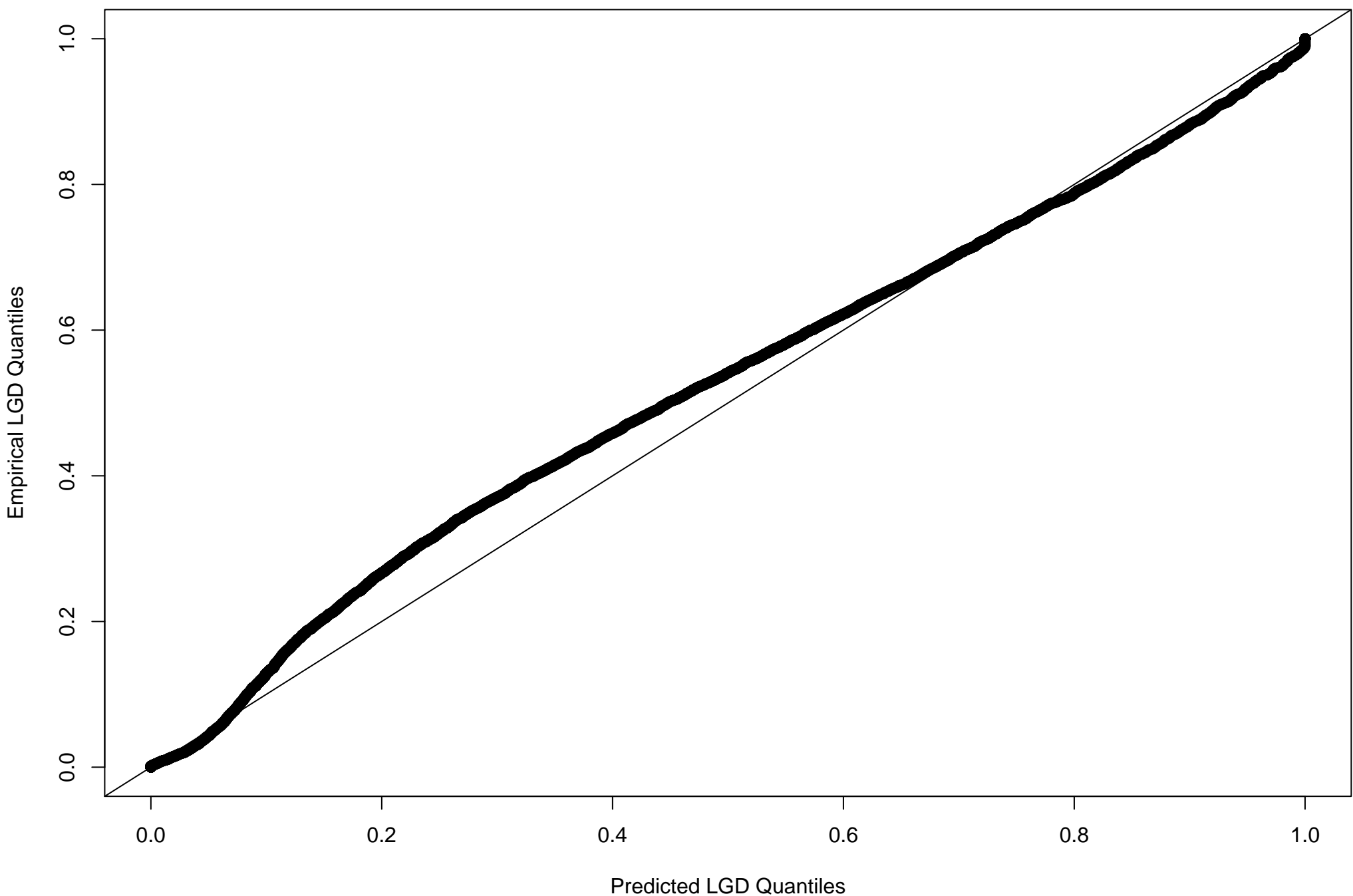


QQ Plot on Train (In-Sample) Data



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

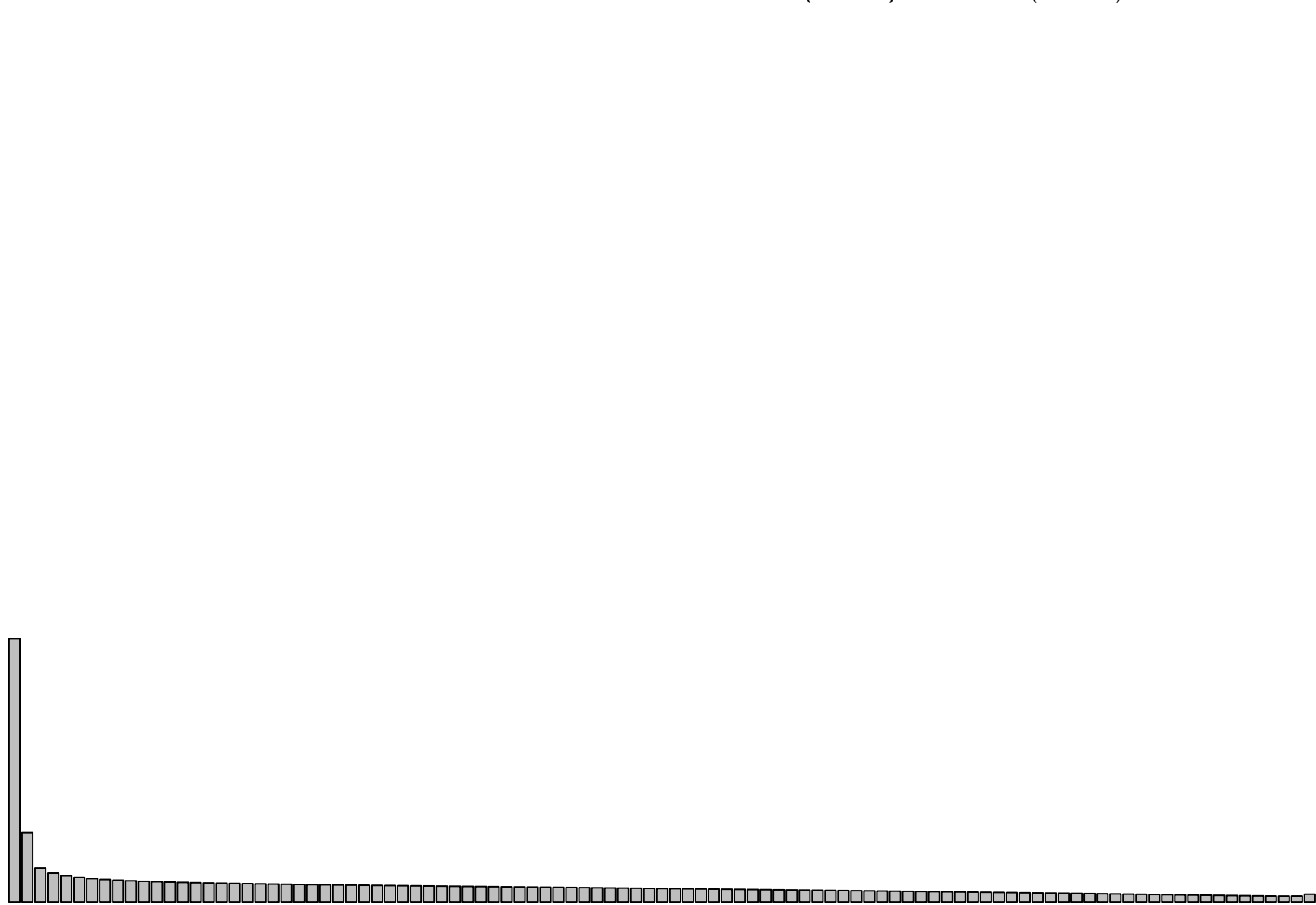
Mean: 35.91% SD: 32.27% Skew: 0.56 Ex Kurt: -0.93 P(LGD=0): 14.66% P(LGD=1): 5.24%

