A Technical Appendix for Burstein and Gopinath (2015)

A.1 Definitions of variables used in construction of trade-weighted measures

- Define the nominal exchange rate $e_{in,t}$ between countries n and i as the number of units of currency n per unit of currency i at time t.
- Log quarterly differences:

$$\triangle e_{in,t} = \ln(e_{in,t}) - \ln(e_{in,t-1})$$

- Define $imports_{in,t}$ as the dollar value of goods imported by country n from country i.
- Define the set of country n's trading partners $\Omega^e_{n,t}$ for which there exist log differences in bilateral exchange rates with n between time t and $t-1$:

$$\Omega^e_{n,t} = \{i : \exists \triangle e_{in,t}, i \neq n\}$$

- Define similarly the set of country n's trading partners $\Omega^{P_j}_{n,t}$ for which there exist log differences in the price index P_j used to construct a real exchange rate, where $P_j \in \{CPItradables, CPIoverall, PPI, IPI, (IPI^{0.5}EPI^{0.5})\}$
- Define the intersection $\Omega_{n,t} = \Omega^e_{n,t} \cap \left(\bigcap_j \Omega^{P_j}_{n,t}\right)$ as the set of trading partners for which there exist log differences in bilateral exchange rates and log differences in all price indices used to construct alternative versions of the real exchange rate
- Then the trade weight $w_{in,t}$ given to trading partner i by country n is:

$$w_{in,t} = \frac{imports_{in,t} + imports_{ni,t}}{\sum_{k \in \Omega_{n,t}} imports_{kn,t} + imports_{nk,t}}$$

A.2 Trade-weighted Nominal Exchange Rate

The trade-weighted Nominal Exchange Rate $\triangle e_{n,t}$ in log quarterly differences is:

$$\triangle e_{n,t} = \sum_{i \in \Omega_{n,t-1}} w_{in,t-1} \triangle e_{in,t}$$

Because this is implemented using bilateral exchange rates vis-a-vis the United States, the calculation of $\triangle e_{n,t}$ in practice becomes:

$$\triangle e_{n,t} = \sum_{i \in \Omega_{n,t-1}} w_{in,t-1}(\triangle e_{USAn,t} - \triangle e_{USAi,t})$$
$$\triangle e_{n,t} = \triangle e_{USAn,t} - \sum_{i \in \Omega_{n,t-1}} w_{in,t-1} \triangle e_{USAi,t}$$

A.3 Trade-weighted Real Exchange Rate

Suppose that the price index being used is the PPI.

The trade-weighted PPI-based real exchange rate, denoted $\triangle rer^{ppi}_{n,t}$ is:

$$\triangle rer^{ppi}_{n,t} = \sum_{i \in \Omega_{n,t-1}} w_{in,t-1}(\triangle ppi_{i,t} - \triangle ppi_{n,t} + \triangle e_{in,t})$$
$$\triangle rer^{ppi}_{n,t} = \left(\sum_{i \in \Omega_{n,t-1}} w_{in,t-1} \triangle ppi_{i,t}\right) - \triangle ppi_{n,t} + \triangle e_{n,t}$$

A.4 Log yearly differences

Time t is in quarters. Log yearly differences of, for example, the nominal exchange rate are represented by:

$$\sum_{k=0}^{3} \triangle e_{n,t-k}$$

A.5 Quarterly differences from HP-filtered trend

Suppose $\triangle e_{n,t}$ exists as early as 1975Q2. Normalize $\triangle e_{n,1975Q1} = 0$ and define quarterly differences from the HP-filtered trend as

$$\triangle e^{HP}_{n,t} = \left(\sum_{s=1975Q1}^{t} \triangle e_{n,s} \right) - HPtrend \left(t, \left\{ \sum_{s=1975Q1}^{t} \triangle e_{n,s} \right\}_{t=1975Q1}^{2011Q4} \right)$$

A.6 Series used for trade-weighted measures

The series summarized below are in log quarterly differences, and thus almost all of them start in the second quarter.

