

Appendix: Indirect Savings from Public Procurement Centralization

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This Appendix is structured as follows. Section A discusses additional features of the Consip framework program. Section B presents evidence on the lack of strategic timing of purchases. Section C provides details about the survey and data work. We conduct further robustness checks in Section D. Section E and Section F report tables for the heterogeneities mentioned in the paper and for the event study analysis, respectively.

A. More on the Consip Experiment

The treatment considered in the paper is Consip's entry into the relevant market, that is, PBs' ability to access centrally-negotiated framework agreements for the purchase of a specific good or service, and the possibility to observe the centrally-negotiated price for that good or service.

Table A1 presents the number of days a Consip agreement was active for each good type. We show the first, second and third deal negotiated by Consip in columns (1), (2) and (3), respectively. Goods that had no second or third Consip deal are assigned a zero.¹

TABLE A1—DEAL DURATION

Number of days a Consip deal is active			
	First deal	Second deal	Third deal
Laptop	120	865	0
Desk	222	0	0
Chair	549	0	0
Landline	729	364	0
Projector	287	0	0
Switch	730	0	0
Cable Copper	730	0	0
Lunch Vouchers	729	1,009	0
Paper	691	0	0
Fax	1,158	0	0
Mobile	319	918	0
Software	406	365	456
Printer	304	271	358

Notes: Each column shows the number of days a Consip agreement has been active for each type of good. The number of days corresponding to the first, second and third deal are shown in columns (1), (2) and (3), respectively. Note that not all goods had a second or a third deal.

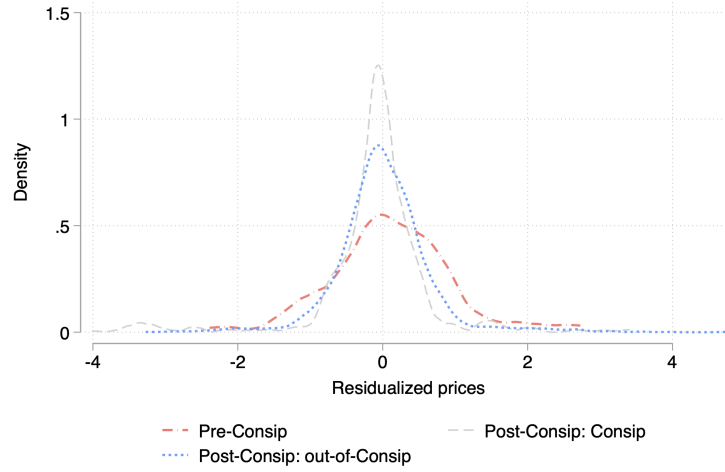
¹The data summarized in Table A1 correspond to those shown in Figure 1 of the paper. At first sight, there seems to be an inconsistency for the goods Software and Lunch vouchers because the table reports more deals than what visually emerges from the figure. However, the underlying reason is simply the granularity of the data, as the figure cannot distinguish between deals that occur within a few days of each other (in the case of Software, the second deal ended on 17 July 2003, and the third deal began on 25 July 2003; in the case of Lunch vouchers, the first deal ended on 19 March 2003, and the second deal began on 24 March 2003).

Figure A1 displays the distribution of residualized prices, distinguishing between pre-Consip, Consip, and (post) out-of-Consip purchases. In panel (a), we compute residualized prices by controlling for PB, good, and month-year fixed effects; in panel (b), we additionally control for good characteristics.

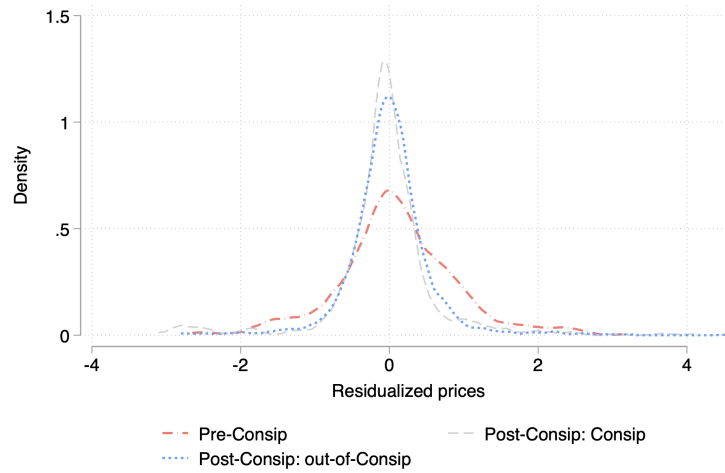
We show the distribution of residualized pre-Consip prices in red, whereas post Consip residualized prices are depicted in blue and gray, for out-of-Consip and Consip purchases, respectively.

