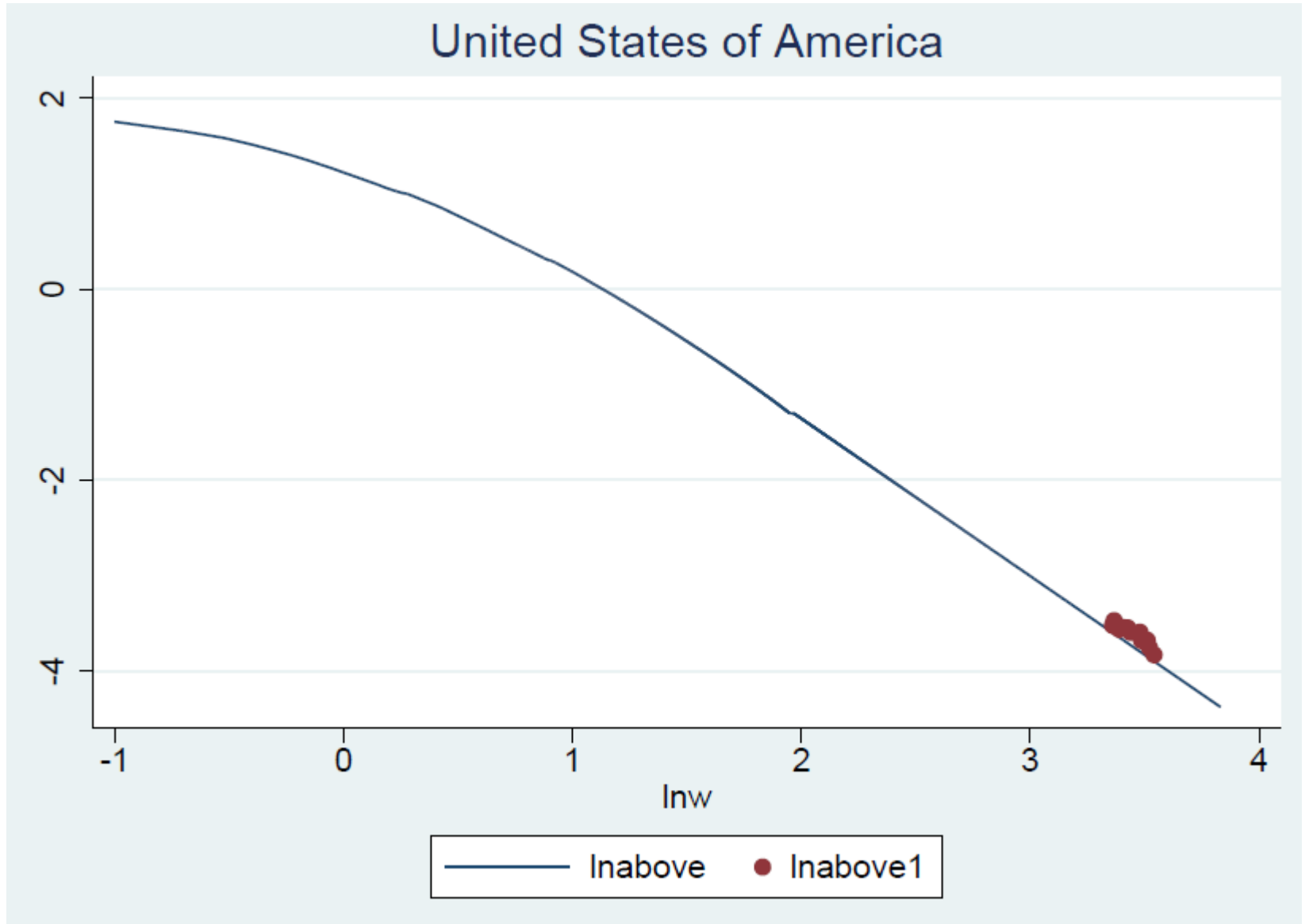
Wealth distribution USA, 2000



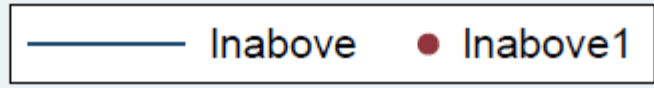
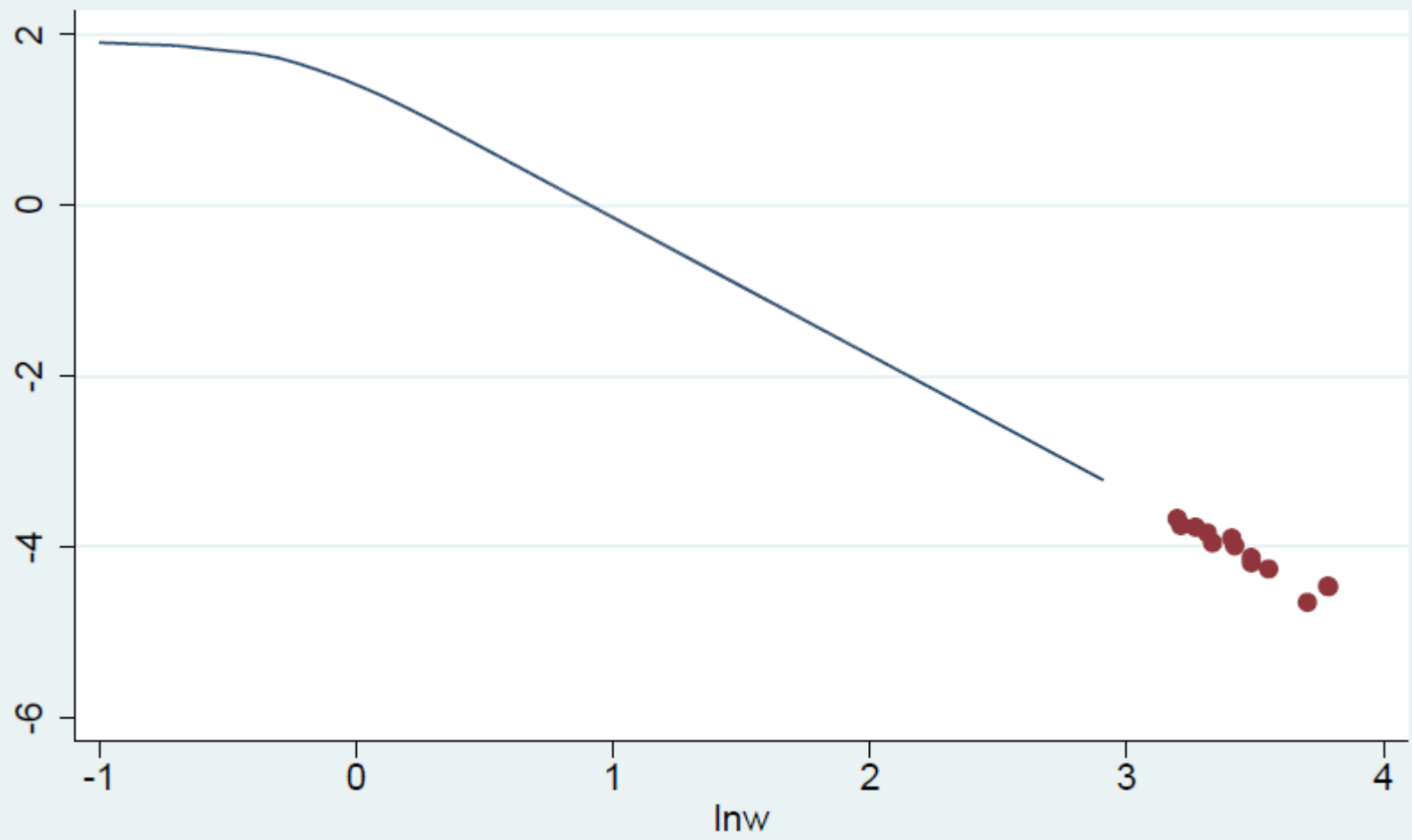
Wealth distribution USA, 2013



