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Title: "AJAE appendix for Retailer Heterogeneity and Price Transmission"

Authors: Hao Lan, Tim Lloyd, Steve McCorriston and Wyn Morgan.

Date: December 2021

Note: The material contained herein is supplementary to the article named in the title and published in the *American Journal of Agricultural Economics*.

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Data Description

The supermarket price data is a balanced panel of unique identifier code (UIC)-level prices of orange juice and coffee products sold in the UK's largest seven supermarket chains over 130 weeks from 10 October 2009 to 31 March 2012 sourced from AC Nielsen UK. A UIC represents a barcode-specific product stocked by a particular retail chain (*i.e.* a unique retailer-product combination) and the panel contains 293 of them, 89 in orange juice and 204 in coffee, including major national brands (60%) and private labels (40%). In all there are 38,090 price observations on the variable labelled p in the table below. The rival price variables ($rp1$ to $rp5$) are constructed from the supermarket price data as described below (see also the details in the main paper). This is augmented with sterling denominated commodity prices (orange juice and coffee) and UK diesel prices.

Table S1: Definitions of the variables used

Prices	
p	The national average unit value of a barcode-specific product per week in each retailer. Each unit value is based on scanner data returns of the total purchases from every store within each retail chain on the Thursday of each week. These data were sourced from Nielsen UK from their Scan Trak database.
Rival prices (separate indices for orange juice and coffee)	
rp	This index represents the average price of the <u>identical product</u> sold in rival retailers per week weighted by retailer market share; products sold in only one retailer are set to missing.
$rp1$	This index represents the average price of <u>all products</u> sold in rivals per week weighted by retailer market share. This measure accommodates a broader set of products, all of which are sold in competing retailers only.
$rp2$	This index confines rival products to be those sold in the retailer in question of the same brand type and hence excludes any products sold in rival retailers. Specifically, when the product is a national brand (private label) then $rp2$ is the average price of national brands (private labels) in that retailer.
$rp3$	This index includes the prices of identical products in rival supermarkets and the prices of products of opposite brand type in the retailer in question. Specifically, if the product in question is a national brand (private label) then $rp3$ would be the average of identical products sold in rivals and the price of private labels (national brands) in the retailer in question.
$rp4$	This index uses the broadest measure of rival products and includes the prices of all products in rival retailers and all other prices in the retailer in question.
$rp5$	This index includes the prices of identical products in rival supermarkets and the prices of products of the same brand type in the retailer in question. Specifically, if the product in question is a national brand (private label) then $rp5$ would be the average of identical products sold in rivals and the price of national brands (private labels) in the retailer in question.
Marginal Costs	
<i>Orange Juice</i>	Merrill Lynch commodity index eXtra (<i>MLCX</i>) spot returns of frozen orange juice concentrate in the world commodity market (weekly average). These data are sourced from Bloomberg, where they are coded as FCOJ. Prices are quoted in US dollars and so converted into UK pounds using the Dollar-Sterling spot exchange rate obtained from the Bank of England and sourced from Bloomberg, coded as USDGBP CURRENCY.
<i>Coffee</i>	Merrill Lynch commodity index eXtra (<i>MLCX</i>) spot returns of green coffee beans in the world commodity market (weekly average). These data are sourced from Bloomberg, where they are coded as MLCXOJSP. Prices are quoted in US dollars and so converted into UK pounds using the Dollar-Sterling spot exchange rate obtained from the Bank of England and sourced from Bloomberg, coded as USDGBP CURRENCY.
Other	
<i>Diesel</i>	Weekly price data from DECC (Department of Energy & Climate Change) are road fuel price statistics and provide average UK retail ('pump') prices for Ultra low sulphur diesel in pence per litre (https://www.gov.uk/government/statistics/weekly-road-fuel-prices)

Table S2 : Distribution of prices by brand and promotion status data by retailer (%)

	Orange Juice				Instant Coffee			
	National Brands	Private Labels	Regular Prices	Sale Prices	National Brands	Private Labels	Regular Prices	Sale Prices
ALL	26	74	93	7	75	25	82	18
Asda	27	73	93	7	77	23	79	21
Sainsbury	33	67	88	12	75	25	80	20
Morrisons	25	75	95	5	72	28	85	15
Tesco	31	69	90	10	76	24	75	25
Co-op	17	83	97	3	76	24	86	14
Waitrose	31	69	94	6	81	19	85	15
M&S	.	100	98	2	29	71	95	5

Table S3: Frequency, implied duration and size of sale prices

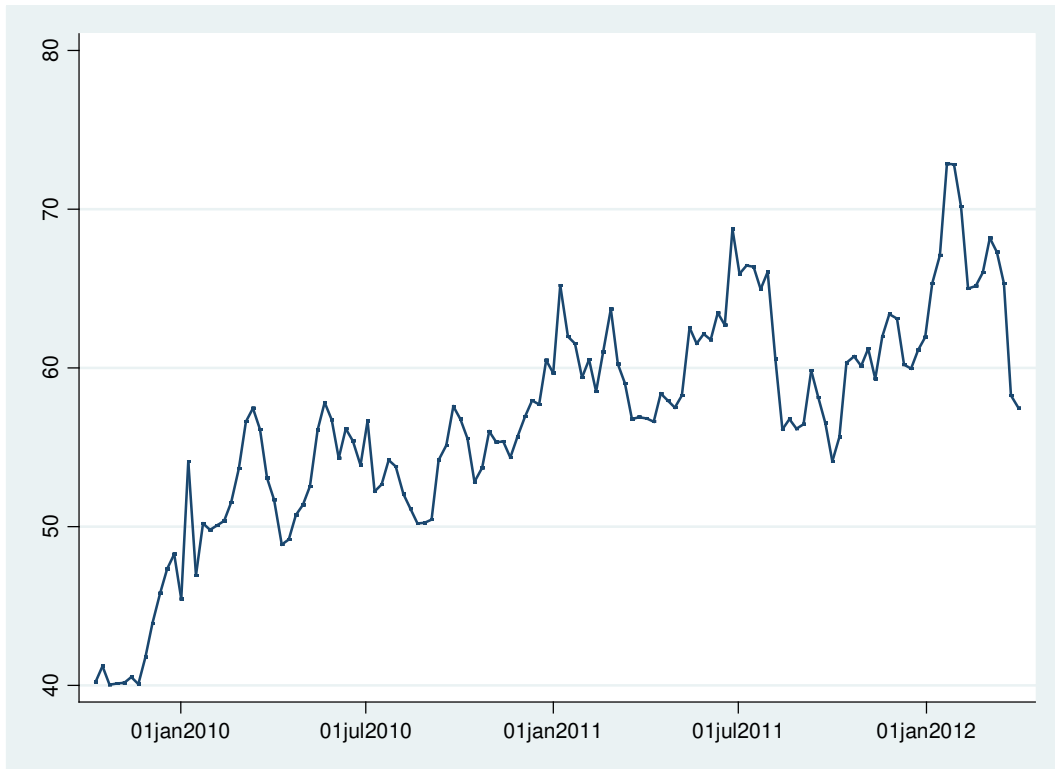
(a) Orange Juice

	Frequency (%)			Median sale duration (weeks)			UICs with promotion (%)		
	10%	25%	35%	10%	25%	35%	10%	25%	35%
Overall	7.1	1.9	0.7	5.0	6.0	5.0	51.9	17.9	8.5
Retail chain									
Asda	6.5	3.5	1.2	7.0	7.0	7.0	75.0	33.3	25.0
Sainsbury	10.2	1.4	1.0	5.0	5.0	5.0	44.0	4.0	4.0
Morrisons	6.8	1.6	0.0	6.0	4.0	.	62.5	31.3	0.0
Tesco	8.7	4.3	1.6	6.0	6.0	5.0	55.6	33.3	27.8
Co-op	4.8	1.2	0.0	6.0	5.0	.	28.6	14.3	0.0
Waitrose	5.7	0.0	0.0	5.0	.	.	61.5	0.0	0.0
M&S	2.0	0.6	0.0	5.0	6.0	.	37.5	12.5	0.0
Brand status									
National Brand	16.7	5.6	2.4	6.0	6.0	5.0	85.2	37.0	29.6
Private Label	3.9	0.6	0.1	5.0	5.0	6.0	40.5	11.4	1.3