Loss Bucket Probability

0.5  
0.4  
0.3  
0.2  
0.1  
0.0

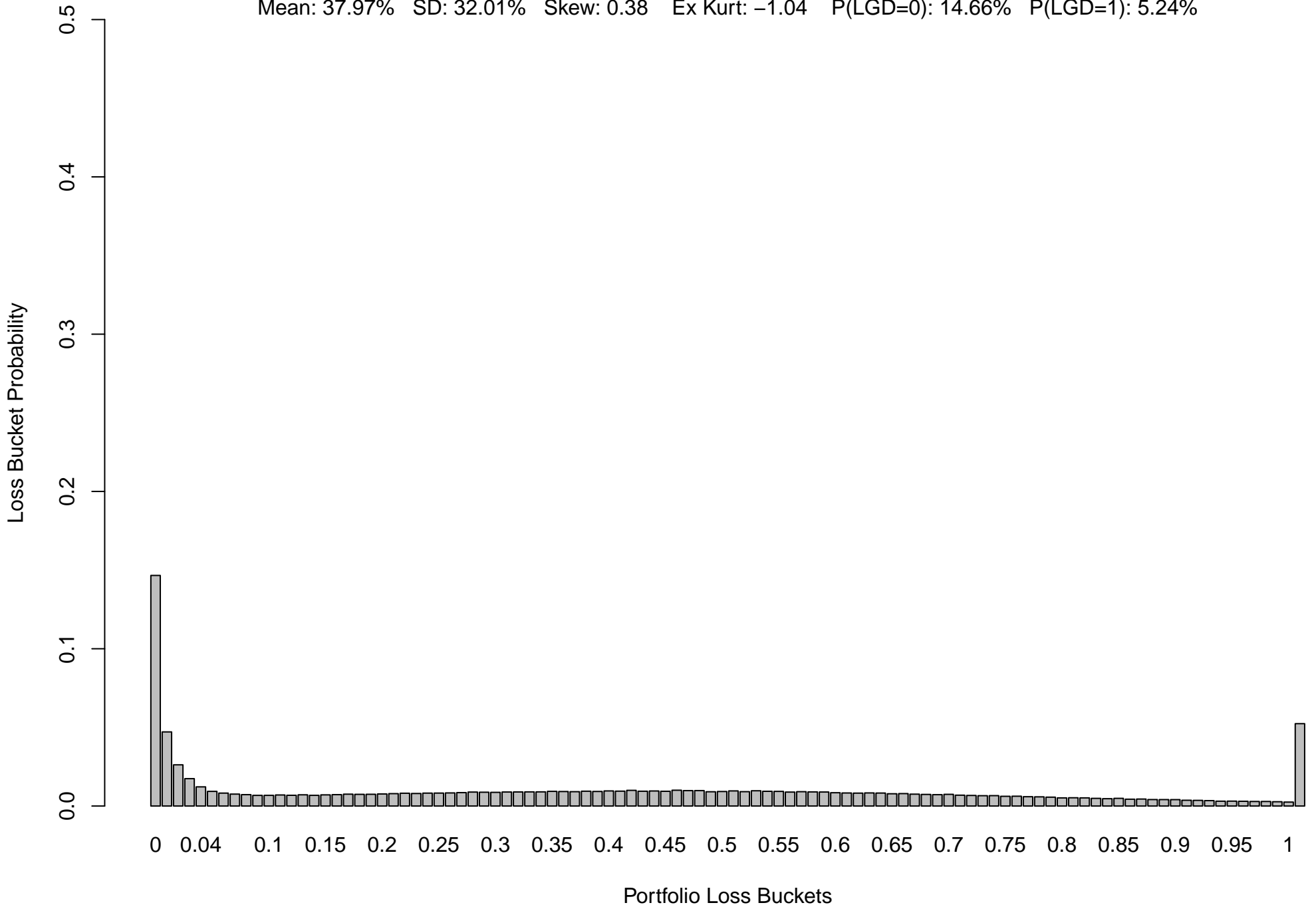
0 0.04 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.75 0.8 0.85 0.9 0.95 1