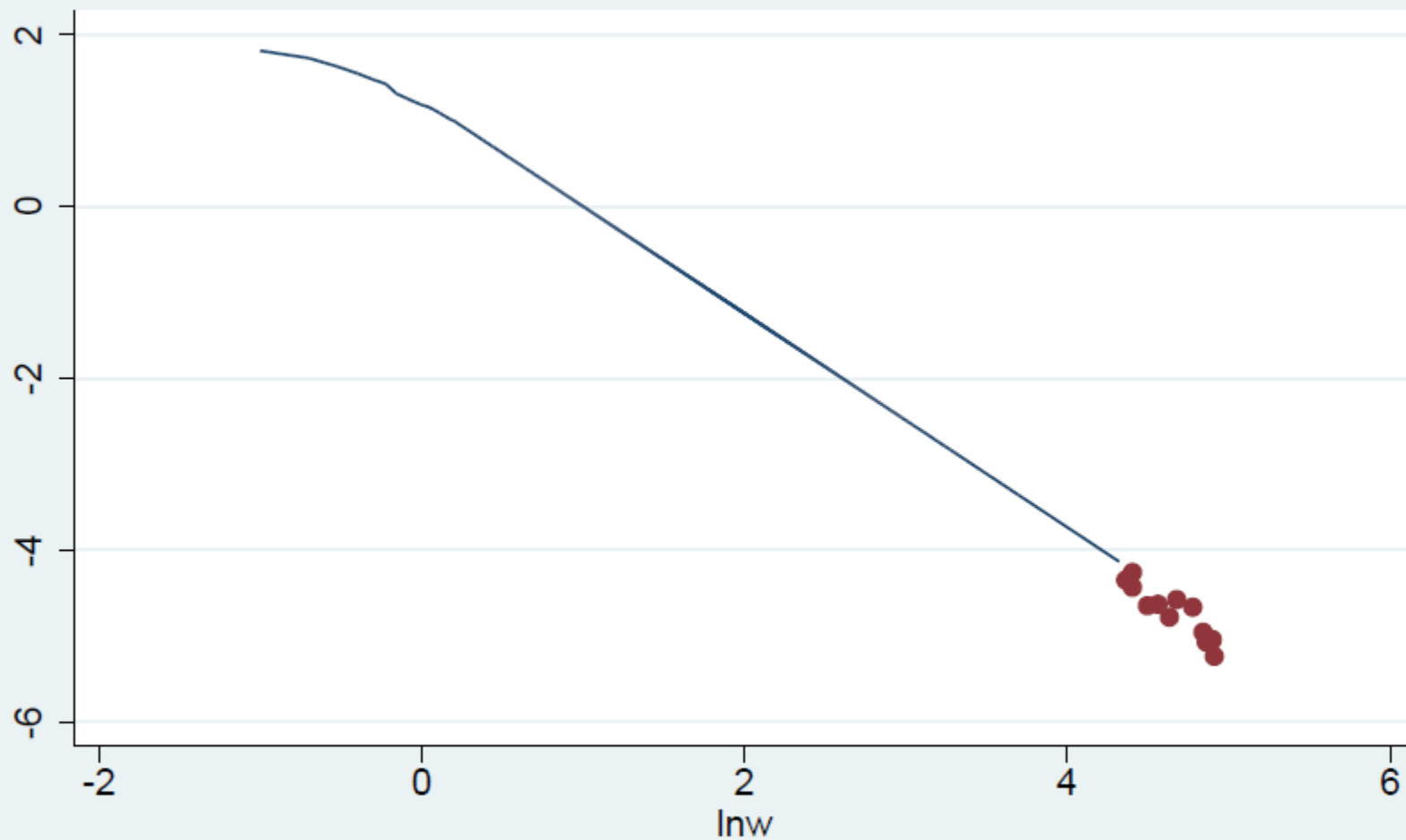
Wealth distribution USA, all years



Australia

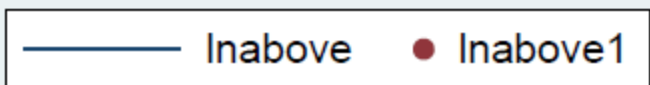
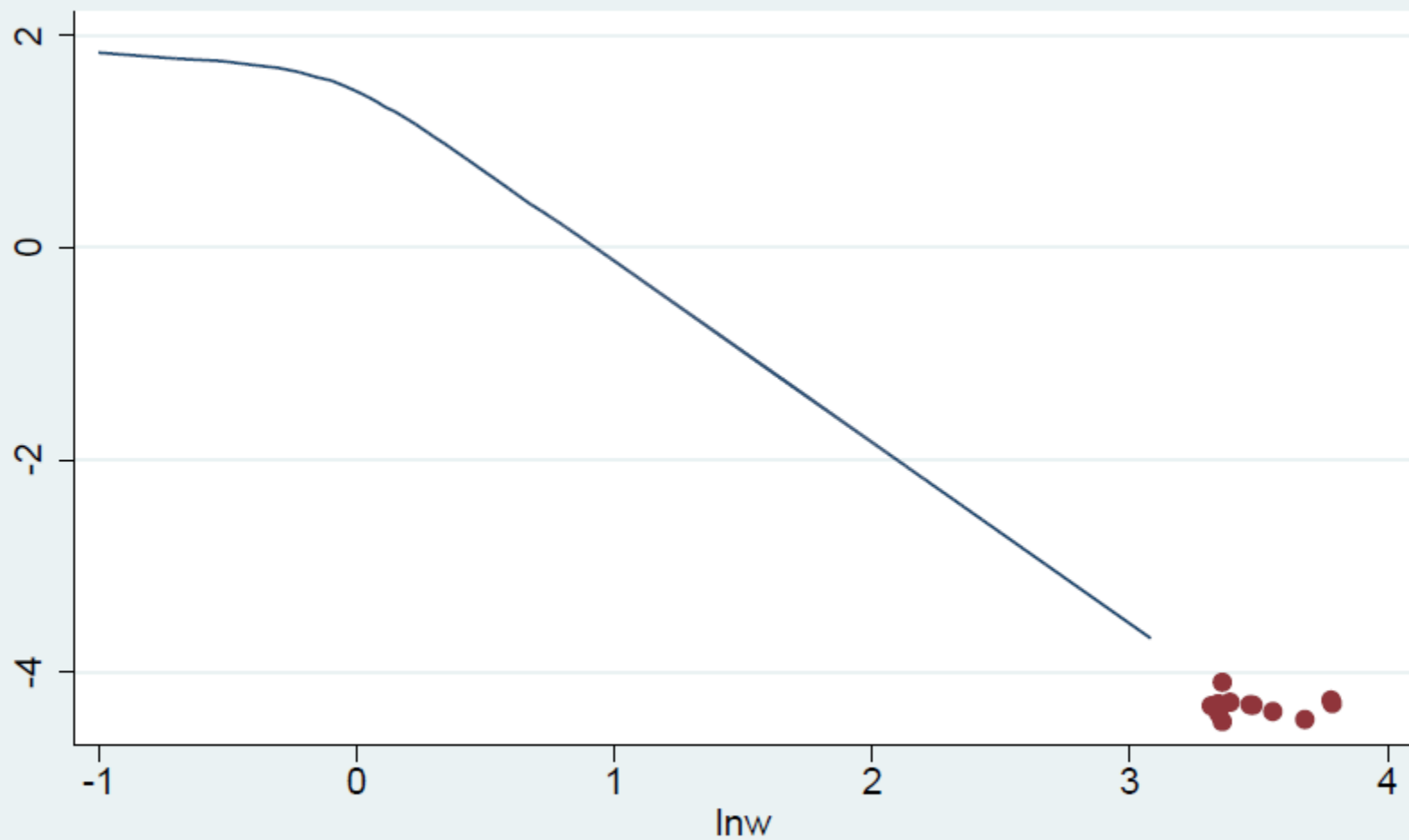