The pre-Consip purchases are characterized by a higher mean and dispersion in both panels (a) and (b), respectively. The post-Consip distributions are characterized by a lower dispersion and mean. The latter two distributions seem to converge when we control for good characteristics. A formal Kolmogorov-Smirnov test, however, rejects the null of the equality of the distributions (although only at the 10 percent level).

FIGURE A1. PRE- AND POST-CONSIP RESIDUALIZED PRICES



(a) Not controlling for good characteristics



(b) Controlling for good characteristics

Notes: The plot depicts distributions of residualized prices obtained after regressing the logarithm of prices on a vector of quantities, PB fixed effects, good fixed effects, month-year fixed effects, and, only in panel (b), good characteristics. In red, we depict the distribution of pre-Consip prices, in blue that of (post) out-of-Consip prices, and in gray we show Consip prices.

A1. Who purchases during mandatory and optional regimes?

To understand which PBs buy and what types of goods are purchased from Consip during each regime, mandatory and optional, we present a balance test in Table A2. Columns (1) and (2) report the means for each group, while column (3) shows a formal mean comparison, namely a t-test, adjusted for group size.

As can be seen from the table, PBs that buy from Consip during mandatory or optional regimes are similar; only Universities seem to be more likely to purchase through Consip during a mandatory regime. Moreover, technologically complex goods such as Laptop, Fax, Software and Printer are more likely to be purchased from Consip while a mandatory regime is in place. The opposite is true for simple goods, which are more likely to be purchased from Consip during an optional regime.

TABLE A2—MEAN COMPARISON OF CONSHIP PURCHASES DURING DIFFERENT REGIMES

	Consp		
	Mandatory	Optional	<i>t-stat</i>
	(1)	(2)	(3)
<i>Type of Public Body</i>			
Ministries and government	0.25	0.20	1.59
Social security	0.01	0.02	-0.59
Regional councils	0.02	0.03	-0.25
Province and town councils	0.25	0.26	-0.29
Health centers	0.30	0.33	-0.66
Mountain village councils	0.02	0.04	-1.51
University	0.09	0.05	1.90
Other	0.05	0.08	-1.23
<i>Type of Good</i>			
Laptop	0.22	0.03	8.89
Desk	0.00	0.07	-4.13
Chair	0.00	0.04	-3.22
Landline	0.20	0.13	2.37
Projector	0.07	0.00	5.66
Switch	0.01	0.03	-1.96
Cabble Copper	0.00	0.07	-3.79
Lunch Vouchers	0.06	0.38	-9.60
Paper	0.06	0.01	3.82
Fax	0.13	0.05	3.76
Mobile	0.09	0.18	-2.87
Software	0.05	0.02	2.15
Printer	0.11	0.00	7.02
Observations	454	239	

Notes: The table shows mean comparisons of Conship purchases during mandatory and optional regimes across types of public bodies and goods.

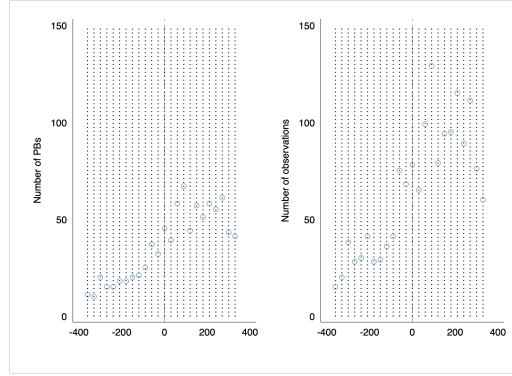
B. Strategic timing

We investigate whether PBs strategically alter the timing of their purchases to avoid delegating them to Consip. Managers who strategically alter their timing would purchase just before the start or just after the end of a Consip deal.

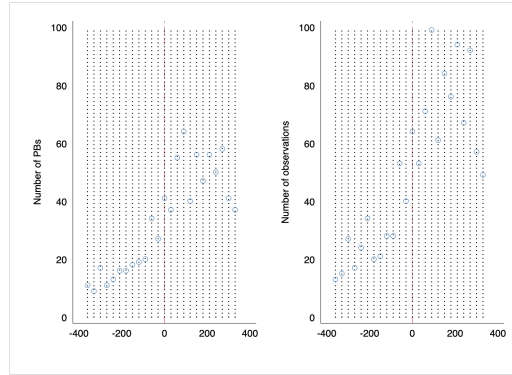
We analyze the distribution of PBs and their purchases around both the start and the end of the Consip deals. We recenter PBs and their purchases around the relevant event (i.e., start or end of a deal), accounting for all the Consip deals available in our sample for the different goods.

As shown in the following figures, reassuringly, we find no evidence of strategic timing behavior, even when separating between PBs that buy from Consip and those that do not. Indeed, we see no concentration of PBs or purchases before the start or after the end of Consip deals.