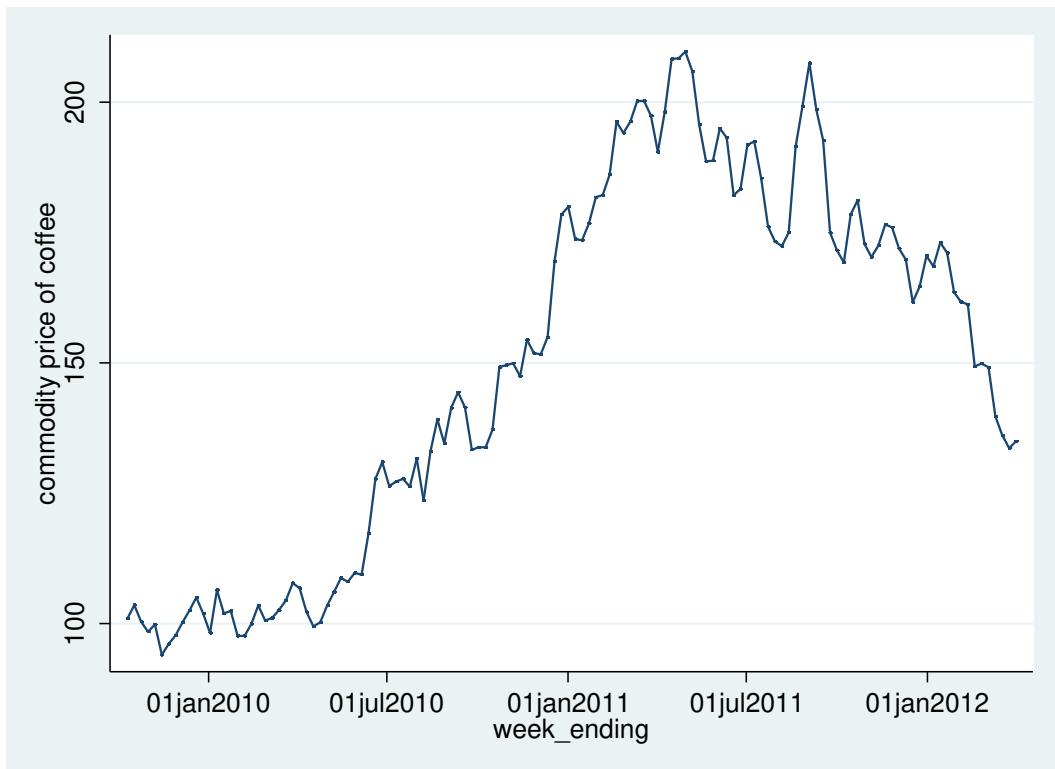
(b) Coffee

	Frequency (%)			Median sale duration (weeks)			UICs with promotion (%)		
	10%	25%	35%	10%	25%	35%	10%	25%	35%
Overall	18.1	10.4	4.0	5.0	5.0	6.0	76.5	58.3	36.3
Retail chain									
Asda	21.4	11.8	6.2	5.0	5.0	6.0	90.0	70.0	60.0
Sainsbury	19.6	11.5	3.3	5.0	5.0	5.0	65.0	55.0	32.5
Morrisons	14.9	9.5	3.3	5.0	5.0	5.0	72.4	55.2	24.1
Tesco	25.1	13.1	7.2	7.0	7.0	7.0	91.9	62.2	51.4
Co-op	14.0	8.5	2.9	5.0	4.0	4.0	73.5	58.8	35.3
Waitrose	15.0	9.1	1.0	5.0	5.0	5.0	74.1	55.6	14.8
M&S	4.9	1.3	0.8	7.0	7.0	7.0	42.9	28.6	14.3
Brand status									
National Brand	23.0	13.5	5.1	5.0	5.0	6.0	84.9	73.7	46.1
Private Label	3.9	1.2	0.5	6.0	6.0	5.0	51.9	13.5	7.7

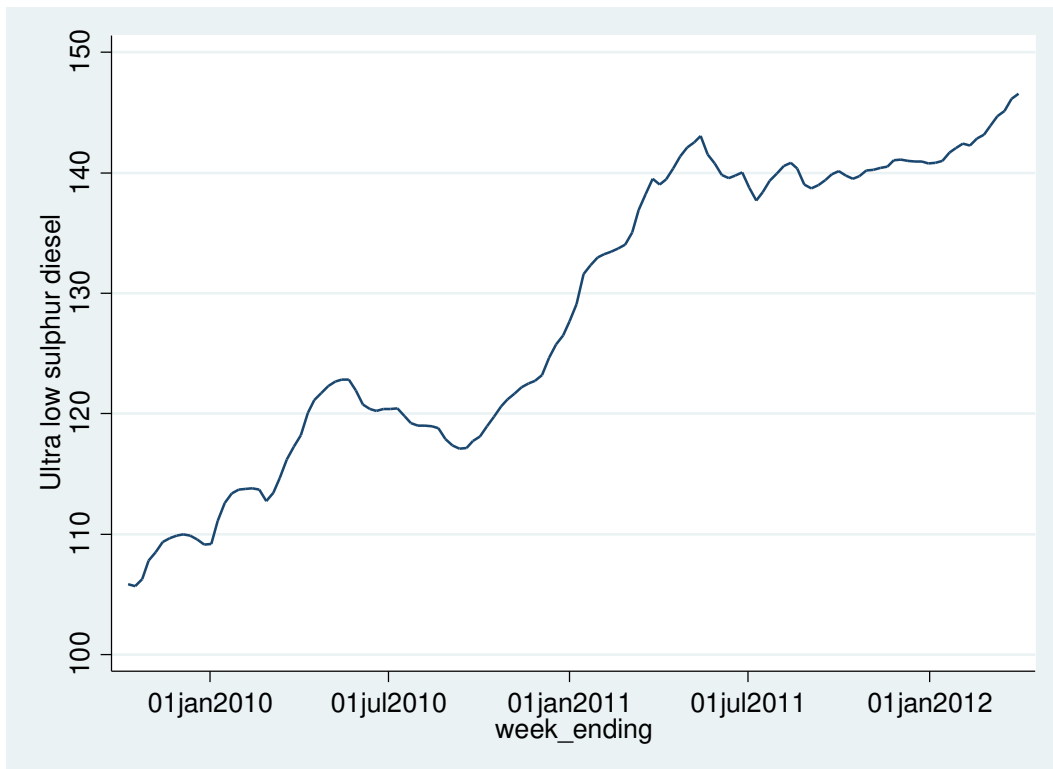
Figure S1: Plots
(a) World Orange Juice commodity price Index



(b) World commodity price index of coffee



(c) UK Price of Diesel



Testing for Non-stationarity

To evaluate the order of integration of the data we apply Hadri's (2007) panel stationary test to the price series (p_{irt}) and measures of rival prices (defined above). Hadri statistics test the null of stationarity, so that rejection implies non-stationarity. Stars (***, ** and *) denote significance at 1%, 5% and 10% respectively. Lags are based on AIC. Both trend and constant are included.