A.6.1 Canada

series	start	end	source	concept	unit
CPIovr	1975q2	2011q4	OECD	all items	2005=100
CPItra	1975q2	2011q4	OECD	commodities - inferred using weights	2005=100
EPI	1975q2	2011q4	OECD	Unit value, EXP-End products, inedible	Local ccy
IPI	1975q2	2011q4	OECD	Unit value, IMP-End products, inedible	Local ccy
NER	1975q2	2011q4	IFS	period average	Nat'l ccy per US Dollar
PPI	1975q2	2011q4	OECD	Total producer prices - Manufacturing	2005=100

A.6.2 France

series	start	end	source	concept	unit
CPIovr	1975q2	1990q1	OECD	all items	2005=100
CPIovr	1990q2	2011q4	INSEE	all items	(1998 = 100)
CPItra	1975q2	1990q1	OECD	commodities - inferred using weights	2005=100
CPItra	1990q2	2011q4	INSEE	commodities - inferred using weights	(1998 = 100)
EPI	1981q2	1994q1	INSEE	Unit value, Manufacturing	chain of base 1980 and 1995, local ccy
EPI	1994q2	1999q1	Eurostat	Industry (ex constr. and waste mgmt. related)	local ccy
EPI	1999q2	2005q1	Eurostat	Manufacturing	local ccy
EPI	2005q2	2011q4	INSEE	EPI manufacturing	(2005 = 100), local ccy
IPI	1981q2	1999q1	INSEE	Unit value, Manufacturing	chain of base 1980 and 1995, local ccy
IPI	1999q2	2005q1	Eurostat	Manufacturing	local ccy
IPI	2005q2	2011q4	INSEE	IPI manufacturing	(2005 = 100), local ccy
NER	1975q2	2011q4	IFS	period average	Nat'l ccy per US Dollar
PPI	1980q2	1995q1	IFS	Wholesale Prices, All Commodities	2005=100
PPI	1995q2	2005q1	OECD	Total producer prices - Industrial Activities	2005=100
PPI	2005q2	2011q4	OECD	Total producer prices - Manufacturing	2005=100

A.6.3 Germany

series	start	end	source	concept	unit
CPIovr	1975q2	1996q1	OECD	all items	2005=100
CPIovr	1996q2	2011q4	Eurostat	HICP - All items	2005=100
CPItra	1996q2	2011q4	Eurostat	HICP - Total goods	2005=100
EPI	1975q2	2011q4	Federal Statistical Office	Products of the manufacturing sector	(2005 = 100), local ccy
IPI	1975q2	2011q4	Federal Statistical Office	Products of the manufacturing sector	(2005 = 100), local ccy
NER	1975q2	2011q4	IFS	period average	Nat'l ccy per US Dollar
PPI	1975q2	1995q1	OECD	Domestic producer prices - Manufacturing	2005=100
PPI	1995q2	2011q4	OECD	Total producer prices - Manufacturing	2005=100

A.6.4 Italy

series	start	end	source	concept	unit
CPIovr	1975q2	1996q1	OECD	all items	2005=100
CPIovr	1996q2	2011q4	Eurostat	HICP - All items	2005=100
CPItra	1996q2	2011q4	Eurostat	HICP - Total goods	2005=100
EPI	1975q2	1999q1	OECD	Unit value, EXP-Manufactured goods, excluding oil products	Local ccy
EPI	1999q2	2002q1	OECD	Unit value, EXP-Manufactured goods	Local ccy
EPI	2002q2	2011q4	Eurostat	Manufacturing	(2005 = 100) local ccy
IPI	1975q2	1999q1	OECD	Unit value, IMP-Manufactured goods, excluding oil products	Local ccy
IPI	1999q2	2011q4	OECD	Unit value, IMP-Manufactured goods	Local ccy
NER	1975q2	2011q4	IFS	period average	Nat'l ccy per US Dollar
PPI	1981q2	1991q1	IFS	Producer Prices, All Commodities	2005=100
PPI	1991q2	2002q1	OECD	Domestic producer prices - Manufacturing	2005=100
PPI	2002q2	2011q4	OECD	Total producer prices - Manufacturing	2005=100

A.6.5 Japan

series	start	end	source	concept	unit
CPIovr	1975q2	2011q4	OECD	all items	2005=100
CPItra	1975q2	2011q4	OECD	commodities - inferred using weights	2005=100
EPI	1975q2	2011q4	OECD	Unit value, EXP-Manufactured goods	Local ccy
IPI	1975q2	2011q4	OECD	Unit value, IMP-Manufactured goods	Local ccy
NER	1975q2	2011q4	IFS	period average	Nat'l ccy per US Dollar
PPI	1975q2	1995q1	IFS	Producer Prices, All Commodities	2005=100
PPI	1995q2	2011q4	OECD	Domestic producer prices - Manufacturing	2005=100