Brazil

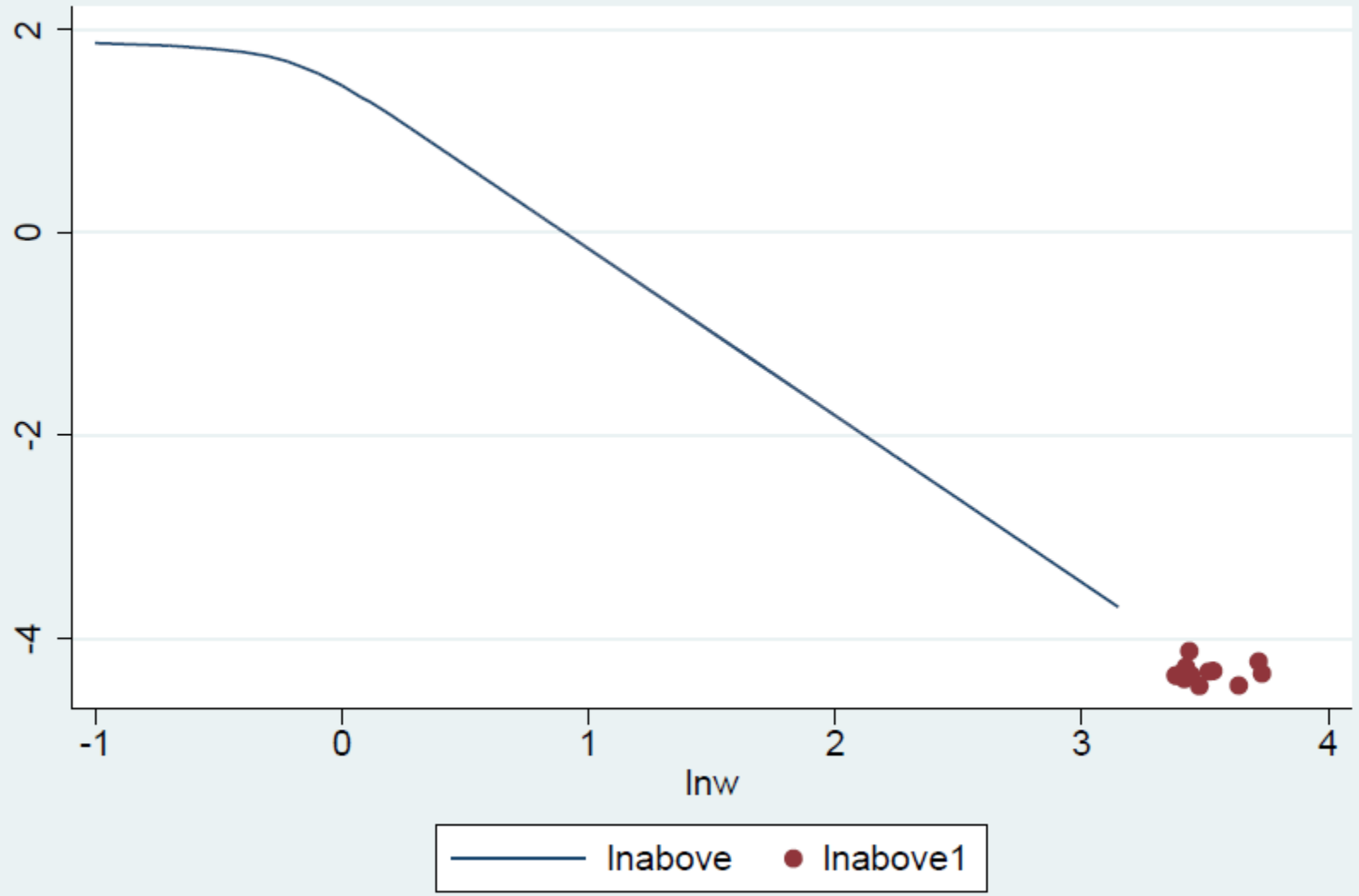


— Inabove ● Inabove1

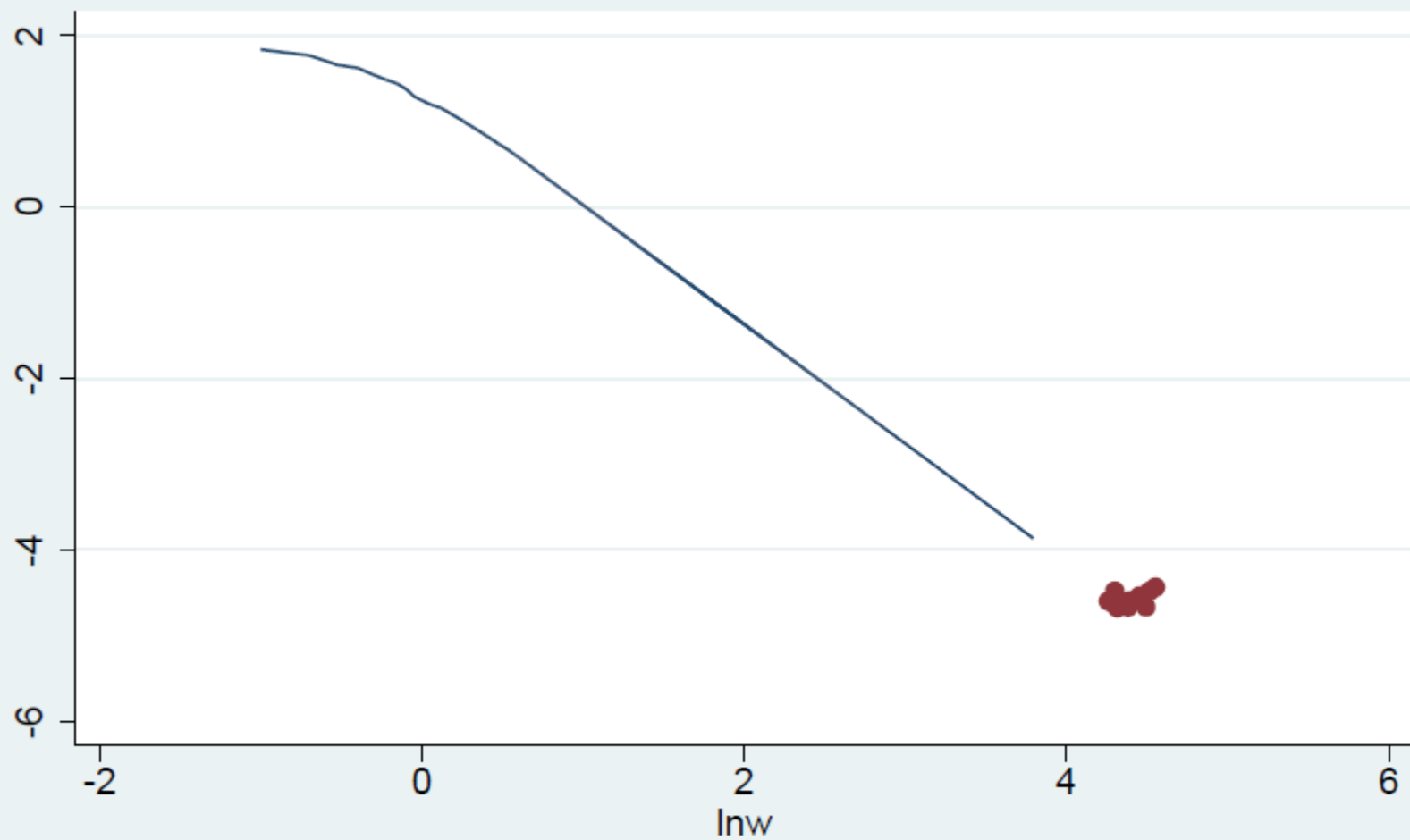
France



Italy

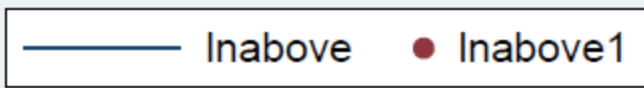
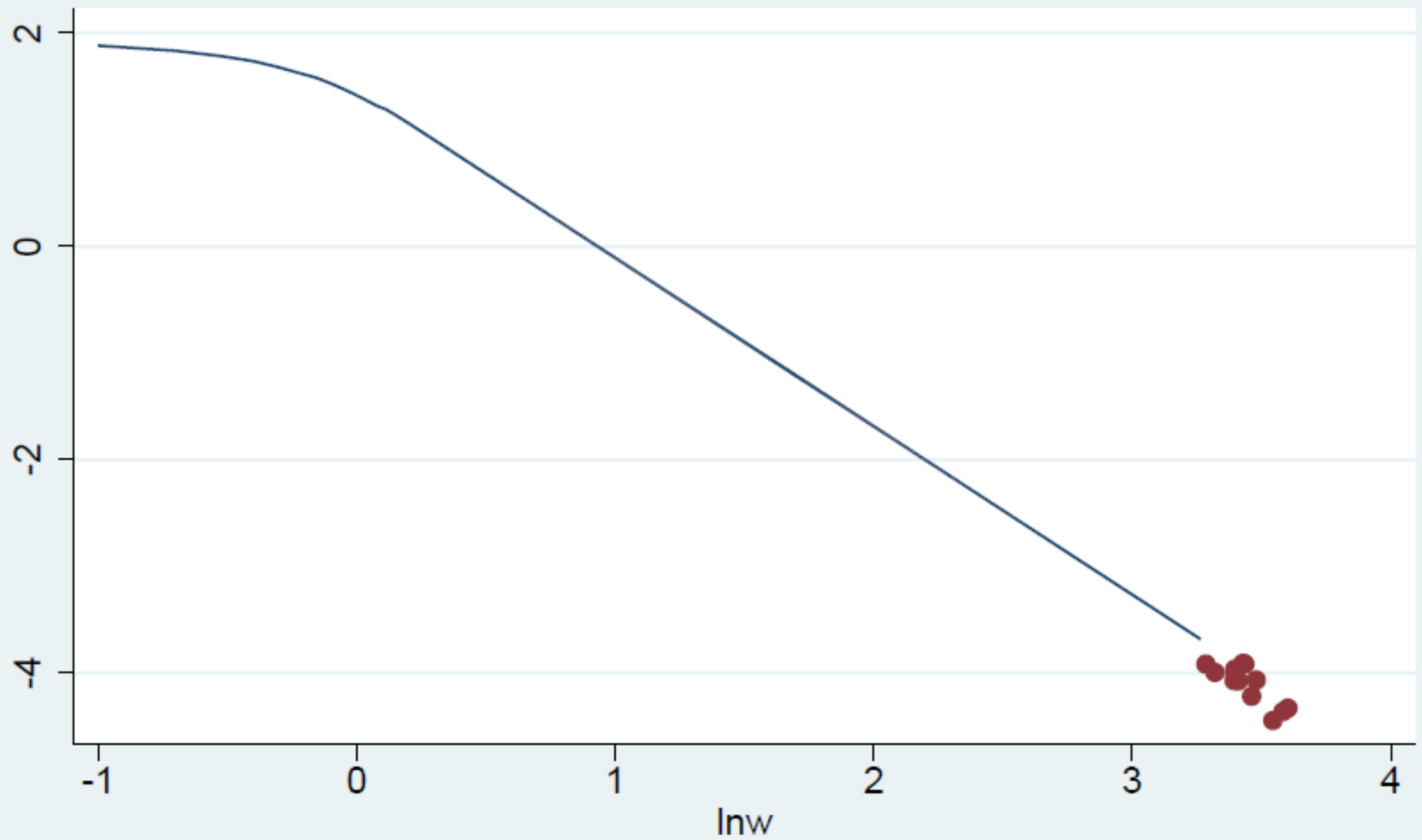


