Description of the Shambaugh exchange rate classification data set.
[*Shambaugh Exchange Rate Regime Classification.dta]*

This data set includes a number of ways of classifying exchange rate regimes.

There are 177 countries (identified by their IFS code used in the IMF's international financial statistics database). The data set is a panel running from 1960 to 2014. Missing observations are due to a lack of exchange rate data from the IFS.

A classification of an exchange rate regime requires defining what it means for a country to have a fixed exchange rate. Klein and Shambaugh (2010) and the appendix to Klein and Shambaugh (2008) provide extensive discussion (especially the working paper version).

The most basic measure of exchange rate regime is the variable "peg" which is based on the classification used in Shambaugh (2004). That paper provides a detailed description and rationale for the rules used. The variable "pegtype" explains which of 4 ways a country year observation could be classified as a "peg" as opposed to a nonpeg (based on either staying within 2% bands against the base currency or zero volatility in all months except for a one off devaluation). Countries must be pegged for 2 consecutive years to be counted as a peg to avoid spuriously classifying observations as pegs due to random lack of volatility. The variable "sypeg" marks those country year observations that meet the rules for a peg, but for only one year. "spegtype" gives the type of single year peg. Again, these single year pegs are not included as pegs under the "peg" classification.

An alternate classification is due to Klein and Shambaugh (2008) which includes single year pegs as pegs, but does not include discrete devaluations (the variable kspeg). As Klein and Shambaugh were studying the durability of regimes, they wanted to focus on whether a peg lasted at a given rate (thus marking devaluations as a nonpeg) and did not want to bias the length of pegs upwards by eliminating single year pegs.

There is also a variable called "soft peg" which allows for a wider band of exchange rate movement – up to 5% bands (see Obstfeld, Shambaugh, and Taylor 2010 for discussion). Soft pegs and pegs are mutually exclusive. Like the simple peg category, a single year soft peg is regarded as a random lack of volatility and is not considered a soft peg. A soft peg, though, may be bordered either by a peg or a soft peg to satisfy the 2 consecutive year rule. Soft peg type details which of the rules for being considered a soft peg were satisfied.

The data set includes other variables that provide information about the exchange rate including the exchange rate against the dollar (ae), whether the base currency is dollar or not (dolot), the alternate non-dollar base for the currency (ot), the exchange rate against that other currency (ote), the identity of the base currency (base), the range of movement against the base (range), the number of months with no change in the exchange rate (numzero), the largest upwards move in the exchange rate in a given month (maxde) the largest negative movement in a given month (minde), and the annual standard deviation of the monthly percentage change in the exchange rate – a frequently used measure of exchange rate volatility – (evol).

Descriptions are below:

ifs	international financial statistics database country code
year	
ae	line ae from the ifs data set (exchange rate against the dollar)- annual average of the month end rates reported in IFS
ote	average of the month end exchange rate against other currency (ot country)
ot	ifs code of non-US base currency
dolot	dollar or nondollar base (1 = dollar)
base	ifs code of base country
range	range of exchange rate against base (in percent)
numzero	months with zero change in exchange rate
pegtype	1 = 0% change, 2 = 1% band, 3 = 2% band, 4 = 1 time deval/reval
peg	standard shambaugh 2004 classification (1 = peg, 0 = nonpeg)
sypeg	single year peg
spegtype	single year peg type (same rules as pegtype)
maxde	largest (or most positive) % monthly change vs base
minde	smallest (or most negative) % monthly change vs base
softpeg	softpeg classification from OST AEJ-macro 2010
softpegtype	see below
evol	standard deviation of percentage change in the exchange rate
kspeg	Klein Shambaugh classification (peg + sypeg - type 4) see JIE 2008

softpegtype: Softpegtype shows which criteria for a softpeg a country has satisfied. There are 4 possibilities described below. Single year softpegs are not coded as soft pegs as they are viewed as likely a random lack of volatility. The softpegtype field still shows those cases where a country has satisfied a criteria. Thus, the total number of nonzero softpegtype exceeds the number of softpegs. (to see the criteria of only those that qualify as soft pegs, simply type: “tab softpegtype if softpeg == 1”)

1 maintains exchange rate within 5% up or down bands and has a maximum monthly change of less than 1%, but is not a peg. [a total of 119 out of the 1585 soft pegs are generated in this manner] NOTE: In some cases (52) the country actually is staying within 2% bands. Normally, this would mean a country was a full peg, but if a country has a single year peg (and hence is coded as a nonpeg) but has a softpeg on either side of the single year peg, it will qualify as a soft peg in both years. Thus, some observations are coded as soft pegs that maintain within a 2% band.

2 maintains exchange rate within 5% bands against the base currency but outside of 2% bands and has some month where the change is greater than 1%. [1435 of the soft peg observations are generated in this manner]

3 Has no month in which the exchange rate changes by more than 2% up or down, but violates the 5% band rule. This category would capture a crawling peg that allows a crawl of up to 2% a month. If the crawl is small enough, it will stay within the 2% or 5% bands and already be a peg or soft peg. If the crawl is greater than 1% a month, though, the exchange rate will move outside of a 5% up or down band during the year. As a practical matter, very few countries satisfy this criteria (mostly Latin American countries between 1975 and 2000). [30 soft peg observations are generated in this manner].

4 0% change in 11 out of 12 months. Normally this would be considered a peg, but if it took place without a pegged observation on either side, it would not be considered a peg. In that case, if there was a soft peg preceding or following it, it would be considered a soft peg. There is only 1 observation that meets this criteria.

Notes: 1. The United States does not have a "base" country and is assumed to be nonpegged.
2. In each release of the coding, there may be some changes to the last year of the previous version as either data is updated or a newly formed peg in the last year is revealed to by a single year peg not a peg.

References:

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Obstfeld, Maurice, Jay C. Shambaugh, and Alan M. Taylor, 2010, "Financial Stability, the Trilemma, and International Reserves", *American Economic Association Journal – Macroeconomics* vol. 2, no. 2, April 2010, pp. 57-94.

Shambaugh, Jay C., 2004, "The Effect of Fixed Exchange Rates on Monetary Policy", *Quarterly Journal of Economics* vol. 119 no.1, February 2004, p. 301-352.