Online Appendix

Response to "The Cyclicality of Sales, Regular and Effective Prices: Comment" by Gagnon, López-Salido and Sockin.

Olivier Coibion	Yuriy Gorodnichenko	Gee Hee Hong
UT Austin	U.C. Berkeley	International
and NBER	and NBER	Monetary Fund

Appendix Table 1. Share of censored price changes out of price changes by type of price change and threshold.

row	Weight used in aggregation across stores and UPCs	Weighted regression	Weights to cities	Price changes	Censoring point, T											
					1	2	3	4	5	6	7	8	9	10	11	12
(1)	unweighted	No	Equal	sales	0.827	0.601	0.428	0.299	0.191	0.136	0.093	0.066	0.023	0.015	0.010	0.007
				regular price	0.359	0.184	0.109	0.069	0.043	0.032	0.024	0.019	0.008	0.006	0.005	0.004
				all	0.782	0.562	0.398	0.277	0.177	0.126	0.087	0.062	0.022	0.014	0.009	0.007
(2)	city specific weights	No	Equal	sales	0.819	0.602	0.432	0.304	0.194	0.135	0.090	0.060	0.020	0.012	0.008	0.005
				regular price	0.295	0.140	0.078	0.047	0.027	0.018	0.012	0.009	0.004	0.003	0.002	0.002
				all	0.773	0.561	0.401	0.281	0.179	0.125	0.083	0.056	0.019	0.012	0.007	0.005
(3)	country weights	No	Equal	sales	0.823	0.607	0.438	0.309	0.198	0.137	0.091	0.061	0.020	0.012	0.007	0.005
				regular price	0.300	0.144	0.081	0.049	0.028	0.019	0.013	0.009	0.004	0.003	0.002	0.002
				all	0.778	0.567	0.407	0.286	0.183	0.127	0.084	0.056	0.019	0.011	0.007	0.005
(4)	city specific weights	Yes	Expend. share	sales	0.812	0.603	0.436	0.313	0.204	0.141	0.092	0.060	0.021	0.012	0.007	0.004
				regular price	0.266	0.121	0.063	0.036	0.019	0.012	0.007	0.005	0.002	0.002	0.001	0.001
				all	0.765	0.562	0.404	0.290	0.188	0.130	0.085	0.056	0.019	0.011	0.006	0.004
(5)	country weights	Yes	Expend. share	sales	0.815	0.607	0.441	0.318	0.207	0.143	0.093	0.061	0.020	0.011	0.006	0.004
				regular price	0.269	0.123	0.065	0.038	0.020	0.013	0.008	0.005	0.002	0.002	0.001	0.001
				all	0.770	0.567	0.410	0.294	0.192	0.132	0.086	0.056	0.019	0.010	0.006	0.004

Notes: The table reports the share of censored price changes in all price changes. The censoring point X sets $(dlogP) * 12 = -X$ if $(dlogP) * 12 < -X$ and $(dlogP) * 12 = X$ if $(dlogP) * 12 > X$. Rows (1)-(3) use equal weights for categories/cities. Rows (4) and (5) use the following weights across categories/cities: $\omega_{cmt} = \frac{TS_{cmt}}{\sum_c \sum_m TS_{cmt}}$ where m, c, t index market (city), category, and time (month), TS is the volume of sales.