Mexico

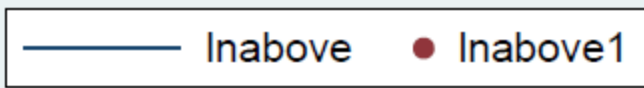
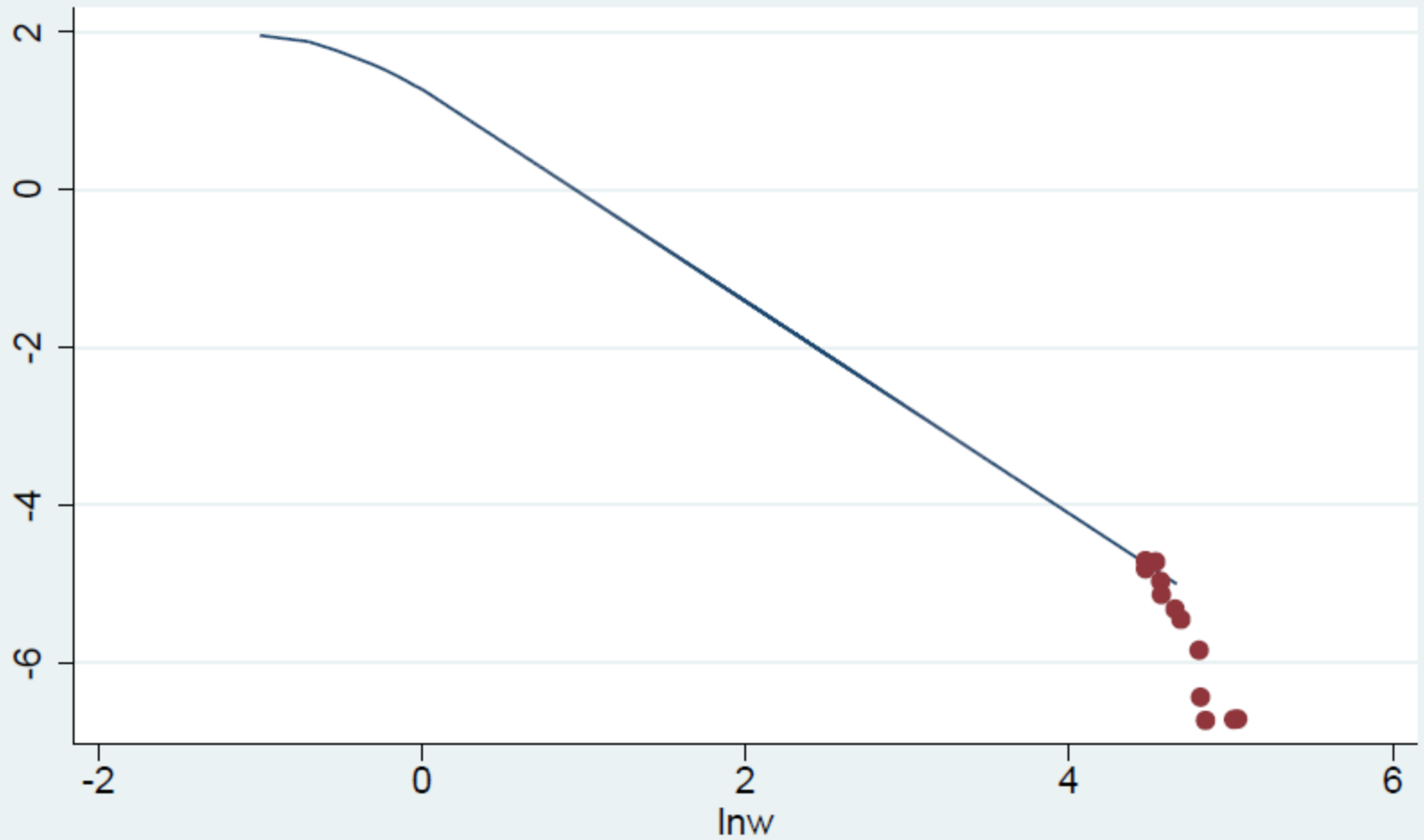


