

Wealth and population growth under dynamic average utilitarianism

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ONLINE APPENDIX

A The value of wealth under TU *per capita* and DAU

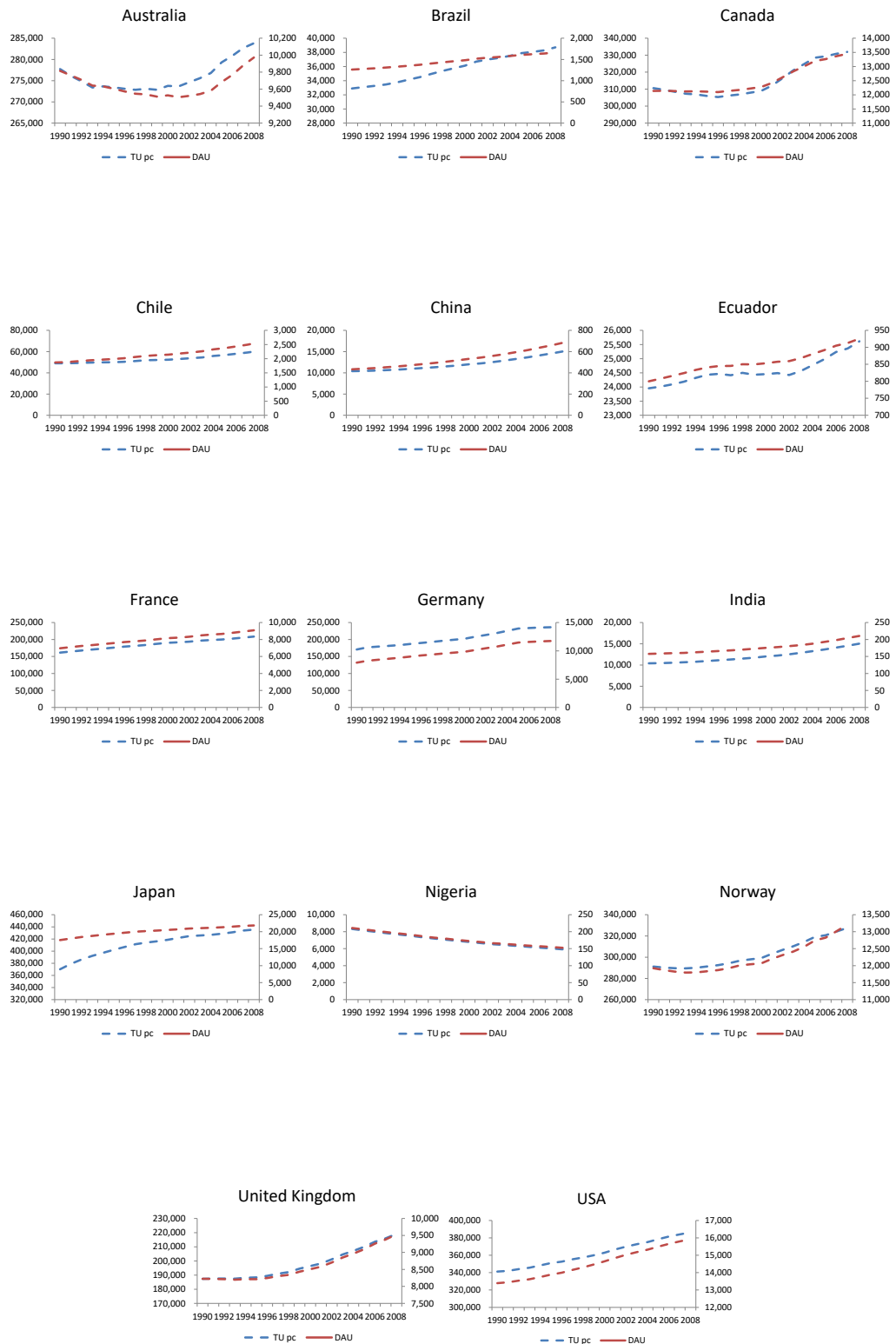


Figure A1: Inclusive wealth under TU *per capita* (dashed line) and under DAU (solid line), 1990-2008. Based on IWR 2012 and the author's calculation.

B Changes in the value of wealth under TU, TU *per capita*, and DAU

Figures A2 and A3 present the change rates in the value of wealth under TU, TU *per capita*, and under DAU.

