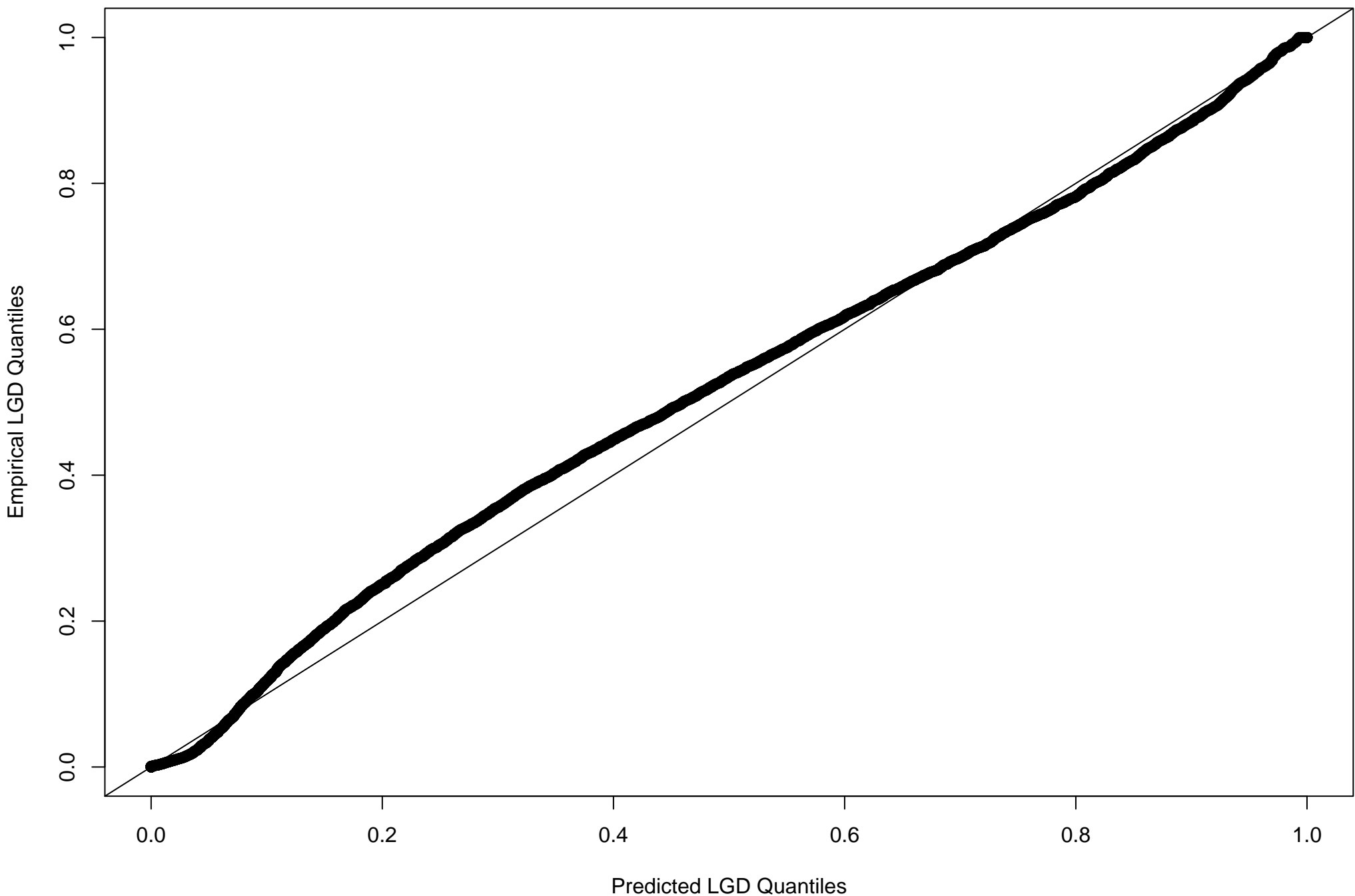


QQ Plot on Train (In-Sample) Data



Predicted LGD (EAD=1) Bucket Probability on Train (In-Sample) Data

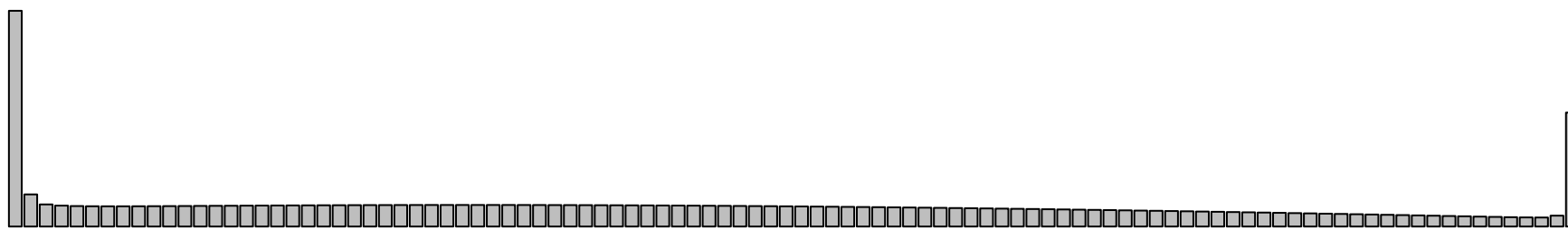
Mean: 42.79% SD: 31.39% Skew: 0.27 Ex Kurt: -1.09 P(LGD=0): 10.07% P(LGD=1): 5.32%

Loss Bucket Probability

0.5
0.4
0.3
0.2
0.1
0.0

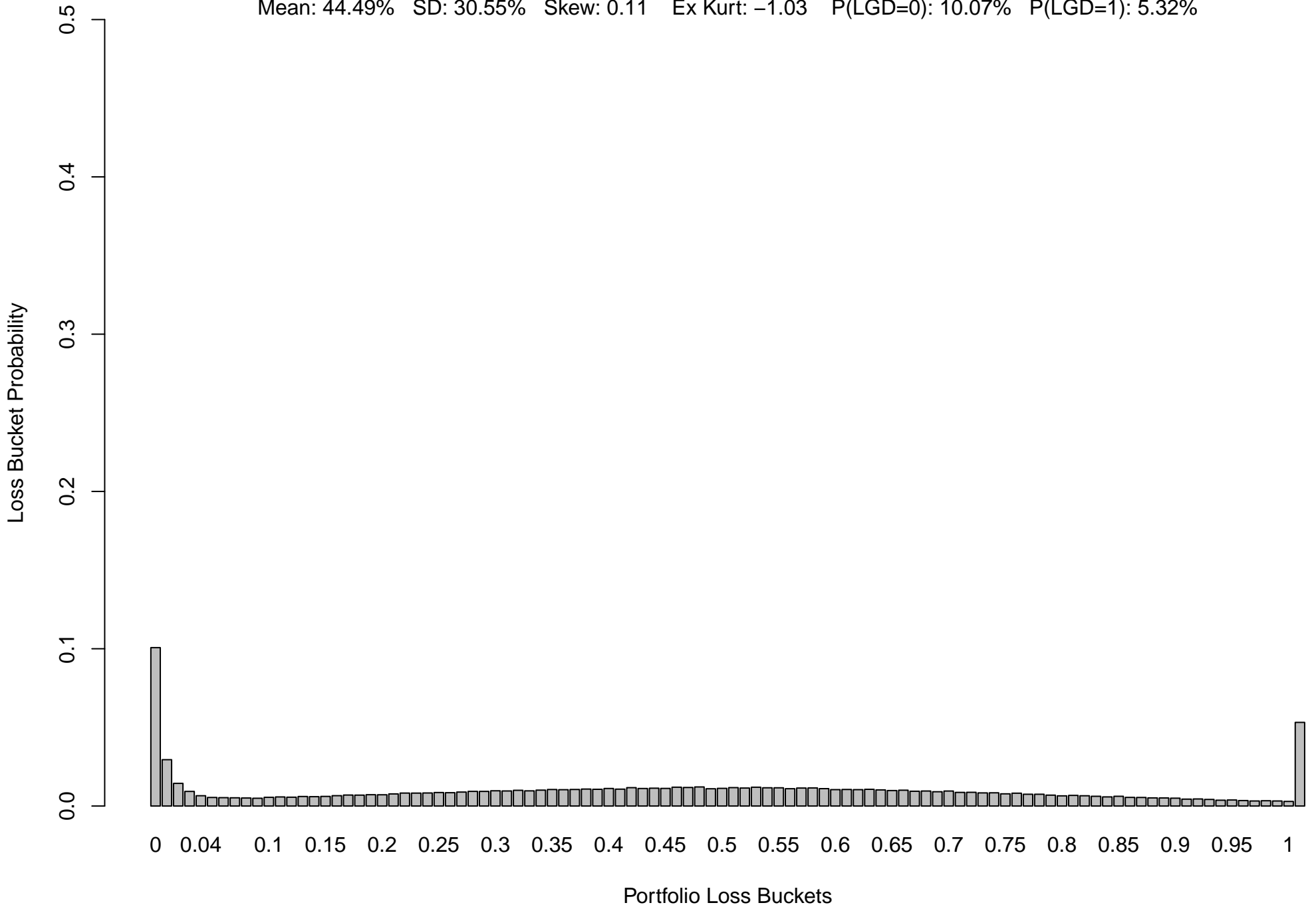
0 0.04 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.75 0.8 0.85 0.9 0.95 1

Portfolio Loss Buckets

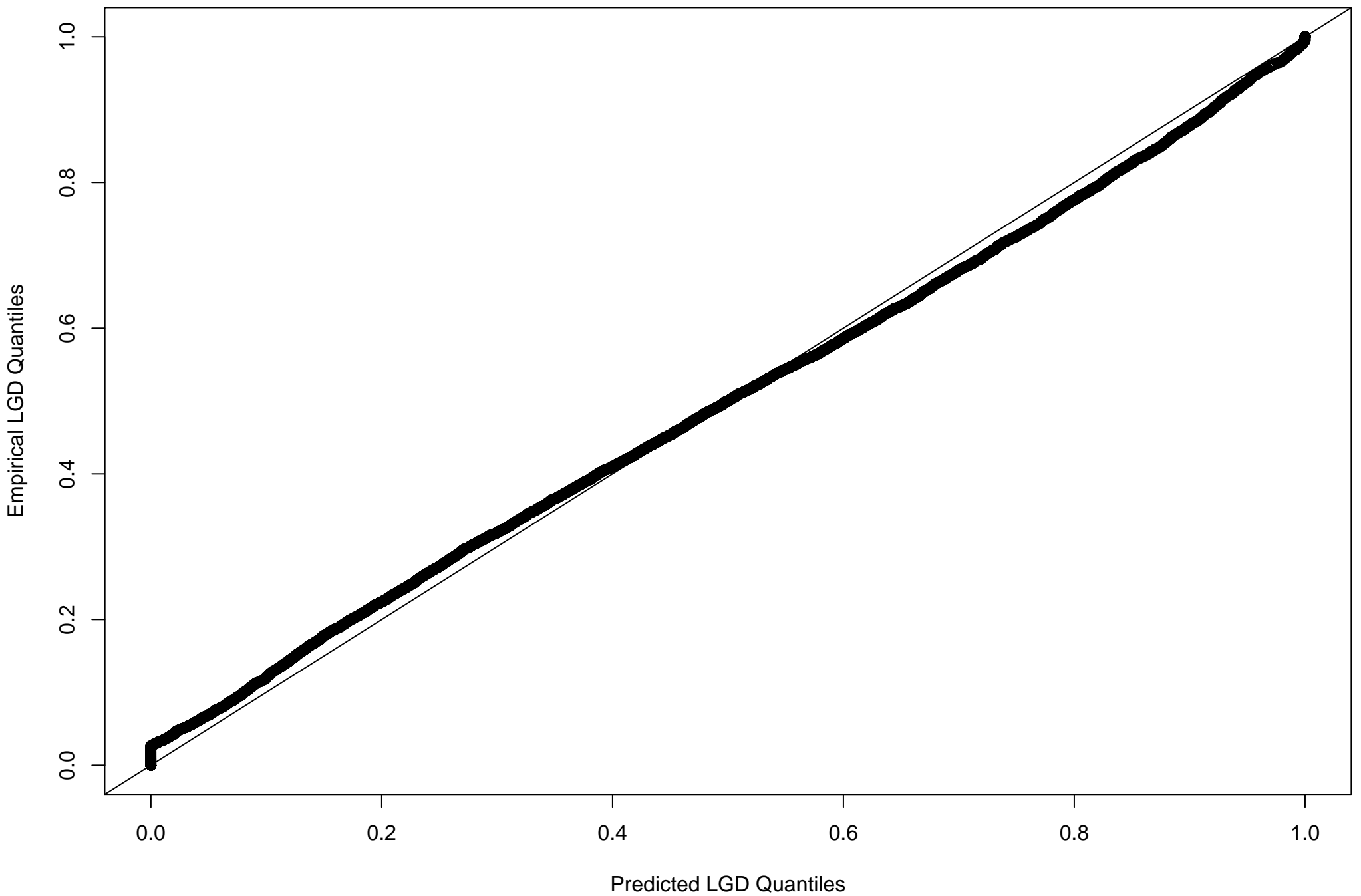


Empirical LGD (EAD=1) Bucket Probability on Train (In-Sample) Data

Mean: 44.49% SD: 30.55% Skew: 0.11 Ex Kurt: -1.03 P(LGD=0): 10.07% P(LGD=1): 5.32%

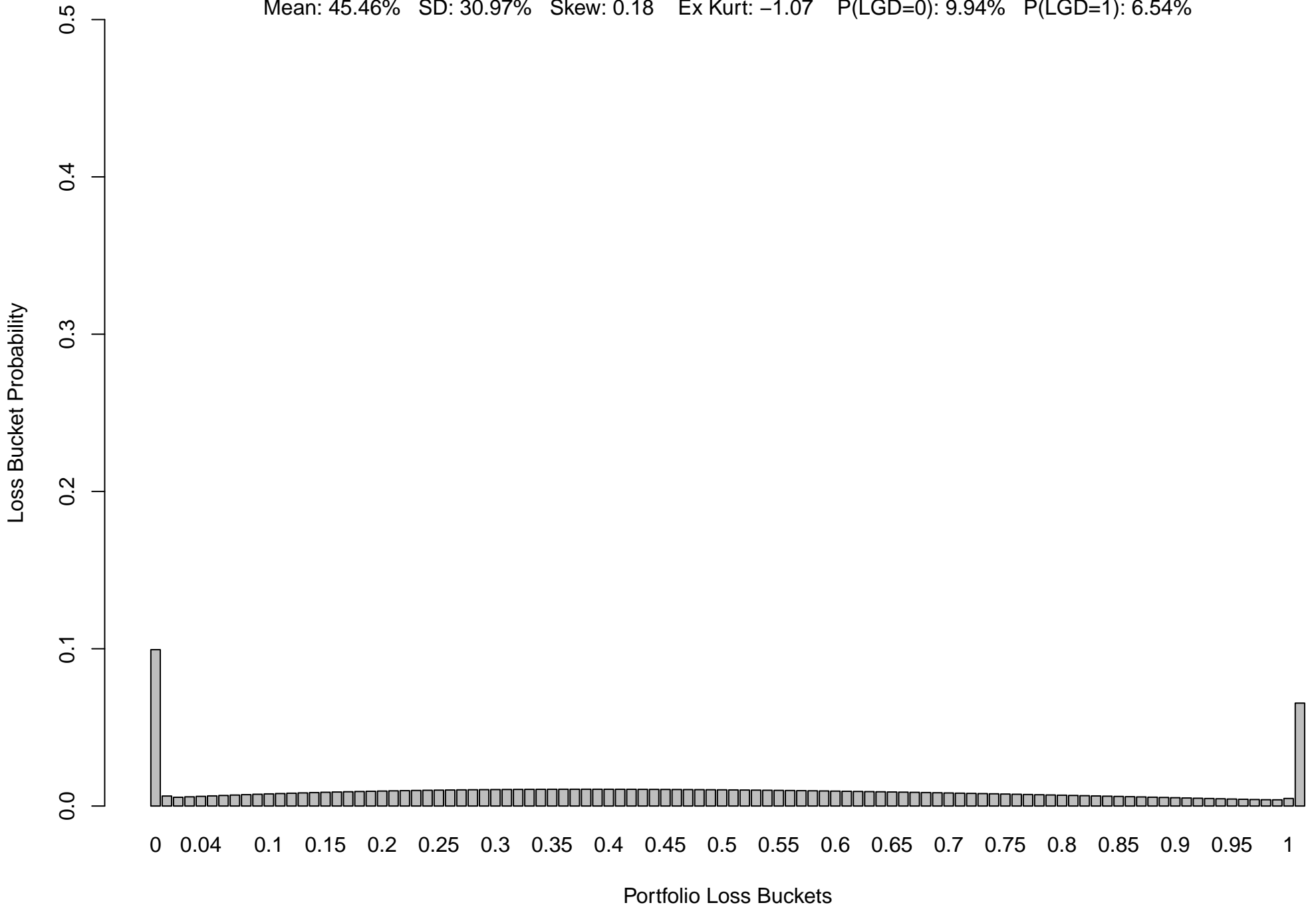


QQ Plot on Validation Data



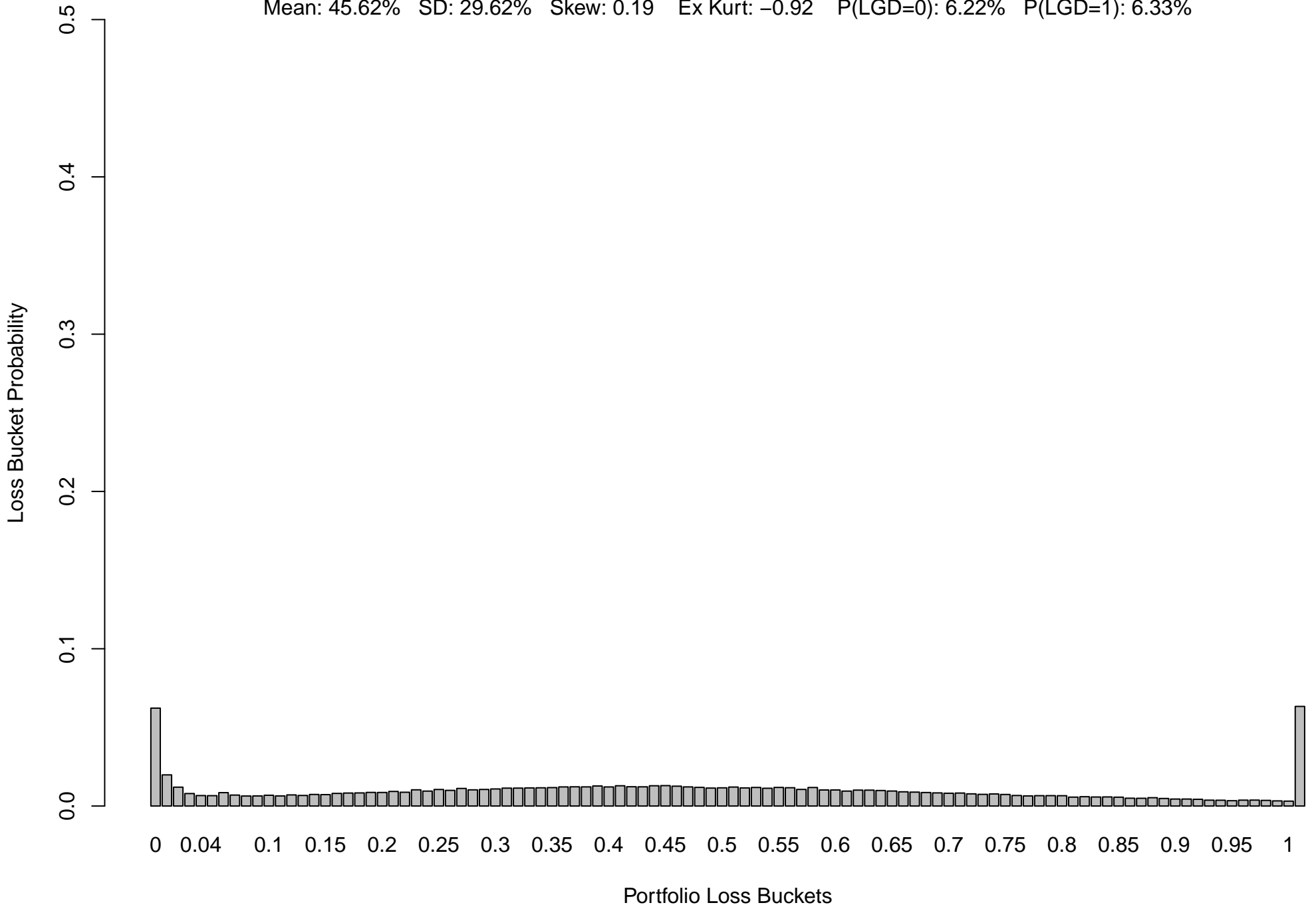
Predicted LGD (EAD=1) Bucket Probability on Validation Data