— Inabove • Inabove1

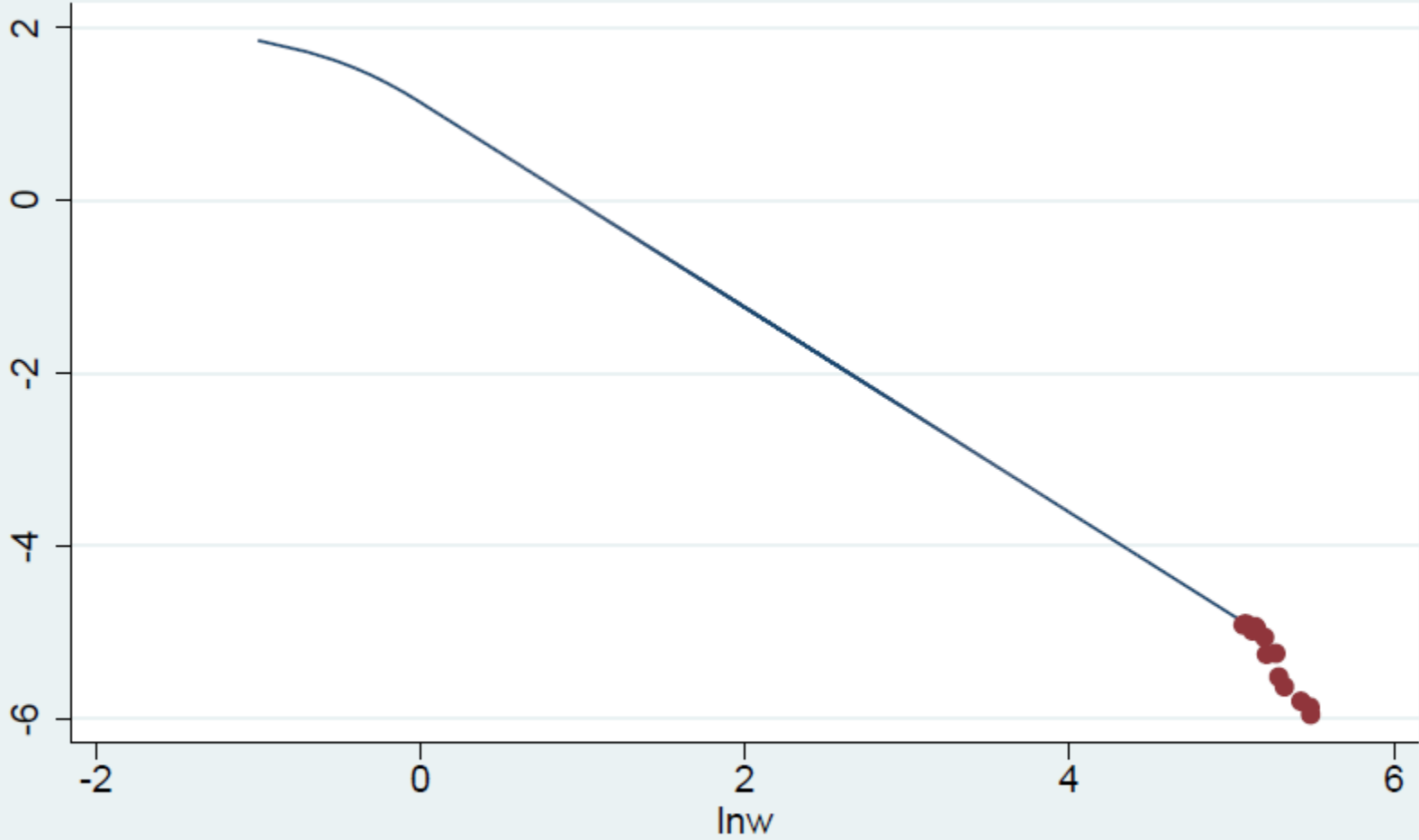
United Kingdom



China

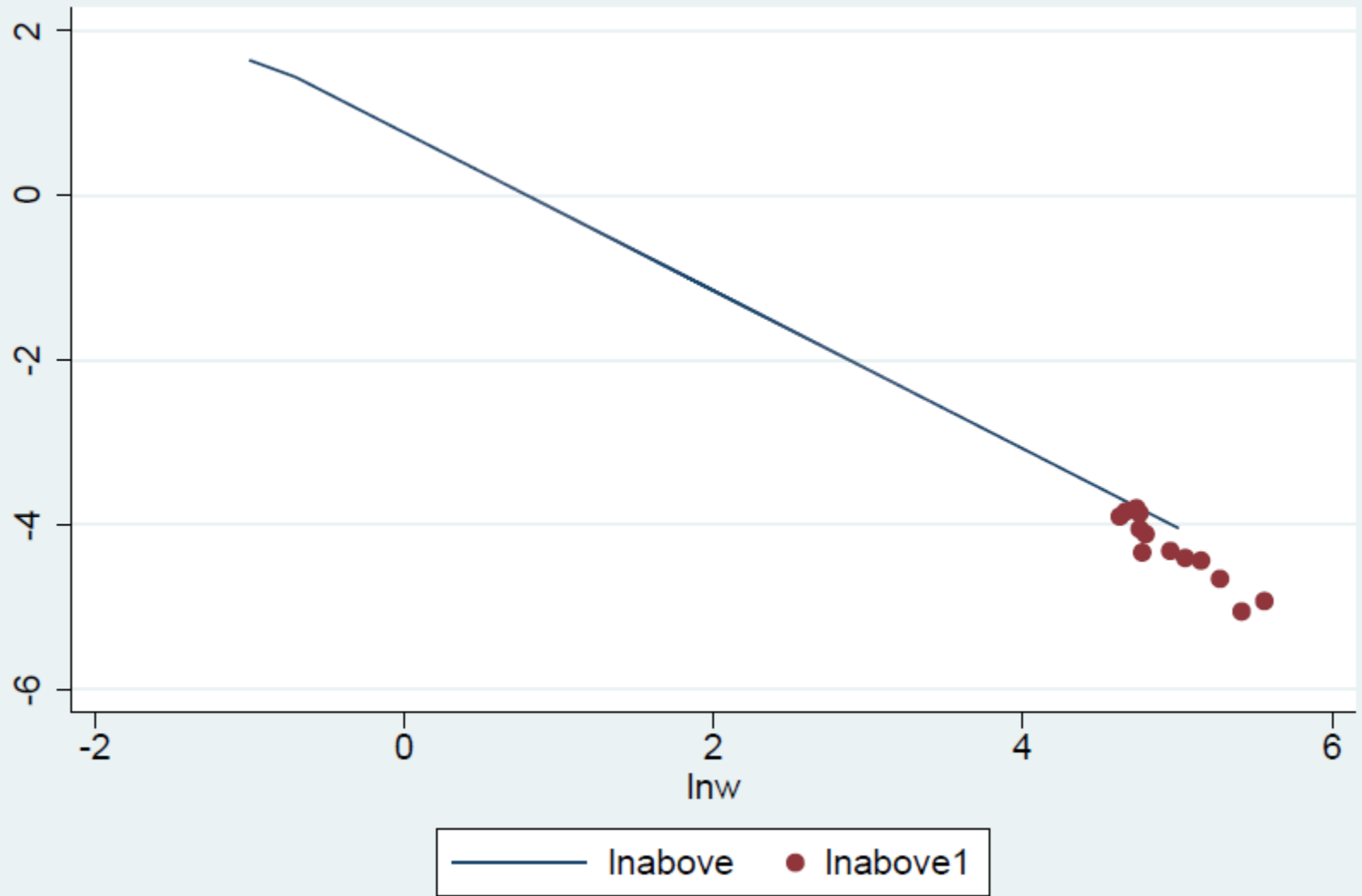


India