row	Weight used in aggregation across stores and UPCs	Weighted regression	Weights to cities	Price changes	Censoring point, T											
					1	2	3	4	5	6	7	8	9	10	11	12
(1)	unweighted	No	Equal	sales	0.141	0.105	0.076	0.053	0.034	0.024	0.016	0.012	0.004	0.003	0.002	0.001
				regular price	0.015	0.007	0.004	0.003	0.002	0.001	0.001	0.001	0.000	0.000	0.000	0.000
				all	0.129	0.096	0.069	0.049	0.031	0.022	0.015	0.011	0.004	0.002	0.002	0.001
(2)	city specific weights	No	Equal	sales	0.157	0.119	0.086	0.061	0.039	0.027	0.018	0.012	0.004	0.002	0.002	0.001
				regular price	0.013	0.005	0.003	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
				all	0.144	0.109	0.079	0.056	0.036	0.025	0.016	0.011	0.004	0.002	0.001	0.001
(3)	country weights	No	Equal	sales	0.160	0.121	0.089	0.063	0.040	0.028	0.018	0.012	0.004	0.002	0.001	0.001
				regular price	0.013	0.005	0.003	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
				all	0.147	0.111	0.081	0.058	0.037	0.025	0.017	0.011	0.004	0.002	0.001	0.001
(4)	city specific weights	Yes	Expend. share	sales	0.180	0.138	0.101	0.073	0.047	0.033	0.021	0.014	0.005	0.003	0.001	0.001
				regular price	0.013	0.005	0.002	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
				all	0.165	0.126	0.093	0.067	0.043	0.030	0.019	0.012	0.004	0.002	0.001	0.001
(5)	country weights	Yes	Expend. share	sales	0.182	0.140	0.103	0.075	0.049	0.033	0.021	0.014	0.005	0.002	0.001	0.001
				regular price	0.013	0.005	0.003	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
				all	0.167	0.129	0.095	0.069	0.045	0.031	0.020	0.013	0.004	0.002	0.001	0.001

Notes: The table reports the share of censored price changes in all non-missing price quotes. The censoring point X sets $(dlogP) * 12 = -X$ if $(dlogP) * 12 < -X$ and $(dlogP) * 12 = X$ if $(dlogP) * 12 > X$. Rows (1)-(3) use equal weights for categories/cities. Rows (4) and (5) use the following weights across categories/cities: $\omega_{cmt} = \frac{TS_{cmt}}{\sum_c \sum_m TS_{cmt}}$ where m, c, t index market (city), category, and time (month), TS is the volume of sales.

Appendix Table 3. Effect of CGH imputation for the sensitivity of posted-price inflation to local unemployment rate.

Weight used in aggregation across stores and UPCs	Censoring point				
	1 (baseline)	3	5	8	12
	(1)	(2)	(3)	(4)	(5)
Panel A: No imputation					
Unweighted	-0.0763	-0.119	-0.148	-0.179	-0.183
	(0.0218)	(0.0450)	(0.0580)	(0.0681)	(0.0701)
City specific weights	-0.0853	-0.129	-0.163	-0.201	-0.207
	(0.0242)	(0.0425)	(0.0506)	(0.0579)	(0.0591)
Country weights	-0.0850	-0.127	-0.158	-0.198	-0.208
	(0.0272)	(0.0481)	(0.0573)	(0.0652)	(0.0665)
Panel B: Imputation (Baseline)					
Unweighted	-0.061	-0.098	-0.123	-0.150	-0.155
	(0.017)	(0.034)	(0.043)	(0.051)	(0.053)
City specific weights	-0.077	-0.118	-0.149	-0.185	-0.192
	(0.021)	(0.035)	(0.042)	(0.048)	(0.049)
Country weights	-0.075	-0.114	-0.142	-0.180	-0.191
	(0.023)	(0.040)	(0.048)	(0.055)	(0.056)
Observations	187,426	187,426	187,426	187,426	187,426
Number of groups	1,550	1,550	1,550	1,550	1,550

Notes: The table reproduces table 1 in CGH (2015) for different values of the truncation point. The table reports estimated coefficients on local unemployment rate when we regress a measure of posted-price city/category inflation on local unemployment rate after controlling for city/category and month fixed effects. The truncation point X sets $(dlogP) * 12 = -X$ if $(dlogP) * 12 < -X$ and $(dlogP) * 12 = X$ if $(dlogP) * 12 > X$ for a price change at the level of good/store/category/city. Panel A shows results when no imputations are used. Panel B shows results for the approach used in CGH (2015). Driscoll-Kraay (1998) standard errors are reported in parentheses.