

.1. Transport Cost Estimates: Yearly Detailed Results

In this section, we complement Table 1 of the main text by reporting the year-to-year results of the estimation driven at the 3-digit classification level. Table [B.1](#) reports the results for each year over 1974-2019 for vessel; Table ?? reports similar results for air transport. In both cases, we report the estimated values of the transport costs (weighted mean and median) when only ad-valorem costs are modeled (Model (A)), when both additive and ad-valorem costs are modeled (Model (B)) and when only additive costs are modeled (Model (A)).

Table B.1: Vessel: Transport costs estimates, all years, products at 5-digit level, sectors at 3-digit level

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Data														
# obs.	19,007	18,710	13,615	12,826	16,601	17,274	17,356	17,788	18,075	18,883	21,650	23,348	23,730	23,626
# sectors	239	239	227	191	234	237	232	231	231	231	232	232	233	234
# origin countries	154	151	160	162	161	164	163	165	160	157	160	171	172	171
<i>Observed transport costs</i>														
Mean (in %)	8.9	8.7	8.4	7.9	7.6	7.3	6.2	5.8	6.3	6.2	6.4	6.5	6.1	5.9
Median (in %)	7.3	7.2	7.0	6.5	6.6	5.9	4.9	4.8	5.2	5.1	5.4	5.6	4.5	4.5
Std. dev.	6.7	6.5	5.8	5.4	5.4	6.4	5.0	5.0	5.3	5.3	5.1	5.2	5.1	4.9
Model (A)														
<i>Mult. term ($\hat{\tau}^{ice}$)</i>														
Mean (in %)	9.8	9.9	8.9	8.3	8.1	7.5	6.5	6.0	6.3	7.0	7.0	7.0	6.7	6.2
Median (in %)	9.6	8.5	8.0	7.3	7.1	6.5	5.5	5.0	5.9	5.7	6.1	6.7	7.0	6.3
Std. dev.	5.3	7.3	4.1	3.8	4.1	3.9	4.0	3.3	3.3	3.8	3.5	3.6	3.5	3.1
Model (B)														
<i>Mult. term ($\hat{\tau}^{adv}$)</i>														
Mean (in %)	5.4	4.8	5.4	3.9	5.9	4.6	3.1	3.3	3.4	4.6	4.1	4.0	3.9	3.5
Median (in %)	4.9	4.1	4.8	3.2	5.4	4.1	2.4	2.9	2.9	4.0	3.5	3.6	3.6	3.0
Std. dev.	4.1	4.7	2.7	3.0	3.1	2.6	2.3	2.3	2.5	2.6	2.8	2.9	2.7	2.3
<i>Additive term ($\hat{\tau}/\hat{p}$)</i>														
Mean (in %)	5.1	5.5	3.5	4.8	2.5	3.1	3.4	2.9	3.5	2.5	3.2	3.2	2.9	2.9
Median (in %)	2.9	3.7	1.9	3.8	1.2	1.7	2.3	1.5	2.3	1.6	2.2	2.1	1.8	1.8
Std. dev.	8.5	7.1	5.4	6.2	4.2	4.8	4.6	4.6	5.5	4.2	4.5	3.9	4.1	4.1
<i>Elasticity ($\hat{\beta}$)</i>														
Mean (in %)	0.41	0.47	0.31	0.52	0.24	0.34	0.50	0.38	0.46	0.28	0.41	0.42	0.38	0.40
Median (in %)	0.38	0.46	0.27	0.57	0.20	0.33	0.51	0.33	0.46	0.27	0.36	0.37	0.33	0.38
Std. dev.	0.30	0.31	0.23	0.28	0.23	0.27	0.25	0.28	0.28	0.22	0.27	0.27	0.26	0.24
Model (C)														
<i>Additive term ($\hat{\tau}^{add}/\hat{p}$)</i>														
Mean (in %)	14.4	14.9	14.2	15.0	11.1	12.8	10.0	9.7	10.8	11.0	11.1	10.6	10.0	9.0
Median (in %)	9.5	10.5	8.4	8.5	6.7	7.2	6.7	6.7	6.8	7.1	7.2	7.4	7.3	6.6
Std. dev.	25.2	23.6	22.9	23.1	35.9	27.8	17.0	15.9	50.0	17.3	22.6	18.0	15.8	16.1

Statistics are weighted by value
Model (A): With ad-valorem transport costs only
Model (B): With additive and ad-valorem transport costs
Model (C): With additive transport costs only