Table S4: Hadri Panel stationary test

	OJ	Coffee
Log retail prices (p)	170.6***	214.8***
Log rival price(rp)	153.4***	293.3***
Log rival price1($rp1$)	101.49***	529.9***
Log rival price2 ($rp2$)	147.1***	494.9***
Log rival price3 ($rp3$)	106.2***	313.5***
Log rival price4 ($rp4$)	106.9***	540.4***
Log rival price5 ($rp5$)	147.0***	319.2***

Note: 1%, 5% and 10% significance of rejecting H_0 denoted by ***, ** and *. Lags are based on AIC. Both trend and constant are included.

Orange juice and coffee commodity prices (mc_t) and diesel prices are evaluated using the Augmented Dickey-Fuller test modified by Elliott, Rothenberg and Stock (1992) and evaluate the no-stationary null. Stars (***, ** and *) denote significance at 1%, 5% and 10% respectively. Lags are based on AIC. Both trend and constant are included.

Table S5 : Unit Root tests

	ADF-GLS Test	
	Levels	First diff.
Log Commodity OJ price	-1.676	-7.088***
Log Commodity Coffee price	-0.746	-8.122***
Log Diesel price	-1.686	-5.018***

Note: 1%, 5% and 10% significance of rejecting H_0 denoted by ***, ** and *. Lags are based on AIC. Both trend and constant are included.

Weak Exogeneity

While cointegration is necessary and sufficient for consistent estimation of the long run parameters, efficient inference requires that the variables are weakly exogeneous. To evaluate the weak exogeneity of the rival price variable rp we undertake a recently proposed test of Moral-Benito and Servén (2015) which evaluates weak exogeneity null against the alternative that at least one UIC price series is not weakly exogenous for the estimation of the long-run parameters in the panel under consideration.¹ Results presented in Table S6 suggest there is little evidence against the weak exogeneity null in the orange juice category (p-values being larger than 5% in all but one case, namely Waitrose-National Brand). In the all products model for coffee, the null of weak exogeneity is rejected with borderline (6%) significance, a result that can be traced back to rejection of weak exogeneity in four private label models (Asda, Sainsbury, Morrison and Tesco). Interestingly, these represent the ‘Big Four’ retail chains in the UK. As such, the results are plausible and of some economic interest. From an econometric perspective, the results suggest that inference may lack the desired efficiency in these cases. Overall, we conclude that rival prices are weakly exogenous for the long-run parameters.

Table S6: Weak Exogeneity Tests: Test Statistic [p-value] for the Null of Weak Exogeneity of Rival Prices (rp)

	All products		National Brands		Private Labels	
	Orange Juice	Coffee	Orange Juice	Coffee	Orange Juice	Coffee
	3.31 [0.40]	2.82 [0.06]	-0.27 [0.73]	-0.47 [0.80]	1.40 [0.22]	3.47 [0.03]
Asda	-0.63 [0.85]	-0.76 [0.88]	-0.01 [0.64]	-0.71 [0.87]	-0.47 [0.80]	4.31 [0.01]
Sainsbury	6.97 [0.00]	2.93 [0.05]	1.97 [0.13]	1.56 [0.19]	0.39 [0.49]	2.83 [0.06]
Morrison	-0.04 [0.65]	2.83 [0.06]	0.97 [0.31]	1.92 [0.14]	0.17 [0.57]	3.98 [0.02]
Tesco	-0.67 [0.86]	5.02 [0.01]	-0.75 [0.88]	1.97 [0.13]	-0.19 [0.70]	5.58 [0.00]
Co-op	0.50 [0.46]	0.42 [0.48]	1.44 [0.21]	0.52 [0.45]	0.17 [0.57]	1.95 [0.13]
Waitrose	-0.22 [0.71]	2.70 [0.06]	-0.18 [0.70]	3.13 [0.04]	0.11 [0.59]	-0.26 [0.73]
M&S	.	-0.11 [0.67]	.	0.78 [0.37]	3.78 [0.02]	0.21 [0.55]

Note: The models used for weak exogeneity testing are those selected by Hausman tests of the MG and PMG specifications. See text for details. Marks and Spencer did not stock branded orange juice products during the sample period

¹ Enrique Moral-Benito & Luis Servén (2015) Testing weak exogeneity in cointegrated panels, *Applied Economics*, 47:30, 3216-3228.

Results for national brand and private labels by retailer

Entries in the following tables contain results that are used to produce Figure 2 in the main paper.

Table S7: Product Type, Price Transmission and Strategic Complementarities by Retail Chain
Orange Juice

	<i>Asda</i>		<i>Sainsbury</i>		<i>Morrisons</i>		<i>Tesco</i>		<i>Co-op</i>		<i>Waitrose</i>		<i>M&S¹</i>
	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>Private Labels</i>
<i>mc</i>	0.247 (0.505)	0.425*** (0.103)	0.298 (0.201)	0.693*** (0.119)	0.209*** (0.064)	0.473*** (0.062)	0.536*** (0.042)	0.835*** (0.107)	0.069*** (0.019)	0.459** (0.180)	0.177 (0.113)	0.651*** (0.096)	0.300*** (0.102)
<i>EC</i>	-0.358*** (0.061)	-0.086*** (0.017)	-0.194*** (0.045)	-0.082*** (0.016)	-0.174** (0.081)	-0.104*** (0.013)	-0.275*** (0.063)	-0.118*** (0.017)	-0.171*** (0.028)	-0.050*** (0.018)	-0.190*** (0.053)	-0.077*** (0.028)	-0.187*** (0.054)
<i>N</i>	381	1016	762	1524	381	1143	635	1397	254	1270	508	1143	889
<i>R</i> ²	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43

Coffee

	<i>Asda</i>		<i>Sainsbury</i>		<i>Morrisons</i>		<i>Tesco</i>		<i>Co-op</i>		<i>Waitrose</i>		<i>M&S</i>	
	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>
<i>mc</i>	0.226*** (0.029)	0.156 (0.135)	0.263*** (0.024)	0.227*** (0.045)	0.271*** (0.033)	0.085*** (0.014)	0.206*** (0.019)	0.161*** (0.040)	0.139** (0.068)	0.057*** (0.006)	0.139*** (0.024)	0.250** (0.103)	0.206*** (0.030)	0.228*** (0.034)
<i>EC</i>	-0.243*** (0.034)	-0.107*** (0.024)	-0.093*** (0.014)	-0.021* (0.012)	-0.111*** (0.019)	-0.114*** (0.033)	-0.175*** (0.028)	-0.058*** (0.015)	-0.204*** (0.031)	-0.255*** (0.046)	-0.105*** (0.016)	-0.093** (0.045)	-0.177*** (0.025)	-0.095** (0.041)
<i>N</i>	2829	882	3720	1280	2646	968	3360	1143	3198	1008	2728	635	3250	635
<i>R</i> ²	0.30	0.33	0.31	0.36	0.33	0.29	0.28	0.35	0.30	0.33	0.31	0.35	0.32	0.35

Notes: ¹ At the time of the data collection, M&S did not stock national brands of orange juice. Standard errors are reported in brackets. *** denotes significance at the 1 per cent level, ** significance at the 5 per cent level and * significance at the 10 per cent level. All specifications include controls for sales. The results presented are based on either mean group or pooled mean group estimator on the basis of a Hausman test for slope homogeneity.