A.6.6 Switzerland

series	start	end	source	concept	unit
CPIovr	1975q2	2005q1	OECD	all items	2005=100
CPIovr	2005q2	2011q4	Eurostat	HICP - All items	2005=100
CPItra	1975q2	2005q1	OECD	commodities - inferred using weights	2005=100
CPItra	2005q2	2011q4	Eurostat	HICP - Total goods	2005=100
IPI	1990q2	2011q4	Federal Statistical Office	Import Price Index	(Dec. 2010 = 100), local ccy
NER	1975q2	2011q4	IFS	period average	Nat'l ccy per US Dollar
PPI	1975q2	2002q3	IFS	Producer Prices, All Commodities	2005=100
PPI	2002q4	2011q4	OECD	Total producer prices - Manufacturing	2005=100

A.6.7 United Kingdom

series	start	end	source	concept	unit
CPIovr	1975q2	1988q1	OECD	all items	2005=100
CPIovr	1988q2	2011q4	ONS	CPI INDEX 00 : ALL ITEMS- estimated pre-97	(2005 = 100)
CPItra	1988q2	2011q4	ONS	CPI INDEX: Goods - estimated pre-96	(2005 = 100)
EPI	1975q2	2011q2	OECD	Unit value, EXP-Manufactured goods	Local ccy
IPI	1975q2	2011q2	OECD	Unit value, IMP-Manufactured goods	Local ccy
NER	1975q2	2011q4	IFS	period average	Nat'l ccy per US Dollar
PPI	1975q2	1991q1	IFS	Producer Prices, All Commodities	2005=100
PPI	1991q2	1996q1	OECD	Domestic producer prices - Industrial Activities	2005=100
PPI	1996q2	2009q1	OECD	Domestic producer prices - Manufacturing	2005=100
PPI	2009q2	2011q4	OECD	Total producer prices - Manufacturing	2005=100

A.6.8 United States

series	start	end	source	concept	unit
CPIovr	1975q2	1998q1	OECD	all items	2005=100
CPIovr	1998q2	2011q3	Eurostat	HICP - All items	2005=100
CPIovr	2011q4	2011q4	OECD	all items	2005=100
CPItra	1975q2	2011q4	BLS	CPI Commodities subindex	1982-1984=100
EPI	1985q2	2011q4	BLS	Exports excluding agricultural commodities	
IPI	1985q2	2011q4	BLS	All Imports excluding petroleum	
NER	1975q2	2011q4	IFS	period average	Nat'l ccy per US Dollar
PPI	1975q2	1986q1	OECD	Total producer prices - Manufacturing	2005=100
PPI	1986q2	2011q4	BLS	Producer Price Index Manufacturing Industries	1984M12=100

A.7 Weights assigned to trading partners

A.7.1 Methodology

The import data used to construct weights is drawn from the IMF Direction of Trade Statistics. Imports are reported c.i.f. and in US dollars, at an annual frequency. Weights are constructed only for the set of trading partners for which nominal exchange rates and all price indices exist at a given point in time. Please refer to the "Definitions" section at the beginning of the Technical appendix for more details. Price indices for trading partners may be a composite of a few different series. For example, if a PPI-based real exchange rate is being constructed, then the manufacturing PPI is used for a trading partner if it is available. If not, then a general PPI is used. Lastly, if that is not available then the overall CPI is used. The same substitution of overall CPI for a trade partner's missing price series applies to the IPI, EPI, and tradable goods CPI - based real exchange rates.