Portfolio Loss Buckets

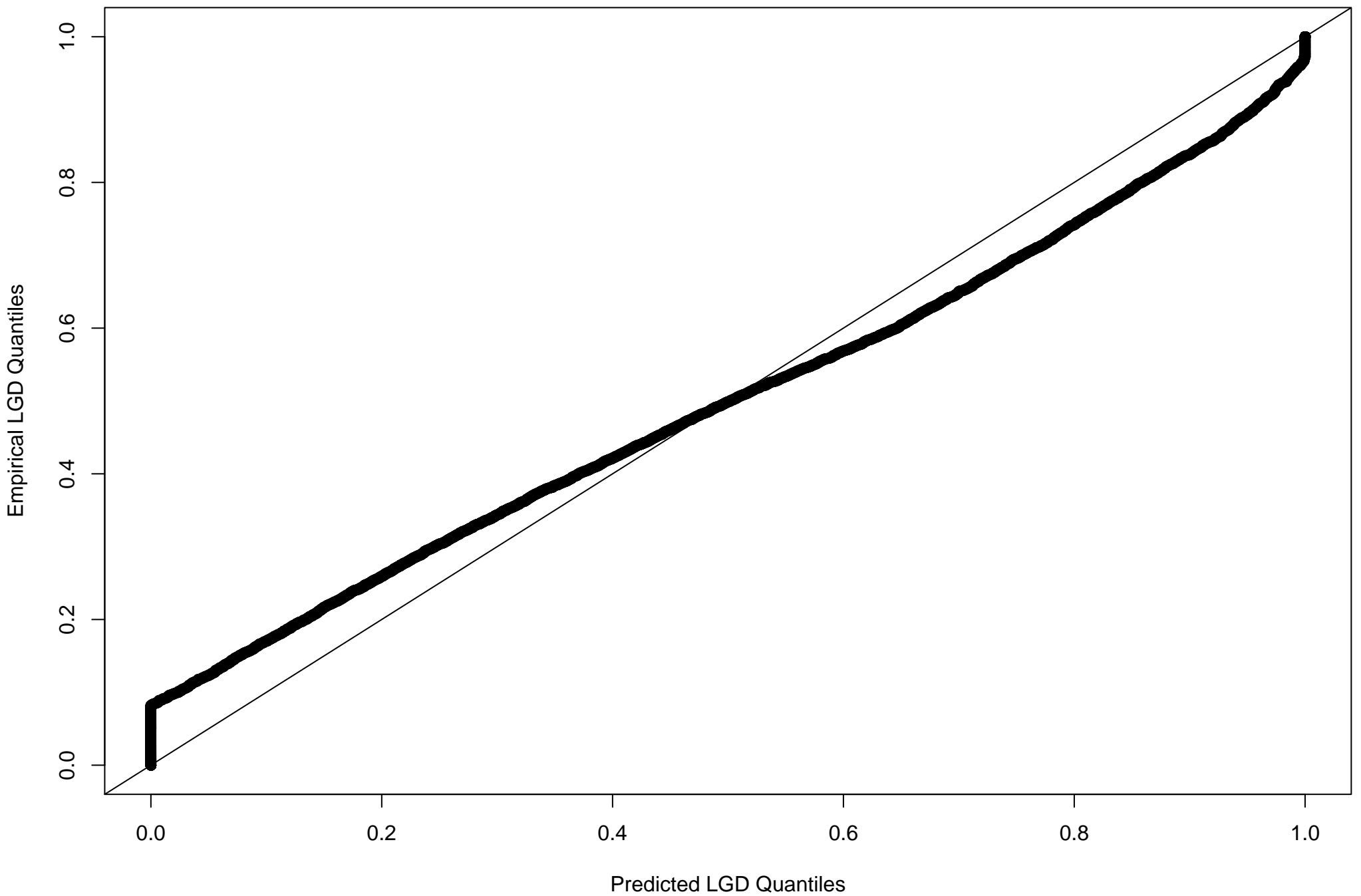


# Empirical LGD (EAD=1) Bucket Probability on Train (In-Sample) Data

Mean: 37.97% SD: 32.01% Skew: 0.38 Ex Kurt: -1.04 P(LGD=0): 14.66% P(LGD=1): 5.24%



QQ Plot on Validation Data



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

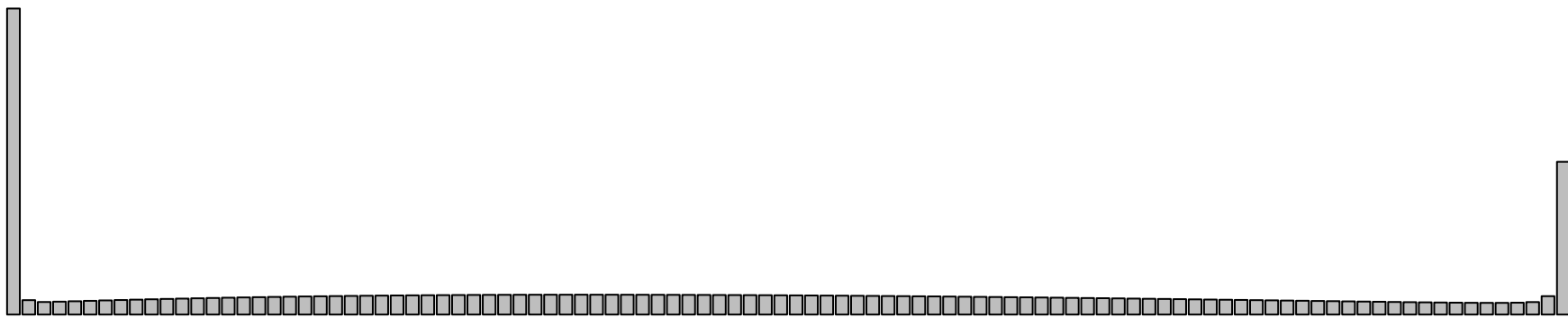
Mean: 44.91% SD: 33.05% Skew: 0.18 Ex Kurt: -1.21 P(LGD=0): 14.36% P(LGD=1): 7.17%

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 Validation Data

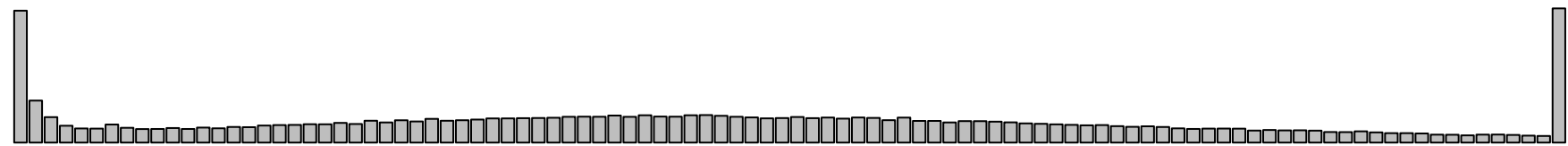
Mean: 45.62% SD: 29.62% Skew: 0.19 Ex Kurt: -0.92 P(LGD=0): 6.22% P(LGD=1): 6.33%