Table S8: Product Type, Price Transmission and Strategic Complementarities by Retail Chain
Orange Juice

	<i>Asda</i>		<i>Sainsbury</i>		<i>Morrisons</i>		<i>Tesco</i>		<i>Co-op</i>		<i>Waitrose</i>		<i>M&S¹</i>
	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>Private Labels</i>
<i>mc</i>	0.515*** (0.102)	0.092 (0.110)	0.334*** (0.086)	0.195*** (0.064)	0.252*** (0.043)	0.012 (0.048)	0.582*** (0.096)	0.505*** (0.080)	0.032 (0.029)	0.091** (0.037)	0.032 (0.069)	0.179*** (0.068)	0.123*** (0.042)
<i>rp</i>	0.393*** (0.139)	0.472** (0.184)	0.251** (0.108)	0.915*** (0.098)	0.064 (0.157)	0.888*** (0.075)	-0.209 (0.129)	0.717*** (0.146)	0.351*** (0.098)	0.567*** (0.090)	0.502*** (0.094)	0.081*** (0.083)	0.635*** (0.081)
<i>EC</i>	-0.320*** (0.101)	-0.089*** (0.019)	-0.158** (*0.063)	-0.091*** (0.024)	-0.178** (0.084)	-0.188*** (0.029)	-0.262*** (0.070)	-0.129*** (0.020)	-0.262* (0.135)	-0.064*** (0.017)	-0.198*** (0.076)	-0.091*** (0.023)	-0.084*** (0.033)
N	381	1016	762	1524	381	1143	635	1397	254	1270	508	1143	889
R²	0.48	0.45	0.65	0.37	0.84	0.53	0.61	0.47	0.19	0.28	0.61	0.39	0.49

Coffee

	<i>Asda</i>		<i>Sainsbury</i>		<i>Morrisons</i>		<i>Tesco</i>		<i>Co-op</i>		<i>Waitrose</i>		<i>M&S</i>	
	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>
<i>mc</i>	0.238*** (0.061)	0.107 (0.134)	0.116*** (0.017)	0.196** (0.043)	0.090*** (0.017)	0.054*** (0.014)	0.104*** (0.018)	0.024 (0.029)	0.114*** (0.030)	0.057*** (0.005)	0.040** (0.019)	0.057 (0.048)	0.072*** (0.018)	0.042 (0.032)
<i>rp</i>	0.109 (0.154)	0.769** (0.311)	0.575*** (0.051)	0.949*** (0.202)	0.796*** (0.057)	0.678*** (0.129)	0.501*** (0.058)	0.556*** (0.076)	0.280*** (0.101)	0.045 (0.034)	0.496*** (0.056)	1.288*** (0.397)	0.258*** (0.048)	0.351*** (0.121)
<i>EC</i>	-0.264*** (0.035)	-0.137*** (0.028)	-0.121*** (0.020)	-0.024** (0.010)	-0.154*** (0.017)	-0.121*** (0.030)	-0.226*** (0.038)	-0.096*** (0.027)	-0.239*** (0.035)	-0.258*** (0.051)	-0.130*** (0.015)	-0.144*** (0.029)	-0.231*** (0.032)	-0.123** (0.052)
N	2829	882	3720	1280	2646	968	3360	1143	3198	1008	2728	635	250	635
R²	0.29	0.32	0.30	0.35	0.32	0.27	0.27	0.33	0.29	0.32	0.30	0.33	0.31	0.33

Notes: ¹ At the time of the data collection, M&S did not stock national brands of orange juice. Standard errors are reported in brackets. *** denotes significance at the 1 per cent level, ** significance at the 5 per cent level and * significance at the 10 per cent level. All specifications include controls for sales and seasonal dummies. The results presented are based on either mean group or pooled mean group estimator on the basis of a Hausman test for slope homogeneity.

Robustness*Sales*

Results for all models for 25% and 35% sales.

Table S9: Estimates of Long Run Price Transmission and Strategic Complementarity
(25% sales)

Orange Juice

	<i>All Products</i>		<i>National Brands</i>		<i>Private Labels</i>	
<i>mc</i>	0.493*** (0.043)	0.194*** (0.034)	0.286*** (0.082)	0.285*** (0.093)	0.565*** (0.048)	0.162*** (0.033)
<i>rp</i>		0.517*** (0.068)		0.111 (0.108)		0.659*** (0.076)
<i>EC</i>	-0.157*** (0.014)	-0.210*** (0.015)	-0.295*** (0.031)	-0.312*** (0.033)	-0.109*** (0.011)	-0.174*** (0.014)
N	11303	11303	2921	2921	8382	8382

Coffee

	<i>All Products</i>		<i>National Brands</i>		<i>Private Labels</i>	
<i>mc</i>	0.202*** (0.029)	0.086*** (0.006)	0.222*** (0.018)	0.112*** (0.018)	0.051*** (0.006)	0.053*** (0.005)
<i>rp</i>		0.532*** (0.021)		0.342*** (0.055)		0.129*** (0.032)
<i>EC</i>	-0.181*** (0.010)	-0.162*** (0.010)	-0.193*** (0.011)	-0.266*** (0.015)	-0.103*** (0.016)	-0.105*** (0.016)
N	25296	25296	18848	18696	6656	6656

Notes: Standard errors are reported in brackets. ***, ** and * denotes significance at the 1, 5 and 10 per cent levels respectively. All specifications include controls for sales and seasonal dummies. The results presented are based on either mean group or pooled mean group estimator on the basis of a Hausman test for slope homogeneity.

Table S10 : Estimates of Long Run Price Transmission and Strategic Complementarity
(35% sales)

Orange Juice

	<i>All Products</i>		<i>National Brands</i>		<i>Private Labels</i>	
<i>mc</i>	0.495*** (0.043)	0.202*** (0.034)	0.287*** (0.082)	0.292*** (0.093)	0.568*** (0.048)	0.171*** (0.033)
<i>rp</i>		0.500*** (0.068)		0.094 (0.110)		0.641*** (0.076)
<i>EC</i>	-0.165*** (0.014)	-0.220*** (0.015)	-0.294*** (0.032)	-0.311*** (0.033)	-0.120*** (0.012)	-0.188*** (0.015)
N	11303	11303	2921	2921	8382	8382

Coffee

	<i>All Products</i>		<i>National Brands</i>		<i>Private Labels</i>	
<i>mc</i>	0.184*** (0.028)	0.076*** (0.005)	0.198*** (0.014)	0.094*** (0.017)	0.051*** (0.006)	0.053*** (0.005)
<i>rp</i>		0.537*** (0.019)		0.357*** (0.053)		0.126*** (0.032)
<i>EC</i>	-0.230*** (0.012)	-0.212*** (0.012)	-0.256*** (0.014)	-0.355*** (0.019)	-0.107*** (0.016)	-0.109*** (0.017)
N	25296	25296	18848	18696	6656	6656

Notes: Standard errors are reported in brackets. ***, ** and * denotes significance at the 1, 5 and 10 per cent levels respectively. All specifications include controls for sales and seasonal dummies. The results presented are based on either mean group or pooled mean group estimator on the basis of a Hausman test for slope homogeneity.

