ONLINE APPENDIX: Coordination and Organization Design: Theory and Micro-evidence
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Table O-1 Need for coordination, Demand uncertainty, and Task delegation: Means and Standard Deviations Sorted by Department

		Need for coordination		Demand uncertainty		Task delegation		
		1	2	3	4	5	6	
	Department Name	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev	N
1	Kids apparel	5.750	1.581	3.375	1.768	11.750	3.327	8
2	Womenswear	5.625	1.118	3.375	1.600	12.625	2.669	8
3	Clothing accessories	5.000	0.816	2.750	0.500	10.750	4.924	4
4	Underwear	5.667	0.866	3.111	1.364	13.000	3.122	9
5	Menswear	5.833	0.753	3.667	0.816	11.143	2.911	6
6	Home furnishing	5.375	1.506	4.125	1.356	11.875	2.850	8
7	Cosmetics	5.500	1.080	2.400	0.843	11.182	1.888	10
8	Grocery	5.000	1.342	2.727	1.104	13.091	2.587	11
9	Liquor	6.333	1.155	2.667	0.577	13.000	2.646	3
10	Daily food	5.000	1.612	2.364	1.206	10.909	3.673	11
11	Deli	5.000	0.953	3.167	1.642	14.333	2.015	12
12	Produce	5.700	0.823	2.900	0.876	11.300	2.830	10
13	Processed meat	4.700	1.636	2.400	0.699	13.300	2.312	10
14	Fish	4.600	0.843	3.200	1.398	13.100	2.726	10
15	Sales operation	5.625	0.916	2.875	1.126	13.375	3.292	8
16	Cashier	6.000	0.943	3.000	1.054	5.600	5.232	10
17	e-Commerce	5.833	0.983	2.167	1.169	7.333	3.502	6
18	Customer service	6.000	1.095	3.500	1.049	8.667	5.391	6
19	IT	5.714	0.756	3.143	1.464	5.286	6.676	7
20	Partners	6.000	1.000	1.667	0.577	6.667	6.028	3
21	Home appliances	5.750	0.500	3.500	1.000	11.250	0.957	4
22	Pharmacy	4.000	0.000	2.000	0.000	5.000	0.000	1
23	Shop-in-shop	6.000	0.000	3.000	0.000	11.333	3.512	3
Total		5.435	1.161	2.964	1.233	11.149	4.139	168

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Table O-2 Need for coordination, Demand uncertainty, and Task delegation:
Means and Standard Deviations Sorted by Store

	Need for coordination		Demand uncertainty		Task delegation		
	1	2	3	4	5	6	
Store	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev	N
1	5.833	0.857	3.278	1.074	11.222	3.750	18
2	5.364	1.206	2.091	1.300	11.818	3.842	11
3	5.385	1.044	2.769	1.166	11.385	4.445	13
4	5.778	1.003	4.000	1.029	10.889	4.013	18
5	5.429	1.399	2.357	1.008	10.929	3.970	14
6	5.278	1.526	3.056	1.474	12.278	3.083	18
7	5.353	0.862	3.529	1.375	10.235	4.507	17
8	5.375	1.408	2.625	0.916	10.889	4.512	8
9	5.214	0.802	2.929	0.475	10.143	5.127	14
10	4.556	1.424	2.556	0.882	12.444	4.127	9
11	5.800	1.146	2.200	0.862	9.733	5.457	15
12	5.308	1.251	3.231	1.423	12.769	2.743	13
Total	5.435	1.161	2.964	1.233	11.149	4.139	168