Mean: 45.46% SD: 30.97% Skew: 0.18 Ex Kurt: -1.07 P(LGD=0): 9.94% P(LGD=1): 6.54%

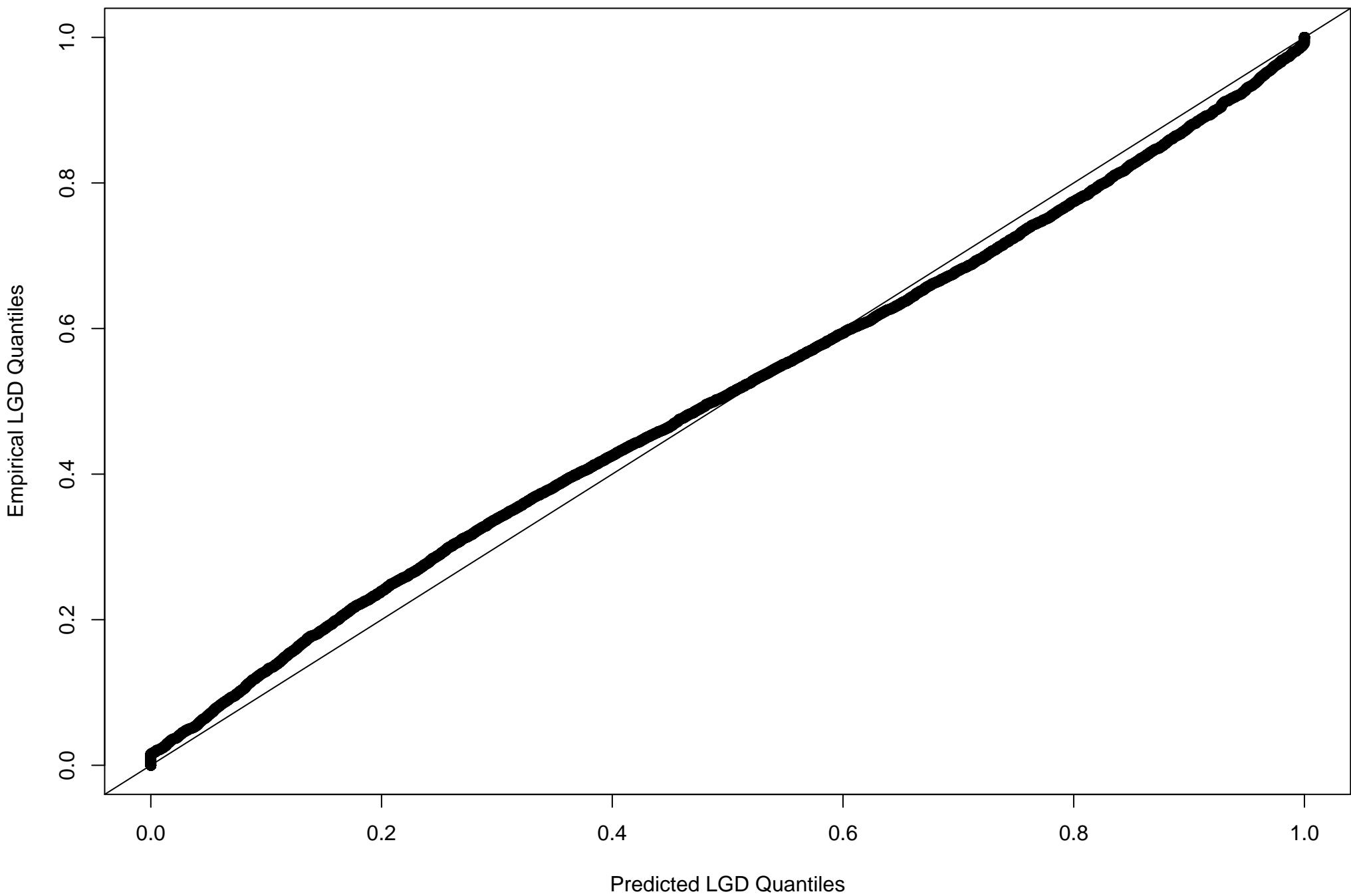


Empirical LGD (EAD=1) Bucket Probability on Validation Data

Mean: 45.62% SD: 29.62% Skew: 0.19 Ex Kurt: -0.92 P(LGD=0): 6.22% P(LGD=1): 6.33%

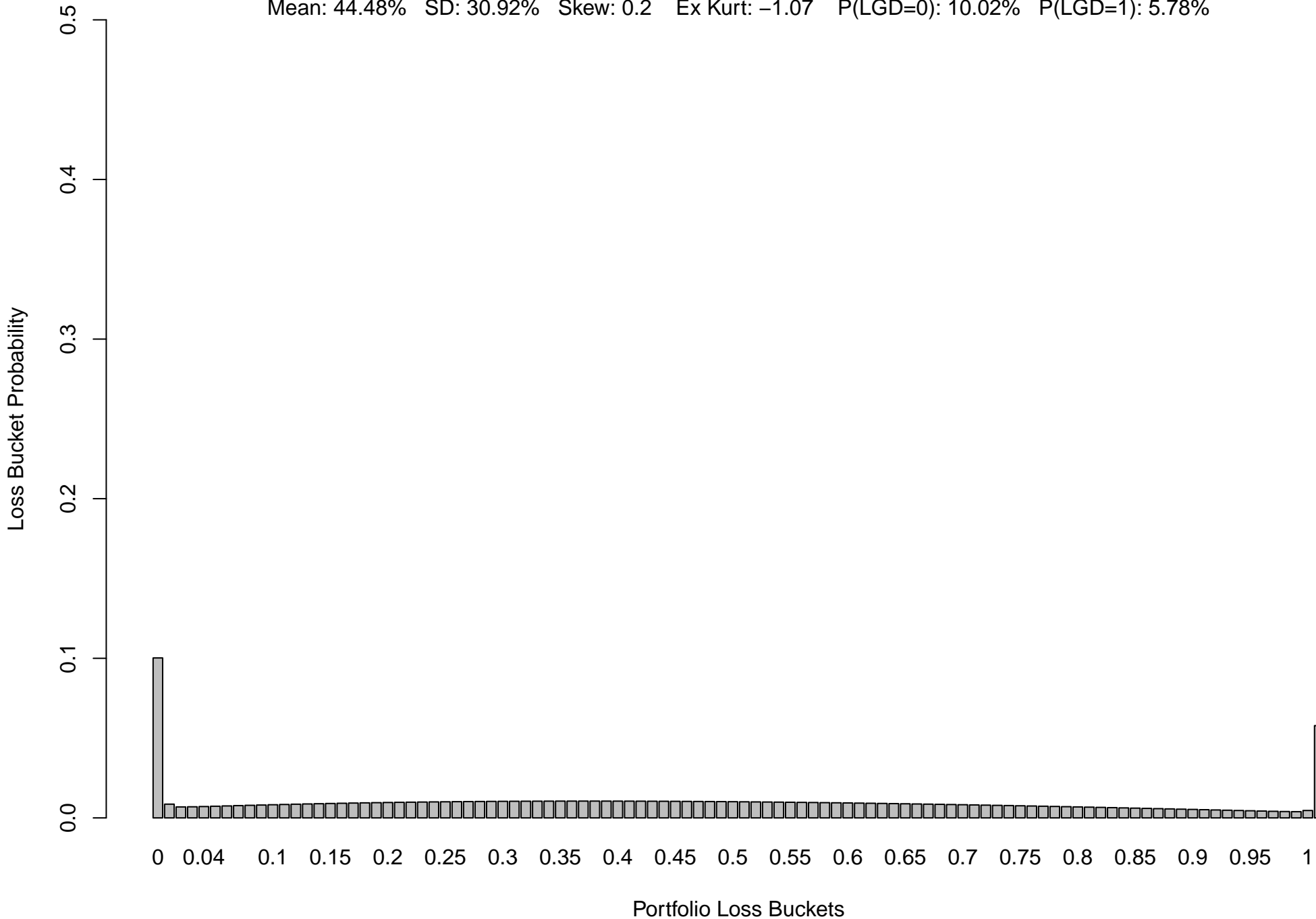


QQ Plot on Train-Validate Data



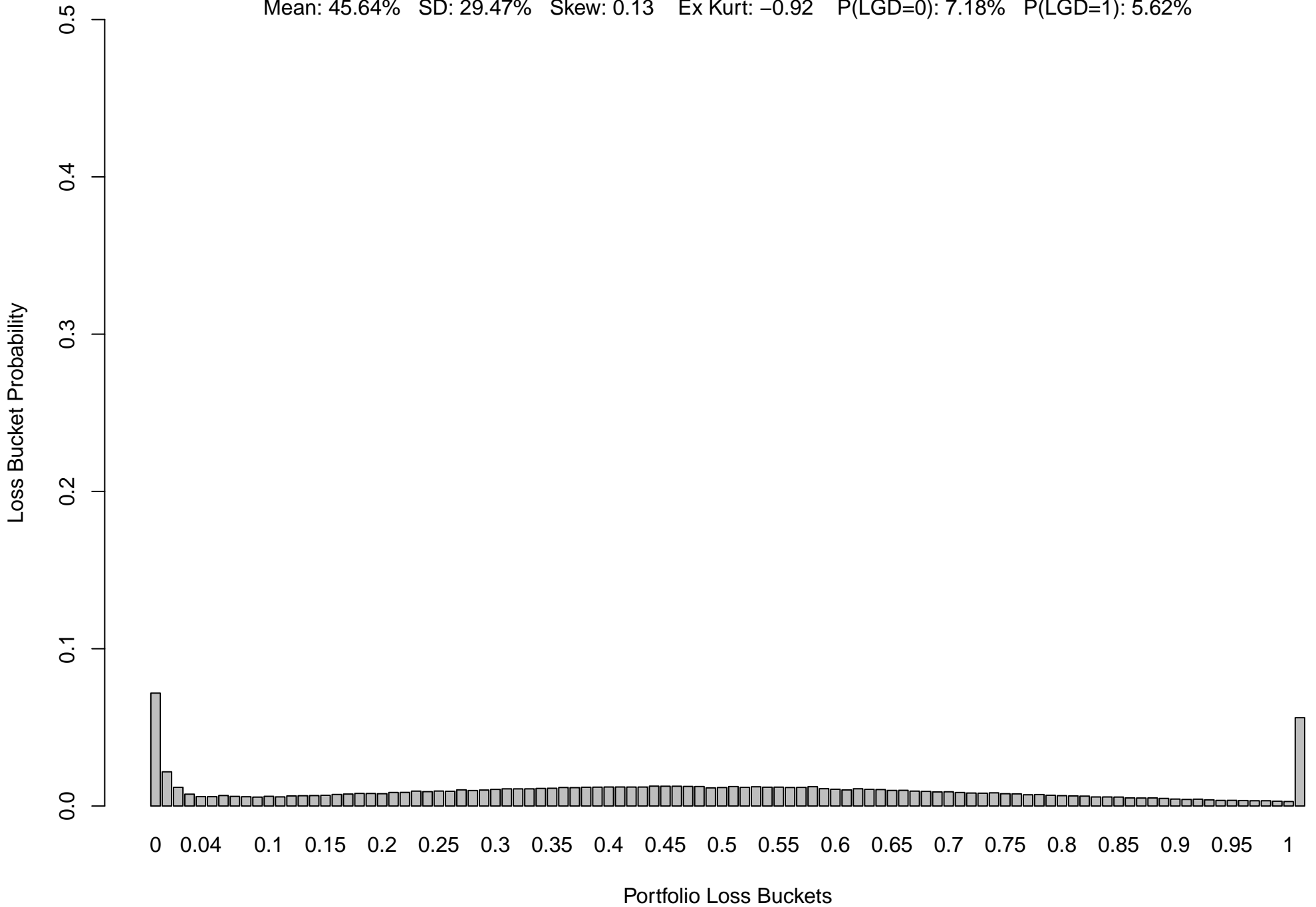
Predicted LGD (EAD=1) Bucket Probability on Train-Validate Data

Mean: 44.48% SD: 30.92% Skew: 0.2 Ex Kurt: -1.07 P(LGD=0): 10.02% P(LGD=1): 5.78%

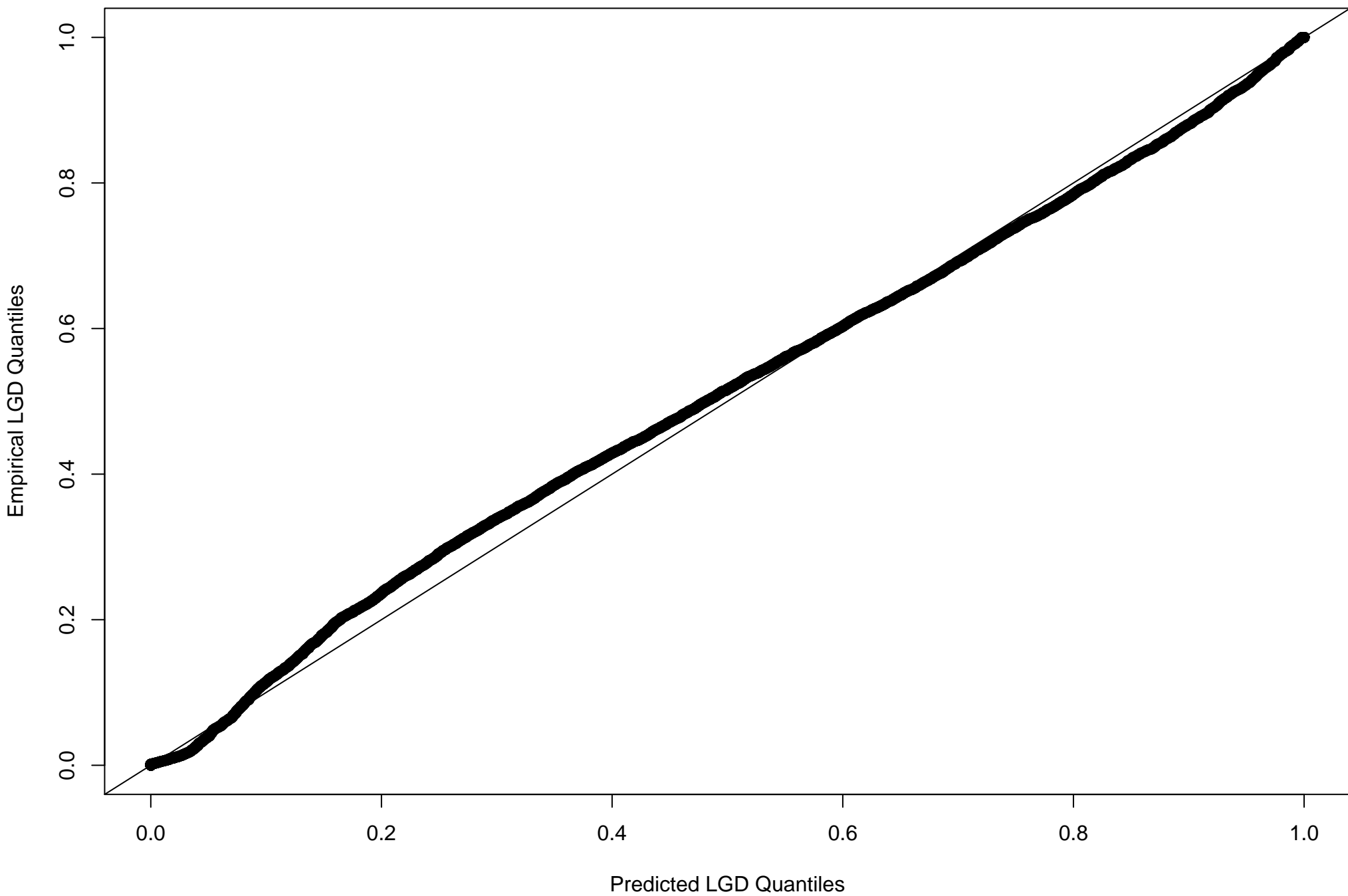


Empirical LGD (EAD=1) Bucket Probability on Train-Validate Data

Mean: 45.64% SD: 29.47% Skew: 0.13 Ex Kurt: -0.92 P(LGD=0): 7.18% P(LGD=1): 5.62%

