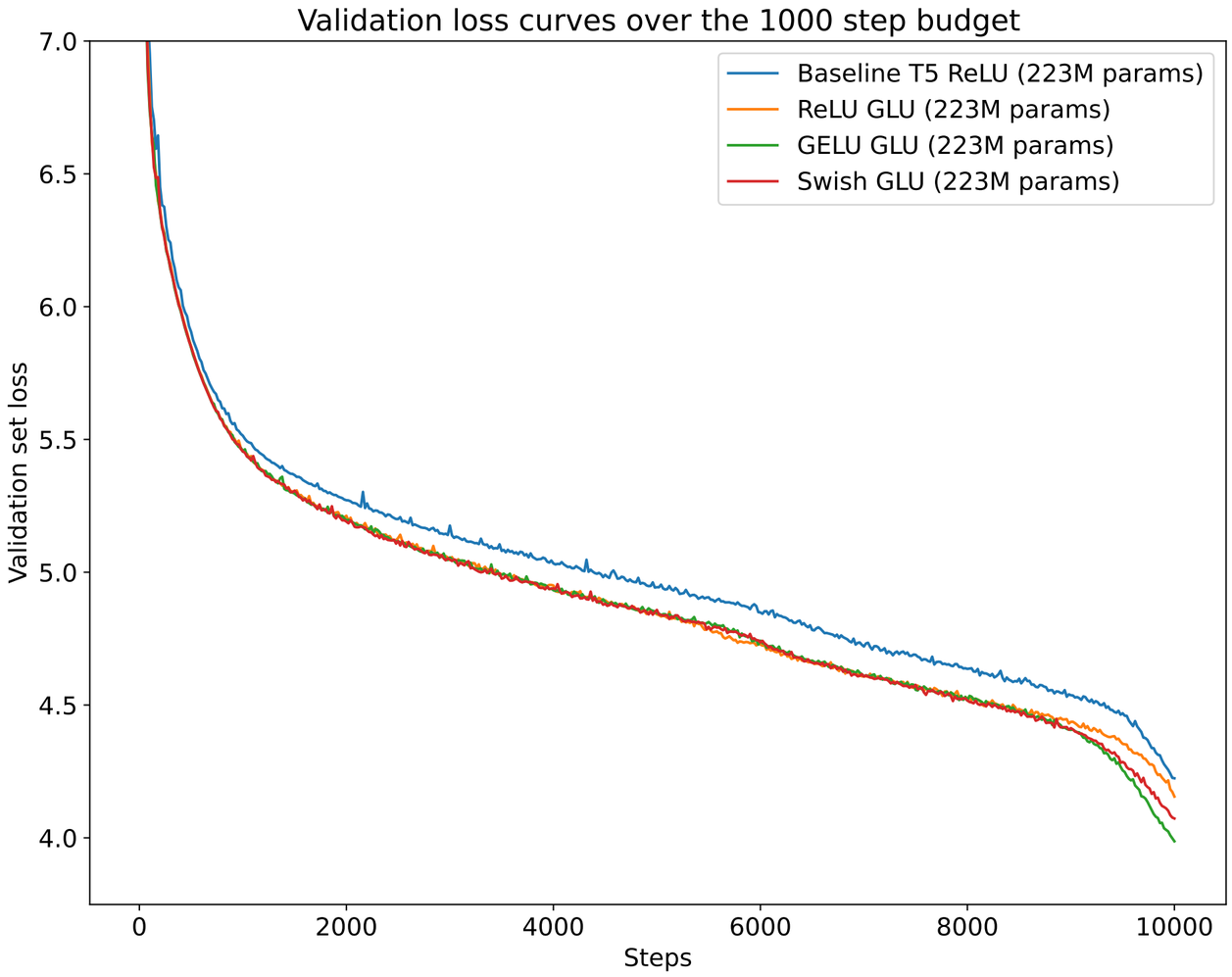
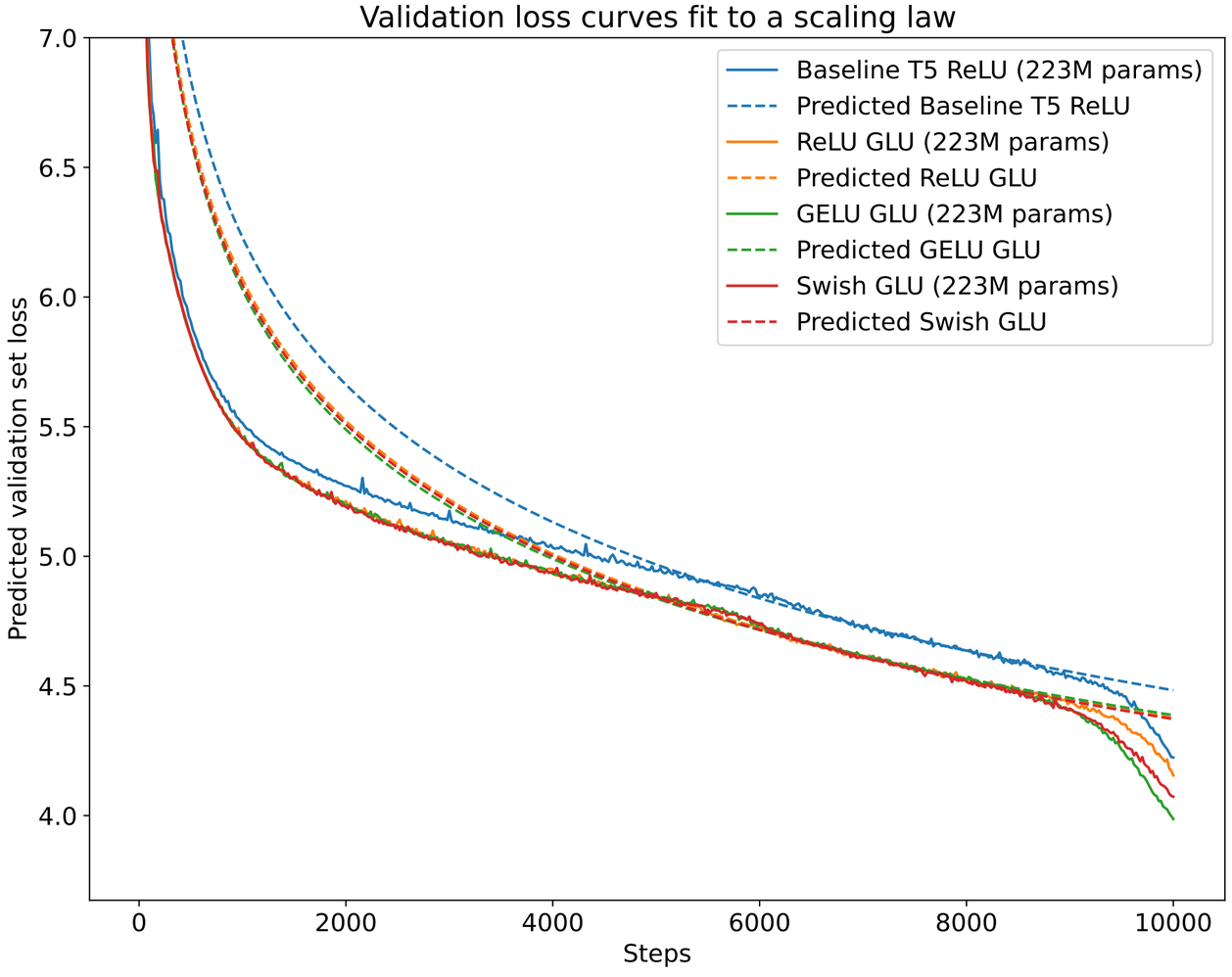
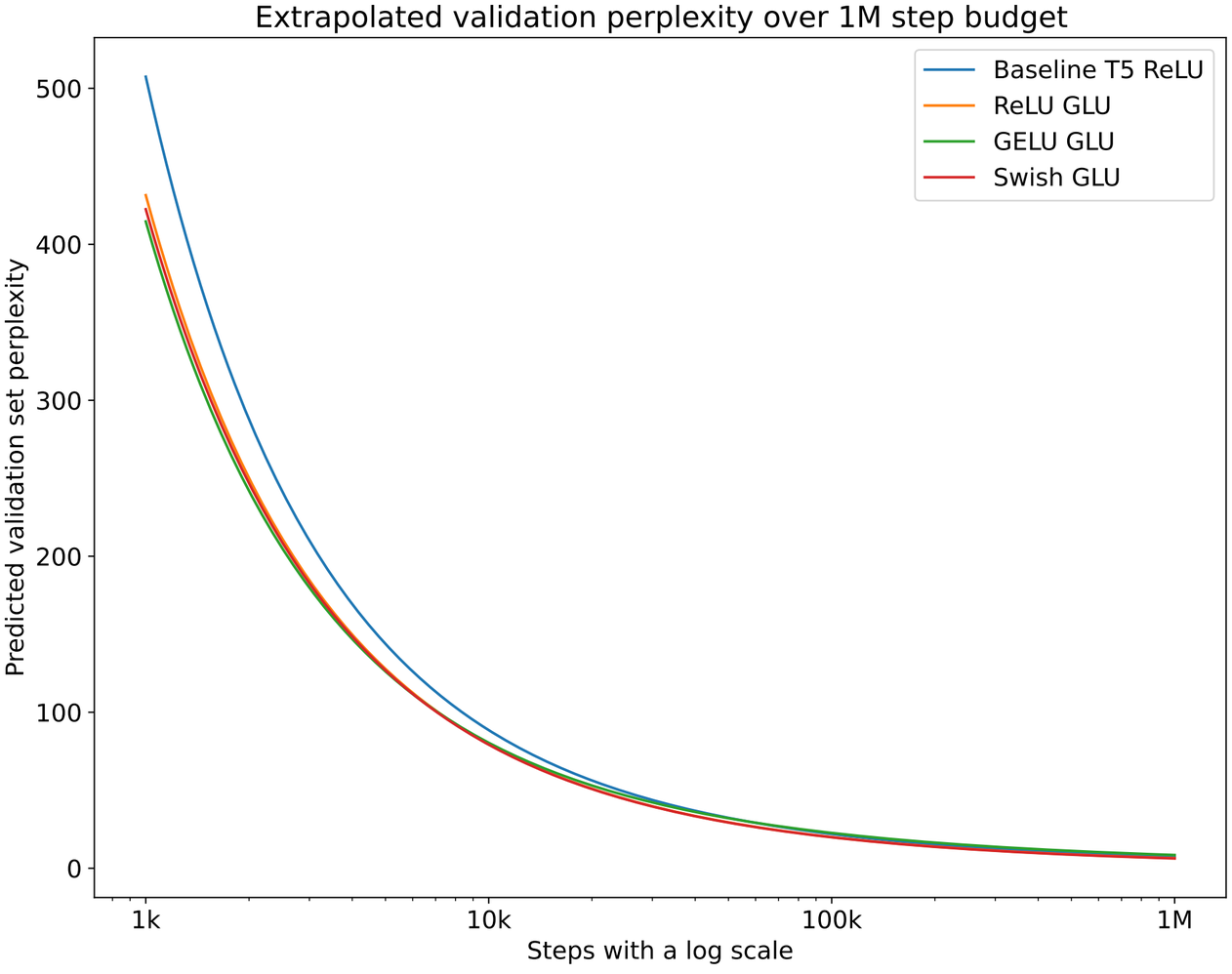
Feedforward layers using Gated Linear Units (GLU)







Scaling law fit details and perplexity (PPL) predictions

Experiment	Train - eval loss	Scaling law	PPL at 100k	PPL at 300k	PPL at 1M
Baseline T5 ReLU	0.081	17.04(t ** -0.097) - 2.47	21.931	12.485	7.188
ReLU GLU	0.099	16.96(t ** -0.087) - 3.21	19.970	11.319	6.448
GELU GLU	0.099	15.64(t ** -0.112) - 1.20	22.638	13.743	8.496
Swish GLU	0.098	17.12(t ** -0.082) - 3.65	19.833	11.174	6.307