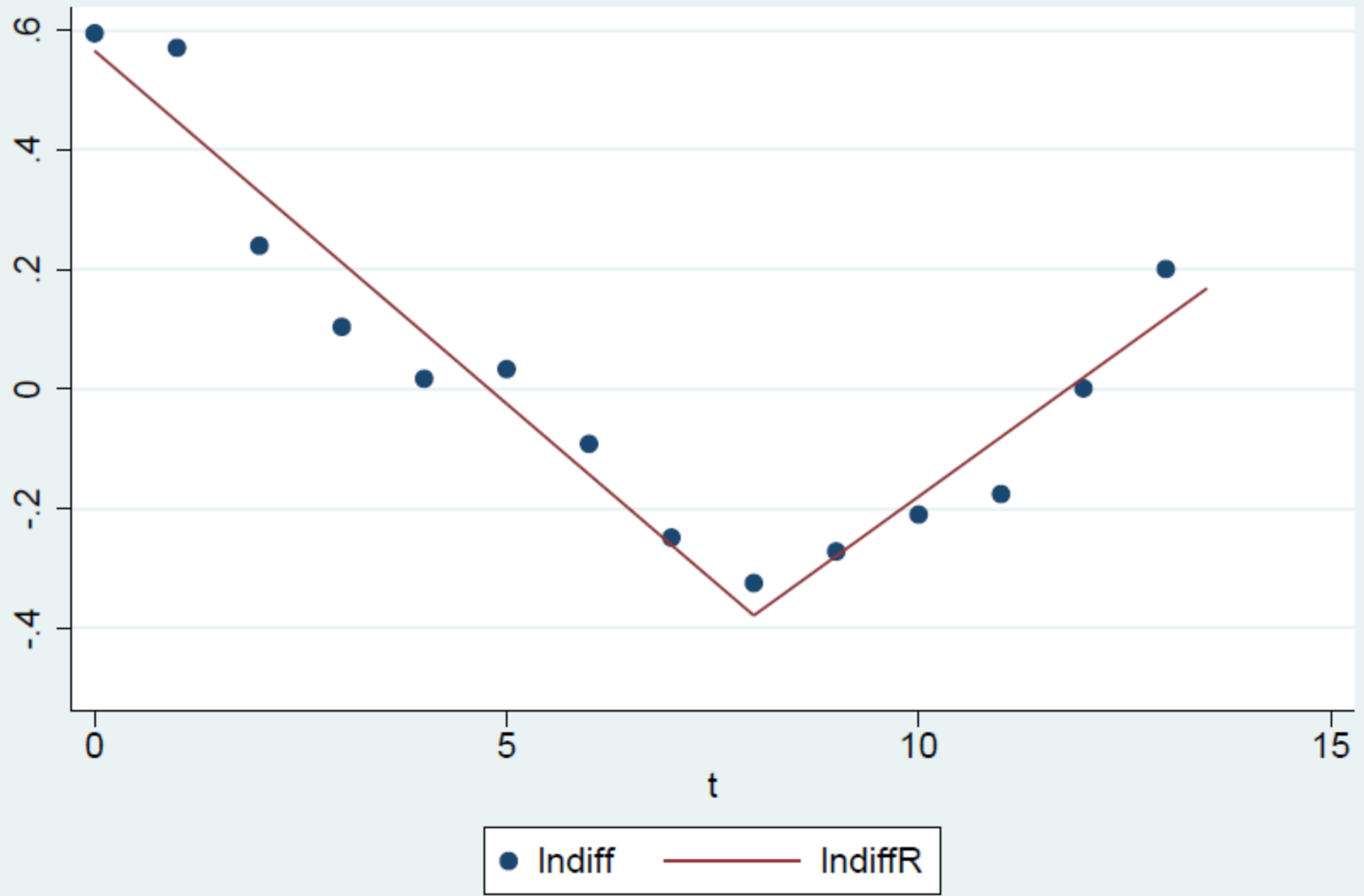


— Inabove ● Inabove1

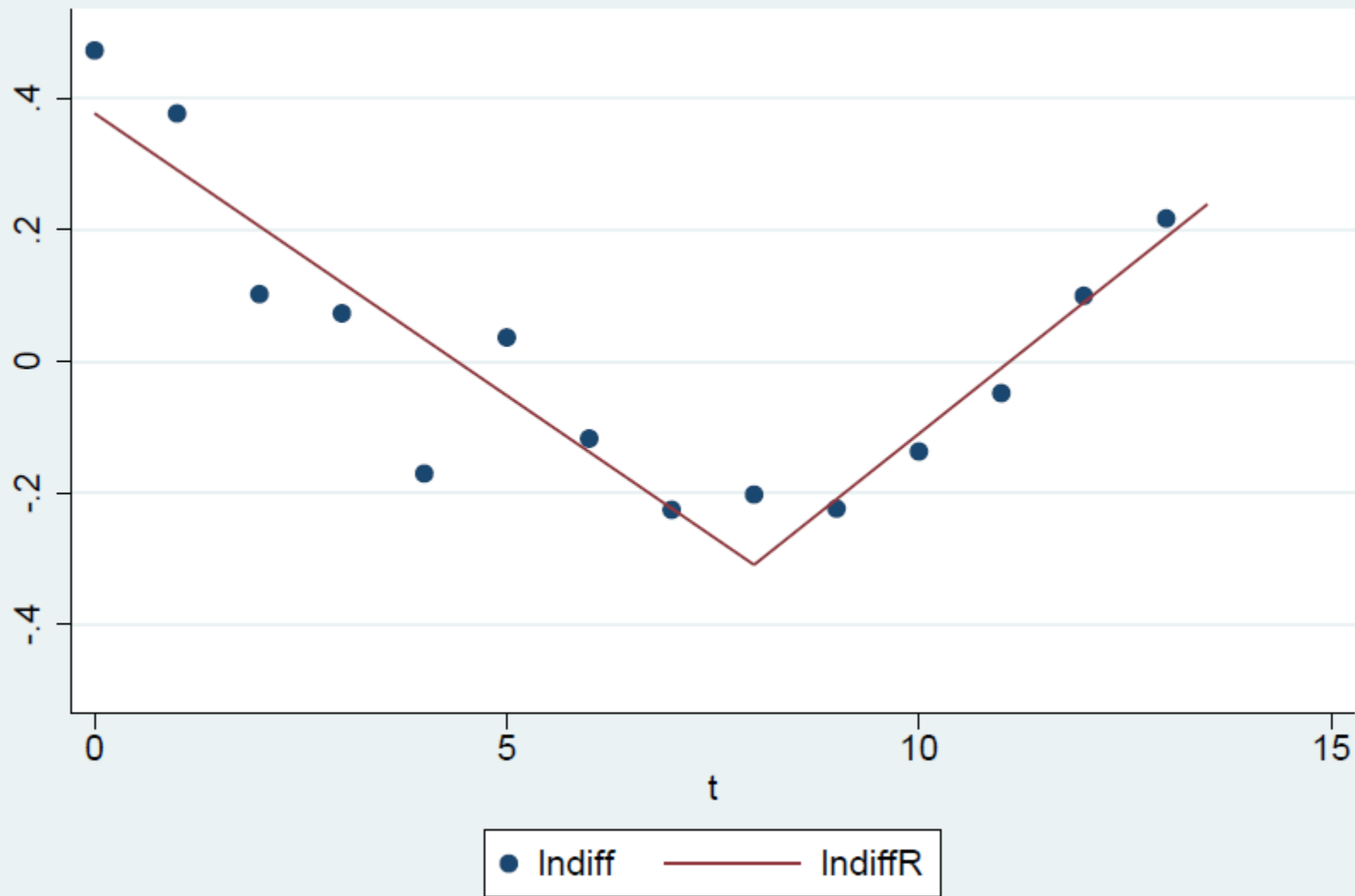
Russian Federation



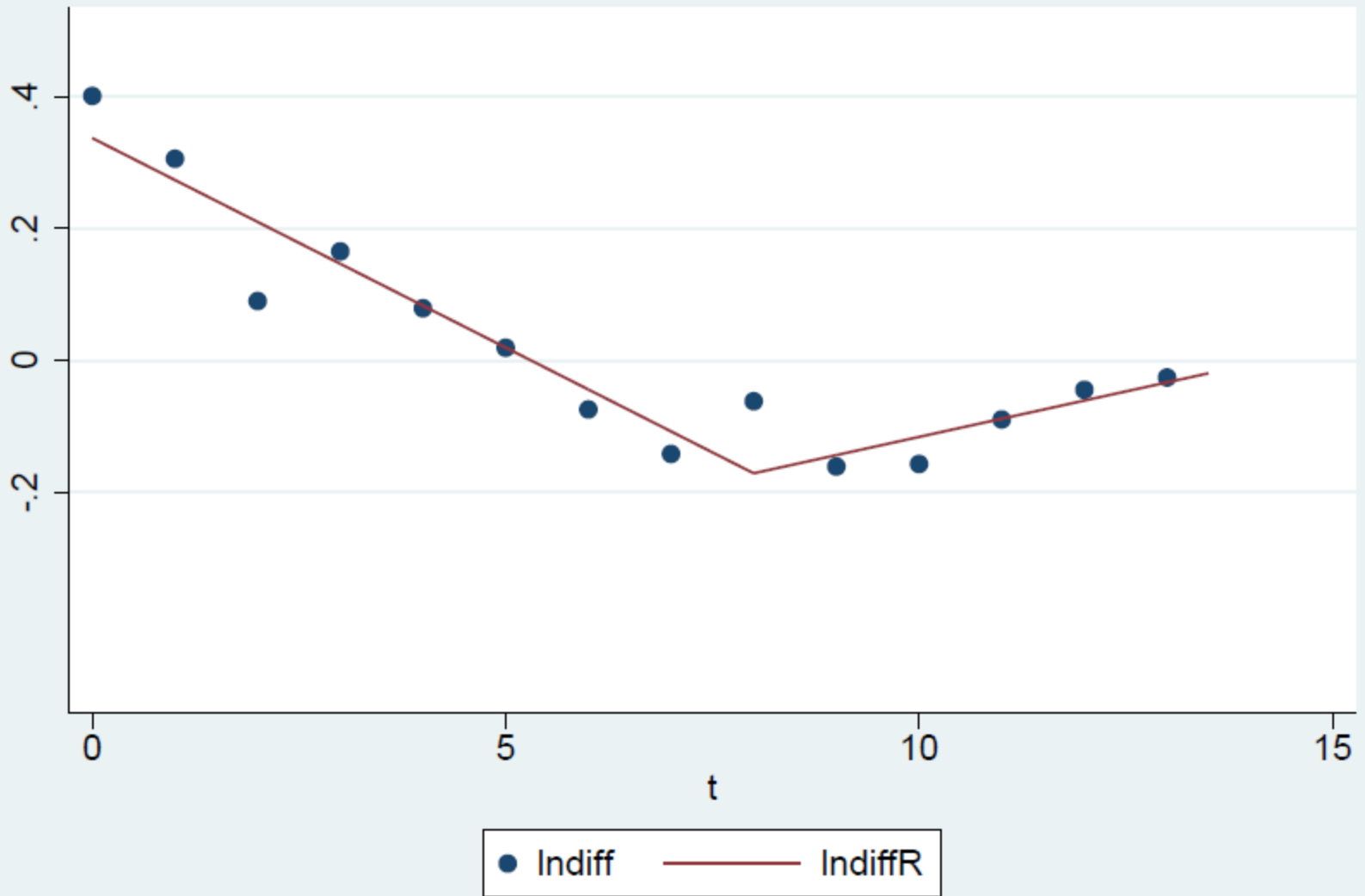
FRA