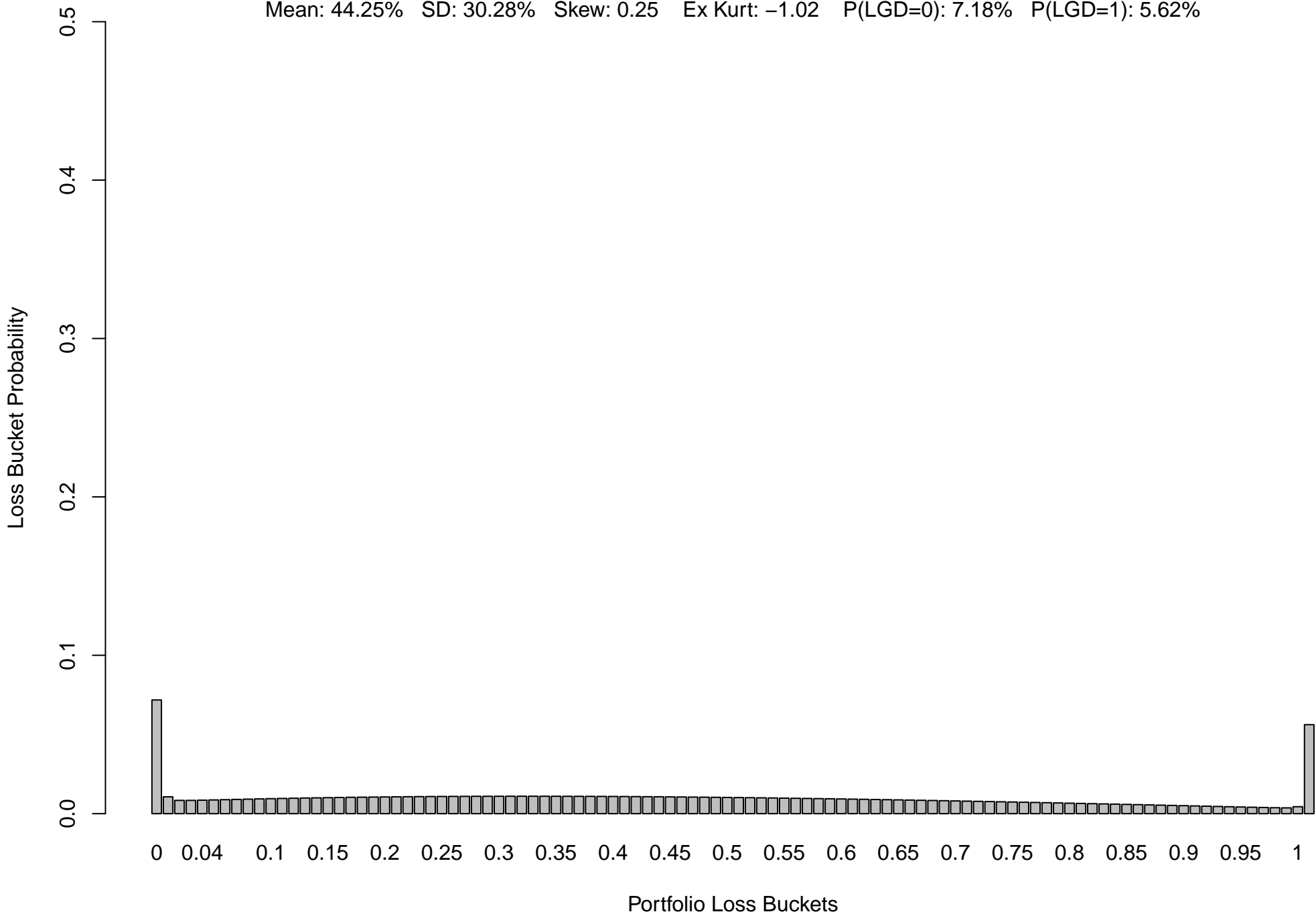


QQ Plot on Train-Validate (In-Sample) Data



Predicted LGD (EAD=1) Bucket Probability on Train-Validate (In-Sample) Data

Mean: 44.25% SD: 30.28% Skew: 0.25 Ex Kurt: -1.02 P(LGD=0): 7.18% P(LGD=1): 5.62%



Empirical LGD (EAD=1) Bucket Probability on Train-Validate (In-Sample) Data

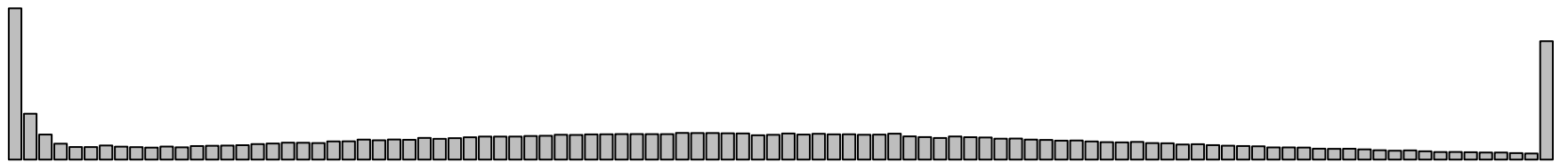
Mean: 45.64% SD: 29.47% Skew: 0.13 Ex Kurt: -0.92 P(LGD=0): 7.18% P(LGD=1): 5.62%

Loss Bucket Probability

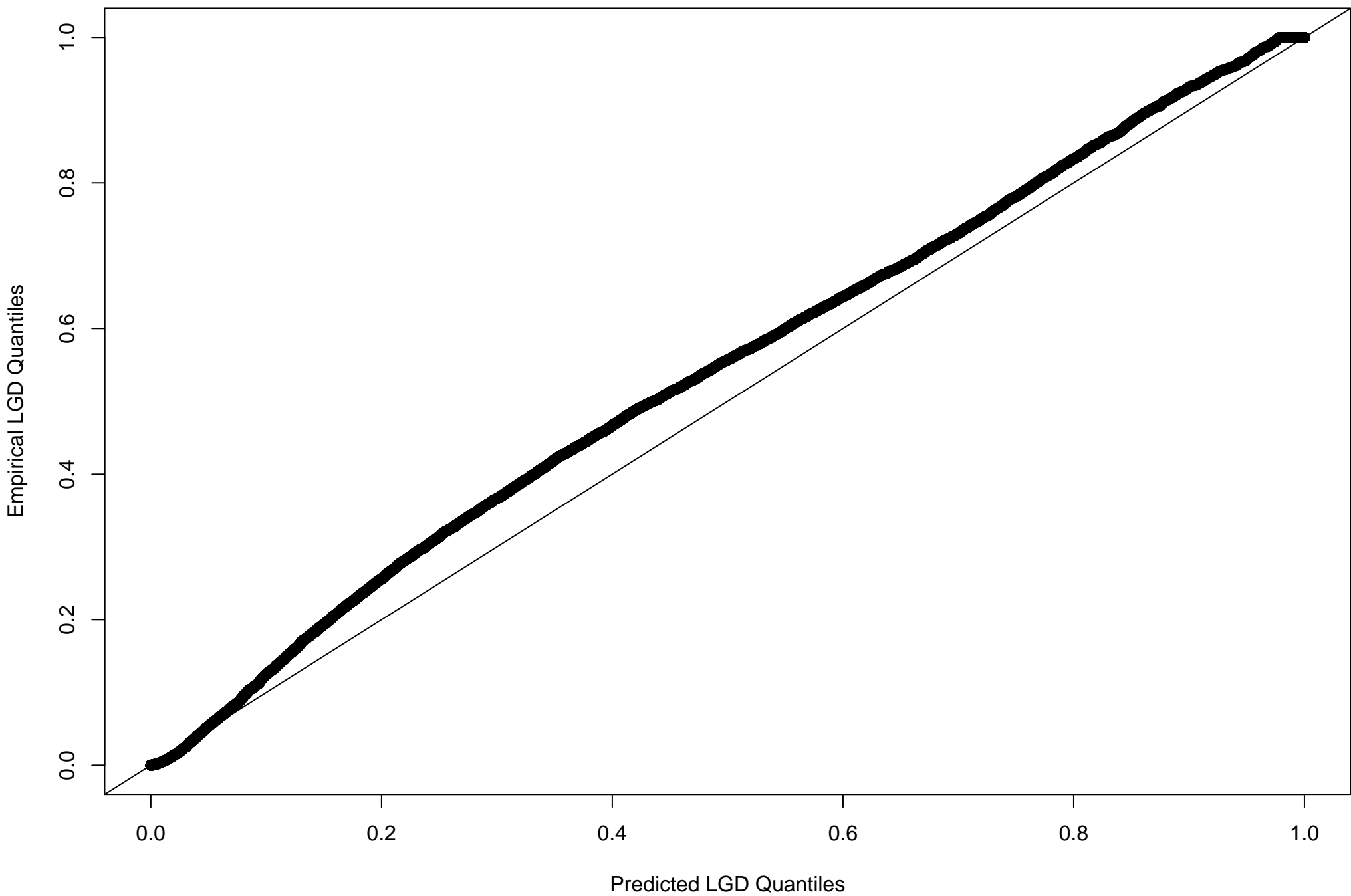
0.5
0.4
0.3
0.2
0.1
0.0

0 0.04 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.75 0.8 0.85 0.9 0.95 1

Portfolio Loss Buckets



QQ Plot on Test Data



Predicted LGD (EAD=1) Bucket Probability on Test Data

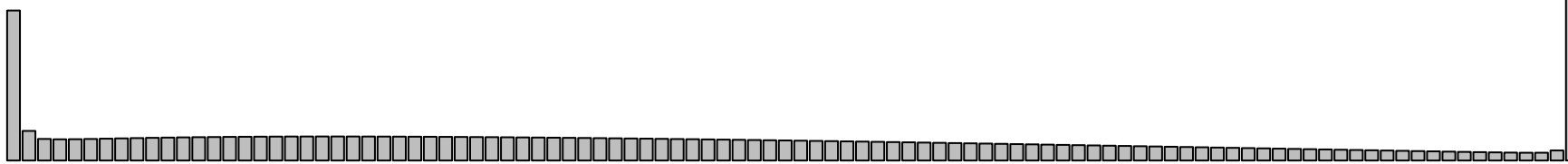
Mean: 43.73% SD: 31.46% Skew: 0.34 Ex Kurt: -1.04 P(LGD=0): 7% P(LGD=1): 7.99%

Loss Bucket Probability

0.5
0.4
0.3
0.2
0.1
0.0

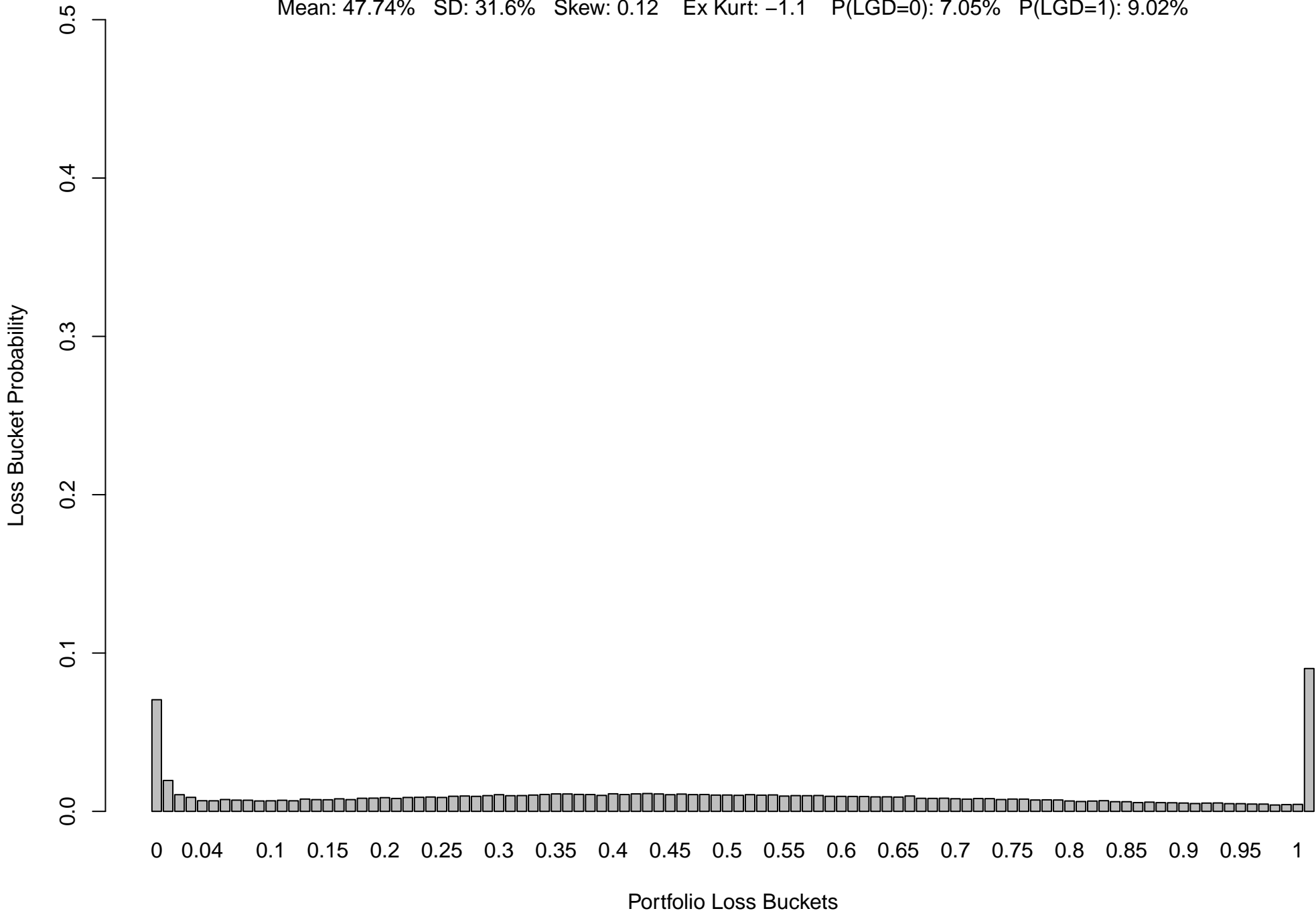
0 0.04 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.75 0.8 0.85 0.9 0.95 1

Portfolio Loss Buckets

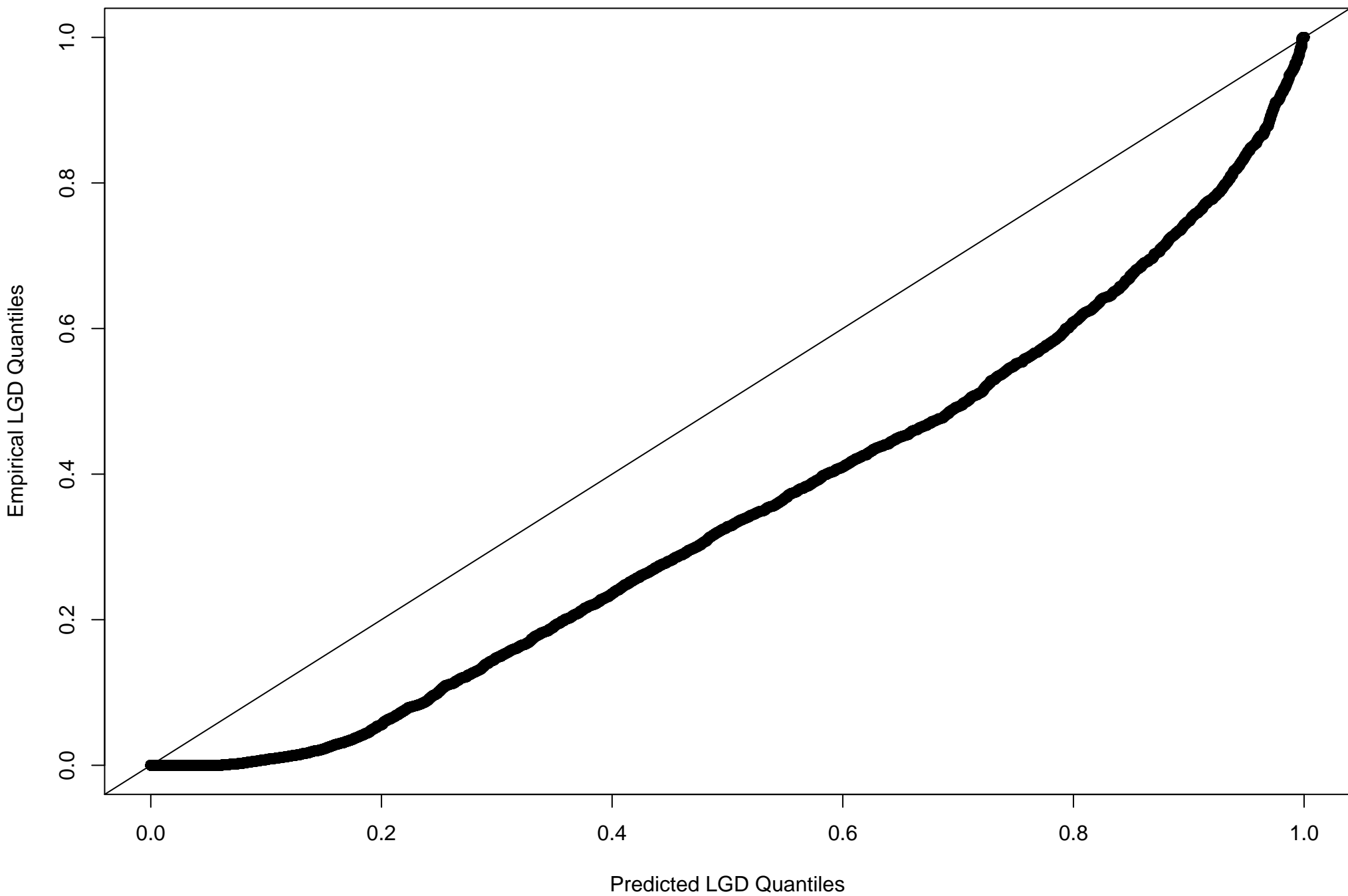


Empirical LGD (EAD=1) Bucket Probability on Test Data

Mean: 47.74% SD: 31.6% Skew: 0.12 Ex Kurt: -1.1 P(LGD=0): 7.05% P(LGD=1): 9.02%



QQ Plot on Test2006 Data



Predicted LGD (EAD=1) Bucket Probability on Test2006 Data

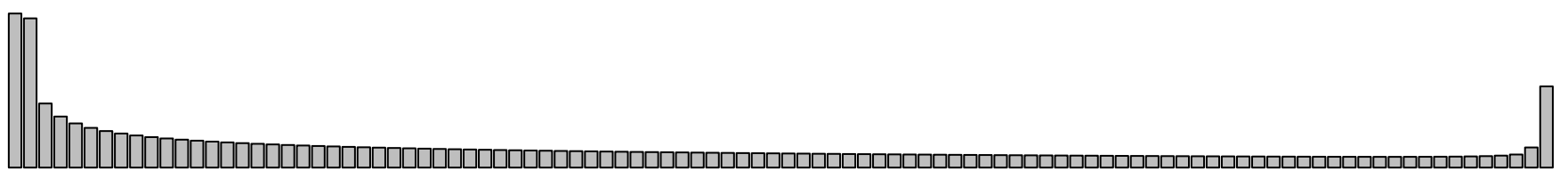
Mean: 36.09% SD: 32.7% Skew: 0.58 Ex Kurt: -0.99 P(LGD=0): 7.31% P(LGD=1): 3.85%

Loss Bucket Probability

0.5
0.4
0.3
0.2
0.1
0.0

0 0.04 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.75 0.8 0.85 0.9 0.95 1