Table S11: Estimates of Long Run Price Transmission and Strategic Complementarities by Retail Chain (25% sales)

Orange Juice

	<i>Asda</i>		<i>Sainsbury</i>		<i>Morrisons</i>		<i>Tesco</i>		<i>Co-op</i>		<i>Waitrose</i>		<i>M&S</i>	
<i>mc</i>	0.705*** (0.059)	0.505*** (0.086)	0.539*** (0.045)	0.214*** (0.049)	0.289*** (0.026)	0.168*** (0.030)	0.558*** (0.041)	0.589*** (0.062)	0.285*** (0.035)	0.074*** (0.029)	0.397*** (0.041)	0.049 (0.046)	0.015 (0.015)	0.129*** (0.041)
<i>rp</i>		0.333*** (0.109)		0.702*** (0.071)		0.633*** (0.058)		-0.064 (0.102)		0.542*** (0.071)		0.813*** (0.055)		0.646*** (0.079)
<i>EC</i>	-0.139*** (0.044)	-0.149*** (0.043)	-0.110*** (0.037)	-0.130*** (0.037)	-0.154*** (0.040)	-0.229*** (0.033)	-0.170*** (0.034)	-0.168*** (0.035)	-0.052*** (0.018)	-0.085*** (0.023)	-0.109*** (0.040)	-0.142*** (0.034)	-0.149** (0.066)	-0.094*** (0.034)
N	1397	1397	2286	2286	1524	1524	2032	2032	1524	1524	1651	1651	889	889

Coffee

	<i>Asda</i>		<i>Sainsbury</i>		<i>Morrisons</i>		<i>Tesco</i>		<i>Co-op</i>		<i>Waitrose</i>		<i>M&S</i>	
<i>mc</i>	0.167*** (0.022)	0.168*** (0.048)	0.252*** (0.023)	0.120*** (0.016)	0.212*** (0.036)	0.098*** (0.011)	0.173*** (0.019)	0.039*** (0.015)	0.139*** (0.022)	0.068*** (0.017)	0.141*** (0.036)	0.029** (0.014)	0.148*** (0.022)	0.080** (0.041)
<i>rp</i>		0.351** (0.151)		0.589*** (0.051)		0.757*** (0.041)		0.679*** (0.048)		0.315*** (0.085)		0.505*** (0.049)		0.230*** (0.086)
<i>EC</i>	-0.194*** (0.025)	-0.298*** (0.036)	-0.083*** (0.011)	-0.102*** (0.015)	-0.153*** (0.021)	-0.185*** (0.024)	-0.176*** (0.019)	-0.216*** (0.025)	-0.228*** (0.026)	-0.253*** (0.021)	-0.135*** (0.019)	-0.151*** (0.020)	-0.147*** (0.040)	-0.194*** (0.037)
N	3780	3720	4960	4960	3683	3683	4736	4662	4216	4352	3456	3456	896	896

Notes: Standard errors are reported in brackets. . ***, ** and * denotes significance at the 1, 5 and 10 per cent levels respectively. All specifications include controls for sales and seasonal dummies. The results presented are based on either mean group or pooled mean group estimator on the basis of a Hausman test for slope homogeneity.

Table S12: Estimates of Long Run Price Transmission and Strategic Complementarities by Retail Chain and Brand Status – 25% sales

Orange Juice

	<i>Asda</i>		<i>Sainsbury</i>		<i>Morrisons</i>		<i>Tesco</i>		<i>Co-op</i>		<i>Waitrose</i>		<i>M&S¹</i>
	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>Private Labels</i>
<i>mc</i>	0.146 (0.462)	0.221** (0.102)	0.273 (0.190)	0.160*** (0.039)	0.269*** (0.005)	0.031 (0.050)	0.755*** (0.090)	0.447*** (0.083)	0.060** (0.028)	0.047 (0.082)	-0.053 (0.105)	0.064 (0.097)	0.105 (0.080)
<i>rp</i>	0.054 (0.230)	0.132 (0.292)	-0.093 (0.219)	0.811*** (0.147)	0.310 (0.342)	0.784*** (0.092)	-0.141 (0.218)	0.770*** (0.103)	0.077 (0.310)	0.428** (0.181)	0.641*** (0.202)	1.118*** (0.288)	0.398*** (0.134)
<i>EC</i>	-0.372*** (0.068)	-0.137*** (0.025)	-0.286*** (0.080)	-0.149*** (0.029)	-0.383*** (0.048)	-0.229*** (0.042)	-0.279*** (0.069)	-0.196*** (0.037)	-0.269* (0.140)	-0.092*** (0.017)	-0.318*** (0.103)	-0.170*** (0.042)	-0.264*** (0.046)
N	381	1016	762	1524	381	1143	635	1397	254	1270	508	1143	889

Coffee

	<i>Asda</i>		<i>Sainsbury</i>		<i>Morrisons</i>		<i>Tesco</i>		<i>Co-op</i>		<i>Waitrose</i>		<i>M&S</i>	
	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>
<i>mc</i>	0.228*** (0.063)	0.103 (0.135)	0.111*** (0.017)	0.192*** (0.043)	0.118*** (0.013)	0.053*** (0.014)	0.095*** (0.018)	-0.005 (0.022)	0.097*** (0.028)	0.056*** (0.006)	0.045** (0.019)	0.064 (0.046)	0.067*** (0.022)	0.236*** (0.037)
<i>rp</i>	0.064 (0.185)	0.806** (0.351)	0.580*** (0.051)	0.955*** (0.200)	0.694*** (0.045)	0.711*** (0.133)	0.552*** (0.062)	0.587*** (0.056)	0.347*** (0.097)	0.018 (0.035)	0.477*** (0.056)	1.222*** (0.413)	0.302*** (0.091)	-0.080 (0.194)
<i>EC</i>	-0.326*** (0.042)	-0.280*** (0.103)	-0.132*** (0.018)	-0.024** (0.010)	-0.211*** (0.027)	-0.123*** (0.030)	-0.233*** (0.038)	-0.137*** (0.045)	-0.246*** (0.036)	-0.257*** (0.048)	-0.152*** (0.018)	-0.201*** (0.073)	-0.234*** (0.034)	-0.094** (0.041)
N	2829	882	3720	1280	2646	968	3360	1143	3198	1008	2728	635	250	635

Notes: ¹ At the time of the data collection, M&S did not stock national brands for orange juice. Standard errors are reported in brackets. *** denotes significance at the 1 per cent level, ** significance at the 5 per cent level and * significance at the 10 per cent level. All specifications include controls for sales and seasonal dummies. The results presented are based on either mean group or pooled mean group estimator on the basis of a Hausman test for slope homogeneity.