Table B.1: Continued

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Data														
# obs.	27,662	29,106	28,383	28,095	29,050	30,839	31,865	32,146	32,344	33,182	33,986	34,585	36,093	36,407
# sectors	234	231	232	230	232	232	232	228	228	229	231	230	230	229
# origin countries	183	182	179	182	198	201	206	201	206	206	204	209	206	209
<i>Observed transport costs</i>														
Mean, in %	5.6	5.3	5.4	5.2	4.9	4.9	5.0	5.0	4.6	4.5	4.9	5.2	5.3	5.2
Median, in %	4.1	4.1	4.1	3.8	3.7	3.7	3.8	3.7	3.5	3.2	3.5	3.8	4.3	3.9
Std. dev.	5.0	4.7	4.8	4.6	4.5	4.5	4.6	4.8	4.3	4.3	4.6	4.5	4.7	4.7
Model (A)														
<i>Mult. term ($\hat{\tau}^{ice}$)</i>														
Mean (in %)	6.1	5.7	5.7	5.5	5.0	5.2	5.2	5.1	4.8	4.7	4.8	5.0	5.1	5.0
Median (in %)	5.7	4.8	4.6	4.4	4.2	4.6	4.1	4.3	3.9	3.9	3.9	4.5	4.8	4.6
Std. dev.	3.4	3.2	3.2	3.3	2.9	3.0	3.2	3.2	2.9	3.0	3.1	2.6	2.8	2.7
Model (B)														
<i>Mult. term ($\hat{\tau}^{adv}$)</i>														
Mean (in %)	4.0	3.0	3.3	3.0	2.6	2.9	2.6	2.8	2.6	2.7	2.1	2.5	2.5	2.7
Median (in %)	3.5	2.6	2.8	2.7	2.3	2.6	2.2	2.5	2.2	2.3	1.8	2.1	2.1	2.6
Std. dev.	2.5	2.3	2.2	2.2	1.9	2.1	2.0	2.0	2.0	1.8	2.0	1.8	2.1	1.9
<i>Additive term ($\hat{\tau}/\hat{p}$)</i>														
Mean (in %)	2.4	2.9	2.8	2.9	2.7	2.7	2.9	2.7	2.5	2.2	3.2	2.8	2.8	2.4
Median (in %)	1.3	2.0	1.7	1.8	1.8	1.6	2.0	1.8	1.6	1.3	2.0	2.0	2.2	1.6
Std. dev.	3.7	3.6	4.1	4.2	3.8	3.7	4.0	3.9	4.1	3.7	4.7	4.0	4.3	3.7
<i>Share of additive costs ($\hat{\beta}$)</i>														
Mean	0.34	0.45	0.39	0.45	0.44	0.43	0.47	0.45	0.44	0.39	0.53	0.49	0.51	0.43
Median	0.34	0.42	0.38	0.44	0.46	0.40	0.45	0.45	0.43	0.38	0.47	0.46	0.48	0.43
Std. dev.	0.21	0.25	0.21	0.23	0.23	0.26	0.24	0.20	0.20	0.19	0.29	0.24	0.28	0.22
Model (C)														
<i>Additive term ($\hat{\tau}^{add}/\hat{p}$)</i>														
Mean (in %)	8.9	8.6	10.2	9.1	8.1	8.1	8.4	8.4	8.0	8.0	8.2	8.0	8.0	7.8
Median (in %)	6.1	5.7	6.3	4.8	4.2	4.9	4.6	4.7	4.2	4.1	4.2	4.4	4.9	4.4
Std. dev.	17.9	18.3	17.6	15.6	13.3	12.2	13.7	15.4	15.0	14.9	15.8	14.2	15.9	14.4

Statistics are weighted by value
Model (A): With ad-valorem transport costs only
Model (B): With additive and ad-valorem transport costs
Model (C): With additive transport costs only