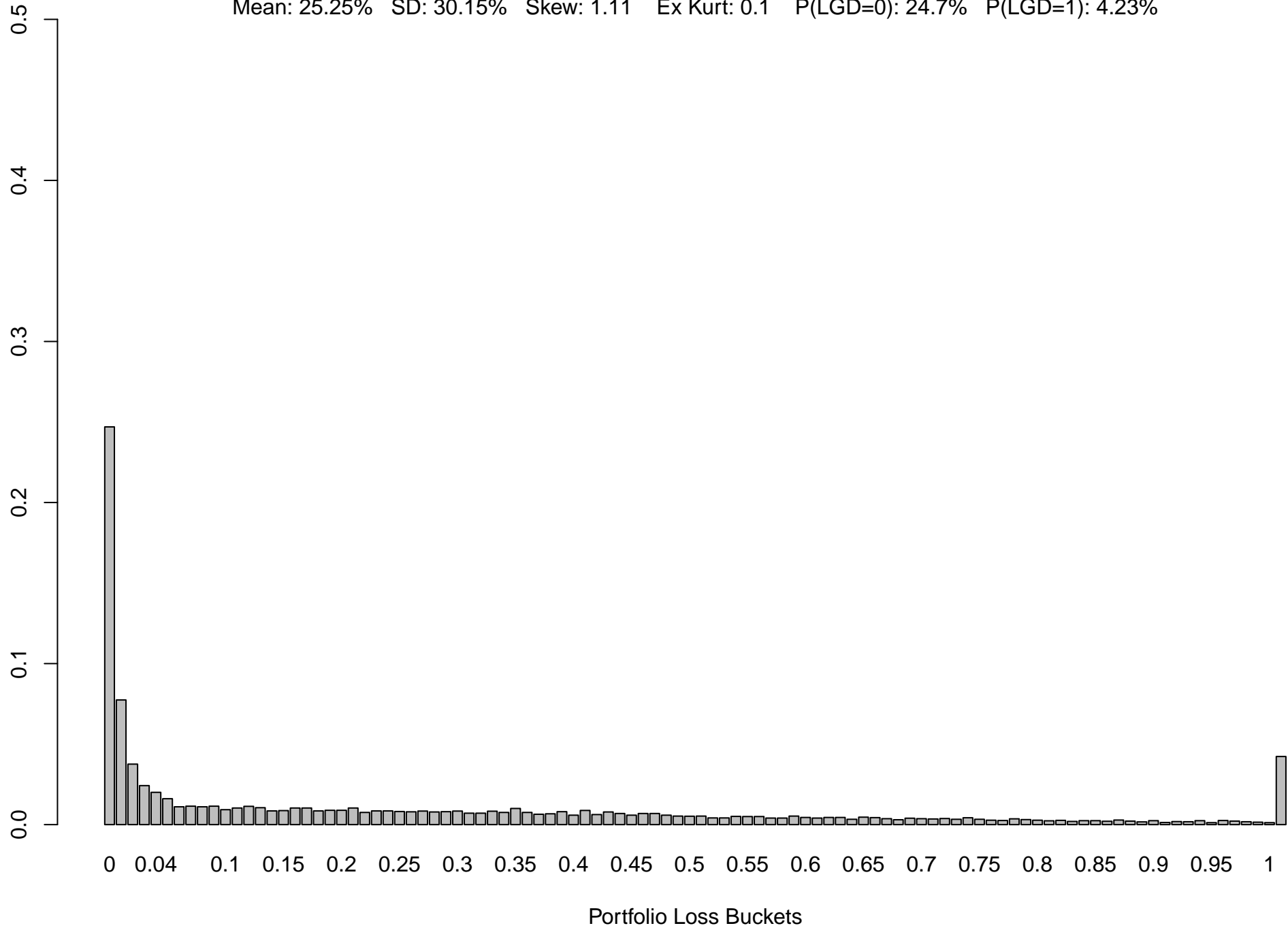
Portfolio Loss Buckets



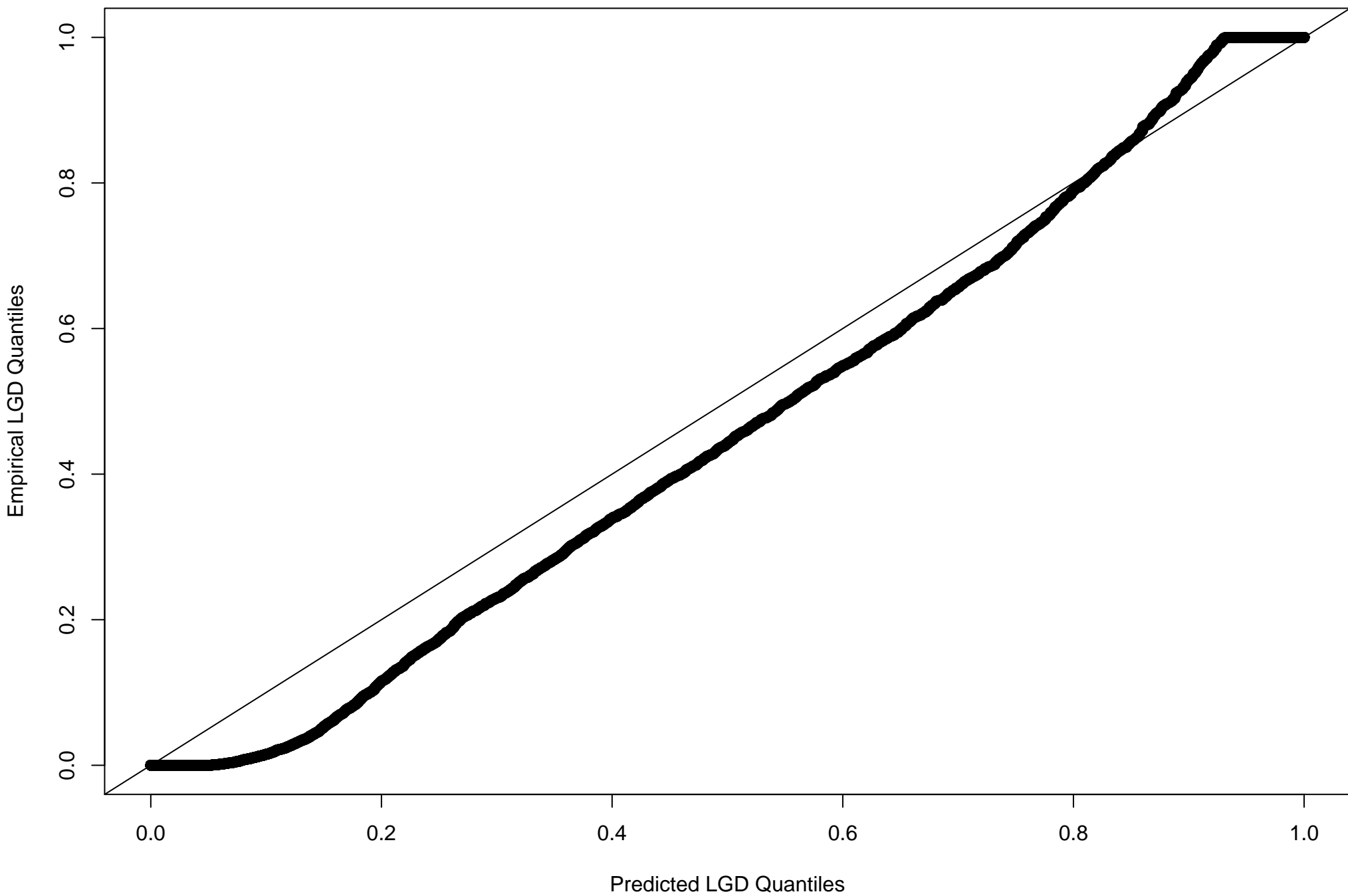
Empirical LGD (EAD=1) Bucket Probability on Test2006 Data

Mean: 25.25% SD: 30.15% Skew: 1.11 Ex Kurt: 0.1 P(LGD=0): 24.7% P(LGD=1): 4.23%

Loss Bucket Probability

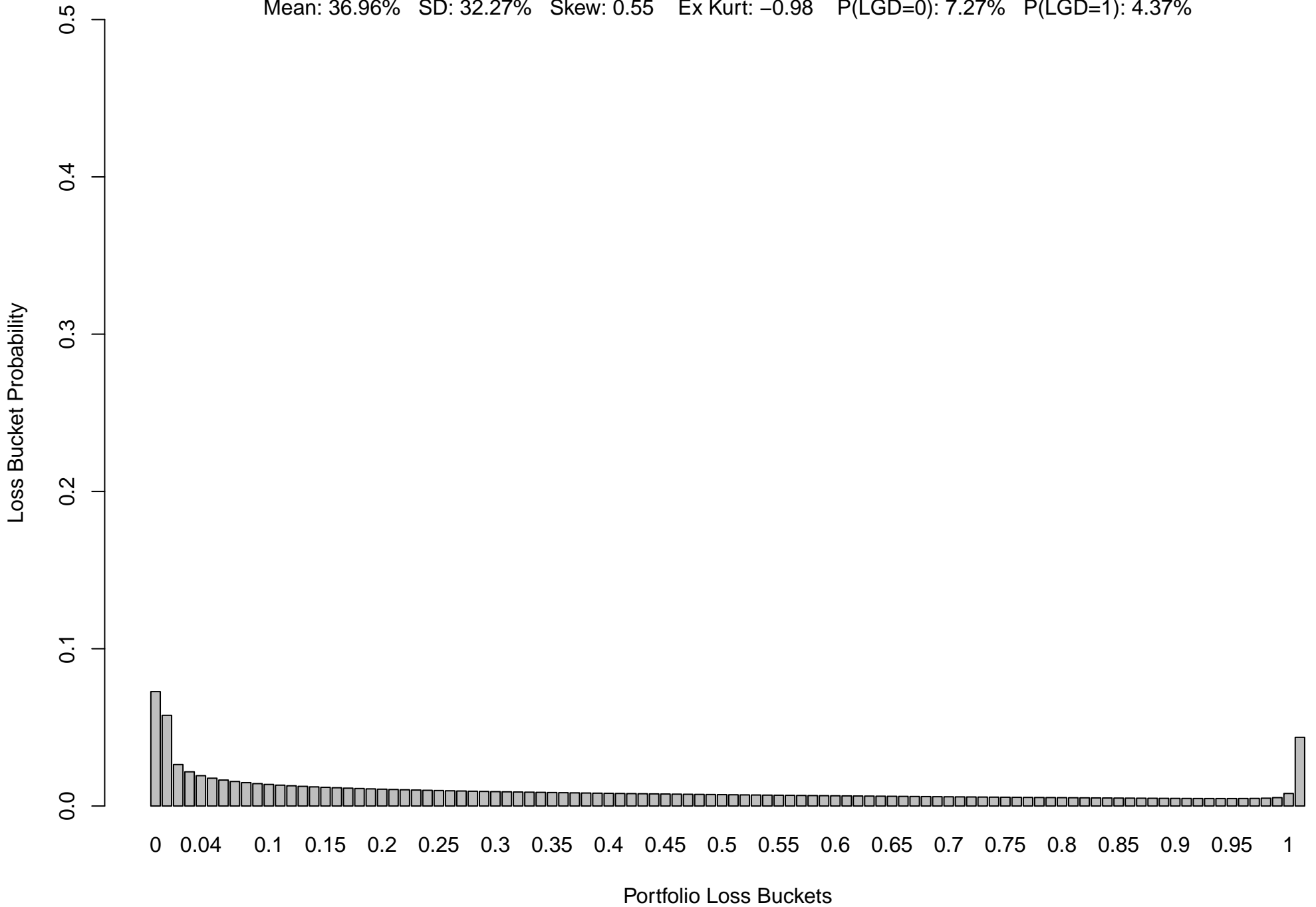


QQ Plot on Test2007 Data



Predicted LGD (EAD=1) Bucket Probability on Test2007 Data

Mean: 36.96% SD: 32.27% Skew: 0.55 Ex Kurt: -0.98 P(LGD=0): 7.27% P(LGD=1): 4.37%



Empirical LGD (EAD=1) Bucket Probability on Test2007 Data

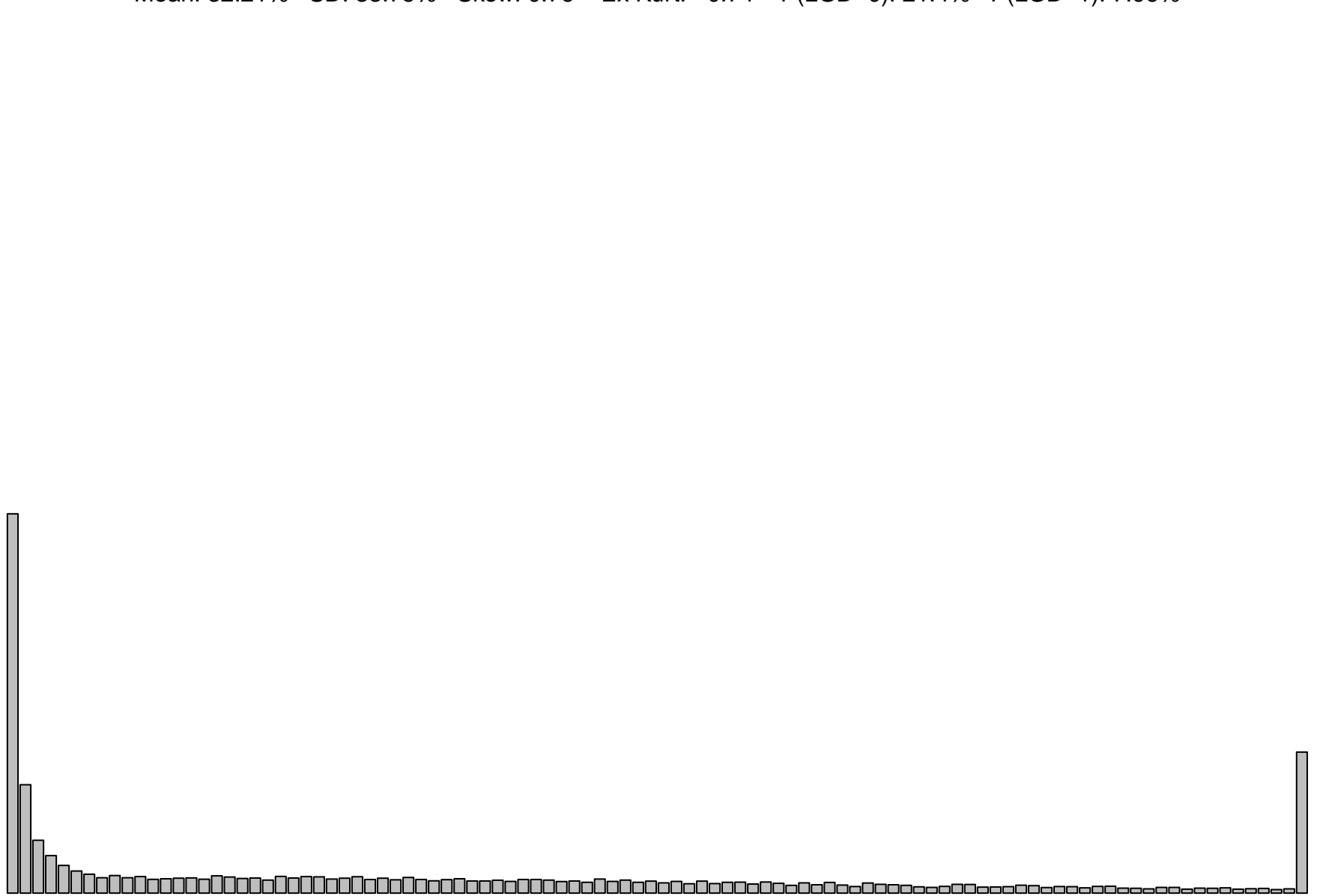
Mean: 32.21% SD: 33.75% Skew: 0.76 Ex Kurt: -0.74 P(LGD=0): 21.4% P(LGD=1): 7.96%

Loss Bucket Probability

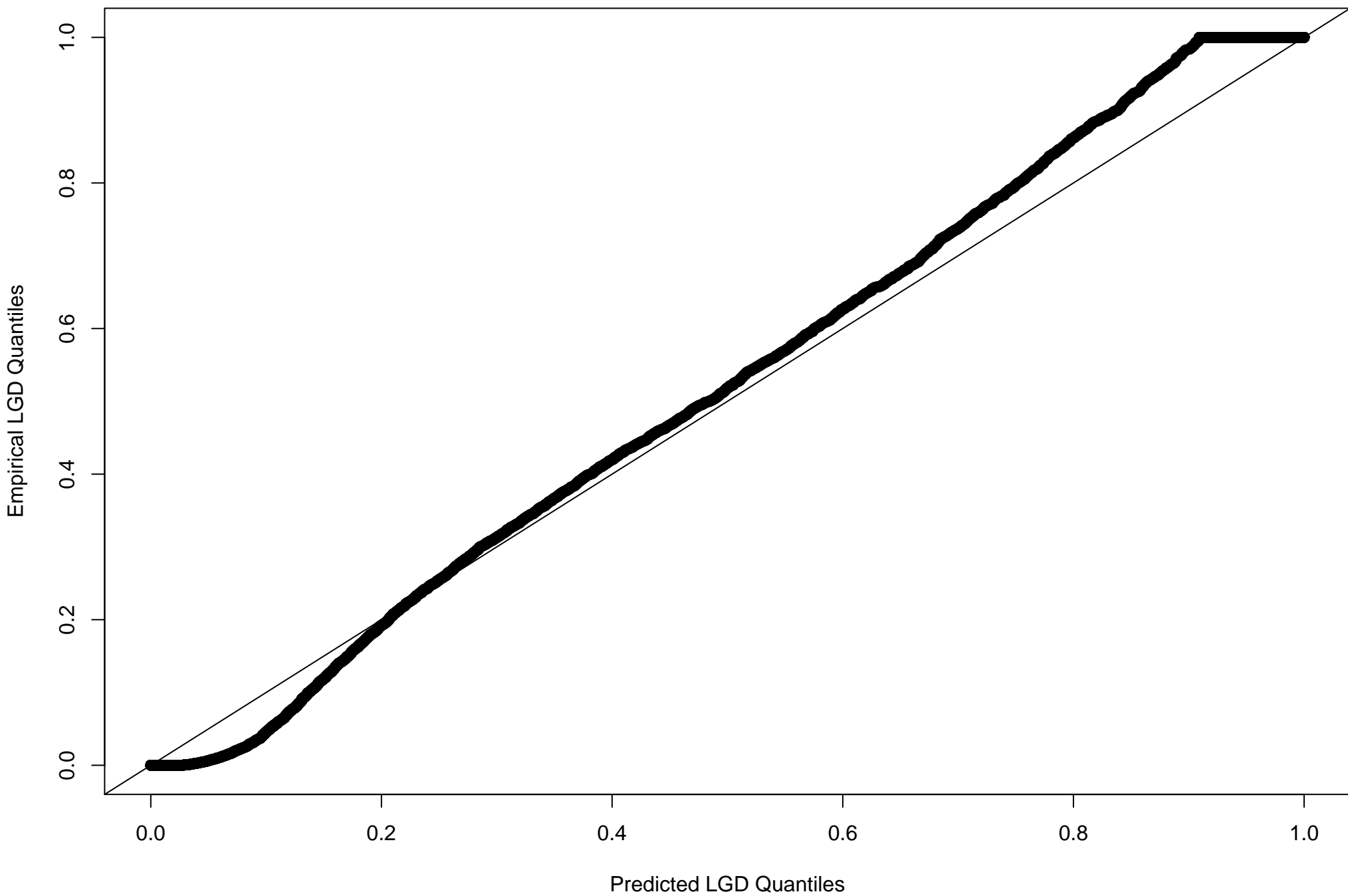
0.5
0.4
0.3
0.2
0.1
0.0

0 0.04 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.75 0.8 0.85 0.9 0.95 1