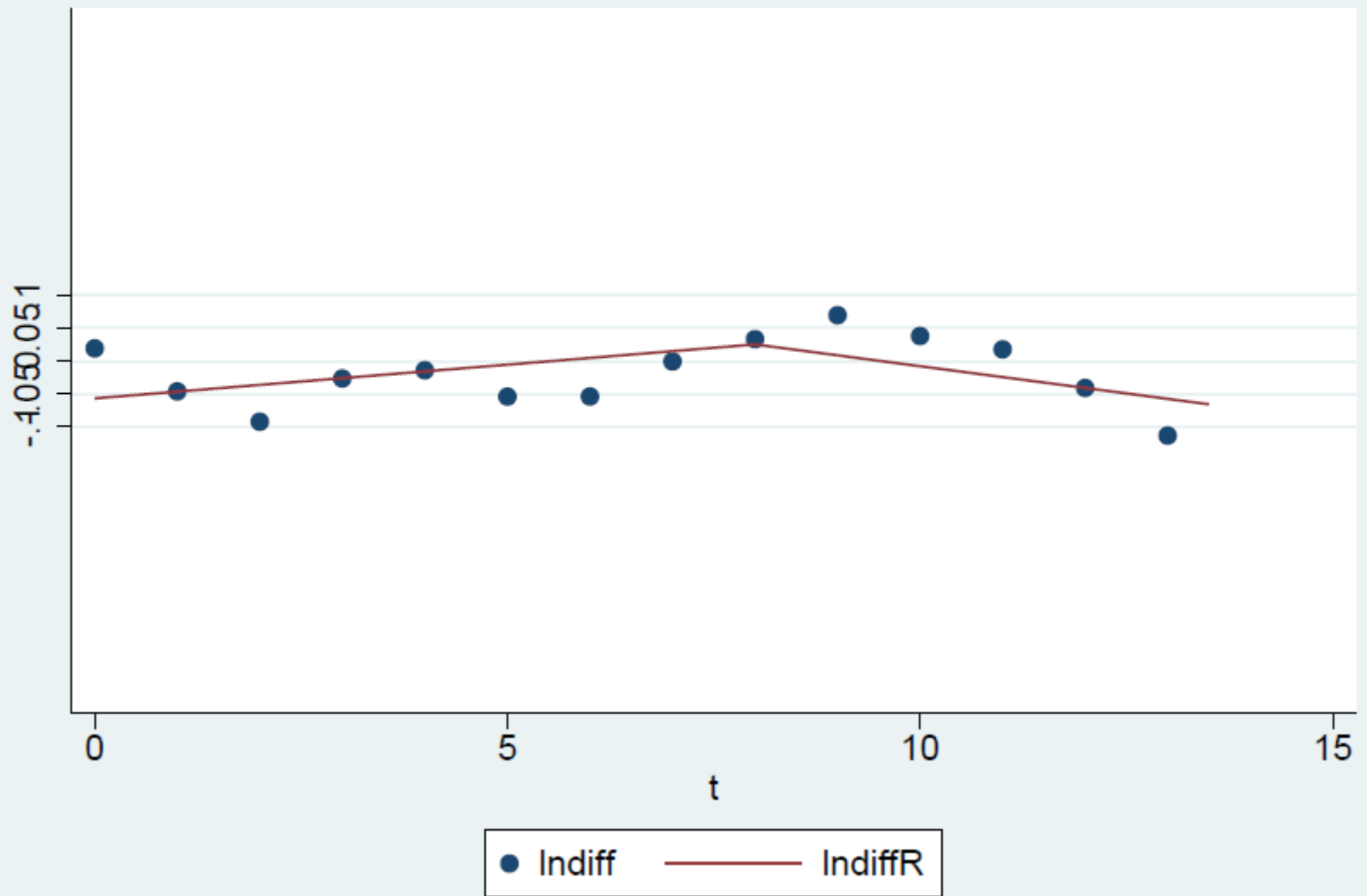
ITA



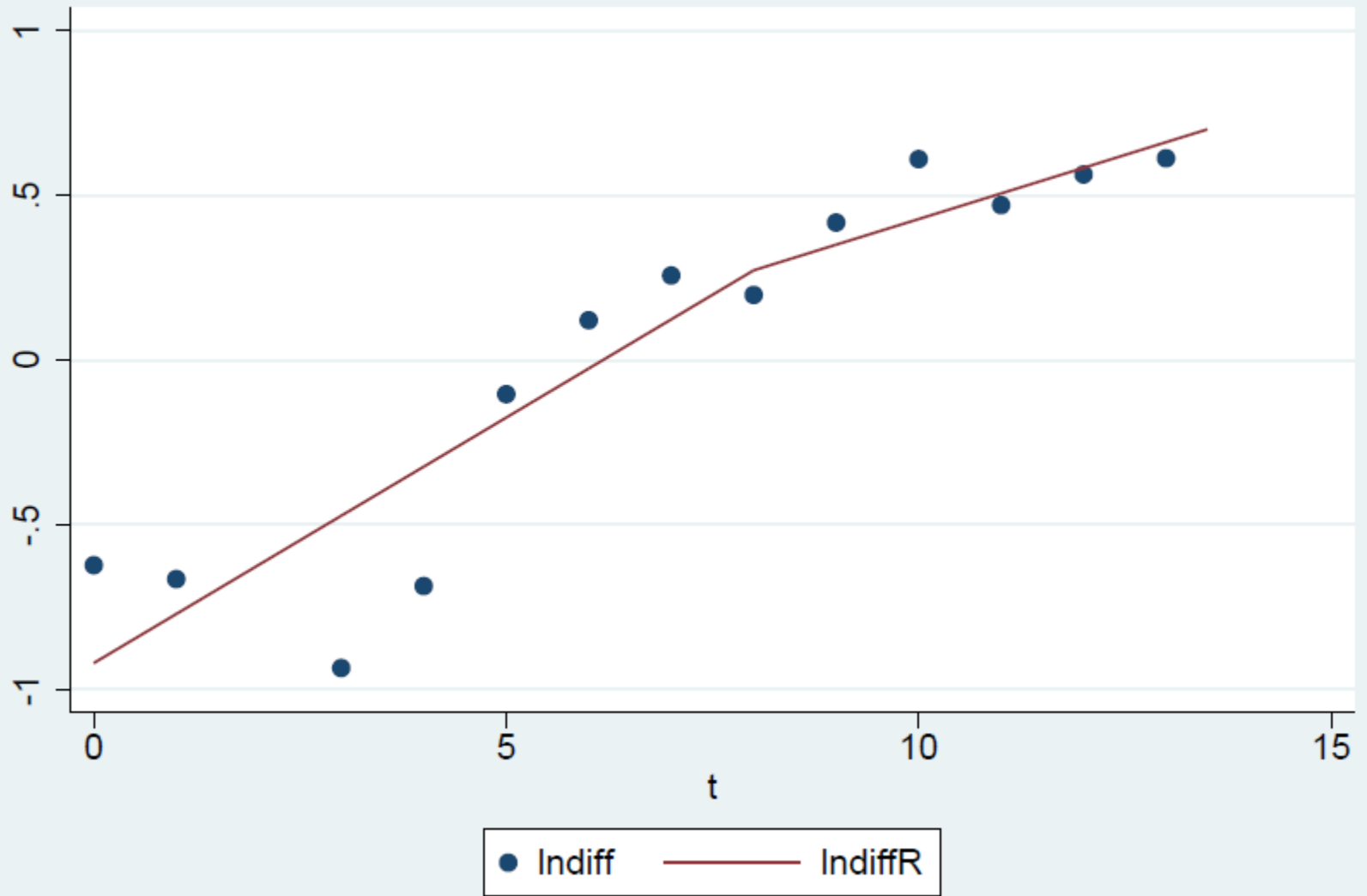
MEX



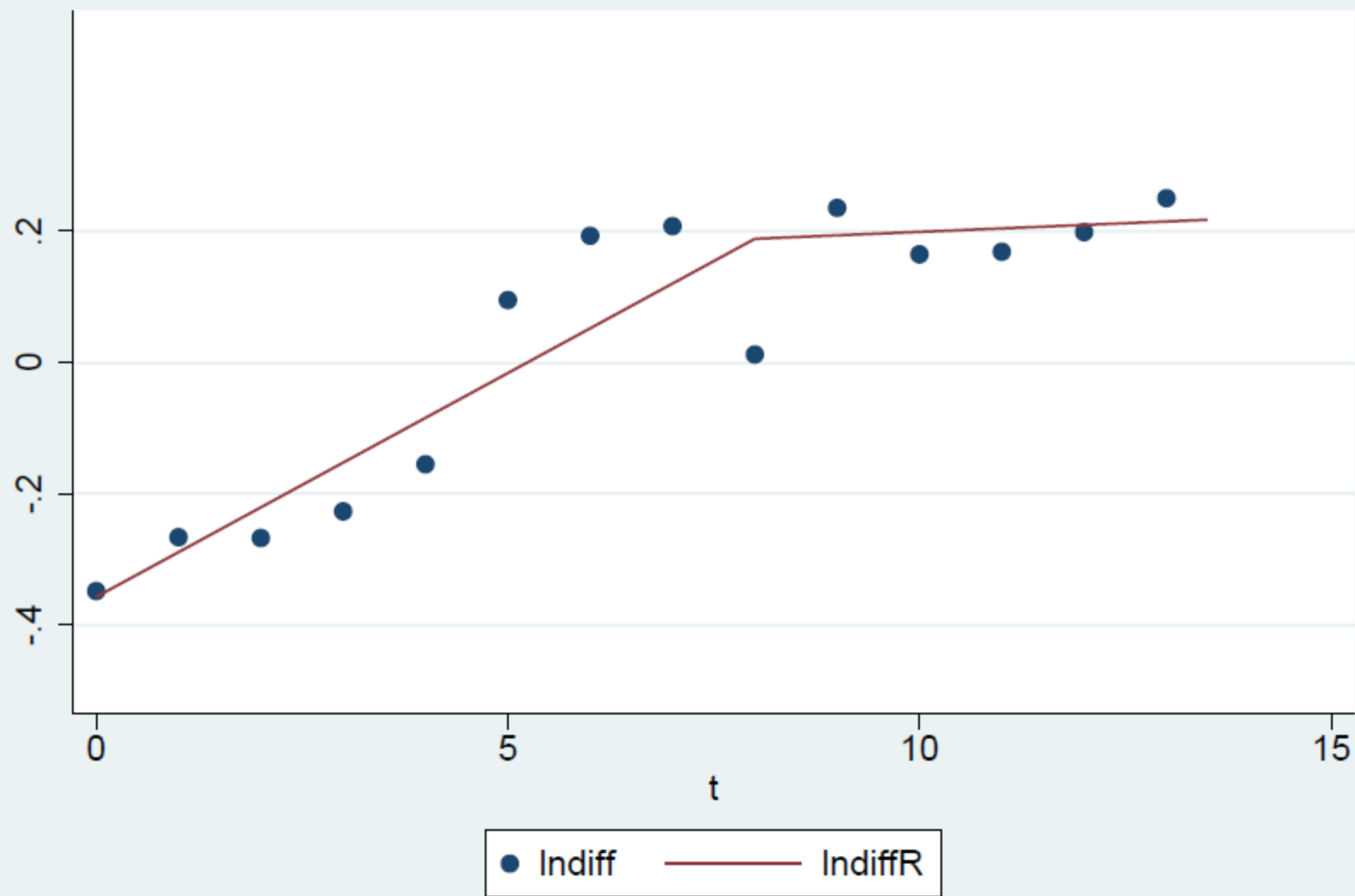
USA