Loss Bucket Probability

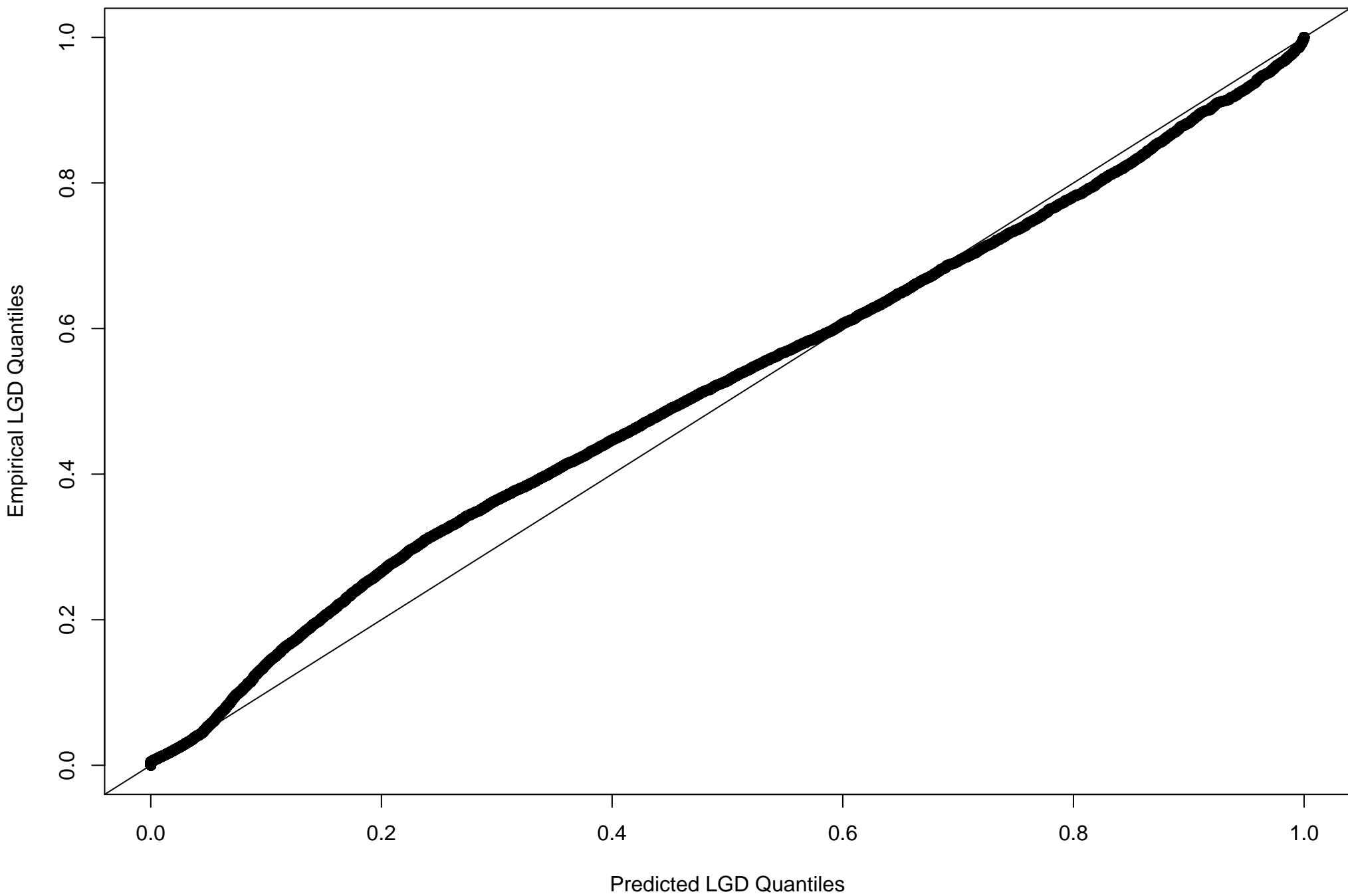
0.5  
0.4  
0.3  
0.2  
0.1  
0.0

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

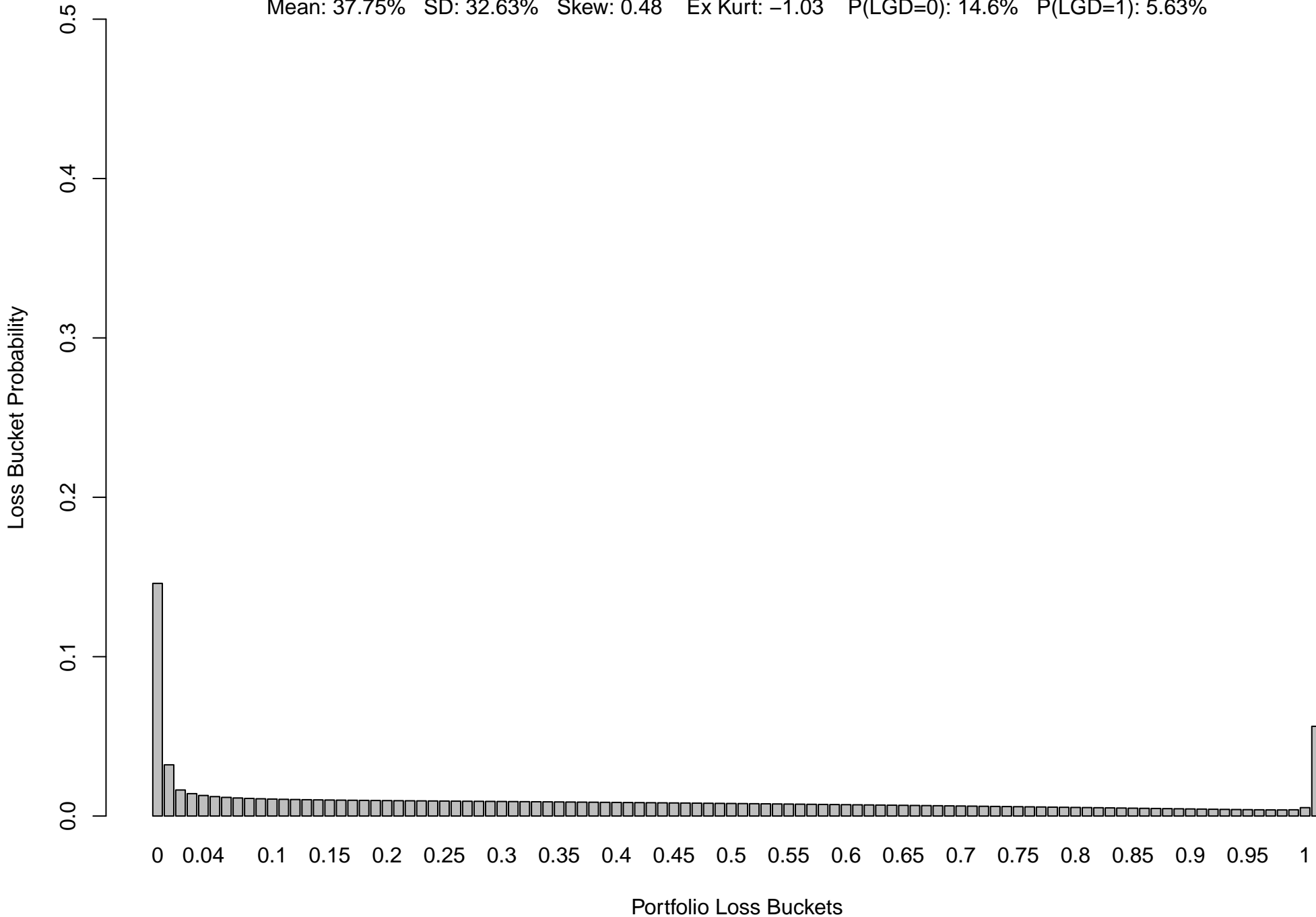


QQ Plot on Train-Validate Data



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