Portfolio Loss Buckets

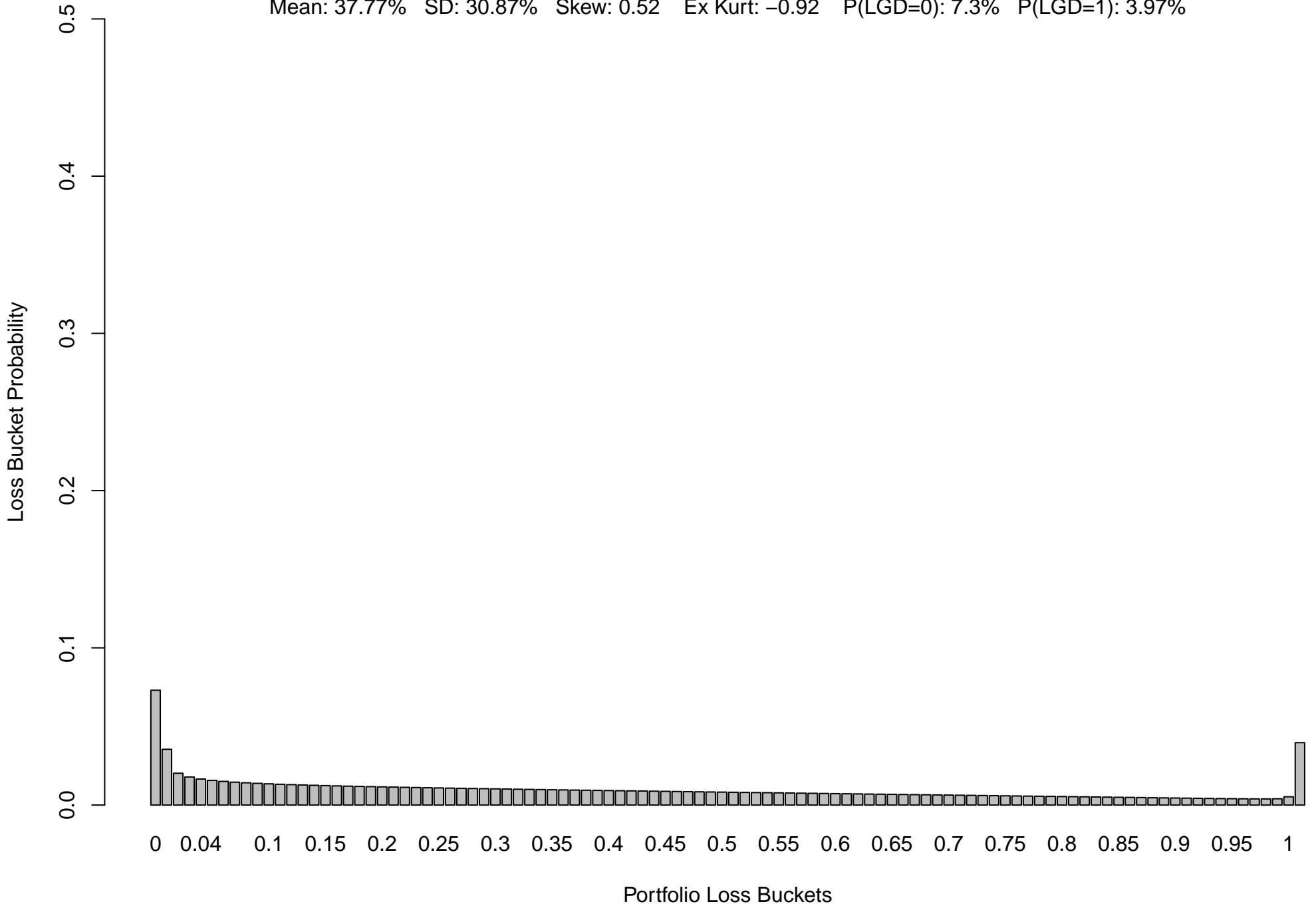


QQ Plot on Test2008 Data



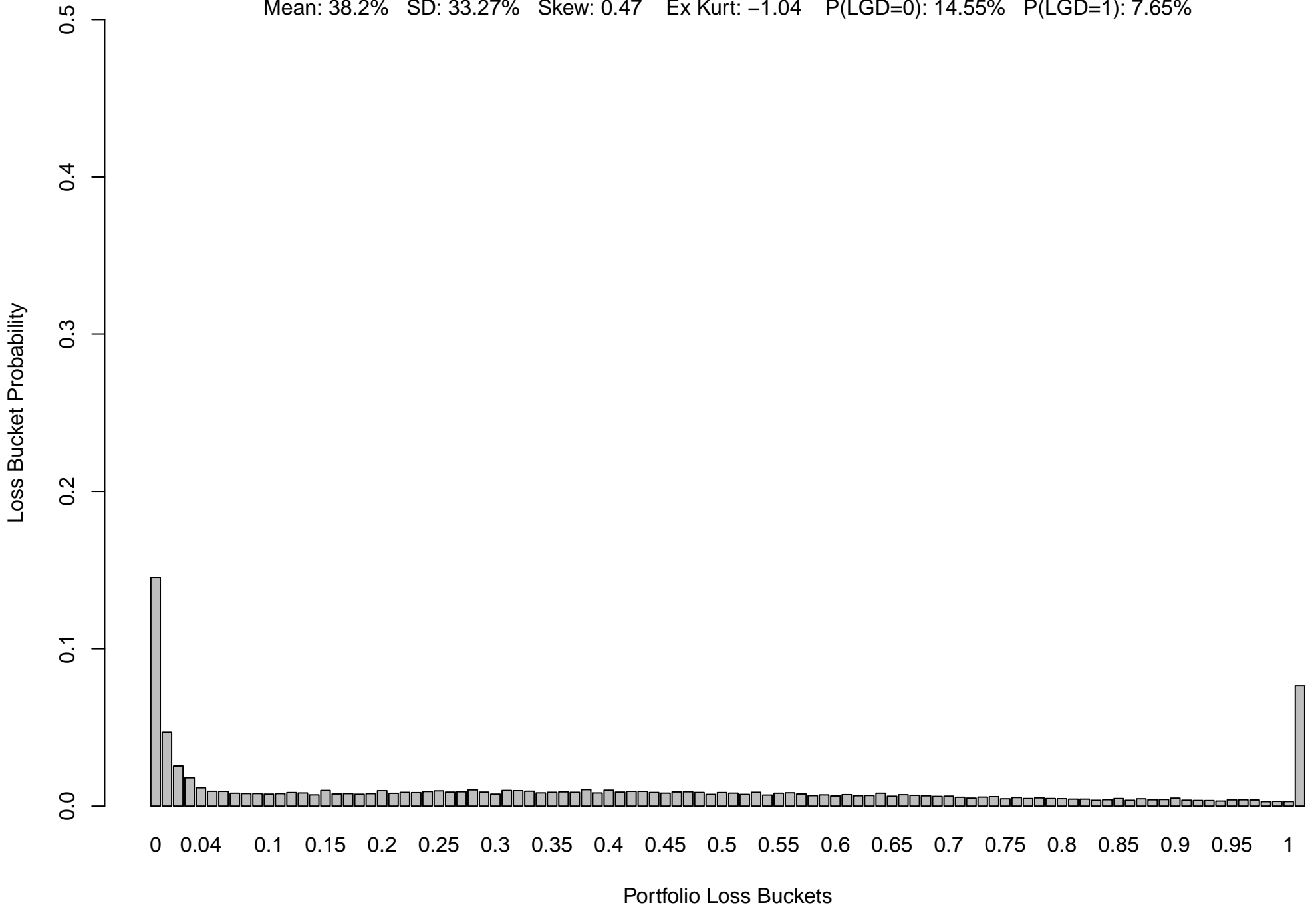
Predicted LGD (EAD=1) Bucket Probability on Test2008 Data

Mean: 37.77% SD: 30.87% Skew: 0.52 Ex Kurt: -0.92 P(LGD=0): 7.3% P(LGD=1): 3.97%

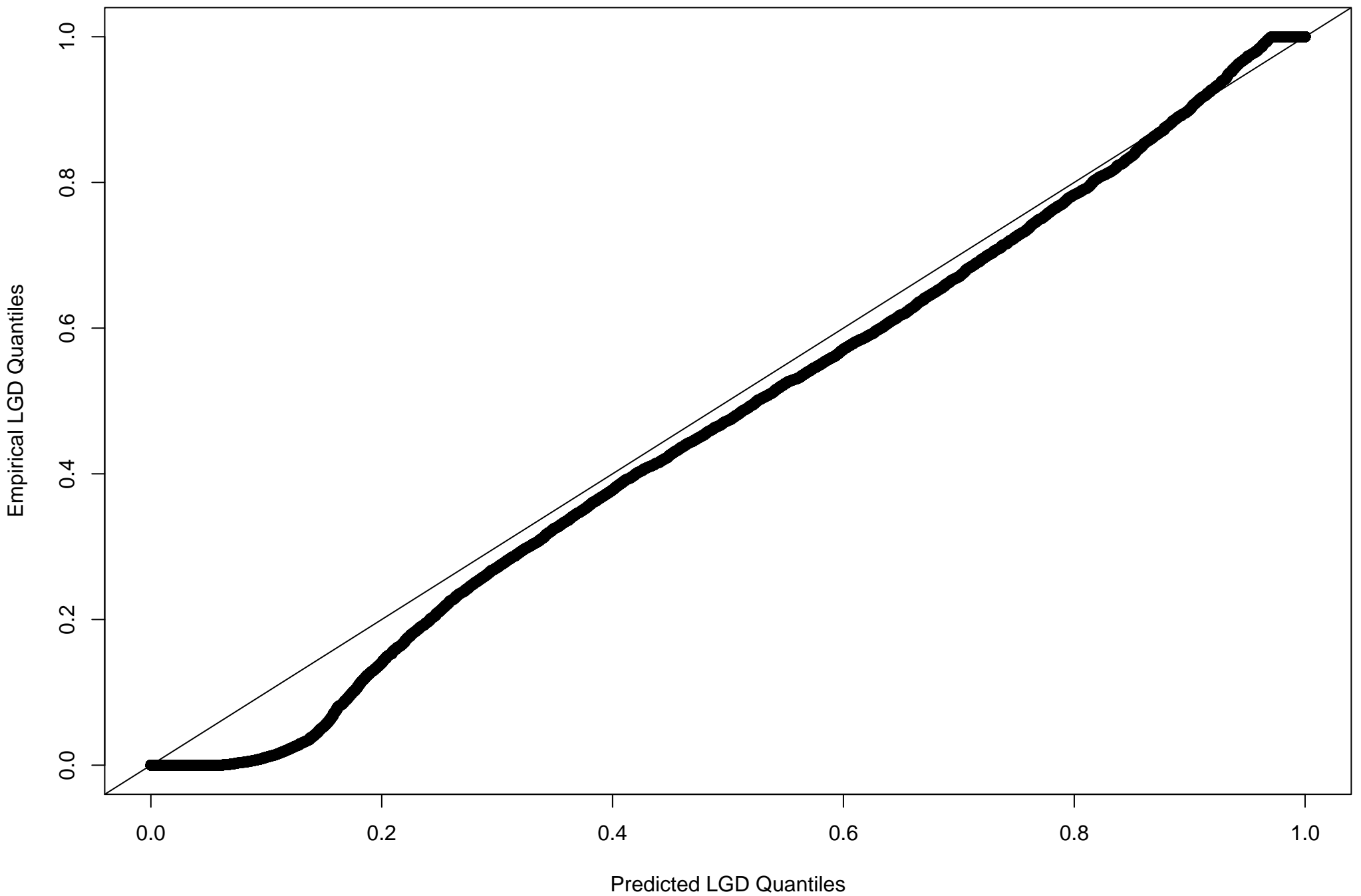


Empirical LGD (EAD=1) Bucket Probability on Test2008 Data

Mean: 38.2% SD: 33.27% Skew: 0.47 Ex Kurt: -1.04 P(LGD=0): 14.55% P(LGD=1): 7.65%

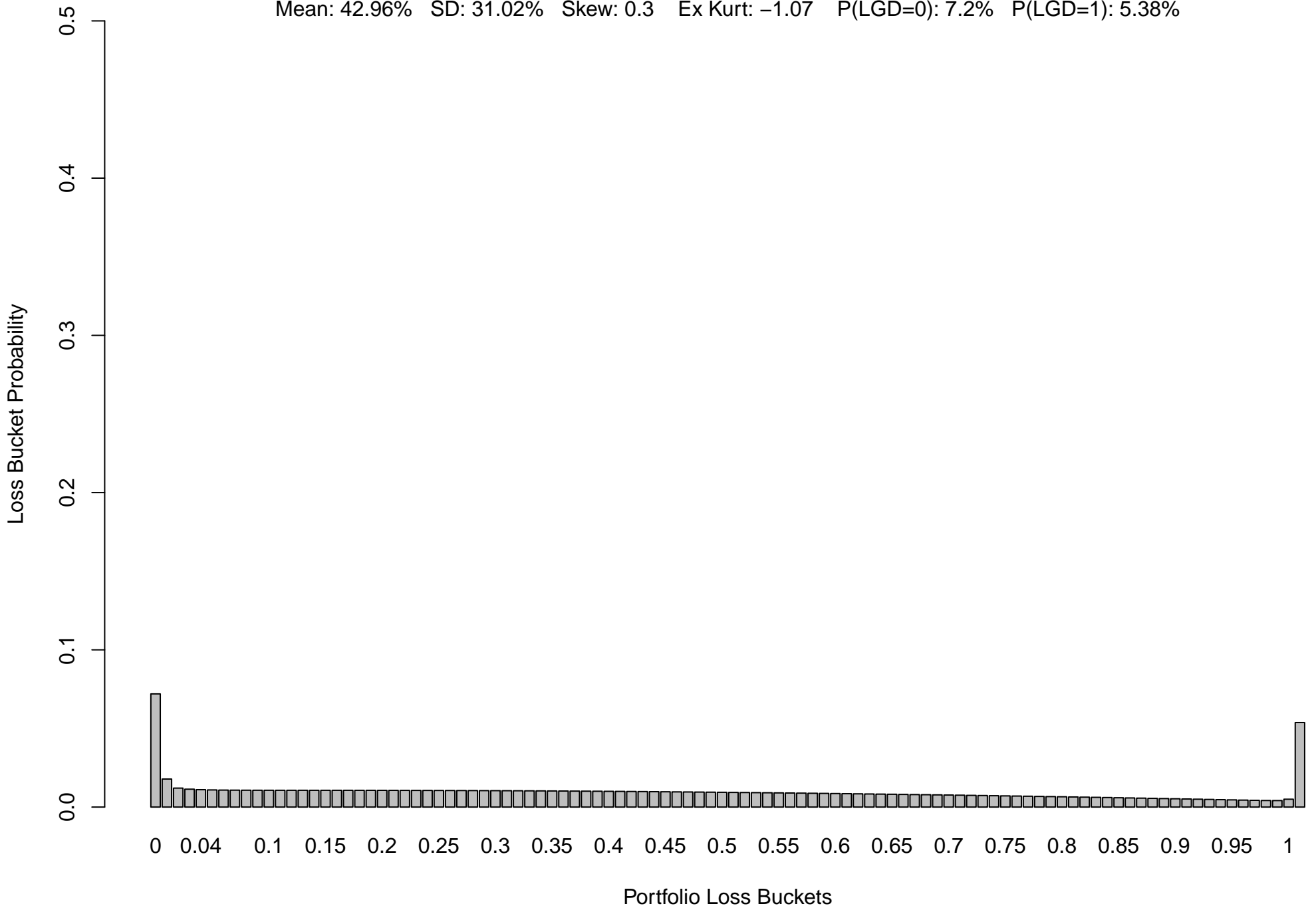


QQ Plot on Test2009 Data



Predicted LGD (EAD=1) Bucket Probability on Test2009 Data

Mean: 42.96% SD: 31.02% Skew: 0.3 Ex Kurt: -1.07 P(LGD=0): 7.2% P(LGD=1): 5.38%



Empirical LGD (EAD=1) Bucket Probability on Test2009 Data

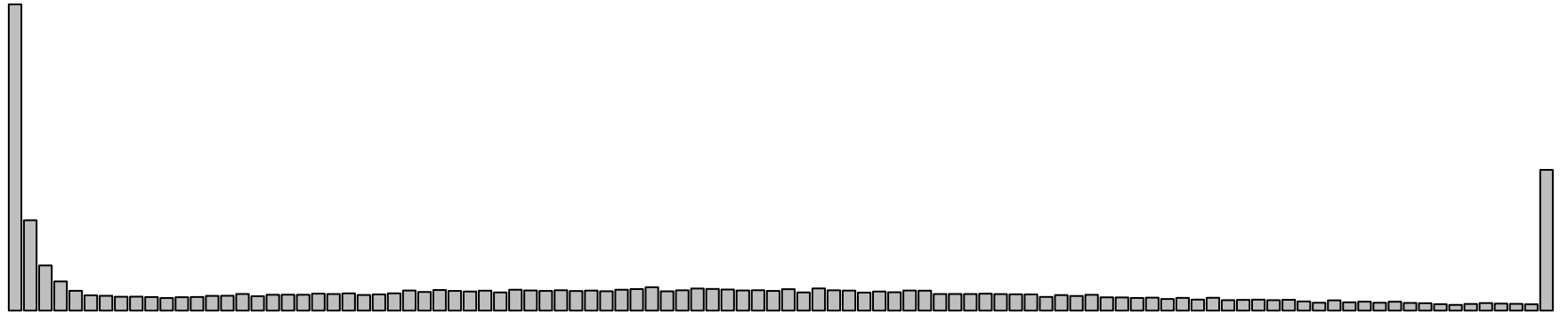
Mean: 39.66% SD: 32.45% Skew: 0.35 Ex Kurt: -1.06 P(LGD=0): 14.55% P(LGD=1): 6.69%

Loss Bucket Probability

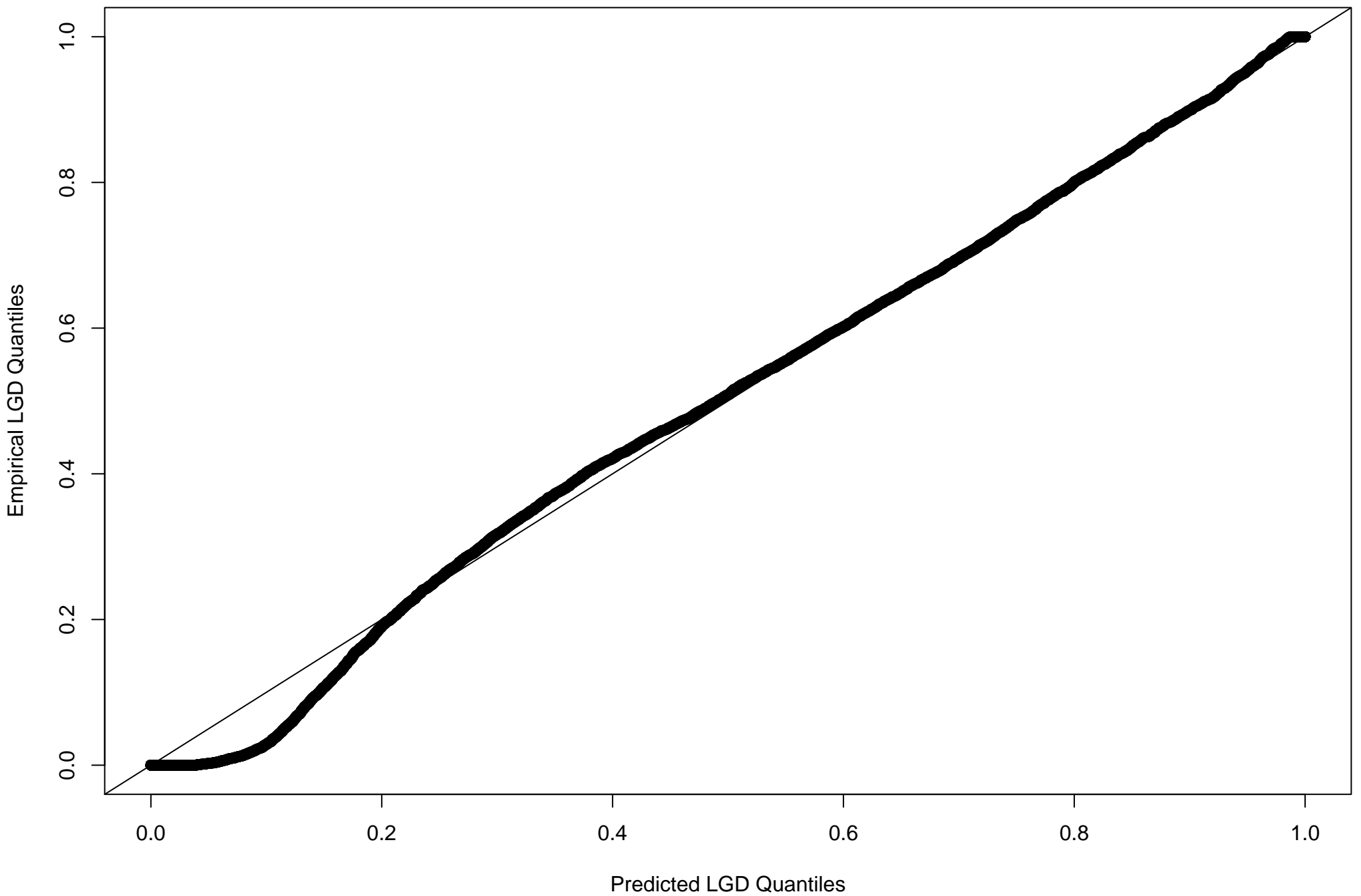
0.5
0.4
0.3
0.2
0.1
0.0

0 0.04 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.75 0.8 0.85 0.9 0.95 1

