**“WAR” (Weighted Average Relative) RER Indices v2.1, Help File**

**Changes of v2.1 vs. v2.0**

* This is just a minor update. There was a bug in the code for the price levels in the Penn World Tables versions 8.0 and 8.1 for the countries such as El Salvador, Barbados, and Malta, so the new version drops these countries from the sample. Thus version 2.1 includes data for just 154 countries, and each country uses trade weights for the other 153 countries.
* The Terms of Trade, computed from PWT v8.1, were added.

**Major Changes from v1.0**

* This version uses Penn World Tables v8.1 in addition to PWTs versions 8.0 and 7.1
* In addition, v2.0 includes Weighted-Average Relative Price index (WARP) data and Balassa-Samuelson adjusted Weighted-Average Relative Price index (BSWARP) for 157 countries, greatly expanding the sample.
* The trade weights now also include 157 countries (the previous version considered only the top 40 trading partners).
* Note that the trade weights (a weighted average of import weights, export weights, and third country competition weights, described in the text of the main paper), come directly from IMF DOTS. Thus, if trade data is missing for a particular country in a given year, the WARP and BS-WARP indices will also be missing.
* I also provide the computation of the trade weights from the raw IMF DOTS trade data so that users can compute their own data, or impute missing years themselves.
* Since the weights and the data changed, I’ve also computed some of the indices using PWTv8.0 data, but full weights for 157 countries, so that a like-for-like comparison is possible.

**Variable Description**

**countrycode** – IMF (DOTS) country code

**country** – Country name, from the PWT

**WARPv81** – WARP computed using v8.1 of the Penn World Tables, using 157 trading partners. Because this is computed using the most recent version of the PWT, which was meant to correct biases in v8.0, this is the version of WARP which most users will be interested in.

**PWARPv81** – Penn effect adjusted WARP using v8.1 of the Penn World Tables, also using 157 trading partners. (This variable was previously called BSWARP for Balassa-Samuelson adjusted WARP, but was changed due to the obvious connotation on a suggestion by Feenstra.)

**WARPv80** -- WARP computed using v8.0 of the Penn World Tables, using 157 trading partners

**PWARPv80** – Penn effect adjusted WARP computed using v8.0 of the Penn World Tables, using 157 trading partners. (This variable was previously called BSWARP for Balassa-Samuelson adjusted WARP.)

**WARPv71** -- WARP computed using v7.1 of the Penn World Tables, using 157 trading partners

**PWARPv71** -- Penn effect adjusted WARP computed using v7.1 of the Penn World Tables, using 157 trading partners. (This variable was previously called BSWARP for Balassa-Samuelson adjusted WARP.)

**WARULC** – Weighted Average Relative Unit Labor Costs. Only the US WARULC index is changed over v1.0, as a bug in the trade weights was fixed, although the index is largely unchanged.

**REER\_RULC** – IMF Relative Unit Labor Cost Index

**REER\_CPI** – IMF CPI-based RER Index

**FedBTWRERIndex\_extended** – This index is computed using the same methodology as the Fed’s Broad Trade-weighted Real Exchange Rate Index, only it spans 1950 to 2011 (the Fed’s index starts in the 1970s). It is unchanged from v1.0.

**Historical\_WARP\_US** – An extension of WARP back to 1820 usinga smaller sample of countries that dwindles to 6 countries by 1920 (see Table A.2 in the main paper for the exact sample). This index is unchanged from v1.0.

**Historical\_Divisia\_US** -- An extension of Divisia (the Fed and IMF’s indexing method) back to 1820 usinga smaller sample of countries that dwindles to 6 countries by 1920 (see Table A.2 in the main paper for the exact sample). This index is unchanged from v1.0.

**ToT** – The Terms of Trade, computed simply as the price level of exports divided by the price level of imports, from PWT v8.1.