Table S13: Estimates of Long Run Price Transmission and Strategic Complementarities by Retail Chain (35% sales)

Orange Juice

	<i>Asda</i>		<i>Sainsbury</i>		<i>Morrisons</i>		<i>Tesco</i>		<i>Co-op</i>		<i>Waitrose</i>		<i>M&S</i>	
<i>mc</i>	0.724*** (0.057)	0.580*** (0.083)	0.539*** (0.045)	0.216*** (0.048)	0.287*** (0.025)	0.169*** (0.030)	0.570*** (0.042)	0.571*** (0.060)	0.285*** (0.035)	0.074** (0.029)	0.397*** (0.041)	0.049 (0.046)	0.264*** (0.046)	0.137*** (0.041)
<i>rp</i>		0.244** (0.106)		0.698*** (0.071)		0.622*** (0.058)		-0.003 (0.103)		0.544*** (0.071)		0.813*** (0.055)		0.618*** (0.078)
<i>EC</i>	-0.141*** (0.046)	-0.148*** (0.046)	-0.109*** (0.037)	-0.131*** (0.037)	-0.182*** (0.041)	-0.254*** (0.027)	-0.184*** (0.032)	-0.184*** (0.033)	-0.051*** (0.017)	-0.084*** (0.023)	-0.109*** (0.040)	-0.142*** (0.034)	-0.075** (0.031)	-0.099*** (0.033)
N	1397	1397	2286	2286	1524	1524	2032	2032	1524	1524	1651	1651	889	889

Coffee

	<i>Asda</i>		<i>Sainsbury</i>		<i>Morrisons</i>		<i>Tesco</i>		<i>Co-op</i>		<i>Waitrose</i>		<i>M&S</i>	
<i>mc</i>	0.148*** (0.020)	0.150*** (0.046)	0.231*** (0.020)	0.112*** (0.015)	0.200*** (0.033)	0.095*** (0.010)	0.170*** (0.018)	0.039*** (0.014)	0.127*** (0.019)	0.061*** (0.017)	0.138*** (0.036)	0.024* (0.013)	0.147*** (0.022)	0.079* (0.041)
<i>rp</i>		0.405*** (0.142)		0.614*** (0.047)		0.744*** (0.038)		0.699*** (0.045)		0.323*** (0.089)		0.541*** (0.044)		0.232*** (0.087)
<i>EC</i>	-0.227*** (0.027)	-0.336*** (0.035)	-0.128*** (0.019)	-0.148*** (0.024)	-0.219*** (0.030)	-0.262*** (0.031)	-0.206*** (0.022)	-0.263*** (0.030)	-0.286*** (0.030)	-0.293*** (0.023)	-0.188*** (0.027)	-0.212*** (0.028)	-0.154*** (0.043)	-0.203*** (0.040)
N	3780	3720	4960	4960	3683	3683	4736	4662	4216	4352	3456	3456	896	896

Notes: Standard errors are reported in brackets. . ***, ** and * denotes significance at the 1, 5 and 10 per cent levels respectively. All specifications include controls for sales and seasonal dummies. The results presented are based on either mean group or pooled mean group estimator on the basis of a Hausman test for slope homogeneity.

Table S14: Estimates of Long Run Price Transmission and Strategic Complementarities by Retail Chain and Brand Status (35% sales)

Orange Juice

	<i>Asda</i>		<i>Sainsbury</i>		<i>Morrisons</i>		<i>Tesco</i>		<i>Co-op</i>		<i>Waitrose</i>		<i>M&S¹</i>
	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>Private Labels</i>
<i>mc</i>	0.208 (0.485)	0.210** (0.106)	0.272 (0.190)	0.160*** (0.039)	0.269*** (0.005)	0.082 (0.050)	0.746*** (0.088)	0.466*** (0.080)	0.060** (0.028)	0.047 (0.082)	-0.053 (0.105)	0.064 (0.097)	0.105 (0.080)
<i>rp</i>	-0.105 (0.268)	0.164 (0.297)	-0.065 (0.210)	0.811*** (0.147)	0.310 (0.342)	0.657*** (0.130)	-0.158 (0.226)	0.745*** (0.101)	0.077 (0.310)	0.430** (0.180)	0.641*** (0.202)	1.118*** (0.288)	0.398*** (0.134)
<i>EC</i>	-0.366*** (0.087)	-0.144*** (0.024)	-0.284*** (0.081)	-0.149*** (0.029)	-0.383*** (0.048)	-0.267*** (0.034)	-0.276*** (0.068)	-0.230*** (0.041)	-0.269* (0.140)	-0.091*** (0.016)	-0.318*** (0.103)	-0.170*** (0.042)	-0.264*** (0.046)
N	381	1016	762	1524	381	1143	635	1397	254	1270	508	1143	889

Coffee

	<i>Asda</i>		<i>Sainsbury</i>		<i>Morrisons</i>		<i>Tesco</i>		<i>Co-op</i>		<i>Waitrose</i>		<i>M&S</i>	
	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>
<i>mc</i>	0.203*** (0.061)	0.103 (0.135)	0.104*** (0.016)	0.192*** (0.043)	0.112*** (0.013)	0.053*** (0.014)	0.091*** (0.016)	-0.005 (0.022)	0.093*** (0.026)	0.056*** (0.006)	0.002 (0.016)	0.065 (0.046)	0.063** (0.026)	0.236*** (0.037)
<i>rp</i>	0.125 (0.183)	0.806** (0.351)	0.606*** (0.047)	0.955*** (0.200)	0.694*** (0.042)	0.680*** (0.129)	0.563*** (0.053)	0.587*** (0.056)	0.326*** (0.091)	0.019 (0.034)	0.547*** (0.048)	1.195*** (0.428)	0.291*** (0.080)	-0.080 (0.194)
<i>EC</i>	-0.381*** (0.039)	-0.280*** (0.103)	-0.194*** (0.027)	-0.024** (0.010)	-0.298*** (0.029)	-0.128*** (0.028)	-0.307*** (0.047)	-0.137*** (0.045)	-	0.325*** (0.044)	-0.264*** (0.046)	-0.246*** (0.034)	-0.221*** (0.077)	-0.282*** (0.083)
N	2829	882	3720	1280	2646	968	3360	1143	3198	1008	2728	635	250	635

Notes: ¹ At the time of the data collection, M&S did not stock national brands of orange juice. Standard errors are reported in brackets. *** denotes significance at the 1 per cent level, ** significance at the 5 per cent level and * significance at the 10 per cent level. All specifications include controls for sales and seasonal dummies. The results presented are based on either mean group or pooled mean group estimator on the basis of a Hausman test for slope homogeneity.

Table S15: Estimates of Long run Price Transmission and Strategic Complementarities (no sales dummy)

Orange Juice						
	Full Data		National Brands		Private Labels	
mc_t	0.496*** (0.044)	0.200*** (0.035)	0.294*** (0.087)	0.288*** (0.095)	0.567*** (0.048)	0.169*** (0.033)
rp_{it}		0.511*** (0.067)		0.130 (0.104)		0.643*** (0.076)
EC	-0.176*** (0.016)	-0.233*** (0.017)	-0.336*** (0.036)	-0.356*** (0.037)	-0.120*** (0.012)	-0.190*** (0.015)
Obs	11303	11303	2921	2921	8382	8382
Coffee						
	Full Data		National Brands		Private Labels	
mc_t	0.182*** (0.028)	0.074*** (0.005)	0.195*** (0.014)	0.103*** (0.015)	0.050*** (0.006)	0.052*** (0.005)
rp_{it}		0.502*** (0.018)		0.319*** (0.057)		0.131*** (0.032)
EC	-0.269*** (0.014)	-0.247*** (0.014)	-0.306*** (0.016)	-0.415*** (0.021)	-0.112*** (0.017)	-0.114*** (0.018)
Obs	25296	25296	18848	18696	6656	6656

Notes: Results are those from the application of equation (6) in the main paper. All specifications include controls for sales and seasonal dummies. The results presented are based on either mean group or pooled mean group estimator on the basis of a Hausman test for slope homogeneity. Standard errors are reported in brackets. ***, ** and * denotes significance at the 1, 5 and 10 per cent levels respectively.