Portfolio Loss Buckets

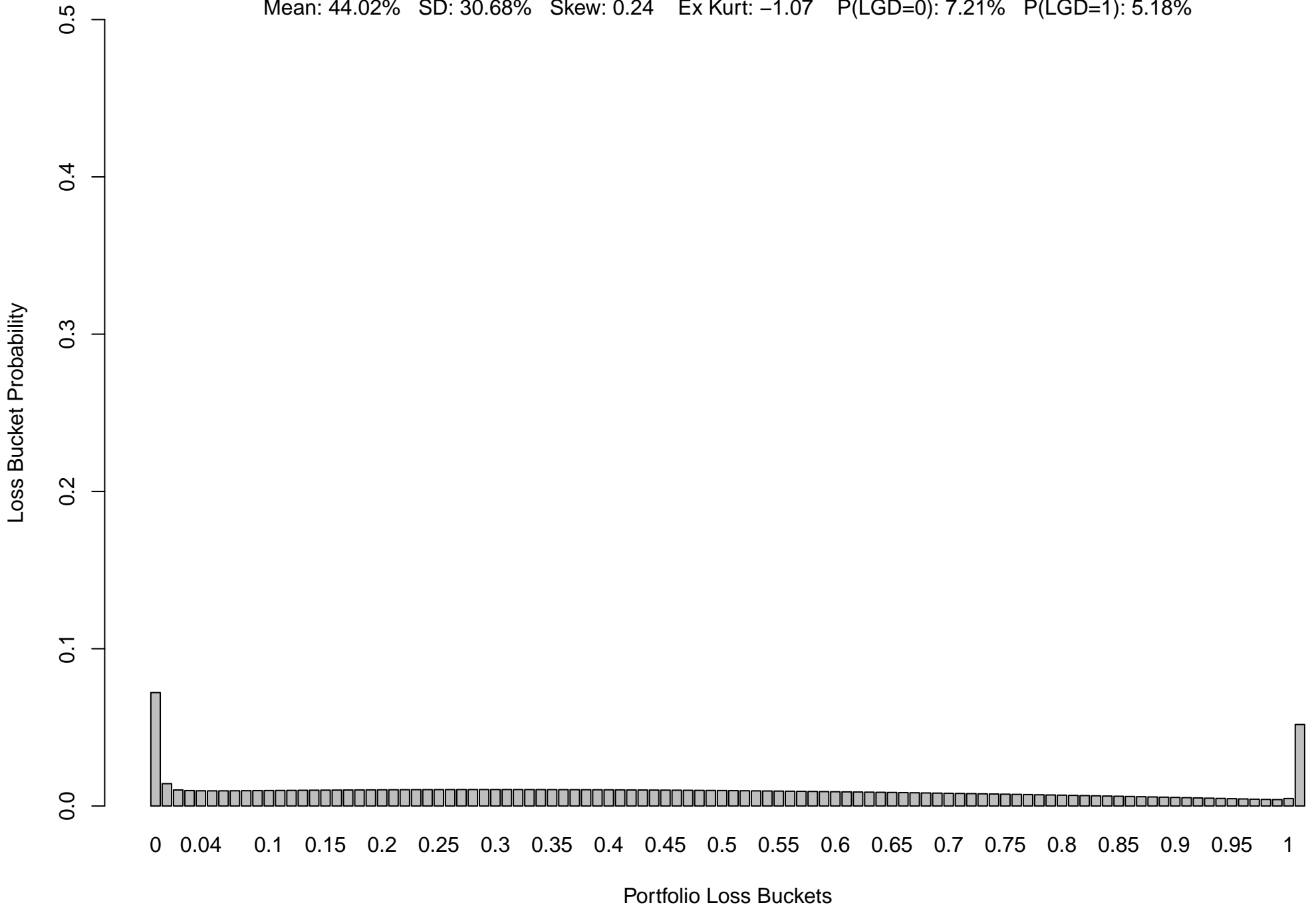


QQ Plot on Test2010 Data



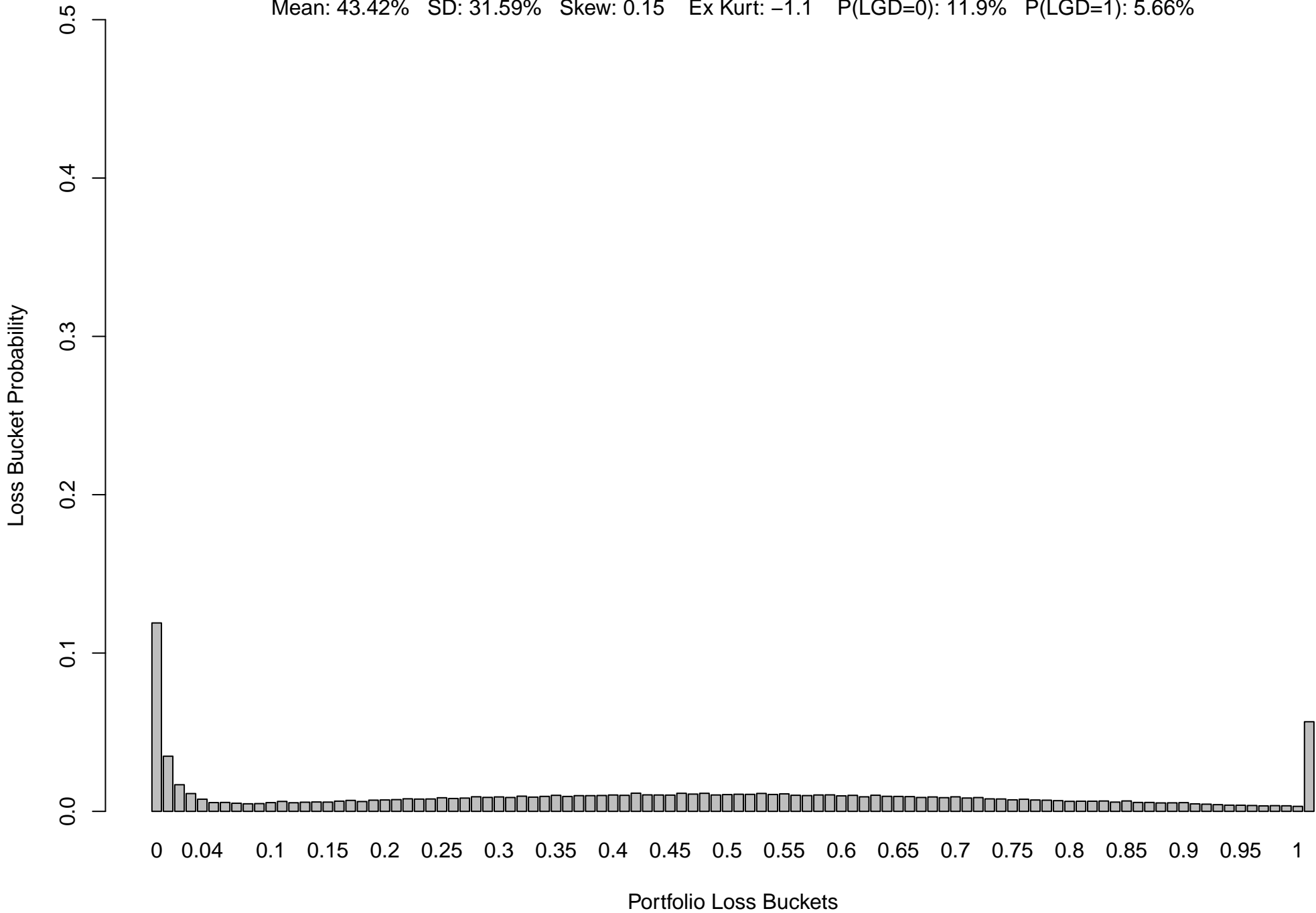
Predicted LGD (EAD=1) Bucket Probability on Test2010 Data

Mean: 44.02% SD: 30.68% Skew: 0.24 Ex Kurt: -1.07 P(LGD=0): 7.21% P(LGD=1): 5.18%

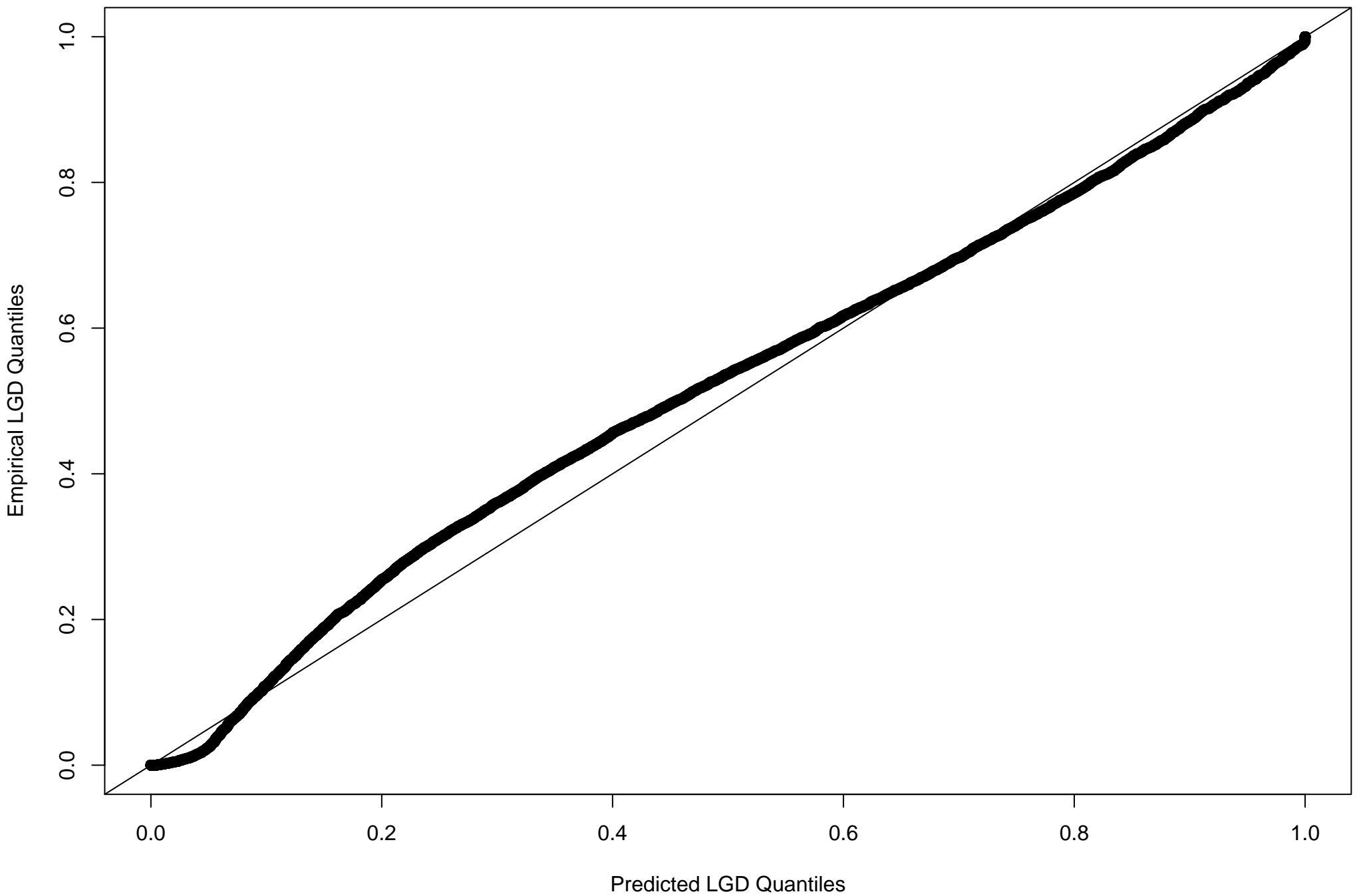


Empirical LGD (EAD=1) Bucket Probability on Test2010 Data

Mean: 43.42% SD: 31.59% Skew: 0.15 Ex Kurt: -1.1 P(LGD=0): 11.9% P(LGD=1): 5.66%

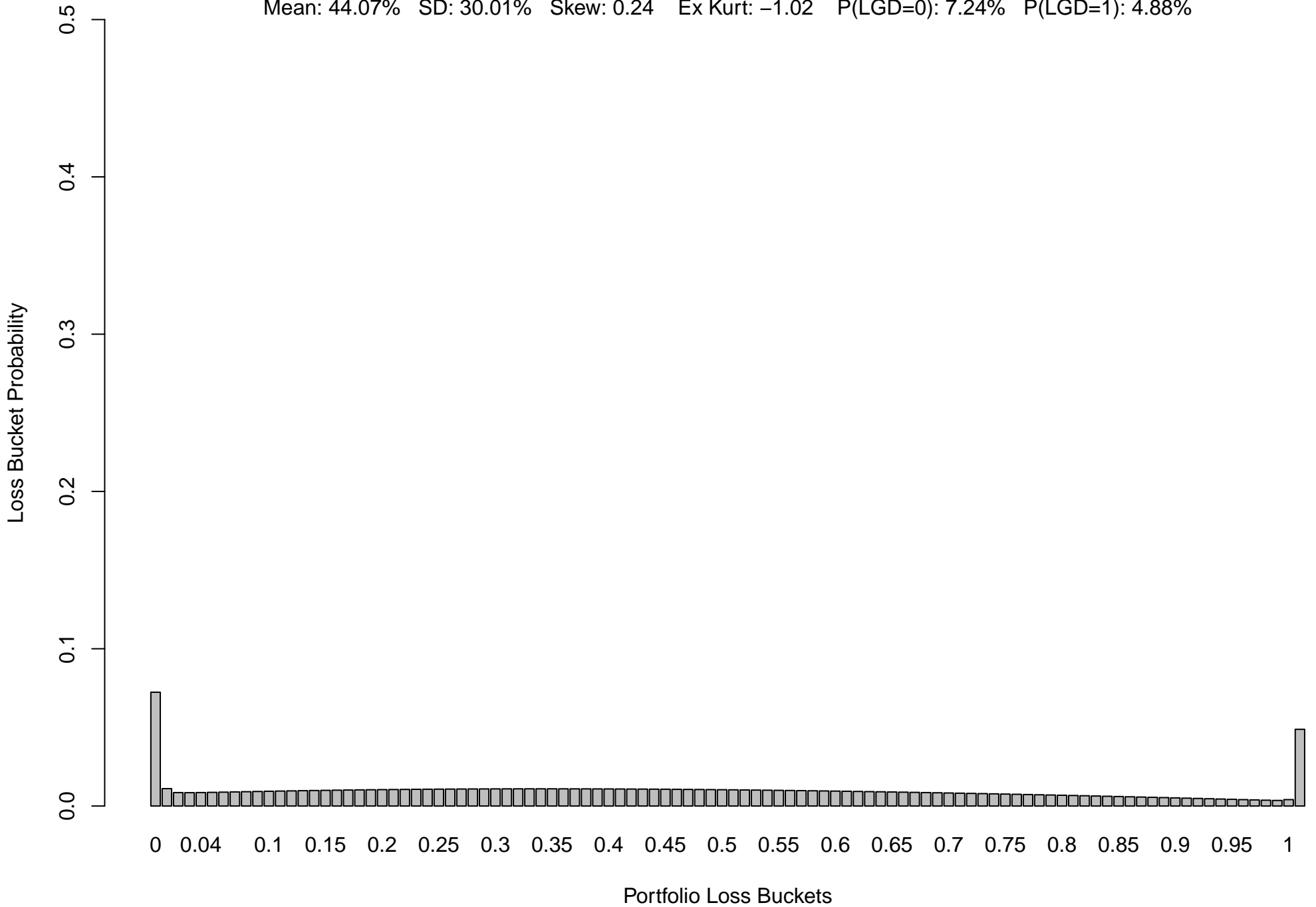


QQ Plot on Test2011 Data



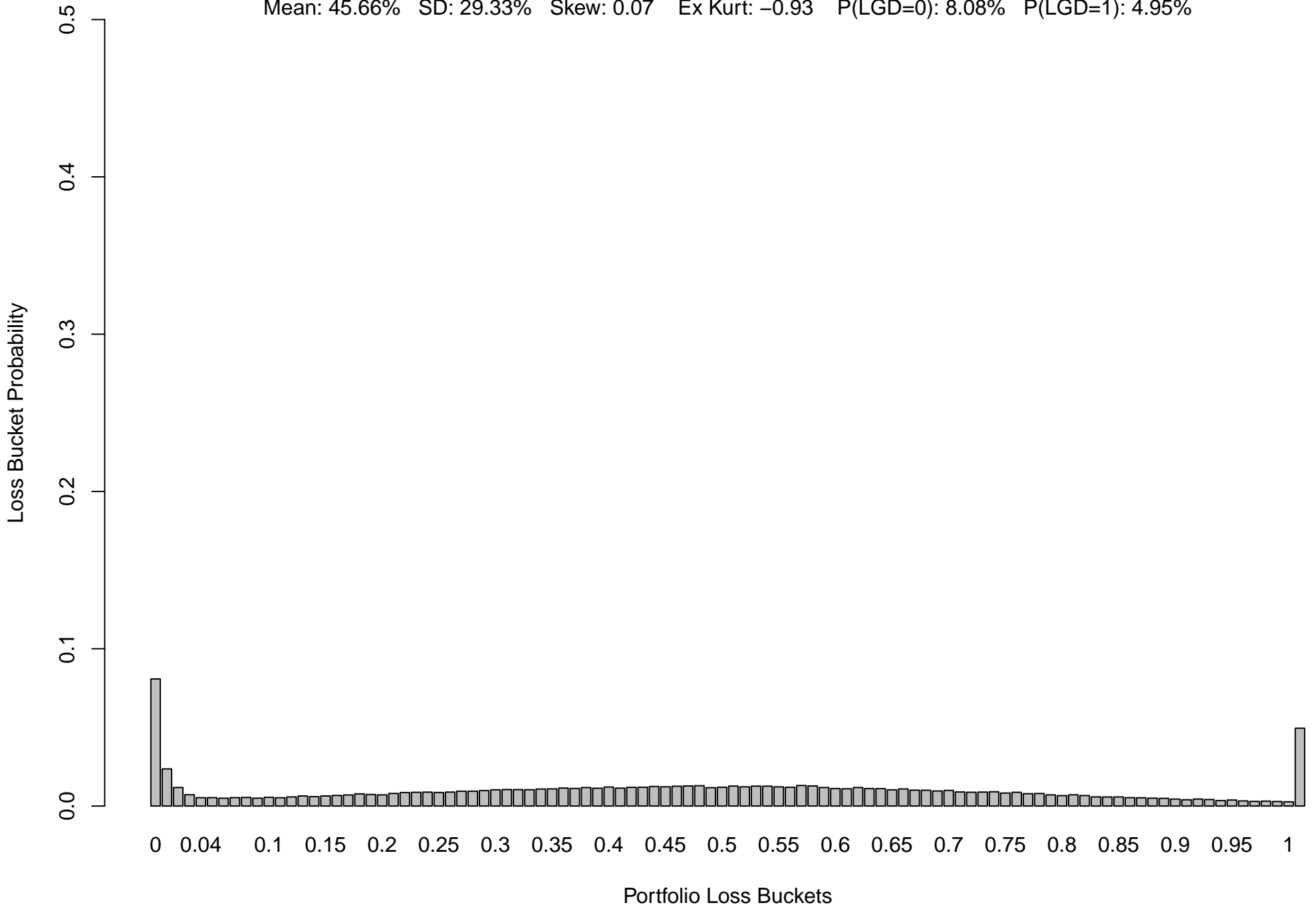
Predicted LGD (EAD=1) Bucket Probability on Test2011 Data