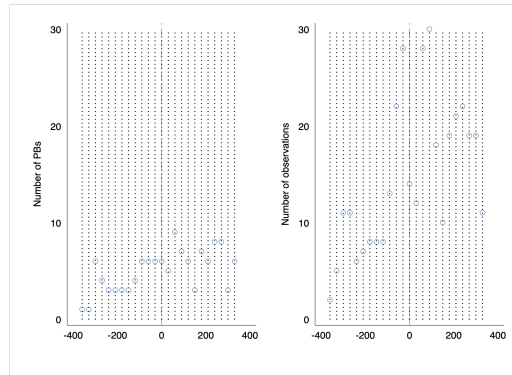
FIGURE B1. NUMBER OF PBs AND OF PURCHASES AROUND THE START OF A CONSHIP DEAL



(a) All sample



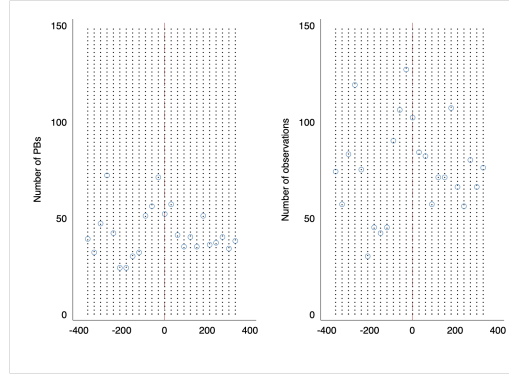
(b) PBs that do not buy from Consip



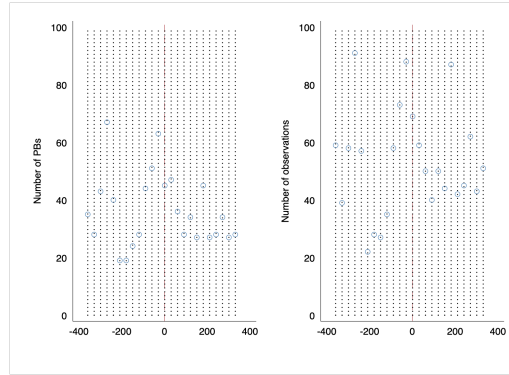
(c) PBs that do buy from Consip

Notes: The figure shows the number of PBs and the total number of purchases around the start of a Consip deal in 30-day intervals. In Panel (a) we plot the full sample, in panel (b) we plot PBs that do not buy from Consip, and in panel (c) PBs that do buy from Consip.

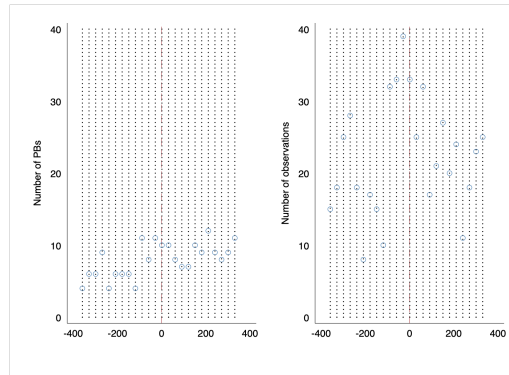
FIGURE B2. NUMBER OF PBs AND OF PURCHASES AROUND THE END OF A CONSHIP DEAL



(a) All sample



(b) PBs that do not buy from Consip



(c) PBs that do buy from Consip

Notes: The figure shows the number of PBs and the total number of purchases around the end of a Consip deal in 30-day intervals. In Panel (a) we plot the full sample, in panel (b) we plot PBs that do not buy from Consip, and in panel (c) PBs that do buy from Consip.

C. Data Source and Data Handling

C1. Bias due to retrospective survey

Generally, retrospective bias is a potential concern because of the self-reported nature of the data. However, in the present context, we do not believe this is a major issue for a variety of reasons.

First, PBs are requested to keep records of their purchases. Filling the questionnaires would imply accessing their records, not relying purely on self-reports. Managers had to report previous purchases covering around two years (because multiple surveys were run, one can see purchases for longer time periods in the dataset).

Second, the whole survey was run by the Italian National Institute of Statistics (ISTAT) jointly with the Italian Treasury (Ministero dell'Economia e delle Finanze, MEF), with considerable resources put into the exercise. For each public body, there was a particular person in charge of answering the questionnaire, typically the person signing procurement contracts. For all these people there are personal IDs, emails, and phone numbers in our dataset. Each person had assigned a counterpart in ISTAT (“referente ISTAT”), whose job was to check the progress until the survey was responded to properly. There was a dedicated call center and dedicated e-mail service for queries, all with the purpose of supporting filling the questionnaire. This was run by Consip and handled thousands of queries: possibly, as a consequence of this set up, the response rates were very high for this type of exercise (around 80%). Also, random samples of contracts had to be supplied to MEF. The questionnaires themselves were quite rigorous, nothing like “what do you remember about” or the like. They all had a friendly web interface to facilitate filling out the survey.