Other costs

Table S16: Estimates of Long-Run Price Transmission and Strategic Complementarities with Diesel Costs

Orange Juice

	<i>Full Data</i>		<i>National Brands</i>		<i>Private Labels</i>	
<i>mc</i>	0.195*** (0.034)	0.123*** (0.051)	0.259*** (0.093)	0.238* (0.141)	0.173*** (0.033)	0.082* (0.049)
<i>rp</i>		0.215*** (0.062)		0.009 (0.165)		0.286*** (0.110)
<i>diesel</i>	0.509*** (0.069)	0.346*** (0.077)	0.138 (0.097)	0.169* (0.098)	0.639*** (0.081)	0.408*** (0.097)
<i>EC</i>	-0.179*** (0.012)	-0.233*** (0.014)	-0.245*** (0.028)	-0.288*** (0.031)	-0.097*** (0.010)	-0.201*** (0.015)
N	11303	11303	2921	2921	8382	8382
R²	0.41	0.39	0.37	0.36	0.53	0.51

Coffee

	<i>All Products[†]</i>		<i>National Brands[†]</i>		<i>Private Labels</i>	
<i>mc</i>	0.139 (0.161)	0.190 (0.225)	0.071 (0.141)	0.030 (0.128)	0.062*** (0.013)	0.045*** (0.012)
<i>rp</i>		-0.443 (0.957)		0.452*** (0.139)		0.161*** (0.033)
<i>diesel</i>	0.057 (0.544)	2.263 (1.880)	0.346 (0.436)	0.311 (0.423)	-0.012 (0.036)	0.030 (0.032)
<i>EC</i>	-0.283*** (0.017)	-0.303*** (0.017)	-0.240*** (0.013)	-0.233*** (0.013)	-0.092*** (0.015)	-0.096*** (0.016)
N	24276	24480	18848	19000	6656	6656
R²	0.31	0.32	0.29	0.33	0.57	0.57

Notes: Standard errors are reported in brackets. ***, ** and * denotes significance at the 1, 5 and 10 per cent levels respectively. All specifications include a control for sales and seasonal dummies. The results presented are based on either mean group (MG) or pooled mean group (PMG) estimator on the basis of a Hausman test for slope homogeneity. In a number of models, the Hausman test selected the PMG estimator, which delivered negative price transmission coefficients. In these cases, the MG results are reported (†).

Table S17: Estimates of Long Run Price Transmission and Strategic Complementarities with diesel costs by Retail Chain

Orange Juice

	<i>Asda</i>	<i>Sainsbury</i>	<i>Morrisons</i>	<i>Tesco</i>	<i>Co-op</i>	<i>Waitrose</i> [†]	<i>M&S</i>							
<i>mc</i>	0.467*** (0.121)	0.489*** (0.121)	0.065 (0.069)	0.006 (0.055)	0.155*** (0.051)	0.039 (0.048)	0.227*** (0.071)	0.248*** (0.078)	0.199** (0.085)	0.044 (0.044)	0.311** (0.138)	0.395 (0.545)	0.096*** (0.035)	0.082 (0.068)
<i>diesel</i>	0.311** (0.147)	0.058 (0.170)	0.710*** (0.085)	0.453*** (0.076)	0.186*** (0.063)	0.199*** (0.065)	0.402*** (0.085)	0.464*** (0.098)	0.104 (0.101)	0.045 (0.064)	0.662*** (0.150)	0.596*** (0.166)	0.278*** (0.042)	0.131 (0.118)
<i>rp</i>		0.278** (0.129)		0.441*** (0.061)		0.552*** (0.058)		-0.114 (0.079)		0.522*** (0.079)		4.638 (4.016)		0.529*** (0.114)
<i>EC</i>	-0.177*** (0.059)	-0.179*** (0.057)	-0.151*** (0.043)	-0.163*** (0.042)	-0.196*** (0.043)	-0.271*** (0.031)	-0.258*** (0.057)	-0.253*** (0.058)	-0.058*** (0.020)	-0.091*** (0.024)	-0.100*** (0.022)	-0.224*** (0.041)	-0.118** (0.052)	-0.099*** (0.033)
N	1397	1397	2286	2286	1524	1524	2032	2032	1524	1524	1560	1560	889	889

Coffee

	<i>Asda</i>	<i>Sainsbury</i> [†]	<i>Morrisons</i> [†]	<i>Tesco</i> [†]	<i>Co-op</i>	<i>Waitrose</i> [†]	<i>M&S</i> [†]							
<i>mc</i>	0.163*** (0.054)	0.079 (0.067)	0.274 (0.229)	-0.268 (0.282)	-0.037 (0.146)	1.374 (1.545)	0.008 (0.271)	0.161 (0.277)	-0.044 (0.037)	0.110 (0.188)	0.089 (0.194)	0.117 (0.225)	-0.115 (0.180)	0.195 (0.140)
<i>diesel</i>	0.026 (0.149)	0.298 (0.263)	-0.170 (0.674)	1.143 (0.757)	0.491 (0.640)	13.509 (13.208)	0.626 (0.882)	-0.192 (0.961)	0.537*** (0.136)	0.071 (0.494)	0.081 (0.609)	-0.221 (0.736)	1.947* (1.064)	-0.790 (1.121)
<i>rp</i>		0.277* (0.152)		1.108* (0.657)		-5.676 (6.659)		0.582*** (0.177)		0.098 (0.107)		0.620*** (0.207)		0.361 (0.608)
<i>EC</i>	-0.164*** (0.024)	-0.256*** (0.032)	-0.159*** (0.019)	-0.181*** (0.023)	-0.508*** (0.065)	-0.291*** (0.036)	-0.250*** (0.024)	-0.283*** (0.026)	-0.285*** (0.026)	-0.336*** (0.035)	-0.195*** (0.026)	-0.232*** (0.027)	-0.297*** (0.074)	-0.340*** (0.096)
N	3780	3720	4760	4760	3480	3480	4699	4699	4216	4148	3240	3240	763	763

Notes: Standard errors are reported in brackets. ***, ** and * denotes significance at the 1, 5 and 10 per cent levels respectively. All specifications include a control for sales and seasonal dummies. The results presented are based on either mean group (MG) or pooled mean group (PMG) estimator on the basis of a Hausman test for slope homogeneity. In a number of models, the Hausman test selected the PMG estimator, which delivered negative price transmission coefficients. In these cases, the MG results are reported (†).

Table S18: Estimates of Long Run Price Transmission and Strategic Complementarities with diesel costs

Orange Juice

	<i>Asda</i>		<i>Sainsbury</i>		<i>Morrisons</i>		<i>Tesco</i>		<i>Co-op</i>		<i>Waitrose</i>		<i>M&S¹</i>
	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels[†]</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands[†]</i>	<i>Private Labels</i>	<i>National Brands[†]</i>	<i>Private Labels</i>	<i>Private Labels</i>
<i>mc</i>	0.138 (0.450)	0.189 (0.219)	0.594 (0.385)	0.337 (0.294)	0.154*** (0.008)	0.003 (0.071)	0.035 (0.147)	0.304** (0.150)	0.025 (0.085)	0.076 (0.096)	0.097 (0.145)	-0.071 (0.099)	0.063** (0.032)
<i>diesel</i>	0.064 (0.051)	0.052 (0.446)	-0.479 (0.305)	0.060 (0.648)	0.163*** (0.004)	0.216** (0.096)	0.845*** (0.177)	0.489 (0.359)	0.145*** (0.032)	-0.203 (0.198)	-0.226 (0.256)	0.651*** (0.194)	0.123 (0.139)
<i>rp</i>	0.072 (0.108)	0.323 (0.315)	0.100 (0.100)	0.574 (0.536)	0.330 (0.397)	0.508*** (0.103)	0.108 (0.323)	0.426 (0.331)	-0.281 (0.653)	0.606** (0.242)	1.561 (1.637)	0.314*** (0.096)	0.253 (0.183)
<i>EC</i>	-0.479*** (0.093)	-0.200*** (0.035)	-0.377*** (0.078)	-0.222*** (0.047)	-0.402*** (0.074)	-0.291*** (0.042)	-0.487*** (0.116)	-0.290*** (0.051)	-0.278 (0.172)	-0.106*** (0.027)	-0.140 (0.116)	-0.239*** (0.049)	-0.351*** (0.045)
N	381	1016	762	1464	381	1143	635	1397	250	1270	476	1143	889