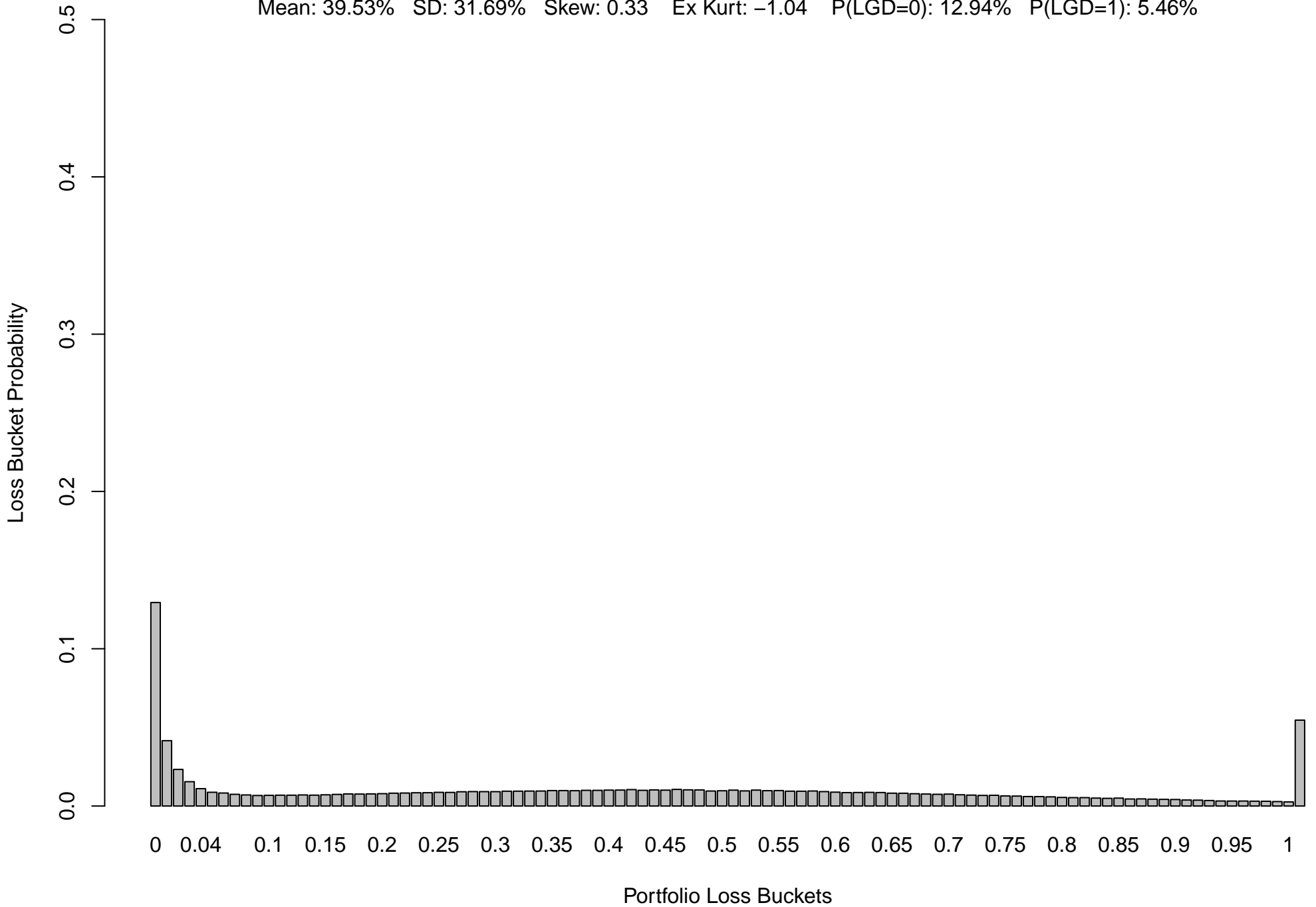
Mean: 37.75% SD: 32.63% Skew: 0.48 Ex Kurt: -1.03 P(LGD=0): 14.6% P(LGD=1): 5.63%



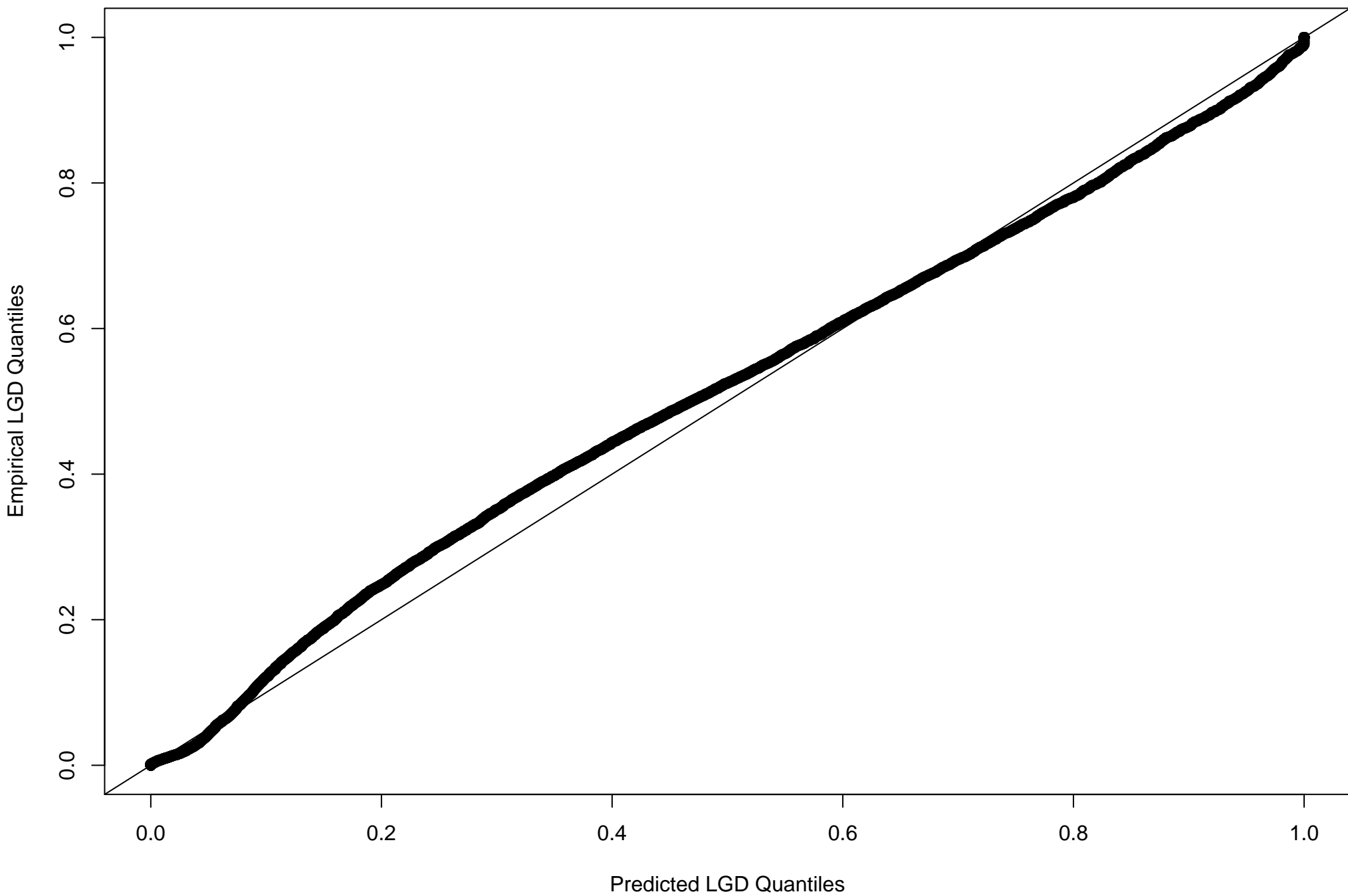


# Empirical LGD (EAD=1) Bucket Probability on Train-Validate Data

Mean: 39.53% SD: 31.69% Skew: 0.33 Ex Kurt: -1.04 P(LGD=0): 12.94% P(LGD=1): 5.46%