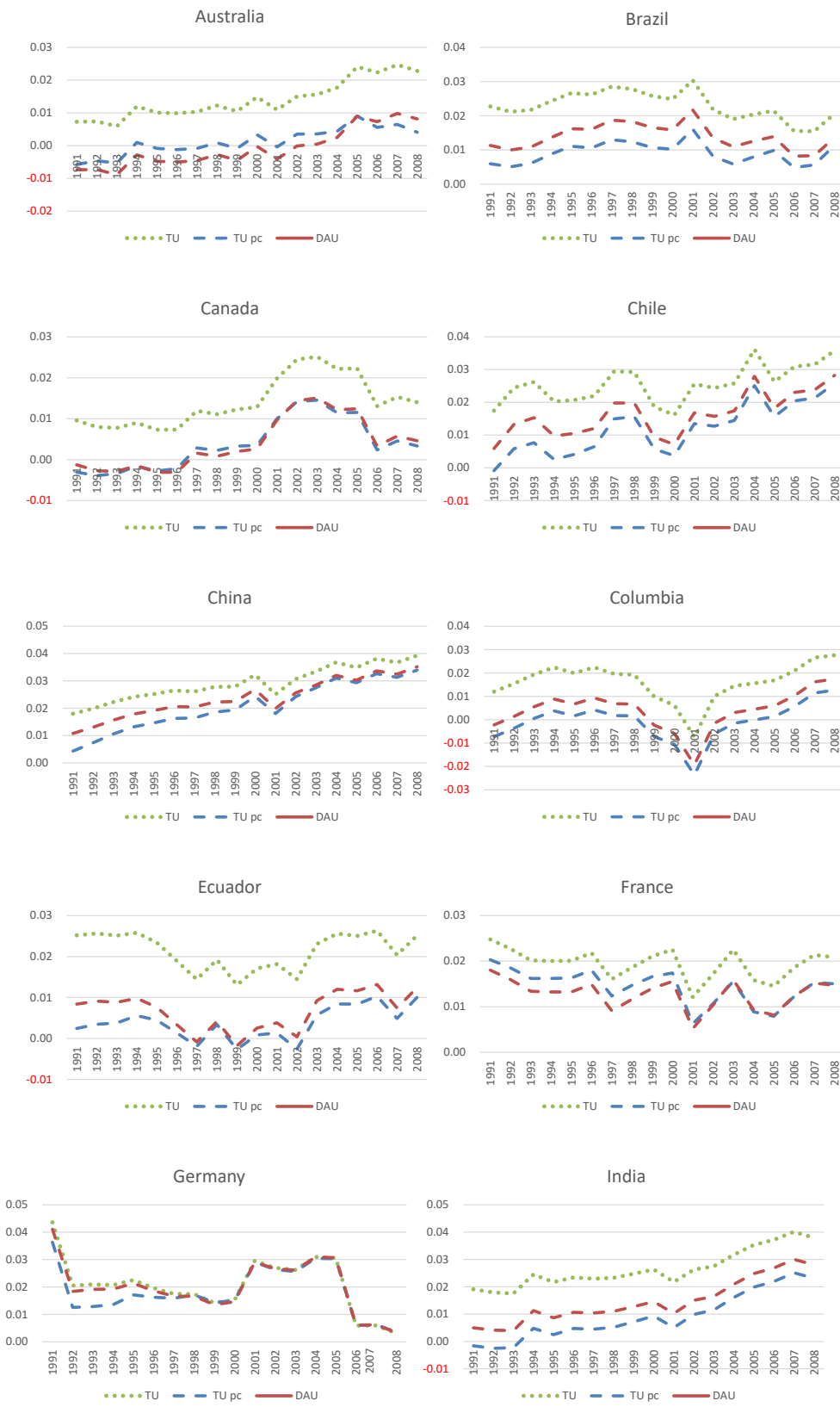


Figure A2: The change rates in the values of wealth under TU (dotted line), under TU *per capita* (dashed line), and under DAU (solid line), 1991-2008. Based on IWR 2012 and the author's calculation.