A.7.2 Weights assigned for log difference between 1975Q3 and 1975Q4

partner	CAN	CHE	DEU	FRA	GBR	ITA	JPN	USA
AUS	0.010	0.008	0.012	0.008	0.036	0.011	0.095	0.025
AUT	0.002	0.055	0.049	0.009	0.013	0.029	0.003	0.004
BEL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CAN	0.000	0.013	0.014	0.016	0.050	0.021	0.060	0.342
CHE	0.004	0.000	0.055	0.053	0.038	0.047	0.012	0.014
CHN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CZE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
DEU	0.025	0.267	0.000	0.301	0.113	0.290	0.045	0.082
DNK	0.002	0.015	0.029	0.011	0.038	0.015	0.006	0.008
ESP	0.004	0.024	0.024	0.041	0.024	0.024	0.008	0.025
FIN	0.001	0.011	0.014	0.008	0.024	0.005	0.003	0.004
FRA	0.016	0.153	0.177	0.000	0.097	0.211	0.024	0.045
GBR	0.052	0.110	0.067	0.097	0.000	0.066	0.036	0.066
GRC	0.001	0.005	0.014	0.008	0.006	0.015	0.008	0.004
HKG	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
HUN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
IDN	0.001	0.003	0.005	0.002	0.003	0.003	0.077	0.023
IND	0.005	0.004	0.006	0.006	0.013	0.004	0.018	0.014
IRL	0.001	0.002	0.005	0.005	0.060	0.004	0.002	0.003
ISL	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.001
ITA	0.015	0.099	0.125	0.155	0.048	0.000	0.013	0.043
JPN	0.061	0.033	0.027	0.024	0.036	0.018	0.000	0.170
KOR	0.005	0.002	0.005	0.003	0.004	0.002	0.059	0.025
LUX	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MEX	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
MYS	0.002	0.001	0.004	0.003	0.010	0.003	0.022	0.008
NLD	0.008	0.044	0.178	0.096	0.096	0.065	0.011	0.033
NOR	0.005	0.011	0.021	0.010	0.035	0.006	0.010	0.008
NZL	0.002	0.001	0.002	0.002	0.019	0.002	0.012	0.005
PHL	0.002	0.002	0.003	0.002	0.004	0.001	0.033	0.012
POL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
PRT	0.001	0.008	0.006	0.007	0.012	0.006	0.002	0.005
RUS	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SGP	0.002	0.004	0.004	0.003	0.009	0.002	0.028	0.013
SVK	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SWE	0.006	0.036	0.048	0.027	0.062	0.021	0.011	0.015
THA	0.001	0.002	0.003	0.002	0.003	0.002	0.028	0.005
USA	0.769	0.086	0.106	0.100	0.145	0.128	0.375	0.000

Weights for BEL, CZE, LUX, RUS, and SVK are zero because import and export data are not available at the time.

Weights for MEX were set to zero prior to 1988 because Mexico had hyperinflation. Incidentally, this means that the log difference between 1987Q4 and 1988Q1 also received zero weight.

Weights for CHN, HKG, HUN, POL are zero because these countries have no overall CPI series during this time.

A.7.3 Weights assigned for log difference between 2011Q3 and 2011Q4

partner	CAN	CHE	DEU	FRA	GBR	ITA	JPN	USA
AUS	0.005	0.009	0.006	0.005	0.016	0.009	0.058	0.014
AUT	0.002	0.045	0.057	0.011	0.008	0.032	0.002	0.004
BEL	0.005	0.027	0.063	0.116	0.062	0.043	0.009	0.015
CAN	0.000	0.010	0.008	0.008	0.032	0.010	0.021	0.195
CHE	0.005	0.000	0.049	0.033	0.018	0.045	0.009	0.012
CHN	0.087	0.043	0.076	0.051	0.071	0.074	0.286	0.185
CZE	0.001	0.009	0.040	0.012	0.011	0.016	0.002	0.002
DEU	0.022	0.269	0.000	0.207	0.149	0.195	0.035	0.050
DNK	0.002	0.004	0.016	0.007	0.017	0.008	0.002	0.003
ESP	0.004	0.020	0.034	0.082	0.037	0.063	0.005	0.008
FIN	0.003	0.003	0.009	0.005	0.007	0.005	0.002	0.002
FRA	0.010	0.084	0.097	0.000	0.077	0.127	0.014	0.022
GBR	0.035	0.040	0.059	0.065	0.000	0.047	0.015	0.033
GRC	0.000	0.002	0.004	0.004	0.003	0.011	0.000	0.001
HKG	0.003	0.028	0.004	0.005	0.011	0.008	0.032	0.011
HUN	0.001	0.004	0.021	0.008	0.008	0.012	0.002	0.002
IDN	0.004	0.002	0.003	0.003	0.003	0.006	0.041	0.011
IND	0.006	0.077	0.010	0.008	0.017	0.015	0.014	0.021
IRL	0.002	0.018	0.006	0.010	0.050	0.007	0.004	0.017
ISL	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000
ITA	0.009	0.082	0.065	0.091	0.040	0.000	0.011	0.018
JPN	0.032	0.028	0.020	0.017	0.021	0.018	0.000	0.072
KOR	0.016	0.007	0.012	0.009	0.008	0.011	0.082	0.036
LUX	0.000	0.002	0.005	0.005	0.002	0.002	0.000	0.001
MEX	0.044	0.005	0.008	0.004	0.005	0.009	0.017	0.158
MYS	0.004	0.004	0.006	0.005	0.007	0.004	0.039	0.015
NLD	0.008	0.029	0.110	0.069	0.087	0.051	0.017	0.020
NOR	0.010	0.003	0.016	0.009	0.037	0.004	0.003	0.005
NZL	0.001	0.001	0.001	0.001	0.002	0.001	0.004	0.002
PHL	0.002	0.001	0.002	0.001	0.003	0.001	0.012	0.006
POL	0.002	0.006	0.044	0.018	0.018	0.027	0.002	0.002
PRT	0.001	0.002	0.007	0.011	0.006	0.008	0.001	0.001
RUS	0.003	0.009	0.034	0.025	0.017	0.033	0.019	0.016
SGP	0.003	0.012	0.006	0.012	0.011	0.005	0.026	0.020
SVK	0.000	0.003	0.013	0.006	0.004	0.009	0.001	0.001
SWE	0.003	0.007	0.022	0.015	0.024	0.013	0.003	0.006
THA	0.005	0.023	0.004	0.004	0.006	0.005	0.051	0.014
USA	0.659	0.082	0.061	0.058	0.103	0.065	0.158	0.000

