Appendix D Results of HHI and DHH methods with and without an extreme cost value. (PDF file)

Regarding the DHH method we observe that, in some cases, this method provides smaller standard errors than the HHI method. However, the estimates obtained with the DHH method, and their significance, are very sensitive to the selection of the variables in the model and to the inclusion or exclusion of the outlier observation. In addition, the estimated parameter of the binary parking variable takes a absolute value that is very large, both for the HHI and for the DHH method. This fact probably distorts the estimated values for the rest of the parameters. This was expected from the results of the simulation study that is presented in Appendix A of the Supplementary Material.

TABLE 15
Estimated parameters and their significance for the single index-model using HHI and DHH in the accident cost data set with (top) and without (bottom) one extreme outlier.

	All the sample					
	All variables		Only telematics		Only non-telematics	
	HHI	DHH	HHI	DHH	HHI	DHH
speedkm	1	1	1	1		
age	0.775	0.775**			1	1
agelic	0.795*	0.795**			2.921**	2.785**
agecar	0.584	0.584**			0.265	0.239*
parking	-9.558**	-9.558**			-18.060**	-17.770**
tkm	-0.367	-0.367**	0.935	0.934		
nightkm	0.236	0.236**	1.664**	1.686		
urbankm	0.549**	0.549**	1.212**	1.254		
	Whithout extreme					
	All variables		Only telematics		Only non-telematics	
	HHI	DHH	HHI	DHH	HHI	DHH
speedkm	1	1	1	1		
age	0.407	0.211			1	1
agelic	1.407	1.477			11.420**	29.571
agecar	0.900	0.897			-4.435**	-11.071
parking	-5.177*	-5.200			-18.328**	-44.074
tkm	-1.006	-1.092	0.895	0.983		
nightkm	-0.317	-0.358	1.687**	1.733		
urbankm	1.078**	1.040	-0.960**	-0.945		
Significant at 5% level * and at 1% level **						