Supplementary material for

"Goodness-of-fit testing for the Cauchy distribution with application to financial modeling"

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Table 1: Power comparison for the tests of size 0.05 against several alternative distributions for $n = 100$

	Alternative									
Statistic	t_3	t_5	N	Lo	La	Gu	Be	Ga	NC	Tu
KS	0.241	0.412	0.772	0.501	0.130	0.987	*1*	*1*	0.075	0.062
A^2	0.543	0.813	0.981	0.887	0.382	0.994	*1*	*1*	0.062	0.086
W^2	0.248	0.439	0.760	0.521	0.140	0.896	0.999	0.990	0.060	0.064
$D_{n,\lambda}$	0.876	0.985	*1*	0.996	0.820	*1*	*1*	*1*	0.090	*0.115*
Z_K	0.740	0.946	*1*	0.985	0.736	*1*	*1*	*1*	0.086	0.084
Z_A	*0.977*	*1*	*1*	*1*	*0.992*	*1*	*1*	*1*	*0.115*	0.047
Z_C	0.961	0.999	*1*	*1*	0.979	*1*	*1*	*1*	0.089	0.072
$\hat{D}_1$	0.958	0.999	**1**	**1**	**1**	**1**	**1**	**1**	0.075	0.025
$\hat{D}_2$	**0.993**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**0.116**	0.017
$\hat{D}_3$	0.942	0.998	**1**	**1**	**1**	**1**	**1**	**1**	0.072	**0.026**
$\hat{D}_4$	0.964	0.999	**1**	**1**	**1**	**1**	**1**	**1**	0.077	0.024
$\hat{D}_5$	0.957	0.999	**1**	**1**	**1**	**1**	**1**	**1**	0.075	0.025
$\hat{D}_6$	0.956	0.999	**1**	**1**	**1**	**1**	**1**	**1**	0.075	**0.026**
$\hat{D}_7$	0.992	**1**	**1**	**1**	**1**	**1**	**1**	**1**	0.110	0.019

Table 2: Power comparison for the tests of size 0.05 against several alternative distributions for $n = 200$

	Alternative									
Statistic	t_3	t_5	N	Lo	La	Gu	Be	Ga	NC	Tu
KS	0.657	0.922	*1*	0.971	0.434	*1*	*1*	1	0.114	0.067
A^2	0.974	*1*	*1*	*1*	0.923	*1*	*1*	*1*	0.110	0.110
W^2	0.690	0.922	0.998	0.964	0.409	*1*	*1*	*1*	0.086	0.070
$D_{n,\lambda}$	0.999	*1*	*1*	*1*	0.999	*1*	*1*	*1*	*0.198*	*0.163*
Z_K	0.996	*1*	*1*	*1*	0.999	*1*	*1*	*1*	0.130	0.103
Z_A	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	0.154	0.051
Z_C	*1*	*1*	*1*	*1*	*1*	*1*	*1*	*1*	0.123	0.083
$\hat{D}_1$	0.993	**1**	**1**	**1**	**1**	**1**	**1**	**1**	0.073	0.025
$\hat{D}_2$	**0.998**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**0.111**	0.015
$\hat{D}_3$	0.986	**1**	**1**	**1**	**1**	**1**	**1**	**1**	0.070	**0.026**
$\hat{D}_4$	0.993	**1**	**1**	**1**	**1**	**1**	**1**	**1**	0.075	0.024
$\hat{D}_5$	0.992	**1**	**1**	**1**	**1**	**1**	**1**	**1**	0.072	**0.026**
$\hat{D}_6$	0.992	**1**	**1**	**1**	**1**	**1**	**1**	**1**	0.073	0.025
$\hat{D}_7$	**0.998**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	0.109	0.016