Table O-3 Effect of Departmental Sales Changes

	Task Delegation	Task Delegation	Delegation – Functional Tasks	Delegation – Functional Tasks	Delegation – Departmental Tasks	Delegation – Departmental Tasks
	1	2	1'	2'	1''	2''
log(*Sales changes*)	-0.07	1.71	-0.04	0.72	0.04	0.59
	(0.20)	(0.87)	(0.14)	(0.62)	(0.08)	(0.32)
Need for coordination	-0.36	-1.46	-0.32	-0.79	-0.12	-0.46
	(0.20)	(0.54)	(0.15)	(0.40)	(0.08)	(0.17)
log(*Sales changes*) $\times$		-0.34		$-0.15^{\dagger}$		-0.11
Need for coordination		(0.16)		(0.11)		(0.06)
Experience	0.13	0.14	0.07	0.07	0.07	0.07
	(0.07)	(0.07)	(0.05)	(0.05)	(0.03)	(0.03)
Education	0.42	0.41	0.23	0.22	0.20	0.20
	(0.27)	(0.26)	(0.19)	(0.19)	(0.10)	(0.10)
Age	0.01	0.01	0.01	0.01	-0.01	-0.01
	(0.04)	(0.04)	(0.03)	(0.03)	(0.02)	(0.02)
Gender	-0.04	0.14	0.16	0.24	-0.01	0.05
	(0.67)	(0.65)	(0.47)	(0.46)	(0.26)	(0.26)
Constant	11.12	16.53	2.46	4.76	9.11	10.80
	(2.22)	(3.64)	(1.75)	(2.69)	(0.78)	(1.25)
12-store fixed effects[#]	No	No	No	No	No	No
R^2	0.083	0.121	0.078	0.091	0.087	0.108
F-statistic	2.41	2.35	1.86	1.61	2.68	3.61
N	128	128	128	128	128	128

OLS regressions. Dependent variables are overall task delegation in columns 1-2, functional task delegation in columns 1'-2', and departmental task delegation in columns 1''-2''. Robust standard errors in parentheses. [#]Store fixed effects are excluded in this table to save degrees of freedom in estimations. Nevertheless, including store fixed effects generates almost identical results.

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Table O-4 Effect of Local Volatility on Task Delegation under High versus Low Coordination Need

(Need for coordination by median split)

	Task delegation		Task delegation		Task delegation	
	Low	High	Low	High	Low	High
	1	1'	2	2'	3	3'
Demand uncertainty	0.57	0.06				
	(0.32)	(0.33)				
log(*Sales deviations*)			0.55	-1.24		
			(0.50)	(0.59)		
log(*Sales changes*)					0.40	-0.54
					(0.29)	(0.27)
Experience	0.29	0.32	0.11	0.15	0.12	0.18
	(0.12)	(0.10)	(0.09)	(0.11)	(0.09)	(0.11)
Education	0.24	0.64	0.44	0.33	0.33	0.40
	(0.49)	(0.37)	(0.42)	(0.35)	(0.43)	(0.33)
Age	-0.11	-0.06	0.00	0.02	-0.01	0.00
	(0.08)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Gender	0.37	-1.43	0.47	-0.27	0.61	-0.55
	(1.18)	(0.86)	(1.07)	(0.82)	(1.05)	(0.76)
Constant	12.04	9.28	9.01	11.07	12.16	7.11
	(3.38)	(2.64)	(2.94)	(2.58)	(3.47)	(2.43)
R^2	0.149	0.195	0.067	0.147	0.086	0.166
F-statistic	2.00	4.06	0.78	2.30	1.29	2.93
N	73	95	62	63	62	66

OLS regressions. Dependent variable is overall task delegation. Robust standard errors in parentheses. Samples in regressions are median split in *Need for coordination*: Low = ratings are 2, 3, 4, and 5; High = ratings are 6 and 7. Store fixed effects excluded to save degree of freedom.

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Table O-5 Task Delegation with Department Fixed Effects