Mean: 44.07% SD: 30.01% Skew: 0.24 Ex Kurt: -1.02 P(LGD=0): 7.24% P(LGD=1): 4.88%

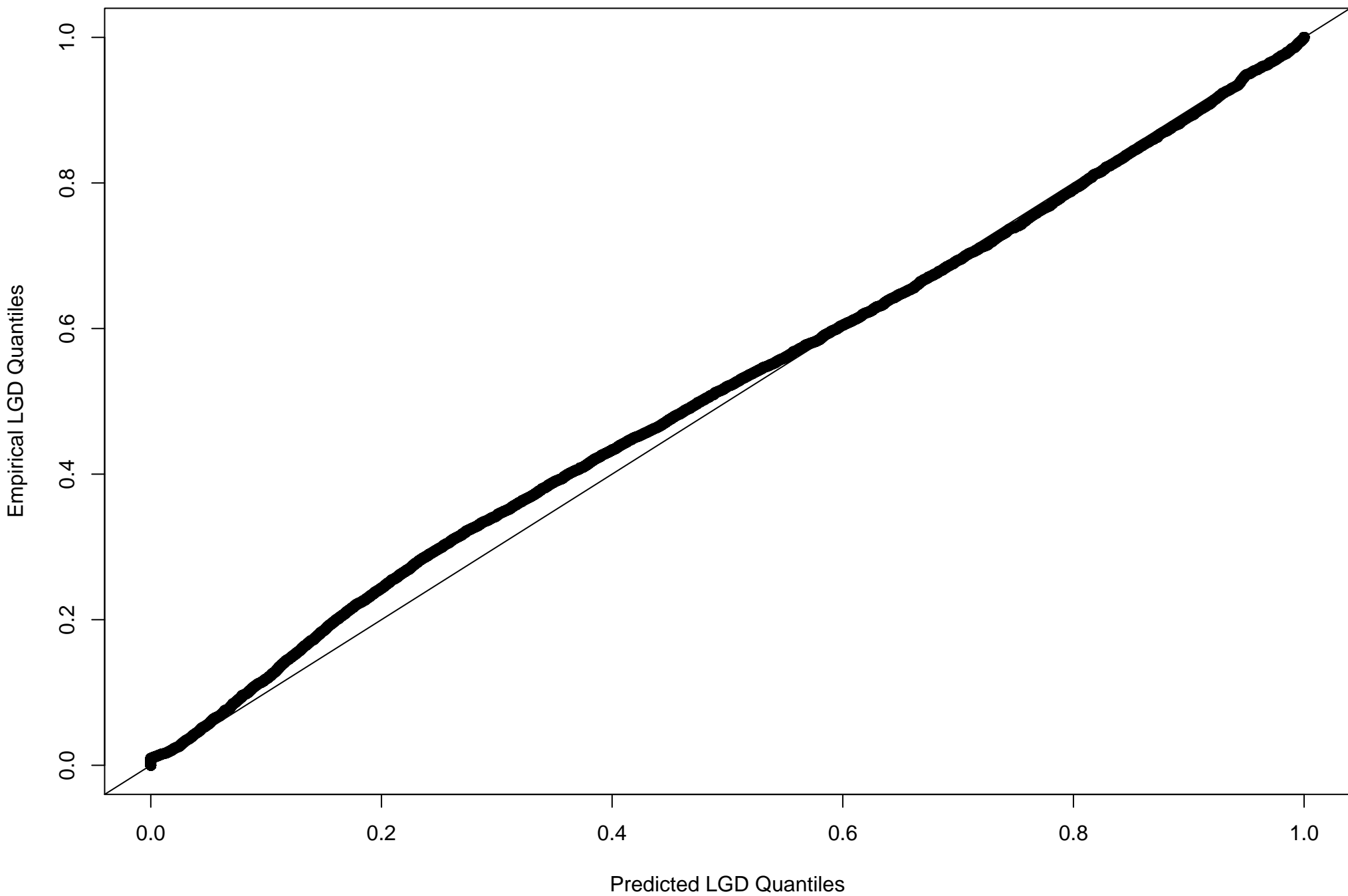


Empirical LGD (EAD=1) Bucket Probability on Test2011 Data

Mean: 45.66% SD: 29.33% Skew: 0.07 Ex Kurt: -0.93 P(LGD=0): 8.08% P(LGD=1): 4.95%

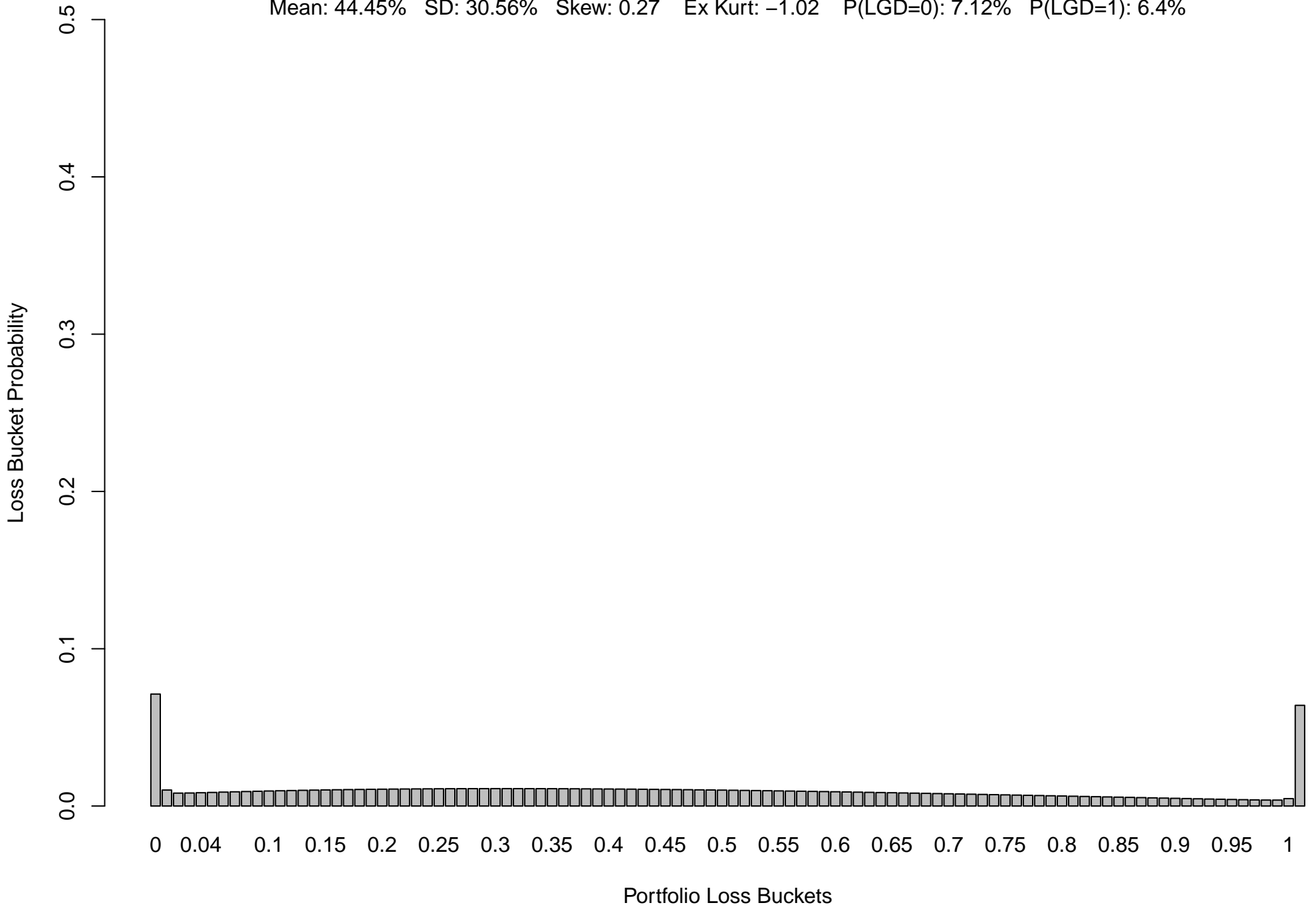


QQ Plot on Test2012 Data



Predicted LGD (EAD=1) Bucket Probability on Test2012 Data

Mean: 44.45% SD: 30.56% Skew: 0.27 Ex Kurt: -1.02 P(LGD=0): 7.12% P(LGD=1): 6.4%



Empirical LGD (EAD=1) Bucket Probability on Test2012 Data

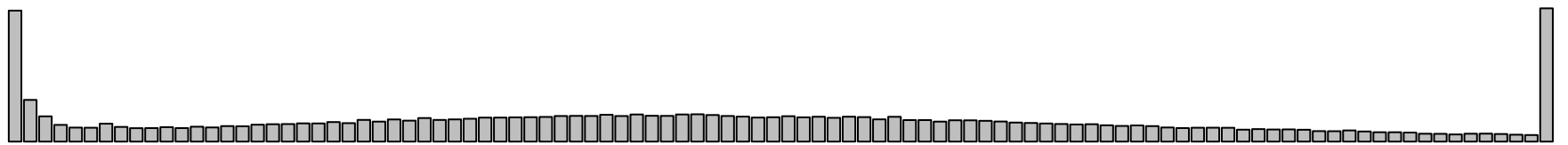
Mean: 45.62% SD: 29.62% Skew: 0.19 Ex Kurt: -0.92 P(LGD=0): 6.22% P(LGD=1): 6.33%

Loss Bucket Probability

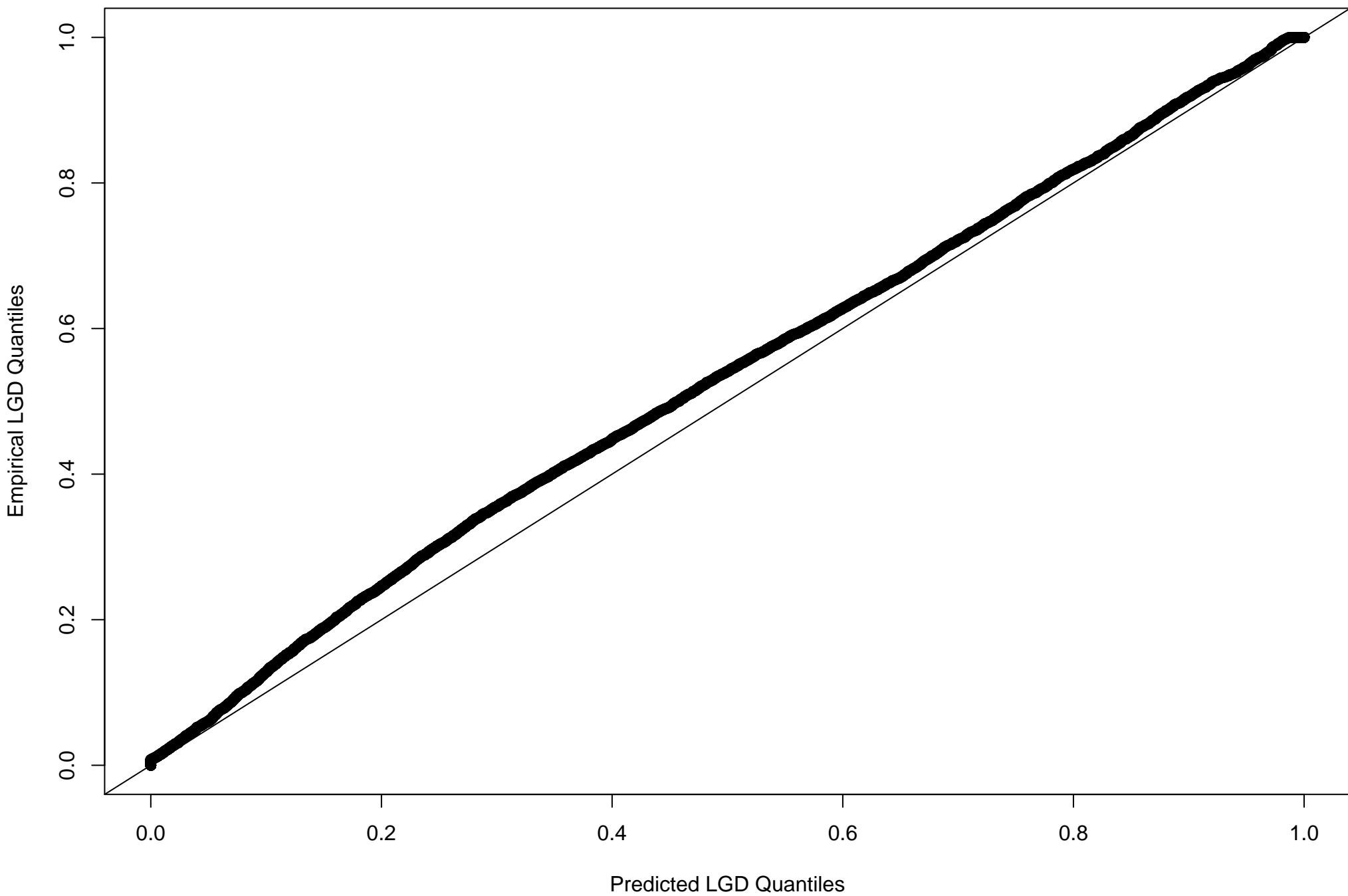
0.5
0.4
0.3
0.2
0.1
0.0

0 0.04 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.75 0.8 0.85 0.9 0.95 1

Portfolio Loss Buckets

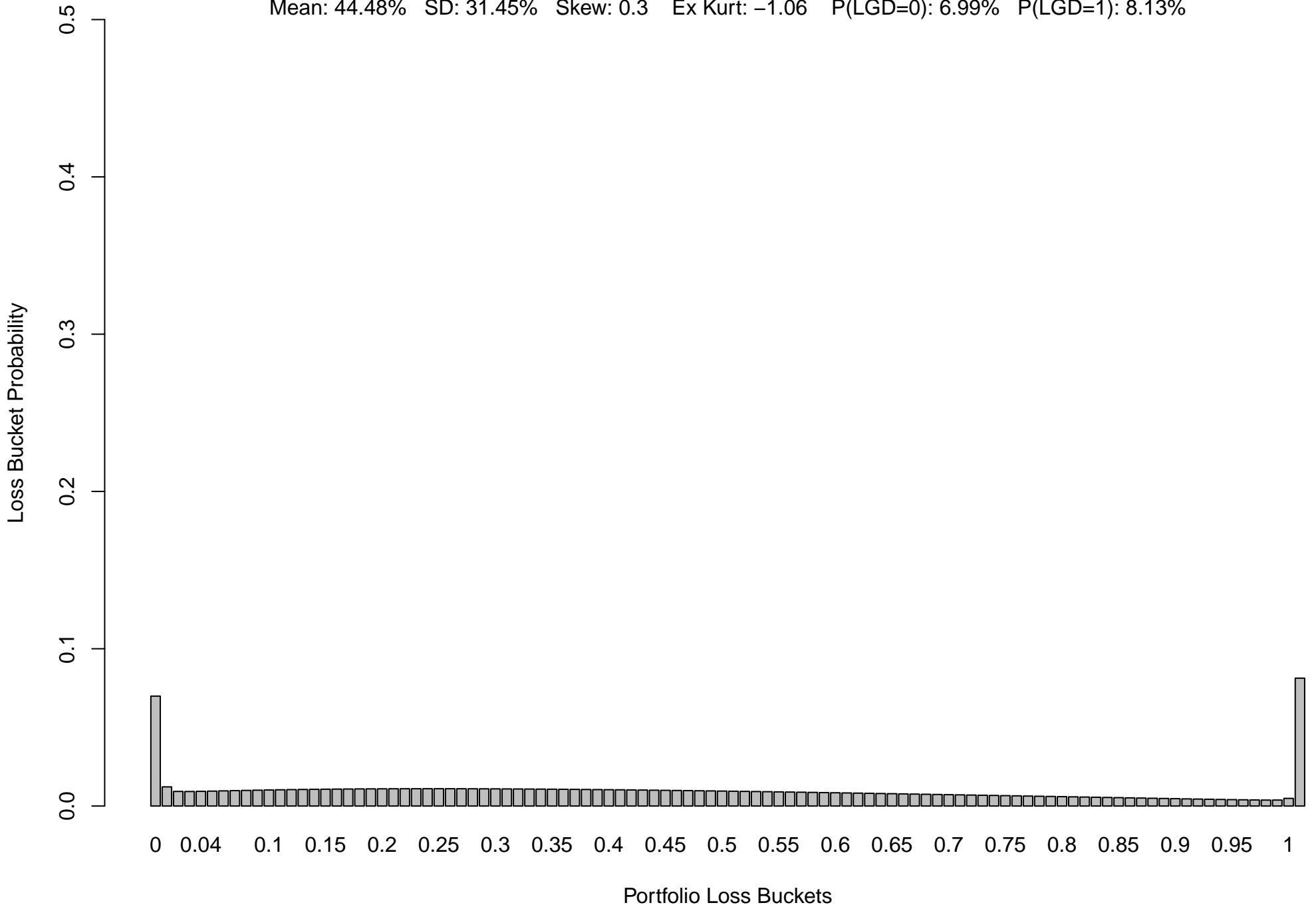


QQ Plot on Test2013 Data



Predicted LGD (EAD=1) Bucket Probability on Test2013 Data

Mean: 44.48% SD: 31.45% Skew: 0.3 Ex Kurt: -1.06 P(LGD=0): 6.99% P(LGD=1): 8.13%



Empirical LGD (EAD=1) Bucket Probability on Test2013 Data

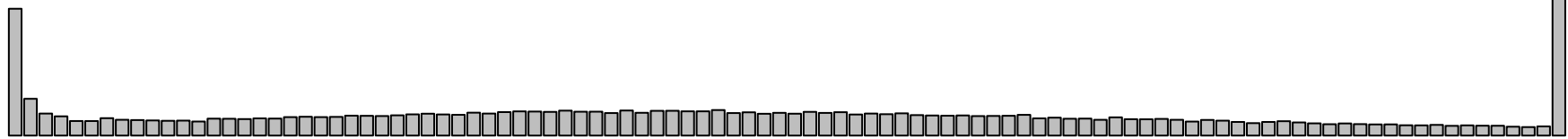
Mean: 47.47% SD: 30.89% Skew: 0.15 Ex Kurt: -1.05 P(LGD=0): 5.98% P(LGD=1): 8.3%