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



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

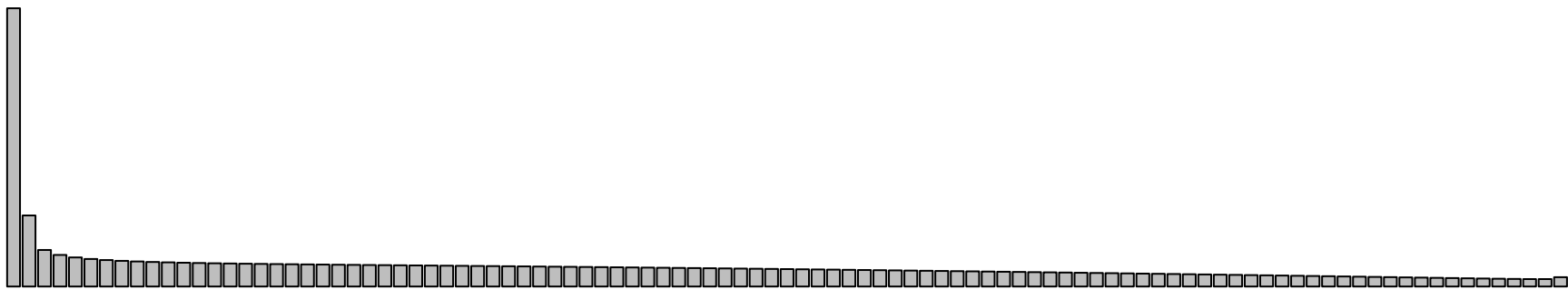
Mean: 37.61% SD: 32.07% Skew: 0.49 Ex Kurt: -0.98 P(LGD=0): 12.94% P(LGD=1): 5.46%

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-Validate (In-Sample) Data

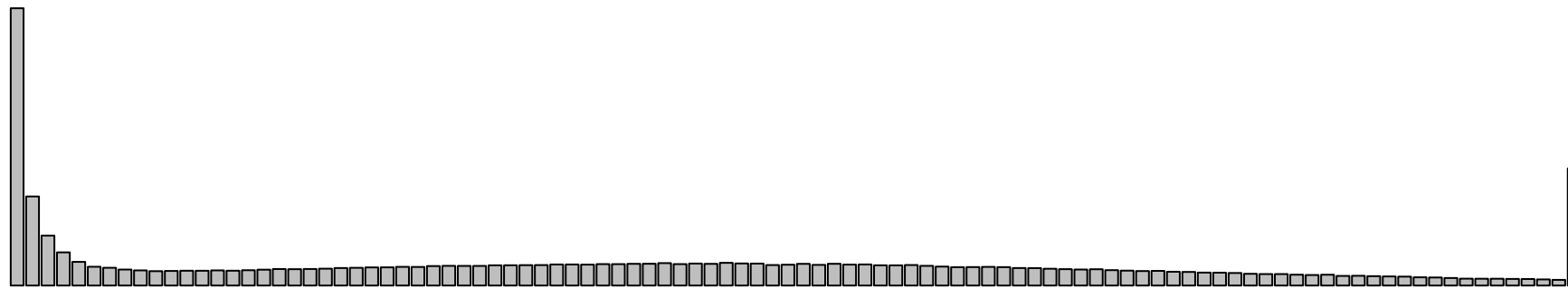
Mean: 39.53% SD: 31.69% Skew: 0.33 Ex Kurt: -1.04 P(LGD=0): 12.94% P(LGD=1): 5.46%