	Task Delegation	Task Delegation	Delegation – Functional Tasks	Delegation – Functional Tasks	Delegation – Departmental Tasks	Delegation – Departmental Tasks
	1	2	1'	2'	1''	2''
Demand uncertainty	0.09	2.01	0.06	1.32	0.02	0.55
	(0.24)	(1.05)	(0.13)	(0.58)	(0.13)	(0.56)
Need for coordination	-0.14	0.90	-0.20	0.48	-0.10	0.18
	(0.26)	(0.61)	(0.14)	(0.34)	(0.13)	(0.32)
Demand uncertainty ×		-0.36		-0.23		-0.10
Need for coordination		(0.19)		(0.10)		(0.10)
Experience	0.05	0.05	0.05	0.05	0.03	0.03
	(0.07)	(0.07)	(0.04)	(0.04)	(0.04)	(0.04)
Education	0.58	0.59	0.20	0.21	0.35	0.35
	(0.28)	(0.28)	(0.16)	(0.15)	(0.15)	(0.15)
Age	0.05	0.06	0.02	0.02	-0.00	-0.00
	(0.04)	(0.04)	(0.02)	(0.02)	(0.02)	(0.02)
Gender	-0.30	-0.02	-0.11	0.07	-0.45	-0.38
	(0.83)	(0.83)	(0.46)	(0.46)	(0.44)	(0.44)
Constant	6.97	0.79	1.00	-3.05	8.47	6.77
	(3.09)	(4.49)	(1.72)	(2.49)	(1.63)	(2.39)
12-store fixed effects	No	No	No	No	No	No
23-departments fixed effects[‡]	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.431	0.445	0.308	0.332	0.627	0.629
F-statistic	3.76	3.82	2.21	2.36	8.34	8.08
N	168	168	168	168	168	168

OLS regressions. Dependent variables are functional task delegation in columns 1-4 and departmental task delegation in columns 1'-4'. Standard errors in parentheses. [‡]Base department of the twenty-three department fixed effects is kids apparel. Store fixed effects are excluded.

Table O-6 Effect of Manager's Time Constraint – Sales-Generating Departments Only

Excludes: Sales Operations, Cashier, Customer Service, Partners, and Information Technology

	Task Delegation	Task Delegation	Delegation – Functional Tasks	Delegation – Functional Tasks	Delegation – Departmental Tasks	Delegation – Departmental Tasks
	1	2	1'	2'	1''	2''
Demand uncertainty	0.34	0.19	0.16	-0.04	0.13	0.13
	(0.24)	(0.42)	(0.17)	(0.29)	(0.10)	(0.20)
No. of subordinates	0.04	0.02	0.02	-0.01	0.03	0.03
	(0.02)	(0.05)	(0.01)	(0.04)	(0.01)	(0.02)
Demand uncertainty × *No. of subordinates*		0.01		0.01		-0.00
		(0.01)		(0.01)		(0.01)
Experience	0.22	0.22	0.09	0.09	0.13	0.13
	(0.08)	(0.08)	(0.05)	(0.05)	(0.04)	(0.04)
Education	0.55	0.55	0.26	0.26	0.32	0.32
	(0.28)	(0.28)	(0.18)	(0.18)	(0.15)	(0.15)
Age	-0.03	-0.03	0.00	0.00	-0.03	-0.03
	(0.05)	(0.05)	(0.03)	(0.03)	(0.03)	(0.03)
Gender	-0.29	-0.28	-0.04	-0.03	0.04	0.04
	(0.70)	(0.70)	(0.49)	(0.49)	(0.32)	(0.32)
Constant	7.78	8.30	-0.10	0.58	7.68	7.66
	(2.00)	(2.37)	(1.30)	(1.58)	(1.06)	(1.25)
12-store fixed effects[#]	Yes	Yes	Yes	Yes	Yes	Yes
	(0)	(0)	(0)	(0)	(0)	(0)
R^2	0.148	0.149	0.122	0.127	0.191	0.191
F-statistic	1.31	1.42	1.27	1.34	1.34	1.73
N	133	133	133	133	133	133

OLS regressions. Dependent variables are overall task delegation in columns 1-2, functional task delegation in columns 1'-2', and departmental task delegation in columns 1''-2''.

Robust standard errors in parentheses. [#]The twelve stores are all the general merchandise stores reporting to the same regional headquarters. Number of fixed effects having $p<0.10$ in parentheses.