C2. Data handling

- There is a small difference between our Figure 1 in the paper and a plot similar in spirit included in Appendix T&F in Bandiera, Prat and Valletti (2009*a*): the presence of Consip deals in the market for Fax machines. During our data work, we noticed a small inaccuracy in how the deal for Fax machines was recorded in Bandiera, Prat and Valletti (2009*b*), and we corrected it to be consistent with the coding for other deals. This correction is included in the replication package. This coding difference, however, does not alter the original BPV findings.
- We assume a mandatory regime has ‘de facto’ ended if the goods cannot be purchased via Consip, while in theory, the regime is still formally in place. (Some goods available through Consip’s catalog, such as Laptops, run out of stock faster than others.) We code our variable accordingly.

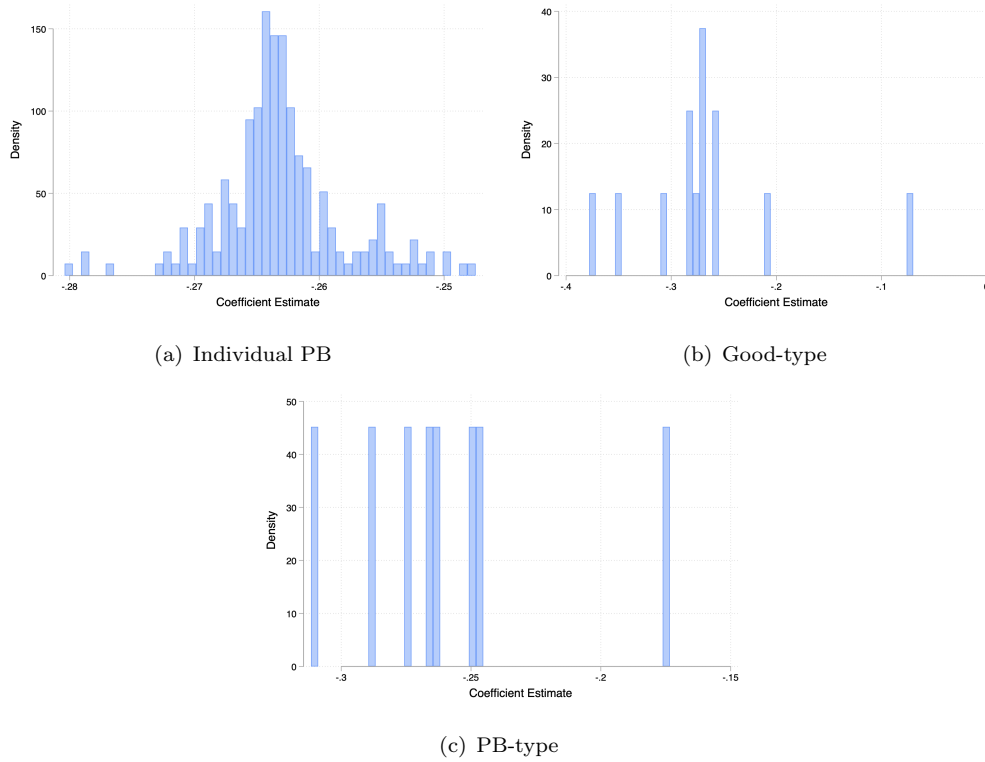
D. Robustness

To check for the robustness of our results, we run a battery of tests.

D1. Dropping one group at a time

First, to confirm the robustness of our main parameter of interest, as an outlier detection exercise, we drop one PB at a time, one good at a time, and one type of PB at a time. Our results are shown in Figure D1. The coefficient estimate remains, in 99 percent of the cases, statistically significant and comparable in magnitude to our main estimate.

FIGURE D1. OUT-OF-CONSP PURCHASES: ROBUSTNESS



Notes: The plots show out-of-Consip coefficient estimates resulting from an outlier detection exercise. In Panel (a), we drop one buyer at a time. In Panel (b), we drop one good at a time. In Panel (c), we drop one PB-type at a time.