Loss Bucket Probability

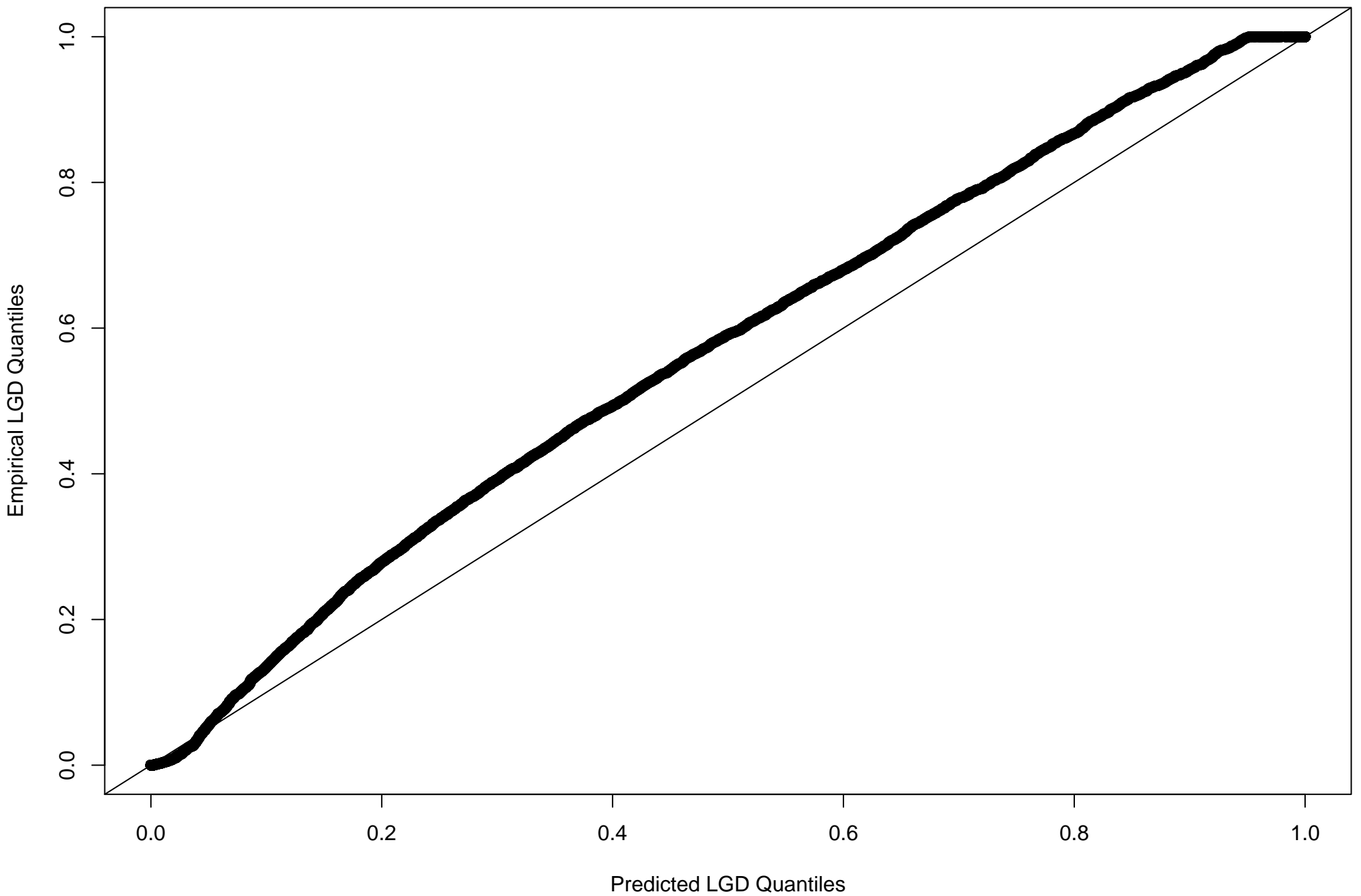
0.5
0.4
0.3
0.2
0.1
0.0

0 0.04 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.75 0.8 0.85 0.9 0.95 1

Portfolio Loss Buckets

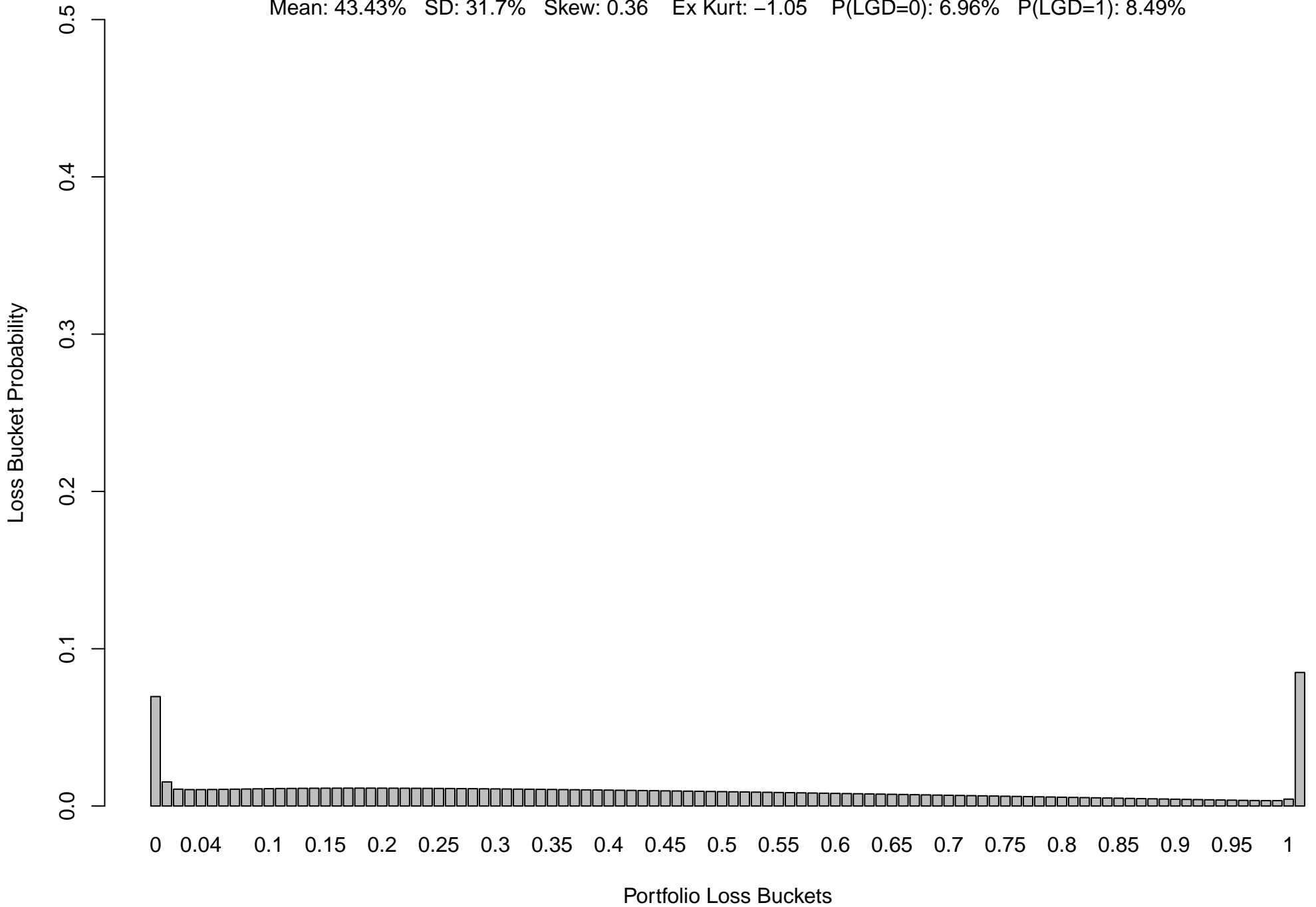


QQ Plot on Test2014 Data



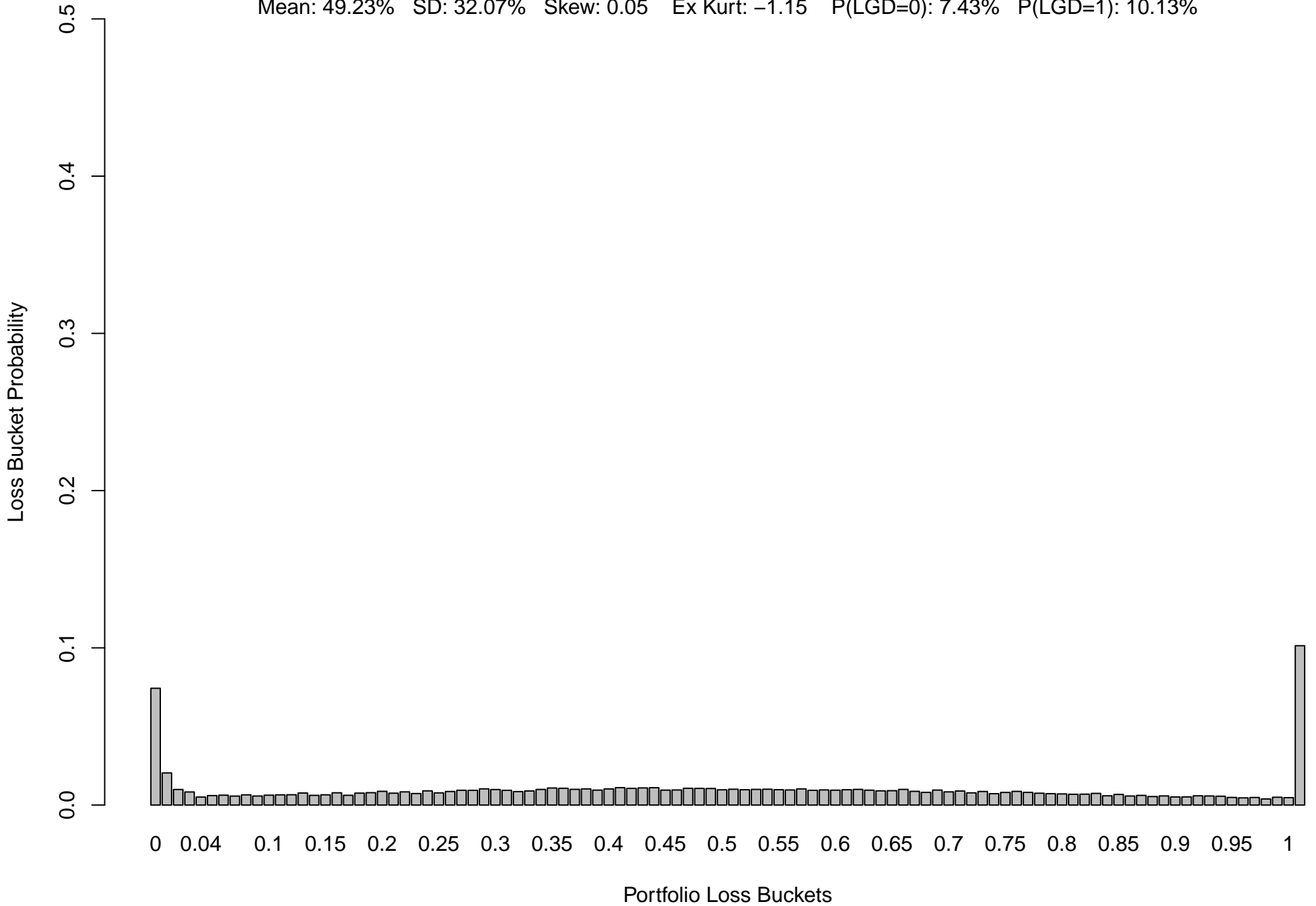
Predicted LGD (EAD=1) Bucket Probability on Test2014 Data

Mean: 43.43% SD: 31.7% Skew: 0.36 Ex Kurt: -1.05 P(LGD=0): 6.96% P(LGD=1): 8.49%

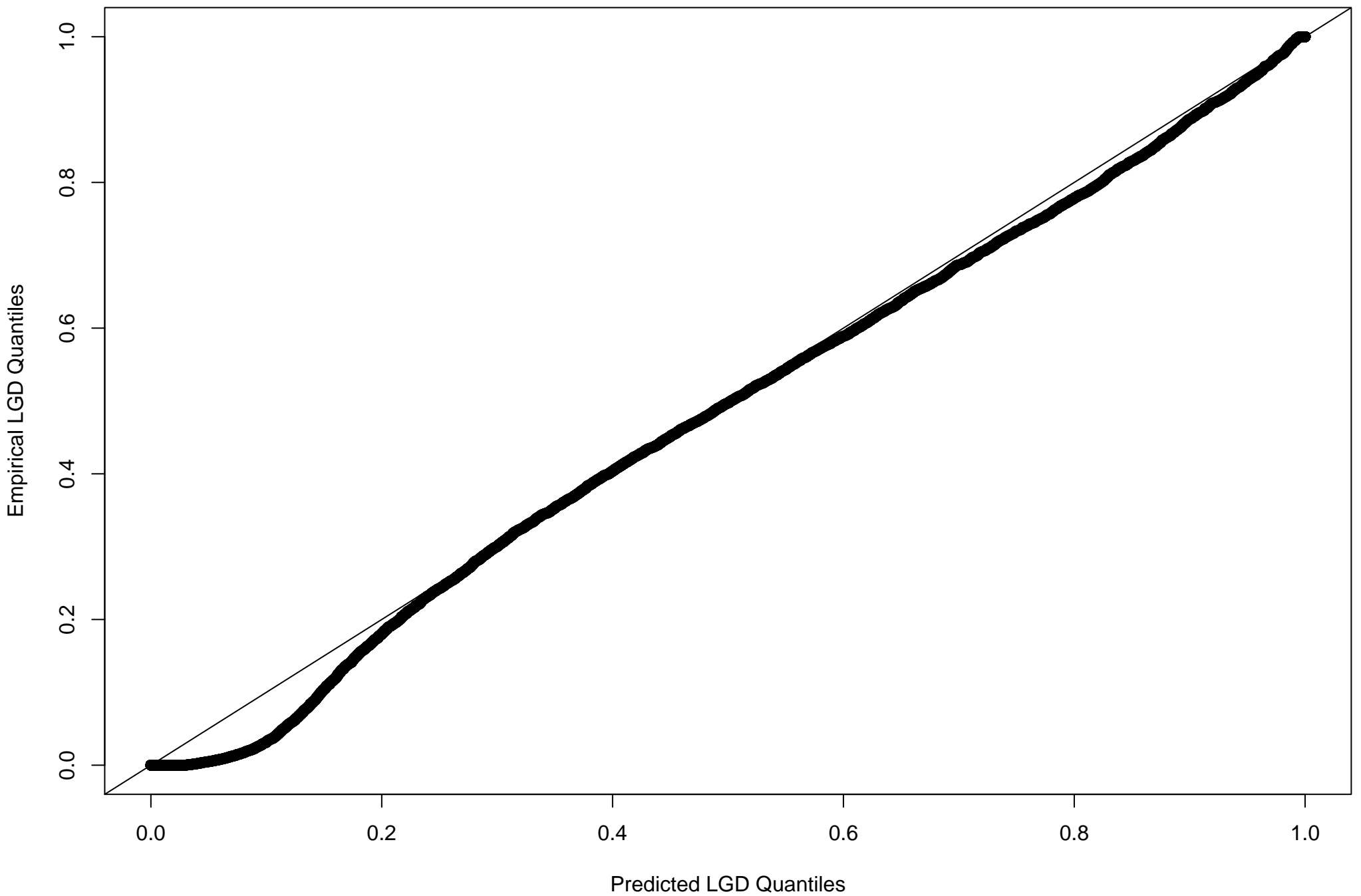


Empirical LGD (EAD=1) Bucket Probability on Test2014 Data

Mean: 49.23% SD: 32.07% Skew: 0.05 Ex Kurt: -1.15 P(LGD=0): 7.43% P(LGD=1): 10.13%

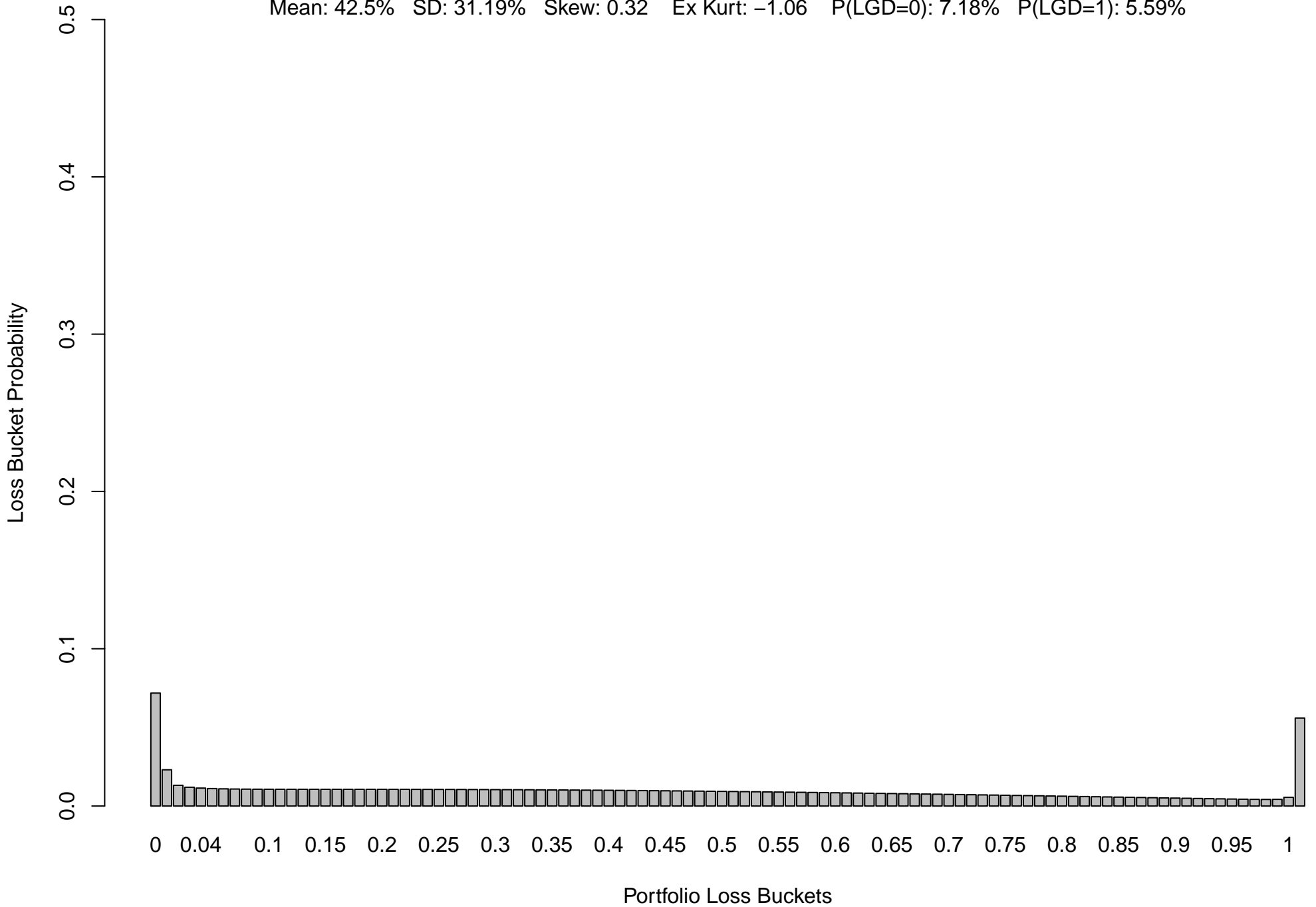


QQ Plot on All Data Data



Predicted LGD (EAD=1) Bucket Probability on All Data Data

Mean: 42.5% SD: 31.19% Skew: 0.32 Ex Kurt: -1.06 P(LGD=0): 7.18% P(LGD=1): 5.59%



Empirical LGD (EAD=1) Bucket Probability on All Data Data

Mean: 41.23% SD: 31.84% Skew: 0.28 Ex Kurt: -1.07 P(LGD=0): 11.72% P(LGD=1): 6.2%