A.8 CPI weights

We inferred a CPI commodities series for countries for which this was not directly available. Depending on the available CPI subcategory series, one of the two following equations was used:

$$CPI = CPI_{comm}^{\gamma_c} CPI_{serv-hous}^{(\gamma_s - \gamma_h)} CPI_{hous}^{\gamma_h}$$

$$CPI = CPI_{comm}^{\gamma_c} CPI_{serv}^{\gamma_s}$$

The weights $\gamma_c, \gamma_s, \gamma_h$ for commodities, services, and housing, respectively, we obtained at an annual frequency between 1986 and 2010 from the BLS, *Table 1 (YYYY-YYYY Weights). Relative importance of components in the Consumer Price Indexes: U.S. city average, December YYYY.*

In particular, γ_c and γ_s correspond to the *Commodities...* and *Services...* lines under the *Special Aggregate Indexes* heading. For housing, γ_h, we used the *Shelter...* line under the *Expenditure category* heading.

A.9 Real exchange rate persistence (Table 2)

Data The real exchange rates (RERs) are the *narrow* RERs compiled by the Bank for International Settlements (BIS). The data was downloaded from the BIS website in September 2012. The RERs use trade weights based on 2008–2010 trade

data. The countries used are listed in Table 7.2 of Burstein & Gopinath (2015) (the files mentioned below also contain data for Spain, which was not used in the published paper). The data series are quarterly and the sample is 1975q1–2011q4.

Estimation procedure The estimation method is exactly as in Steinsson (2008), using Steinsson's Matlab code in essentially unmodified form (but with our data). For all 8 countries, the quarterly log RER is modeled as an AR(5) process. α denotes the sum of the AR coefficients. The half-life (HL) is the largest time T such that the impulse response function IR satisfies $IR(T-1) \geq 0.5$ and $IR(T) < 0.5$. The up-life (UL) and quarter-life (QL) are similarly defined with 1 (0.25, resp.) replacing 0.5. As discussed by Steinsson, UL/HL and HL $-$ (QL $-$ HL) $=$ 2HL $-$ QL may be interpreted as measuring the extent of hump-shaped behavior, as both measures are 0 under exponential decay.

Due to the strong persistence of most RER series, the Hansen (1999) grid bootstrap is used to obtain a median unbiased (MU) estimate of α. The other AR parameters are estimated by OLS conditional on the MU estimate of α. Point estimates of the HL/UL/QL statistics (which are expressed in years) are calculated from the point estimates of the AR parameters. The MU estimate of α is obtained by applying Hansen's grid bootstrap with $G = 80$ grid points over the interval $[\hat{\alpha}_{OLS} - 0.07, 1]$, using $B = 249$ bootstrap replications per grid point. 90% confidence intervals and p-values are obtained by bootstrapping residuals over 1,000 replications. The p-values reported in the Matlab output are for the hypotheses $\alpha = 1$, HL $= \infty$, UL $= \infty$, QL $= \infty$, UL/HL $= 0$, HL $-$ QL $= 0$ and 2HL $-$ QL $= 0$.

