**Appendix**

Projecting out-of-pocket payments

Liu et al. (2016) projected future of values of out-of-pocket spending per capita (*OOPPC*). A similar procedure allows for projections of percentage of total health expenditures paid out-of-pocket (*%OOP*) -- the measure we use for our estimates and projections. The procedure for selecting a model to project *OOPPC* to 2030 proceeded as follows.

* Split the estimation sample into an initialization data set (1995-2008) and a testing data set (2009).
* Estimate eight different models, separately for each country, using the initialization data set.
* Use the estimated coefficients from each model to predict *OOPPC* in 2009-2013.
* Compare the predicted 2009-2013 values with the actual 2009-2013 data. To assess the fit of each model, calculate the root mean squared error.
* Select the two models with the smallest prediction errors and make projections for 2014-2030. Average projections from the two models to improve accuracy. The two models selected need not be the same for each country.

The eight candidate models can be summarized as follows:

1. A country-specific moving average of *OOPPC* using 18 prior periods without weights.
2. A country-specific moving average of *OOPPC* using 14 prior periods where weights estimated so that more distant observations progressively received smaller weights.
3. Country-specific double-exponential smoothing over 14 prior periods.
4. Country-specific linear regression with a time trend.
5. Country-specific linear regression with linear and quadratic time trends.
6. Pooled linear regression with linear and quadratic time trends and country fixed effects.
7. Pooled linear regression with linear and quadratic time trends and dummy variables for three World Bank income group classifications.
8. Same as 7, but corrects for AR1 serial correlation.