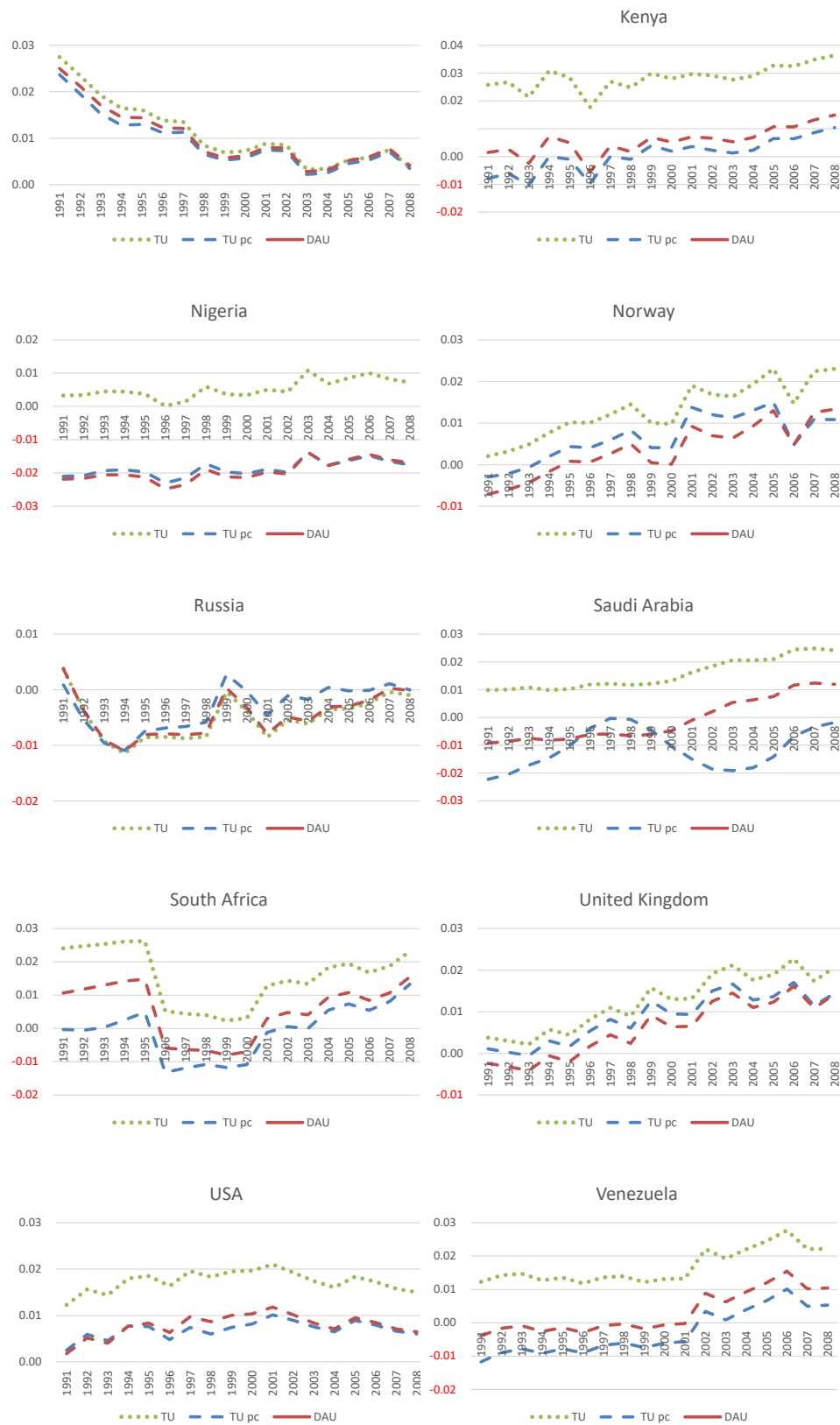


Figure A3: (cont'd) The change rates in the values of wealth under TU (dotted line), under TU *per capita* (dashed line), and under DAU (solid line), 1991-2008. Based on IWR 2012 and the author's calculation.

C Estimates of population growth functions

In subsection 3.3, we did an exercise on the value of population, which involves a forward-looking term. In particular, we assumed that the logistical population growth is of the form $\nu(N)N = -AN^2 + A\bar{N}N$. The estimated coefficients were based on the population dataset from United Nations Population Division (2013) in table A1.

Table A1: Estimates of population growth functions to compute the value of life

Country	A (unit:10 ⁻⁹)	A \bar{N}
Australia	0.547 (36.881)	0.025 (49.227)
Brazil	0.182 (65.921)	0.044 (80.294)
Canada	0.508 (43.535)	0.027 (53.394)
Chile	0.547 (36.881)	0.025 (49.227)
China	0.263 (17.121)	0.041 (21.446)
Colombia	0.581 (62.191)	0.040 (76.643)
Ecuador	1.443 (75.927)	0.038 (93.409)
France	0.233 (23.503)	0.019 (28.226)
Germany	0.315 (2.804)	0.028 (3.159)
India	0.025 (36.383)	0.036 (45.845)
Japan	0.300 (12.604)	0.041 (14.858)
Kenya	0.180 (136.49)	0.034 (199.231)
Nigeria	0.026 (88.476)	0.032 (155.44)
Norway	1.520 (13.085)	0.014 (19.281)
Russia	0.289 (10.669)	0.046 (12.794)
Saudi Arabia	1.314 (22.573)	0.056 (27.182)
South Africa	0.617 (43.271)	0.042 (50.793)
United Kingdom	0.114 (7.540)	0.010 (10.083)
United States	0.042 (44.952)	0.021 (58.235)
Venezuela	0.931 (98.424)	0.043 (119.247)

Note: t values in parenthesis.

References

United Nations Population Division (2013), *World Population Prospects:*

The 2012 Revision.

UNU-IHDP and UNEP (2012). *Inclusive Wealth Report 2012*, New York:

Cambridge University Press.