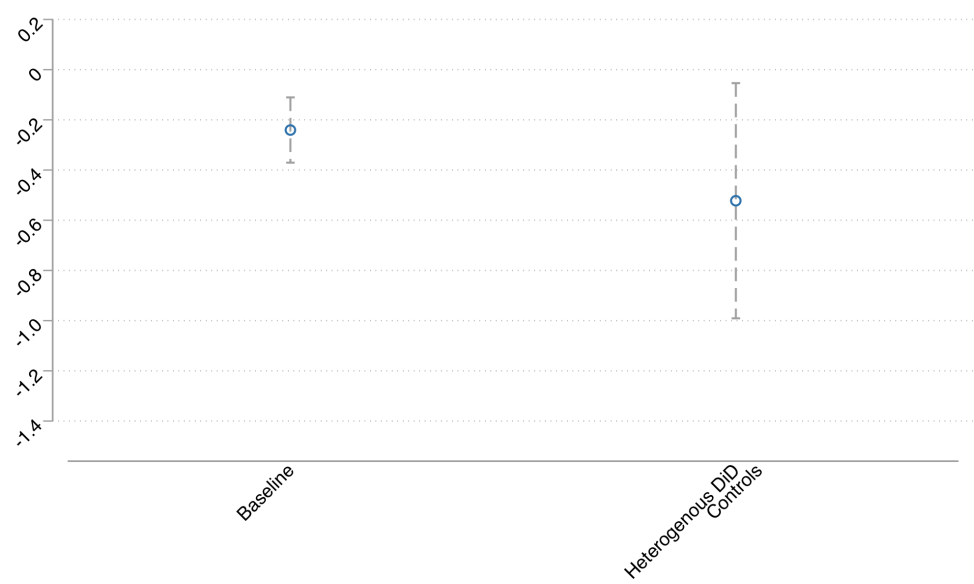
D2. Heterogeneous Differences-in-Differences

We implement heterogeneous difference-in-differences as proposed by De Chaisemartin and d’Haultfoeuille (2020). Our setting, differently from what is considered in the framework of De Chaisemartin and d’Haultfoeuille (2020), has multiple treatment points in time for the same group, different groups (group heterogeneity), and an extremely large number of controls (which we pre-select via PDS Lasso).

To handle this, we first residualize prices accounting for the distinct goods purchased by the PB and good-specific non-parametric time trends, including the previously selected set of Lasso controls. We then use the Stata command *did_multipligt* by De Chaisemartin, D’Haultfoeuille and Guyonvarch (2019) that implements De Chaisemartin and d’Haultfoeuille (2020), using as our outcome variable the residualized prices previously derived.

The results from implementing this strategy are shown in Figure D2. Results are compared to our ‘baseline’, namely our preferred estimate derived in the paper. Albeit the methods of De Chaisemartin and d’Haultfoeuille (2020) yield a higher coefficient estimate, the confidence interval contains the baseline.

FIGURE D2. HETEROGENEOUS DiD



Notes: The figure presents coefficients estimates from our baseline regression and the heterogeneous DiD estimates following De Chaisemartin and d’Haultfoeuille (2020), and the respective 95% confidence intervals.

D3. Robustness Consip Experience

We conduct some robustness on the results on spillovers from the Consip experience (Section V.B of the paper). We check if our results are driven by the type of PB. The governance of central PBs is different from the governance of more autonomous PBs such as universities. Hence we first drop from our sample central PBs, and then we drop autonomous PBs.

Results are reported in Table D1. In column (1), we consider the full sample, as in the paper. In column (2), we drop central PBs, whereas in column (3) we drop autonomous PBs such as universities and health centers. As can be seen from the table, our findings are robust to these sample restrictions.

TABLE D1—CONSIP EXPERIENCE SPILLOVERS (ROBUSTNESS)

	Full sample		No Central PBs		No Autonomous
	(1)	(2)	(3)		
Post Consip (β_1)	-0.173 (0.084)	-0.195 (0.088)	-0.135 (0.127)		
Consip Experience from Mandatory Regime	-0.017 (0.128)	0.211 (0.168)	-0.061 (0.129)		
Consip Experience from Optional Regime	0.336 (0.145)	0.225 (0.163)	0.434 (0.205)		
Post Consip x Consip Experience from Mandatory Regime (β_M)	-0.036 (0.133)	-0.248 (0.168)	0.039 (0.155)		
Post Consip x Consip Experience from Optional Regime (β_O)	-0.311 (0.154)	-0.209 (0.170)	-0.288 (0.207)		
Estimate $\beta_1 + \beta_M$	-0.209	-0.443	-0.097		
SE $\beta_1 + \beta_M$	0.127	0.186	0.137		
Estimate $\beta_1 + \beta_O$	-0.484	-0.404	-0.423		
SE $\beta_1 + \beta_O$	0.158	0.160	0.217		
Observations	3091	2771	1695		
PB fixed effects	Yes	Yes	Yes		
Good fixed effects	Yes	Yes	Yes		
Year-Month fixed effects	Yes	Yes	Yes		
Controls	No	No	No		

Notes: The dependent variable is the logarithm of the price paid by the public bodies for the specific good. Post Consip is an indicator variable that takes value one if the good is purchased after Consip enters the market and zero otherwise. Controls are selected using the PDS Lasso methodology. Consip Experience from Mandatory or Optional are indicator variables taking value one if the public body has at least one previous Consip purchase done while a mandatory or optional regime was in place. Standard errors, clustered at the PB level, are shown in parentheses.