Loss Bucket Probability

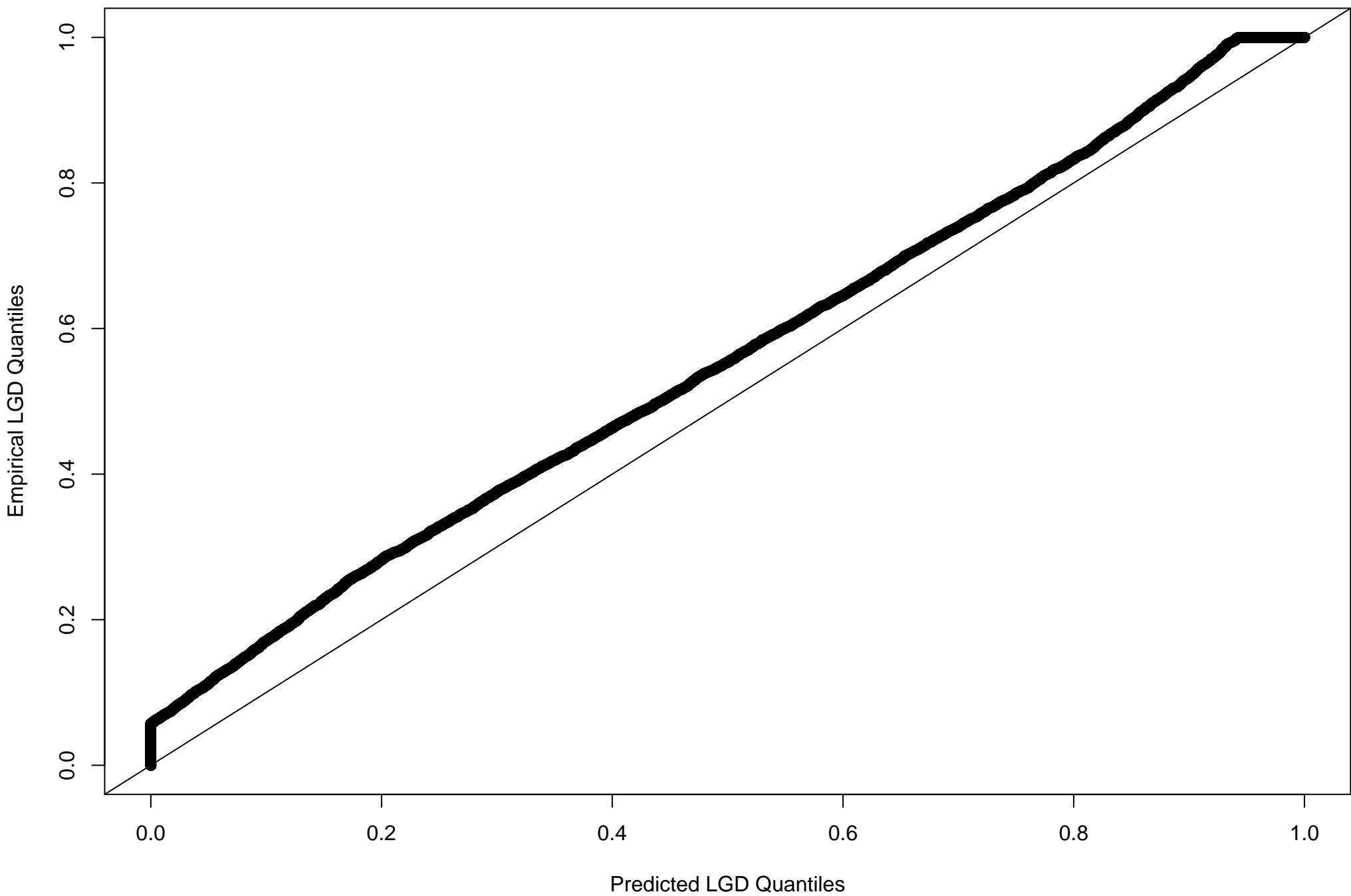
0.5  
0.4  
0.3  
0.2  
0.1  
0.0

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

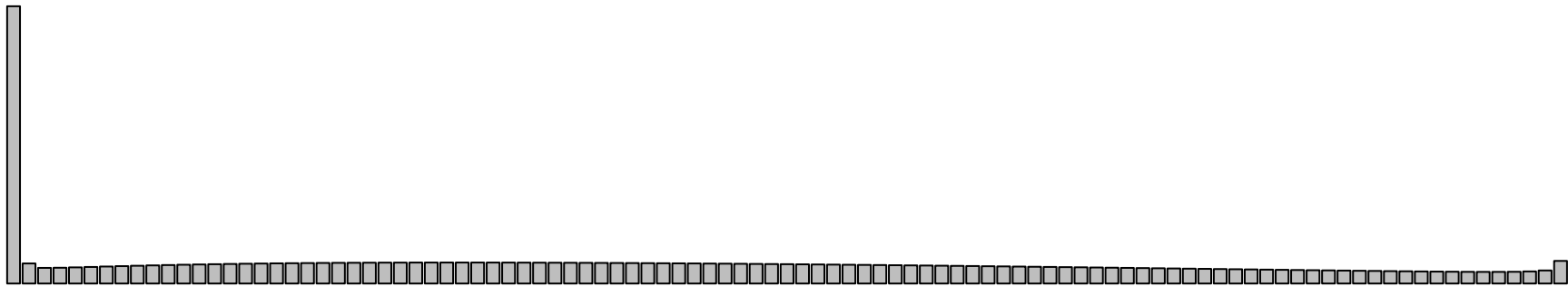
Mean: 43.45% SD: 32.4% Skew: 0.25 Ex Kurt: -1.16 P(LGD=0): 12.91% P(LGD=1): 5.7%

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

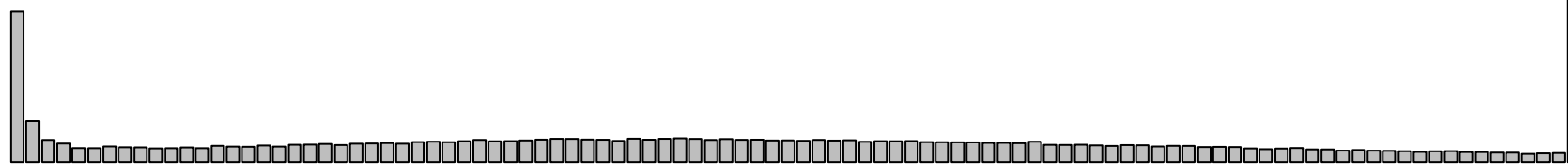
Mean: 47.74% SD: 31.6% Skew: 0.12 Ex Kurt: -1.1 P(LGD=0): 7.05% P(LGD=1): 9.02%