Notice that Table 7.2 in Burstein & Gopinath (2015) only reports the half-life and up-life estimates with corresponding 90% confidence intervals.

Errors There is a minor error in the published Table 7.2 in Burstein & Gopinath (2015). The point estimate of the up-life for Switzerland should be 0.9, with a 90% confidence interval of $[0.3, 1.3]$. See Table A below for the correct numbers.

A.10 Pass-through regressions (Table 4)

Data The data for the pass-through regressions comes from a variety of sources. We use quarterly data on each of the 8 countries listed in Table 7.4 of Burstein & Gopinath (2015). The largest sample used for the reported numbers is 1975q1–2011q4, but several regressions are based on shorter samples (see below).

The construction of the import price index (IPI), tradeable consumer price index (CPIT), and trade-weighted foreign producer price index (PPI) was described above.

The *narrow* nominal exchange rate (NER) series used for every country is the BIS *narrow* nominal effective exchange rate (NEER). The data was downloaded from the BIS website in August 2012.

For the U.S., in addition to the BIS narrow NEER index, we also use a *broad* NER index, namely the Broad NER index produced by the Fed Board of Governors (FRB) for the H.10 "Foreign Exchange Rates" statistical release. The data was downloaded from the St. Louis Fed's FRED website (series code "TWEXB") in August 2012, averaging daily levels to quarterly frequency.

We do not use the BIS's broad NEER indices for any country.

Estimation procedure The pass-through into import prices and that into traded CPI are estimated using the exact same procedure. Below we focus on import prices.

- *Dynamic lag regressions:* The nominal exchange rate pass-through into import prices is estimated by a quarterly regression of the log import price index (in domestic currency) on lags 0 to 8 of the log trade-weighted nominal exchange rate (in units of domestic per foreign currency) and lags 0 to 8 of log trade-weighted foreign PPI (in foreign currency). The short-run pass-through is given by the lag-0 coefficient on the nominal exchange rate, while the long-run pass-through is given by the sum of the 9 coefficients on lags of the exchange rate. Standard errors are calculated using the Newey-West HAC estimator with a bandwidth of 8 lags.

- *VECM*: These results are not reported in the paper, although they are mentioned briefly in the text (Burstein & Gopinath, 2015, p. 403). We follow Nakamura & Steinsson (2012). For each country, a three-dimensional VECM in the log import price index, the log nominal exchange rate and the log foreign PPI is estimated. The lag length is determined by the AIC. The cointegration rank is estimated by the Johansen trace statistic using a significance level of 95%. The specification allows for a constant in the cointegrating relation but not a time trend, unlike in Nakamura & Steinsson (2012). If the data points towards a cointegration rank of 1, the VECM is estimated by maximum likelihood. The long-run exchange rate pass-through is given by (negative) the coefficient on the exchange rate in the estimated cointegrating vector (the coefficient on import prices is normalized to 1). The long-run marginal cost pass-through is given by (negative) the coefficient on foreign PPI in the cointegrating vector. Standard errors are based on the usual asymptotic normal approximation.

Errors The published Table 7.4 in Burstein & Gopinath (2015) contains a number of errors. The largest sample used for all countries except France is 1983q1–2011q4, not 1975q1–2011q4 as claimed in the published table. For France the largest sample is 1975q1–2011q4, as claimed. There were also a few inaccuracies in the sample coverage notes for individual countries. See Tables B and C below for the correct numbers and notes on the 1975q1–2011q4 and 1983q1–2011q4 subsamples, respectively.

We remark that the differences between the results on various subsamples are small and do not affect any qualitative conclusions.