Coffee

	<i>Asda</i>		<i>Sainsbury</i>		<i>Morrisons</i>		<i>Tesco</i>		<i>Co-op</i>		<i>Waitrose</i>		<i>M&S</i>	
	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands[†]</i>	<i>Private Labels[†]</i>	<i>National Brands[†]</i>	<i>Private Labels[†]</i>	<i>National Brands[†]</i>	<i>Private Labels[†]</i>	<i>National Brands</i>	<i>Private Labels</i>	<i>National Brands[†]</i>	<i>Private Labels[†]</i>	<i>National Brands</i>	<i>Private Labels</i>
<i>mc</i>	0.084 (0.085)	0.012 (0.083)	0.097 (0.126)	-1.365 (1.025)	-0.035 (0.105)	-0.095* (0.057)	0.064 (0.209)	0.019 (0.069)	0.120 (0.246)	0.041 (0.062)	0.175 (0.274)	-0.009 (0.056)	-0.044 (0.077)	-0.038 (0.041)
<i>rp</i>	0.092 (0.151)	0.642** (0.276)	0.520** (0.208)	2.873 (2.568)	1.007 (0.674)	0.376 (0.434)	0.518*** (0.127)	0.752*** (0.266)	0.107 (0.139)	-0.008 (0.068)	0.514** (0.208)	0.895* (0.540)	0.140*** (0.012)	0.102 (0.076)
<i>diesel</i>	0.184 (0.286)	0.199 (0.167)	0.066 (0.430)	4.376* (2.570)	0.543 (0.336)	0.915** (0.456)	0.069 (0.694)	0.306 (0.423)	0.153 (0.643)	-0.091 (0.213)	-0.442 (0.898)	0.517 (0.326)	0.108 (0.108)	0.191 (0.191)
<i>EC</i>	-0.304*** (0.041)	-0.154*** (0.032)	-0.205*** (0.029)	-0.106*** (0.019)	-0.238*** (0.032)	-0.176*** (0.017)	-0.279*** (0.026)	-0.221*** (0.051)	-0.301*** (0.034)	-0.368*** (0.049)	-0.236*** (0.032)	-0.177*** (0.022)	-0.279*** (0.035)	-0.385*** (0.046)
N	2829	882	3570	1190	2625	1024	3584	1152	3172	1008	2640	630	250	254

Notes: ¹ At the time of the data collection, M&S did not stock national brands. Standard errors are reported in brackets. ***, ** and * denotes significance at the 1, 5 and 10 per cent levels respectively. All specifications include a control for sales and seasonal dummies. The results presented are based on either mean group (MG) or pooled mean group (PMG) estimator on the basis of a Hausman test for slope homogeneity. In a number of models, the Hausman test selected the PMG estimator, which delivered negative price transmission coefficients. In these cases, the MG results are reported (†).

Alternative measures of rival prices

For definitions of alternative measures see Table S1.

Table S19 Estimates of Long Run Price Transmission and Strategic Complementarities

Orange Juice

	rp1			rp2			rp3			rp4			rp5		
	All data	NB [†]	PL	All data	NB	PL	All data	NB	PL	All data	NB	PL	All data	NB	PL
<i>mc</i>	0.243*** (0.050)	0.336* (0.183)	0.250*** (0.046)	0.116** (0.047)	0.156 (0.132)	0.102** (0.044)	0.116** (0.047)	0.199** (0.095)	0.398*** (0.058)	0.180*** (0.050)	0.148 (0.150)	0.192*** (0.044)	0.084*** (0.020)	0.191** (0.085)	0.101*** (0.036)
<i>rp</i>	0.496*** (0.128)	0.029 (0.314)	0.635*** (0.131)	0.710*** (0.134)	0.478 (0.348)	0.791*** (0.135)	0.710*** (0.134)	0.116 (0.168)	0.460*** (0.130)	0.599*** (0.124)	0.268 (0.303)	0.714*** (0.128)	0.328** (0.165)	0.238*** (0.075)	0.437*** (0.078)
<i>EC</i>	-0.177*** (0.013)	-0.221*** (0.027)	-0.146*** (0.012)	-0.200*** (0.014)	-0.257*** (0.030)	-0.180*** (0.015)	-0.200*** (0.014)	-0.261*** (0.028)	-0.103*** (0.008)	-0.189*** (0.014)	-0.279*** (0.030)	-0.157*** (0.013)	-0.199*** (0.013)	-0.273*** (0.032)	-0.173*** (0.013)
<i>N</i>	11303	2829	8382	11303	2921	8382	11303	2921	7493	11303	2921	8382	11303	2921	8382
<i>R</i> ²	0.41	0.37	0.53	0.37	0.33	0.50	0.41	0.37	0.54	0.40	0.36	0.53	0.41	0.37	0.52

Coffee

	rp1			rp2			rp3			rp4			rp5		
	All data	NB [†]	PL	All data [†]	NB [†]	PL	All data	NB	PL	All data	NB	PL	All data	NB	PL
<i>mc</i>	0.030*** (0.008)	0.034** (0.017)	0.054*** (0.008)	0.053* (0.029)	0.059* (0.033)	0.045*** (0.007)	0.084*** (0.007)	0.133*** (0.034)	0.208 (0.171)	0.006 (0.009)	0.032* (0.018)	-0.001 (0.043)	0.110*** (0.019)	0.119*** (0.018)	0.133* (0.080)
<i>rp</i>	0.932*** (0.039)	0.883*** (0.105)	0.023 (0.032)	0.806*** (0.198)	0.741*** (0.137)	0.078 (0.057)	0.681*** (0.029)	0.462*** (0.120)	0.838** (0.326)	1.041*** (0.041)	0.872*** (0.102)	1.509*** (0.546)	0.519*** (0.146)	0.297** (0.142)	0.813*** (0.154)
<i>ecm</i>	-0.147*** (0.009)	-0.209*** (0.009)	-0.089*** (0.015)	-0.264*** (0.015)	-0.283*** (0.018)	-0.087*** (0.015)	-0.144*** (0.009)	-0.233*** (0.013)	-0.149*** (0.015)	-0.146*** (0.009)	-0.240*** (0.013)	-0.154*** (0.016)	-0.211*** (0.011)	-0.223*** (0.013)	-0.156*** (0.016)
<i>N</i>	25296	19456	6656	24480	18240	6656	25296	18696	6656	25296	18848	6656	25296	18848	6656
<i>R</i> ²	0.30	0.45	0.34	0.29	0.41	0.33	0.30	0.44	0.34	0.30	0.45	0.34	0.30	0.44	0.34

Notes: Standard errors are reported in brackets. ***, ** and * denotes significance at the 1, 5 and 10 per cent levels respectively. All specifications include a control for sales and seasonal dummies. The results presented are based on either mean group (MG) or pooled mean group (PMG) estimator on the basis of a Hausman test for slope homogeneity. In a number of models, the Hausman test selected the PMG estimator, which delivered negative price transmission coefficients. In these cases, the MG results are reported (†)

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