E. Heterogeneities by good, institutions and size

We extend our regression model to allow for various types of heterogeneity in the treatment effect depending on the type of good, complex or simple, and type of institutional class the public body belongs to.

To identify heterogeneous effects by market, we interact the *Post Consip* indicator with indicator variables for each good. Table E1 reports the results and highlights heterogeneity. We observe that indirect savings emerge mainly in markets with technologically complex goods, such as laptops, projectors, and fax machines. A possible interpretation is that simpler goods are more easily comparable, and leave less room for price heterogeneity or differentiation. Therefore, simpler goods could already be rather competitive before centralization takes place. If a market is more transparent and competitive (which is captured by good fixed effects), it is plausible that Consip's entry in the market does not generate strong information externalities.

The second dimension of heterogeneity we investigate relates to the type of PB. In Table E2, we interact the *Post Consip* indicator with an indicator variable for each PB institutional class.² We follow BPV and classify PBs into: i) Napoleonic bodies, i.e., central administrations whose operations tend to be controlled by civil servants; ii) local governments, whose CEOs are elected directly and have broad powers; and iii) semi-autonomous bodies, such as health authorities and universities, who enjoy substantial budgetary and administrative autonomy. We find that only some classes of PBs generate significant indirect savings: semi-autonomous bodies and, to a lesser extent, local bodies. Savings for central administrations, are not statistically different from zero.

Table E3 considers heterogeneity analysis with respect to pre-Consip distribution of purchased quantities. We rank PBs in quartiles based on their pre-Consip average quantities purchased, from lowest (1st Quantity Quartile) to highest (4th

²The model specification is different from that considered so far because we cannot include PB fixed effects but only PB type fixed effects.

Quantity Quartile). Then, interact the *Post Consip* indicator with indicator variables for each pre-Consip PB quantity quartile. We find that the indirect effects are statistically different from zero in the lower quartiles. Savings emerge when PBs purchase less, and thus are less likely to have individual purchasing experience before Consip's entrance. This is in line with our interpretation in Section IV of the paper, and Figure 4 in particular: savings emerge when PBs have less experience and are more inefficient, while more efficient PBs already know how to procure their goods.

Finally, in Table E4 we show the table equivalent of Figure 4 included in Section IV of the paper. Namely, we explore the heterogeneity in indirect savings among PBs based on their competence levels. Results indicate that indirect effects are statistically different from zero and increasing in magnitude only in the two upper quartiles of the distribution.

TABLE E1—HETEROGENEOUS EFFECTS BY MARKET

	(1)	(2)
Post-Consip $\times$ Laptop	-0.747 (0.186)	-0.830 (0.192)
Post-Consip $\times$ Desk	-0.310 (0.121)	-0.233 (0.107)
Post-Consip $\times$ Chair	-0.149 (0.112)	-0.154 (0.107)
Post-Consip $\times$ Landline	-1.570 (0.790)	-0.715 (0.780)
Post-Consip $\times$ Projector	-0.499 (0.083)	-0.515 (0.086)
Post-Consip $\times$ Switch	-0.363 (0.211)	-0.293 (0.212)
Post-Consip $\times$ Cable Copper	-0.004 (0.329)	-0.025 (0.299)
Post-Consip $\times$ Lunch Vouchers	-0.556 (0.159)	-0.632 (0.189)
Post-Consip $\times$ Paper	-0.079 (0.119)	-0.023 (0.122)
Post-Consip $\times$ Fax	-0.485 (0.134)	-0.551 (0.171)
Post-Consip $\times$ Mobile	0.104 (0.753)	0.611 (0.737)
Post-Consip $\times$ Software	-0.527 (0.504)	-0.959 (0.517)
Post-Consip $\times$ Printer	-0.307 (0.739)	-0.583 (0.643)
Observations	3091	3091
PB fixed effects	Yes	Yes
Good fixed effects	Yes	Yes
Month-year fixed effects	Yes	Yes
Controls	No	Yes

Notes: The dependent variable is the logarithm of price. Each specification includes the vector of quantities purchased by each PB. Standard errors are clustered at the PB level.