References

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	U.S.		Japan		Italy		U.K.		France		Germany		Canada		Switzerland	
	HL	UL	HL	UL	HL	UL	HL	UL	HL	UL	HL	UL	HL	UL	HL	UL
MU estimate	6.0	2.4	3.7	1.6	5.6	2.0	2.9	1.3	3.2	1.0	3.7	2.1	8.7	3.4	1.6	**0.9**
90% CI	2.2	0.5	1.8	0.4	2.0	0.7	1.7	0.3	1.4	0.3	2.0	0.9	2.4	1.0	1.1	**0.3**
	Inf	Inf	24.9	6.5	Inf	Inf	10.5	3.0	Inf	Inf	13.4	5.2	Inf	Inf	2.6	**1.3**

Table A: Persistence of RER deviations, 1975q1–2011q4. Numbers in bold are corrected relative to Burstein & Gopinath (2015).

		U.S.		Japan		Italy		U.K.		France		Germany		Canada		Switzerland	
		ERPT	SE	ERPT	SE	ERPT	SE	ERPT	SE	ERPT	SE	ERPT	SE	ERPT	SE	ERPT	SE
Import Price Index																	
Dynamic Lag																	
Short run	Narrow NER	0.20	0.05	**0.75**	**0.06**	**0.51**	**0.06**	**0.38**	**0.02**	0.40	0.09	**0.41**	**0.05**	**0.74**	**0.05**	0.13	0.03
	Broad NER	0.20	0.04														
Long Run	Narrow NER	0.51	0.08	**0.69**	**0.10**	**0.53**	**0.18**	**0.85**	**0.07**	0.97	0.13	**0.48**	**0.11**	**1.04**	**0.07**	0.47	0.09
	Broad NER	0.27	0.11														
Tradeable CPI																	
Dynamic Lag																	
Short run	Narrow NER	**0.07**	**0.02**	**-0.03**	**0.01**	-0.03	0.19	0.05	0.02	0.04	0.05	-0.01	0.04	**0.03**	**0.05**	**0.11**	**0.04**
	Broad NER	**0.09**	**0.03**														
Long Run	Narrow NER	**0.17**	**0.04**	**0.11**	**0.03**	0.01	0.11	0.14	0.07	0.36	0.11	-0.01	0.05	**0.29**	**0.13**	**0.20**	**0.11**
	Broad NER	**0.13**	**0.07**														

Coverage. US (broad+narrow): CPIT (1975-2011), IPI (1985-2011), Japan: CPIT, IPI (1975-2011), Italy: CPIT (1996-2011), IPI (1975-2011), UK: CPIT (1988-2011), IPI (1975-2011), France: CPIT (1975-2011), IPI (1981-2011), Germany: CPIT (1996-2011), IPI (1975-2011), Canada: CPIT, IPI (1975-2011), Switz.: CPIT (1975-2011), IPI (1990-2011)

Table B: Short-run and long-run NER pass-through using aggregate indices, 1975q1–2011q4 (where available). Numbers in bold differ from Burstein & Gopinath (2015) due to different sample.

		U.S.		Japan		Italy		U.K.		France		Germany		Canada		Switzerland	
		ERPT	SE	ERPT	SE	ERPT	SE	ERPT	SE	ERPT	SE	ERPT	SE	ERPT	SE	ERPT	SE
Import Price Index																	
Dynamic Lag																	
Short run	Narrow NER	0.20	0.05	0.75	0.07	0.53	0.05	0.37	0.04	**0.26**	**0.08**	0.43	0.05	0.75	0.05	0.13	0.03
	Broad NER	0.20	0.04														
Long Run	Narrow NER	0.51	0.08	0.71	0.12	0.53	0.16	0.87	0.08	**0.73**	**0.20**	0.64	0.10	0.80	0.12	0.47	0.09
	Broad NER	0.27	0.11														
Tradeable CPI																	
Dynamic Lag																	
Short run	Narrow NER	0.06	0.02	-0.04	0.02	-0.03	0.19	0.05	0.02	**0.07**	**0.08**	-0.01	0.04	0.02	0.05	0.11	0.05
	Broad NER	0.09	0.03														
Long Run	Narrow NER	0.17	0.04	0.10	0.04	0.01	0.11	0.14	0.07	**0.40**	**0.15**	-0.01	0.05	0.14	0.19	0.29	0.10
	Broad NER	0.14	0.08														

Coverage. As in Table B, but restricted to 1983–2011.

Table C: Short-run and long-run NER pass-through using aggregate indices, 1983q1–2011q4 (where available). Numbers in bold differ from Burstein & Gopinath (2015) due to different sample.