Table B.1: Continued

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Data														
# obs.	37,256	37,673	37,757	41,431	41,764	39,604	38,950	37,336	37,748	38,567	38,387	38,477	39,147	40,031
# sectors	229	229	230	229	231	227	228	226	226	227	223	224	225	225
# origin countries	206	211	210	206	207	207	199	207	198	202	203	203	203	204
<i>Observed transport costs</i>														
Mean (in %)	4.9	5.6	5.7	5.4	5.1	4.7	4.4	4.3	4.2	3.6	3.7	3.7	3.7	4.3
Median (in %)	3.8	4.5	4.8	3.9	3.7	3.6	3.6	3.5	3.2	2.6	2.9	2.6	2.8	3.3
Std. dev.	4.4	4.8	4.8	4.9	4.6	4.2	3.8	3.5	3.6	3.2	3.2	3.2	3.1	3.4
Model (A)														
<i>Mult. term ($\hat{\tau}^{ice} - 1$)</i>														
Mean, in %	4.8	5.3	5.4	5.4	4.8	4.7	4.4	4.3	4.0	3.5	3.6	3.6	3.5	3.9
Median, in %	4.1	4.9	5.0	4.9	4.3	4.2	3.8	4.1	3.5	3.0	3.1	3.3	2.9	3.3
Std. dev.	2.6	2.8	2.9	2.6	2.6	2.3	2.2	2.1	2.0	1.8	1.8	1.8	1.8	1.9
Model (B)														
<i>Mult. term ($\hat{\tau}^{adv} - 1$)</i>														
Mean, in %	2.1	2.4	2.7	2.6	2.3	2.5	2.1	2.2	1.9	1.8	1.8	2.2	2.0	2.0
Median, in %	1.7	1.9	2.8	2.2	1.9	2.3	1.8	2.0	1.8	1.6	1.4	1.8	1.6	1.7
Std. dev.	2.1	2.3	2.1	2.2	2.0	2.0	2.0	1.7	1.7	1.5	1.5	1.2	1.4	1.4
<i>Additive term (\hat{t}/\hat{p})</i>														
Mean (in %)	2.9	3.2	2.9	3.0	2.8	2.4	2.4	2.1	2.5	1.9	1.9	1.5	1.6	2.1
Median (in %)	2.3	2.5	1.9	2.2	1.9	1.8	2.1	1.7	1.9	1.6	1.6	0.8	1.2	1.6
Std. dev.	3.4	4.1	4.2	3.4	3.8	3.0	2.8	2.4	2.5	2.0	2.0	2.0	1.9	2.2
<i>Share of additive costs ($\hat{\beta}$)</i>														
Mean	0.56	0.55	0.47	0.53	0.54	0.49	0.54	0.48	0.54	0.54	0.52	0.33	0.41	0.47
Median	0.53	0.48	0.45	0.50	0.52	0.45	0.53	0.47	0.53	0.52	0.52	0.30	0.40	0.47
Std. dev.	0.27	0.29	0.27	0.28	0.27	0.27	0.29	0.25	0.30	0.30	0.25	0.21	0.25	0.23
Model (C)														
<i>Additive term (\hat{t}^{add}/\hat{p})</i>														
Mean, in %	8.0	8.3	8.1	8.4	7.5	7.0	6.6	6.4	6.3	5.4	5.2	5.2	5.2	6.0
Median, in %	4.7	5.2	5.3	5.7	5.1	4.6	5.3	4.5	4.6	3.9	3.5	3.3	3.2	4.2
Std. dev.	13.9	13.9	13.2	14.7	13.1	14.8	9.5	8.1	9.8	6.9	7.6	8.7	7.7	8.4

Statistics are weighted by value
Model (A): Iceberg transport costs only
Model (B): With additive and ad-valorem transport costs
Model (C): With additive transport costs only

Table B.1: Continued

	2016	2017	2018	2019
Data				
# obs.	40,569	40,647	41,118	41,137
# sectors	225	225	222	223
# origin countries	207	208	209	212
<i>Observed transport costs</i>				
Mean (in %)	4.1	4.0	4.0	4.1
Median (in %)	3.2	3.2	2.8	3.0
Std. dev.	3.3	3.2	3.9	3.5
Model (A)				
<i>Mult. term ($\hat{\tau}^{ice}$)</i>				
Mean (in %)	3.9	3.7	3.6	3.9
Median (in %)	3.3	3.4	3.1	3.8
Std. dev.	1.8	1.9	1.6	1.7
Model (B)				
<i>Mult. term ($\hat{\tau}^{adv}$)</i>				
Mean (in %)	2.3	2.4	2.0	2.0
Median (in %)	2.0	2.0	1.8	1.7
Std. dev.	1.5	1.3	1.3	1.4
<i>Additive term (\hat{t}/\tilde{p})</i>				
Mean (in %)	1.8	1.6	1.8	2.2
Median (in %)	1.4	1.0	1.3	1.8
Std. dev.	1.8	1.9	2.0	2.3
<i>Elasticity ($\hat{\beta}$)</i>				
Mean (in %)	0.41	0.33	0.43	0.50
Median (in %)	0.41	0.34	0.42	0.47
Std. dev.	0.24	0.21	0.25	0.25
Model (C)				
<i>Additive term (\hat{t}^{add}/\tilde{p})</i>				
Mean (in %)	5.9	5.8	5.5	5.9
Median (in %)	4.1	4.1	3.7	4.3
Std. dev.	8.0	8.1	9.1	13.7

Statistics are weighted by value

Model (A): Iceberg transport costs only

Model (B): With additive and ad-valorem transport costs

Model (C): With additive transport costs only