TABLE E2—HETEROGENEOUS EFFECTS BY PB INSTITUTIONAL CLASS

	(1)	(2)
Post-Consip $\times$ Napoleonic bodies	-0.124 (0.115)	-0.121 (0.104)
Post-Consip $\times$ Local governments	-0.376 (0.151)	-0.271 (0.127)
Post-Consip $\times$ Semi-autonomous bodies	-0.283 (0.084)	-0.290 (0.077)
Observations	3091	3091
PB type fixed effects	Yes	Yes
Good fixed effects	Yes	Yes
Month-year fixed effects	Yes	Yes
Controls	No	Yes

Notes: The dependent variable is the logarithm of price. Each specification includes the vector of quantities purchased by each PB. Standard errors are clustered at the PB level.

TABLE E3—HETEROGENEOUS EFFECTS BY PRE-CONSIP QUANTITIES

	(1)	(2)
Post-Consip $\times$ 1st Quantity Quartile	-0.251 (0.080)	-0.196 (0.077)
Post-Consip $\times$ 2nd Quantity Quartile	-0.409 (0.153)	-0.337 (0.155)
Post-Consip $\times$ 3rd Quantity Quartile	-0.107 (0.113)	-0.118 (0.109)
Post-Consip $\times$ 4th Quantity Quartile	-0.072 (0.154)	-0.070 (0.129)
Observations	2136	2136
PB fixed effects	Yes	Yes
Good fixed effects	Yes	Yes
Month-year fixed effects	Yes	Yes
Controls	No	Yes

Notes: The dependent variable is the logarithm of price. Each specification includes the vector of quantities purchased by each PB. Standard errors are clustered at the PB level.

TABLE E4—HETEROGENEOUS EFFECTS BY PRE-CONSIP PRICES

	(1)	(2)
Post Consip x 1st Quartile	0.167 (0.139)	0.178 (0.131)
Post Consip x 2nd Quartile	-0.189 (0.072)	-0.114 (0.078)
Post Consip x 3rd Quartile	-0.339 (0.081)	-0.357 (0.081)
Post Consip x 4th Quartile	-0.918 (0.132)	-0.800 (0.128)
Observations	2550	2550
PB fixed effects	Yes	Yes
Good fixed effects	Yes	Yes
Month-Year fixed effects	Yes	Yes
Controls	No	Yes

Notes: The dependent variable is the logarithm of price. Each specification includes the vector of quantities purchased by each PB. Standard errors are clustered at the PB level.

F. Event study

In Table F1, we present the event study coefficients and their standard errors, for each event study plot included in the paper. Columns (1) and (2) present our main results (illustrated in the paper in Figure 2), columns (3) and (4) instead show the results by good-type: complex and simple (illustrated in the paper in Figure 3).

TABLE F1—EVENT STUDIES AROUND START AND END OF FIRST DEAL

	Main results		Heterogeneity by good-type	
	(1) Deal Start	(2) Deal End	(3) Complex	(4) Simple
Quarter -7	0.178 (0.130)	0.288 (0.145)	0.079 (0.087)	0.167 (0.172)
Quarter -6	0.099 (0.136)	0.158 (0.104)	-0.009 (0.243)	0.080 (0.151)
Quarter -5	0.021 (0.220)	0.130 (0.090)	0.013 (0.165)	0.002 (0.238)
Quarter -4	-0.087 (0.155)	0.085 (0.079)	-0.189 (0.339)	-0.116 (0.188)
Quarter -3	-0.025 (0.145)	-0.004 (0.080)	0.119 (0.176)	-0.062 (0.166)
Quarter -2	0.042 (0.138)	0.019 (0.087)	0.084 (0.124)	0.023 (0.167)
Quarter -1	0.000 (.)	0.000 (.)	0.000 (.)	0.000 (.)
Quarter 0	-0.112 (0.118)	-0.205 (0.144)	-0.107 (0.282)	-0.160 (0.132)
Quarter +1	-0.087 (0.101)	0.006 (0.086)	-0.249 (0.102)	-0.089 (0.129)
Quarter +2	-0.154 (0.091)	-0.053 (0.095)	-0.016 (0.120)	-0.192 (0.107)
Quarter +3	-0.254 (0.095)	-0.087 (0.106)	-0.266 (0.141)	-0.283 (0.113)
Quarter +4	-0.242 (0.092)	-0.049 (0.094)	-0.303 (0.176)	-0.197 (0.118)
Quarter +5	-0.312 (0.100)		-0.485 (0.120)	-0.224 (0.148)
Quarter +6	-0.349 (0.130)		-0.504 (0.192)	-0.331 (0.209)
Quarter +7	-0.373 (0.118)		-0.689 (0.221)	-0.342 (0.158)
Quarter +8	-0.446 (0.120)		-0.725 (0.199)	-0.411 (0.157)
Quarter +9	-0.204 (0.173)			-0.182 (0.190)
Quarter +10	-0.371 (0.107)			-0.364 (0.134)
Quarter +11	-0.314 (0.106)			-0.289 (0.138)
Constant	7.450 (0.104)	7.288 (0.097)	7.404 (0.150)	-2.390 (1.637)
Observations	2024	1419	386	1638
PB fixed effects	Yes	Yes	Yes	Yes
Good fixed effects	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes

Notes: We show coefficient estimates and standard errors for each event study plot in the paper.