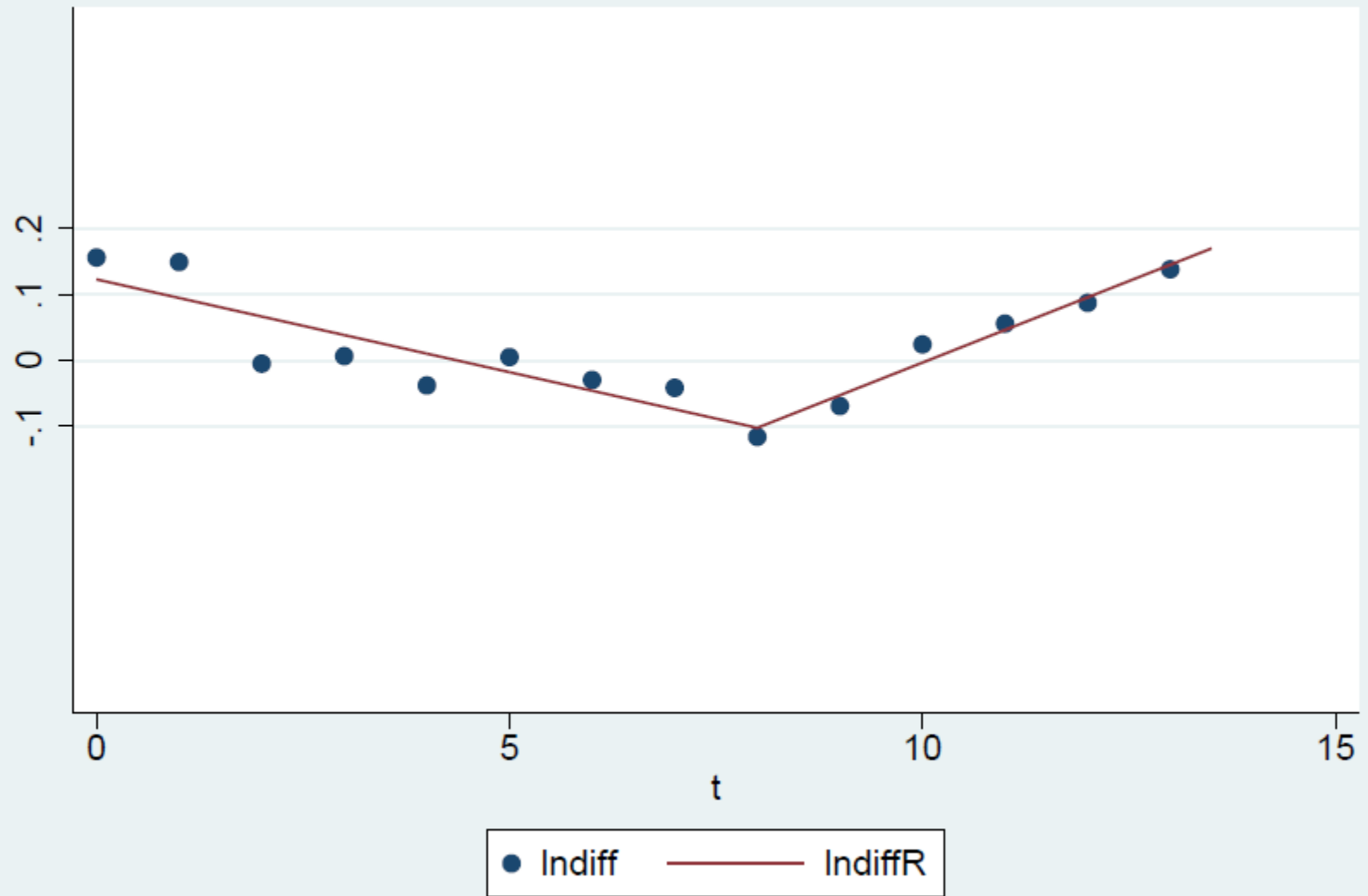
CHN



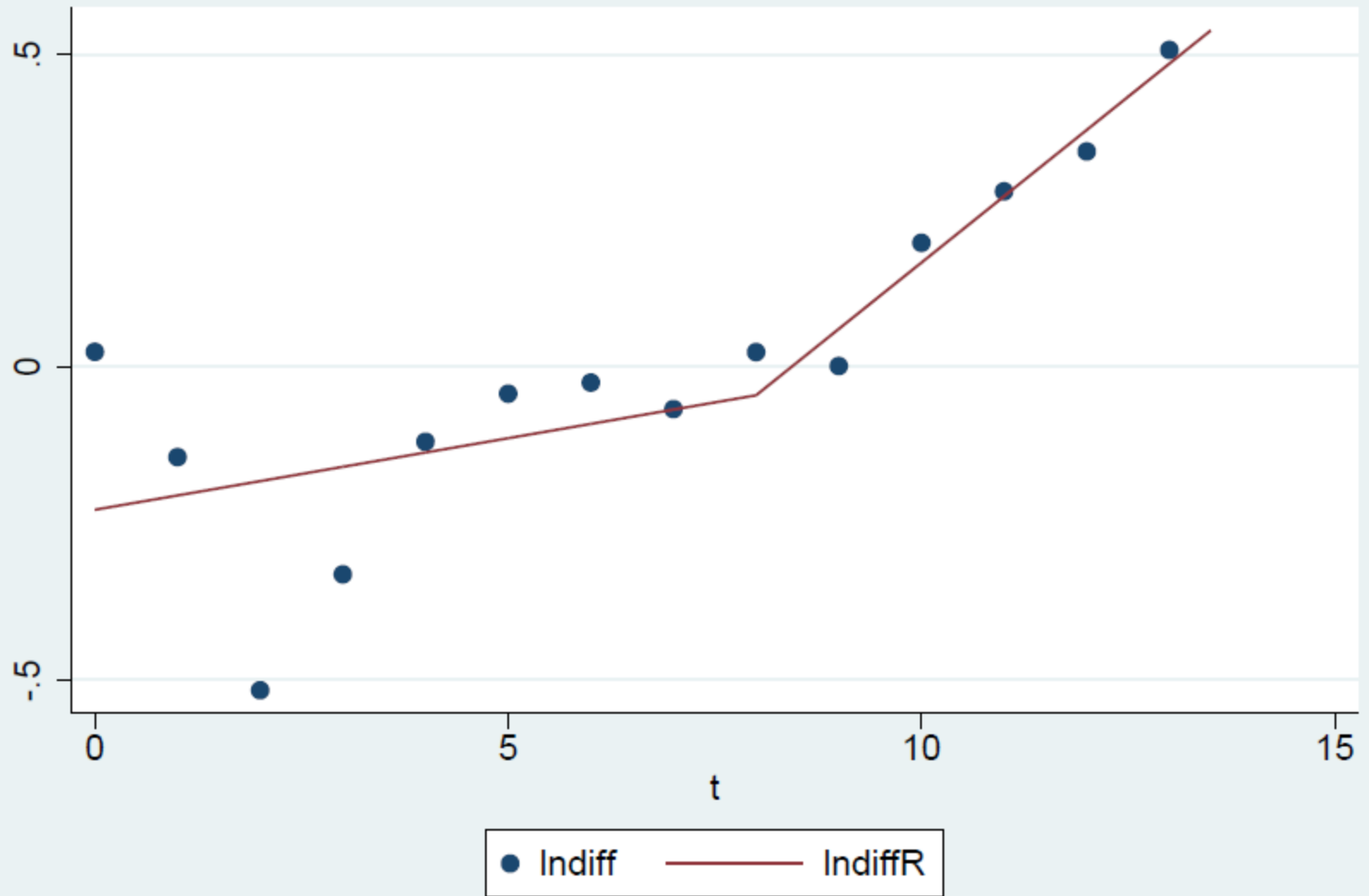
IND



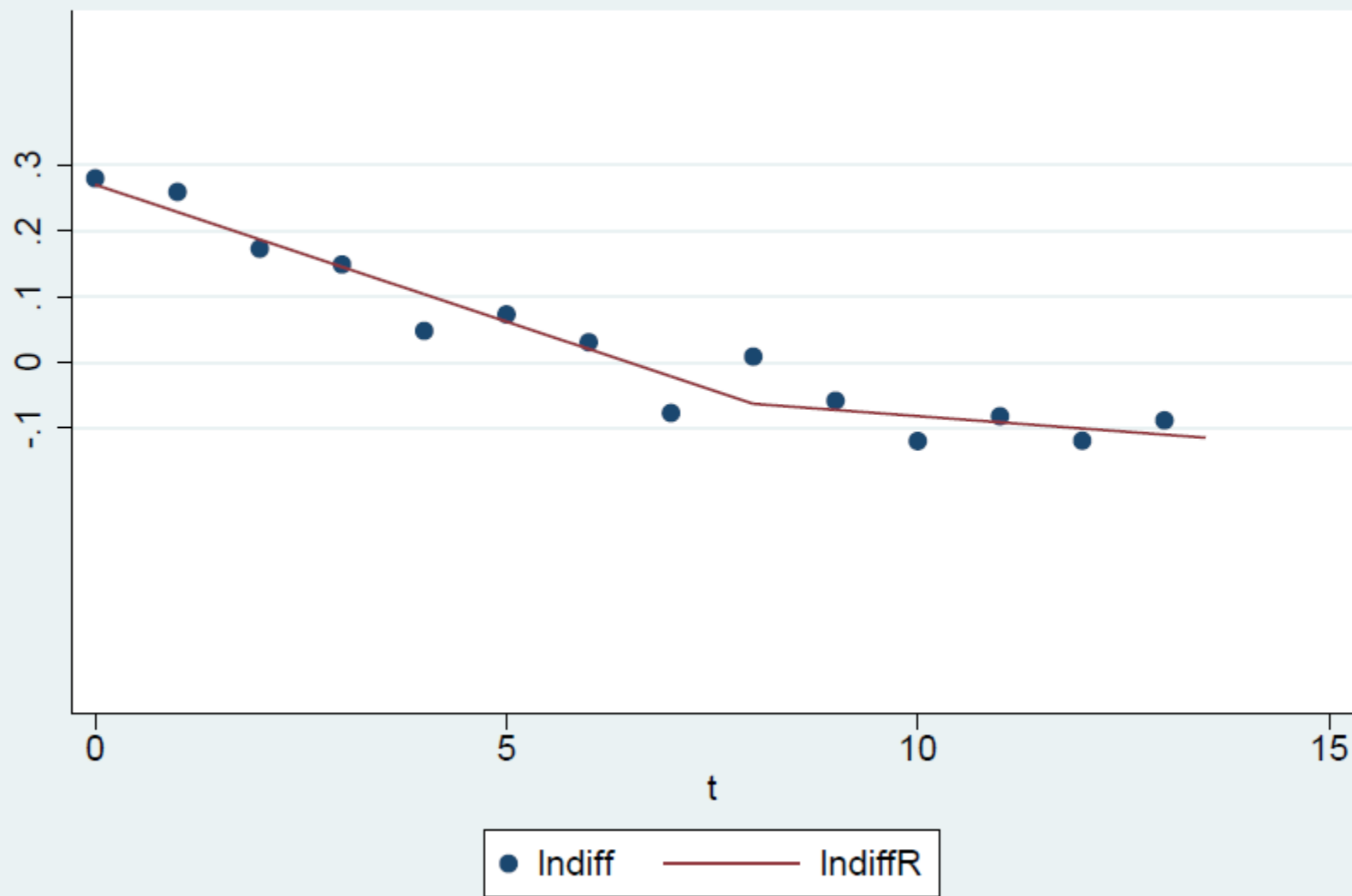
Europe



Africa



CAN



AUS