Table O-7 Effect of Manager's Time Constraint – Sales Deviations

	Task Delegation	Task Delegation	Delegation – Functional Tasks	Delegation – Functional Tasks	Delegation – Departmental Tasks	Delegation – Departmental Tasks
	1	2	1'	2'	1''	2''
log(*Sales deviations*)	-0.84	-1.46	-0.79	-1.25	0.17	0.07
	(0.51)	(0.65)	(0.37)	(0.46)	(0.24)	(0.28)
No. of subordinates	0.03	-0.04	0.02	-0.03	0.01	0.00
	(0.02)	(0.06)	(0.01)	(0.04)	(0.01)	(0.02)
log(*Sales deviations*) × *No. of subordinates*		0.03		0.02		0.00
		(0.02)		(0.02)		(0.01)
Experience	0.16	0.15	0.09	0.08	0.07	0.07
	(0.08)	(0.08)	(0.05)	(0.05)	(0.03)	(0.03)
Education	0.47	0.47	0.26	0.26	0.23	0.23
	(0.28)	(0.29)	(0.19)	(0.19)	(0.11)	(0.11)
Age	0.01	0.01	0.02	0.02	-0.01	-0.01
	(0.05)	(0.05)	(0.03)	(0.03)	(0.02)	(0.02)
Gender	-0.02	0.03	0.32	0.35	-0.10	-0.09
	(0.79)	(0.78)	(0.56)	(0.55)	(0.29)	(0.29)
Constant	9.87	11.02	1.40	2.25	7.81	7.99
	(2.21)	(2.45)	(1.49)	(1.68)	(1.00)	(1.03)
12-store fixed effects[#]	Yes	Yes	Yes	Yes	Yes	Yes
	(0)	(0)	(1)	(0)	(0)	(0)
R^2	0.118	0.128	0.149	0.160	0.128	0.129
F-statistic	1.12	1.43	1.47	2.03	1.08	1.04
N	122	122	122	122	122	122

OLS regressions. Dependent variables are overall task delegation in columns 1-2, functional task delegation in columns 1'-2', and departmental task delegation in columns 1''-2''.

Robust standard errors in parentheses. [#]The twelve stores are all the general merchandise stores reporting to the same regional headquarters. Number of fixed effects having $p < 0.10$ in parentheses.

Table O-8 Effect of Manager's Time Constraint – Sales Changes

	Task Delegation	Task Delegation	Delegation – Functional Tasks	Delegation – Functional Tasks	Delegation – Departmental Tasks	Delegation – Departmental Tasks
	1	2	1'	2'	1''	2''
log(*Sales changes*)	-0.14	0.14	-0.10	0.07	0.06	0.16
	(0.21)	(0.39)	(0.15)	(0.26)	(0.08)	(0.16)
No. of subordinates	0.02	-0.01	0.02	0.00	0.01	0.00
	(0.02)	(0.03)	(0.01)	(0.02)	(0.01)	(0.01)
log(*Sales changes*) × *No. of subordinates*		-0.01		-0.01		-0.00
		(0.01)		(0.01)		(0.00)
Experience	0.16	0.15	0.08	0.08	0.08	0.08
	(0.08)	(0.08)	(0.05)	(0.05)	(0.03)	(0.03)
Education	0.49	0.47	0.29	0.28	0.21	0.20
	(0.27)	(0.28)	(0.19)	(0.19)	(0.11)	(0.11)
Age	0.00	0.00	0.02	0.02	-0.01	-0.01
	(0.05)	(0.05)	(0.03)	(0.03)	(0.02)	(0.02)
Gender	-0.31	-0.38	0.01	-0.03	-0.05	-0.07
	(0.71)	(0.70)	(0.50)	(0.50)	(0.29)	(0.29)
Constant	7.83	8.75	-0.37	0.19	8.48	8.79
	(2.39)	(2.61)	(1.67)	(1.76)	(0.98)	(1.12)
12-store fixed effects[#]	Yes	Yes	Yes	Yes	Yes	Yes
	(0)	(0)	(0)	(0)	(0)	(0)
R^2	0.107	0.114	0.115	0.120	0.130	0.135
F-statistic	0.83	0.79	1.13	1.03	1.16	1.06
N	125	125	125	125	125	125

OLS regressions. Dependent variables are overall task delegation in columns 1-2, functional task delegation in columns 1'-2', and departmental task delegation in columns 1''-2''.

Robust standard errors in parentheses. [#]The twelve stores are all the general merchandise stores reporting to the same regional headquarters. Number of fixed effects having $p<0.10$ in parentheses.