In Table F2, we report coefficient estimates of a specification where we interact our baseline estimates with an indicator for complex goods. The coefficient on the interaction term is negative and statistically significant, indicating that complex goods generate higher savings.

TABLE F2—HETEROGENEOUS EFFECTS BY GOOD TYPE

	(1)	(2)	(3)	(4)
Post Consip	-0.228 (0.078)	-0.164 (0.086)	-0.119 (0.115)	-0.186 (0.077)
Post Consip x Complex Good	-0.265 (0.100)	-0.185 (0.120)	-0.221 (0.220)	-0.367 (0.101)
Observations	3091	2299	2984	3091
PB fixed effects	Yes	Yes	Yes	Yes
Good fixed effects	Yes	Yes	Yes	Yes
Year-Month fixed effects	Yes	Yes	Yes	Yes
Good x PB fixed effects	No	Yes	No	No
Good x Year-Month fixed effects	No	No	Yes	No
Controls	No	No	No	Yes

Notes: The dependent variable is the logarithm of price. Each specification includes the vector of quantities purchased by each PB. Standard errors are clustered at the PB level.

In panel (b) of Figure 2 we center the analysis at the end of the *first* deal. This means that the analysis is run for goods that had only one active deal, and exclude observations in the post period when a second or third deal was active.

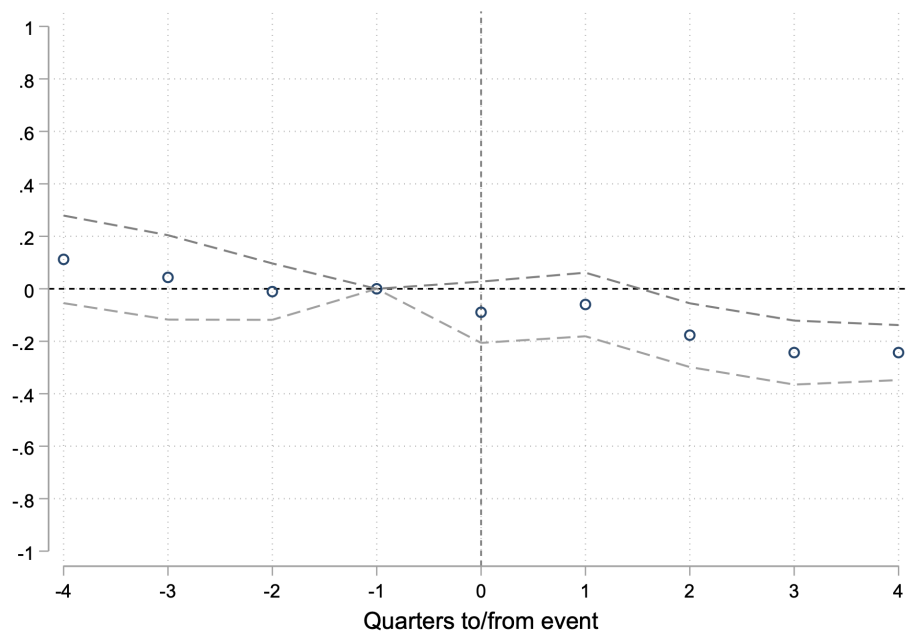
For robustness, we also estimate a version of equation (F1), which corresponds to equation (2) in the paper, where we center the analysis with respect to the *last* deal for each good.

$$(F1) \quad \ln p_{igt} = \alpha + \sum_{t=t_0-n}^{t_0+N} \beta_{t-t_0} PostConsip_{gt} + X_{igt}\gamma + \rho_g Q_{igt} + \theta_g + w_i + \epsilon_{igt}.$$

Thus, for goods for which there is only one deal, the event study is centered at the end of the first deal; for goods for which there are two deals, the event study is centered at the end of the second deal and excludes all purchases made up to the end of the first deal; finally, for goods for which three deals are available, the event study is centered at the end of the third deal and excludes all purchases that occurred up to the end of the second deal. To ensure that there are enough observations in each lead and lag, we restrict our lead indicators to -4.

Results are shown in Figure F1 and they are qualitatively similar to panel (b) of Figure 2, indicating that information spillovers, rather than increased bargaining power, seem to be the suggested mechanism behind our findings.

FIGURE F1. END LAST DEAL



Notes: The figure presents coefficients estimates from the event study where we use the end of the last deal and the respective 95% confidence intervals.

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