



Corrigendum to

“Economic motivation of households to undertake private precautionary measures against floods” published in Nat. Hazards Earth Syst. Sci., 11, 309–321, 2011

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In our paper a miscalculation led to an important underestimation of the benefit cost ratios of private precautionary measures against flooding. We herewith provide the correct benefit-cost ratios for different activities under different flood scenarios and different discount rates on the next page (Table).

The overall finding of our paper holds however, as the comparison of benefits and costs demonstrates that large investments, like the building of a sealed cellar, are only economically efficient, if the building is flooded frequently ($>1/50$ yr), thus built in areas at serious risk of flooding. In contrast, small investments like the installation of an oil tank protection can prevent high damage at very low cost. Such investments are still profitable, if the building is flooded on average every 50 yr or less. It could be therefore argued that these low cost measures should become mandatory by means of building codes.

Table. Benefit-cost ratios for different precautionary building measures under different flood scenarios, calculated with different discount rates.

Cellar only affected						
flood return period	1/50 yr		1/10 yr		1/1 yr	
discount rate	4 %	3 %	4 %	3 %	4 %	3 %
Waterproof skin (bitumen sealing)	0.16	0.20	0.79	0.99	7.93	9.87
Waterproof concrete	0.14	0.17	0.70	0.86	6.95	8.65
Securing of oil tanks	5.61	6.32	28.04	31.58	280.38	315.76
Cellar and ground floor affected						
flood return period	1/50 yr		1/10 yr		1/1 yr	
discount rate	4 %	3 %	4 %	3 %	4 %	3 %
Waterproof skin (bitumen sealing)	0.55	0.68	2.73	3.39	27.27	33.92
Waterproof concrete	0.48	0.59	2.39	2.97	23.89	29.72
Securing of oil tanks	9.59	10.80	47.95	54.00	479.45	539.96
Mobile flood walls	1.12	1.22	5.62	6.11	56.19	61.14