Loss Bucket Probability

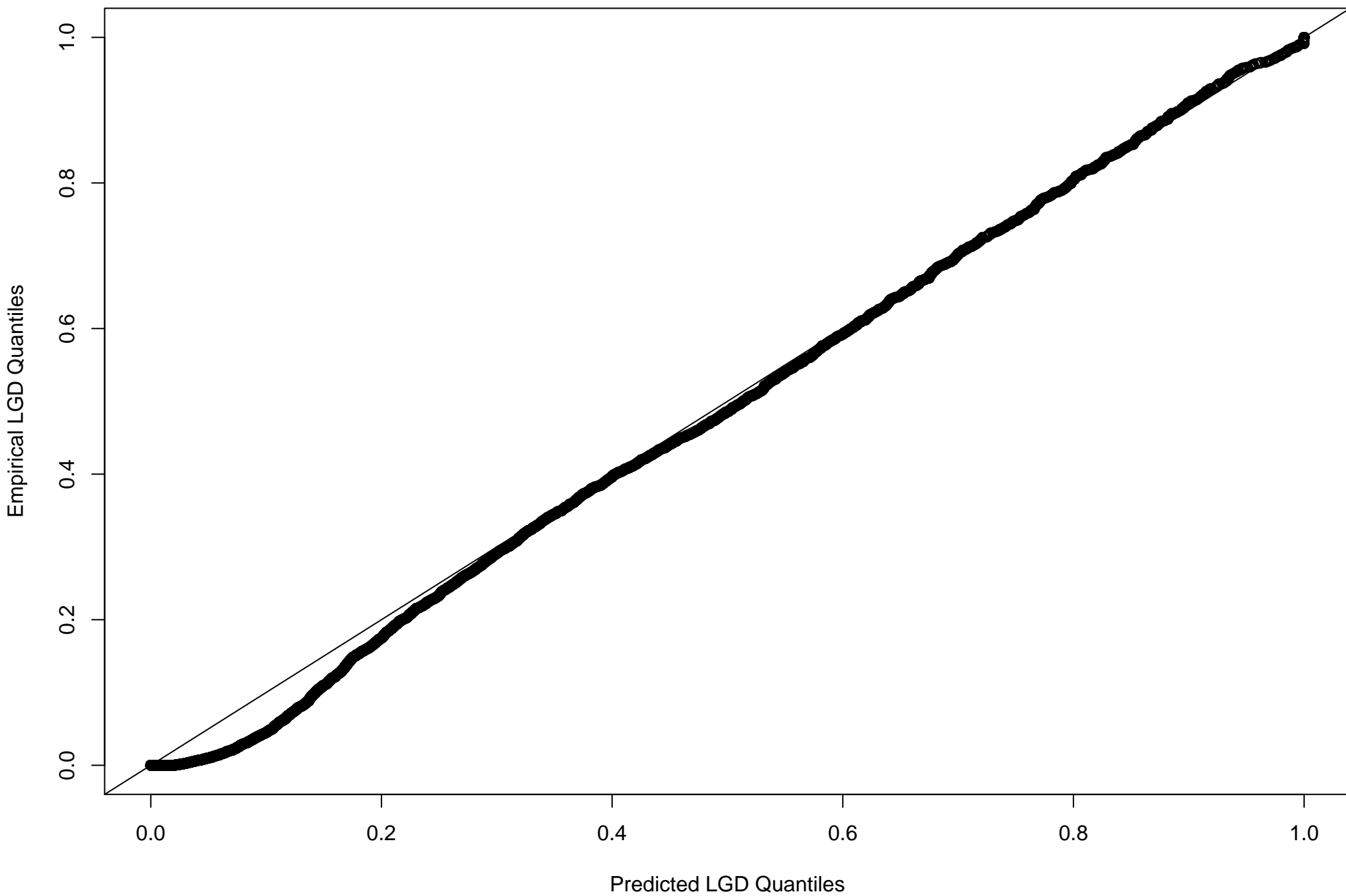
0.5  
0.4  
0.3  
0.2  
0.1  
0.0

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



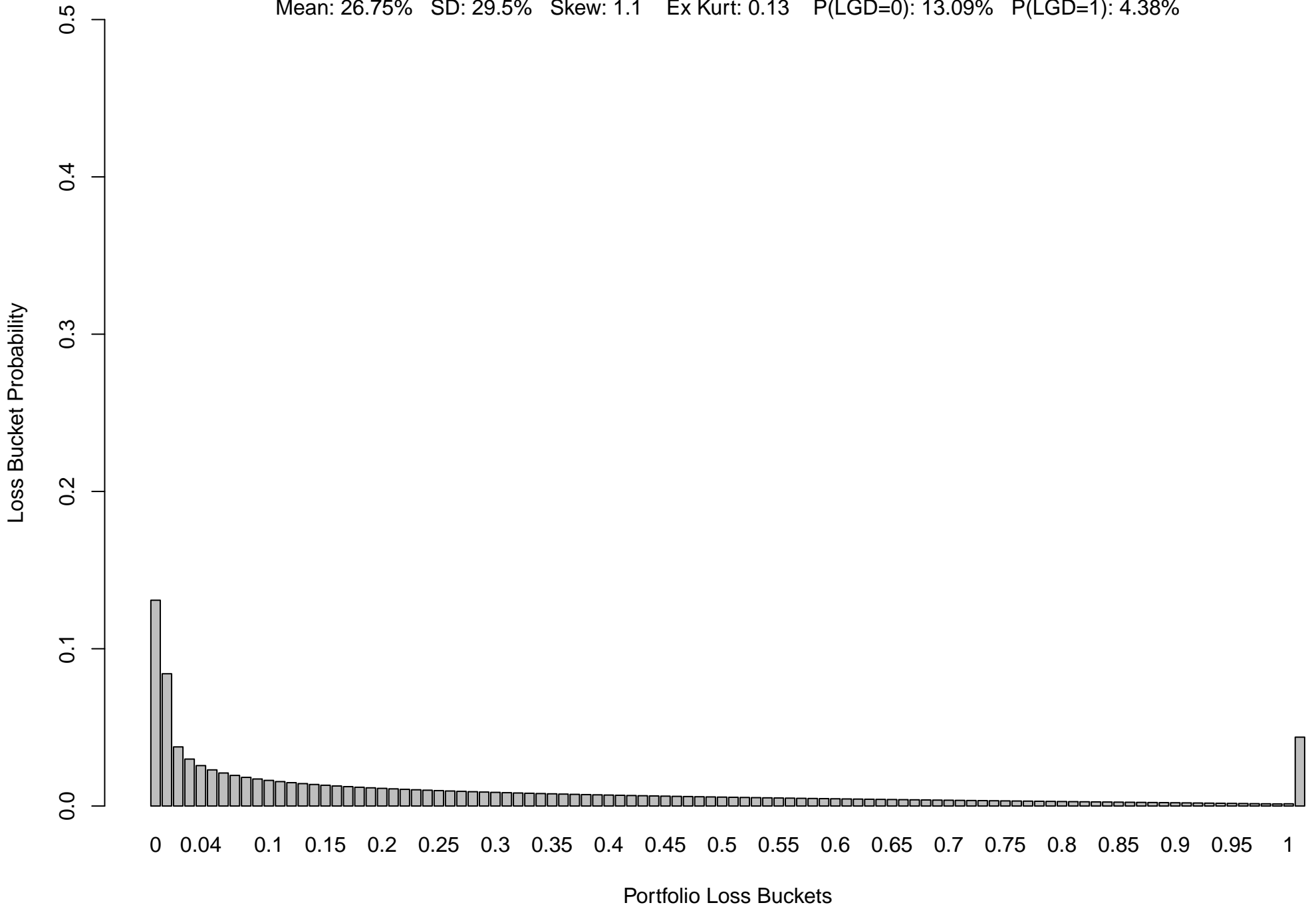
QQ Plot on Test2006 Data





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

Mean: 26.75% SD: 29.5% Skew: 1.1 Ex Kurt: 0.13 P(LGD=0): 13.09% P(LGD=1): 4.38%



# 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

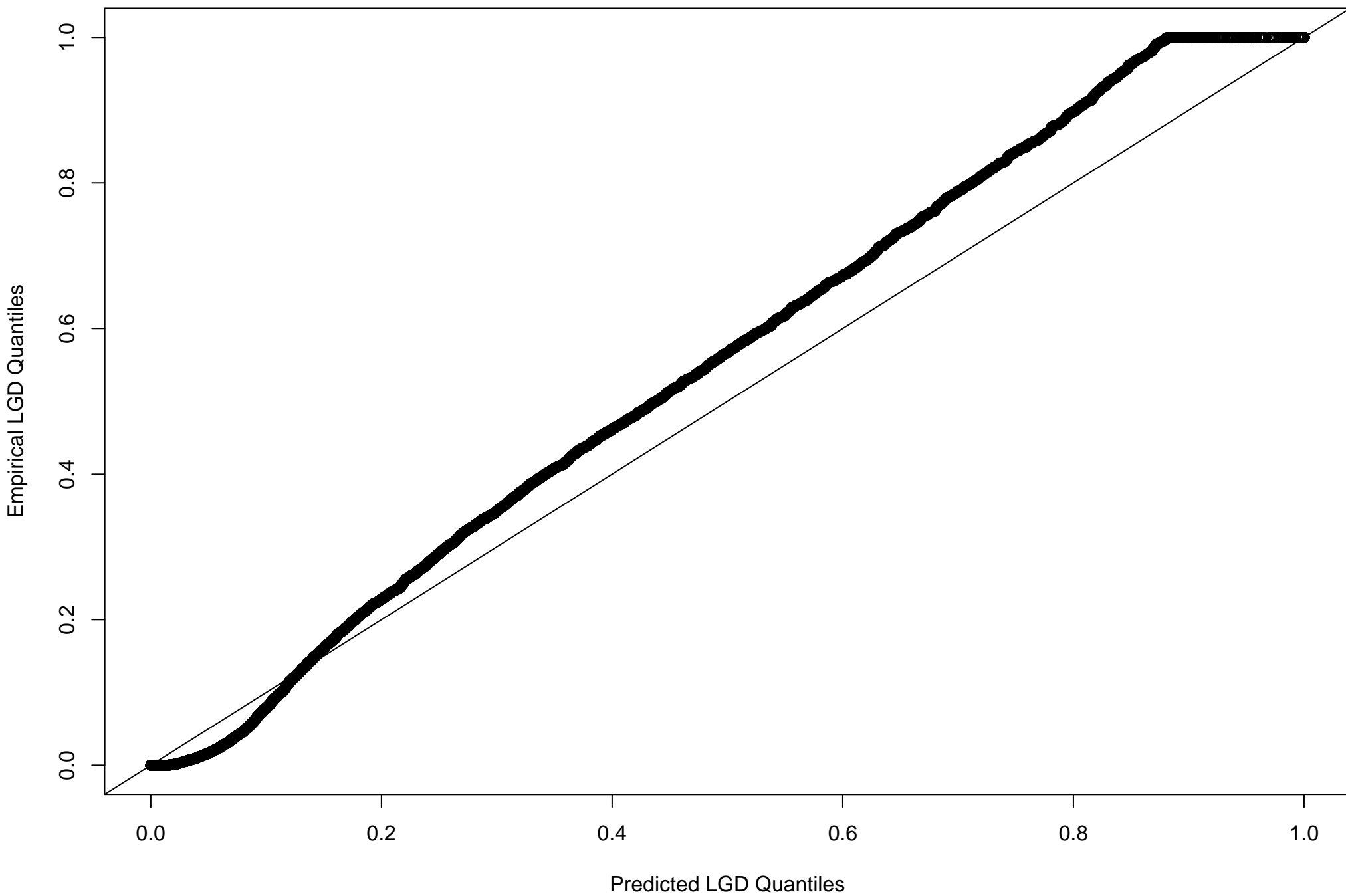
0.5  
0.4  
0.3  
0.2  
0.1  
0.0

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

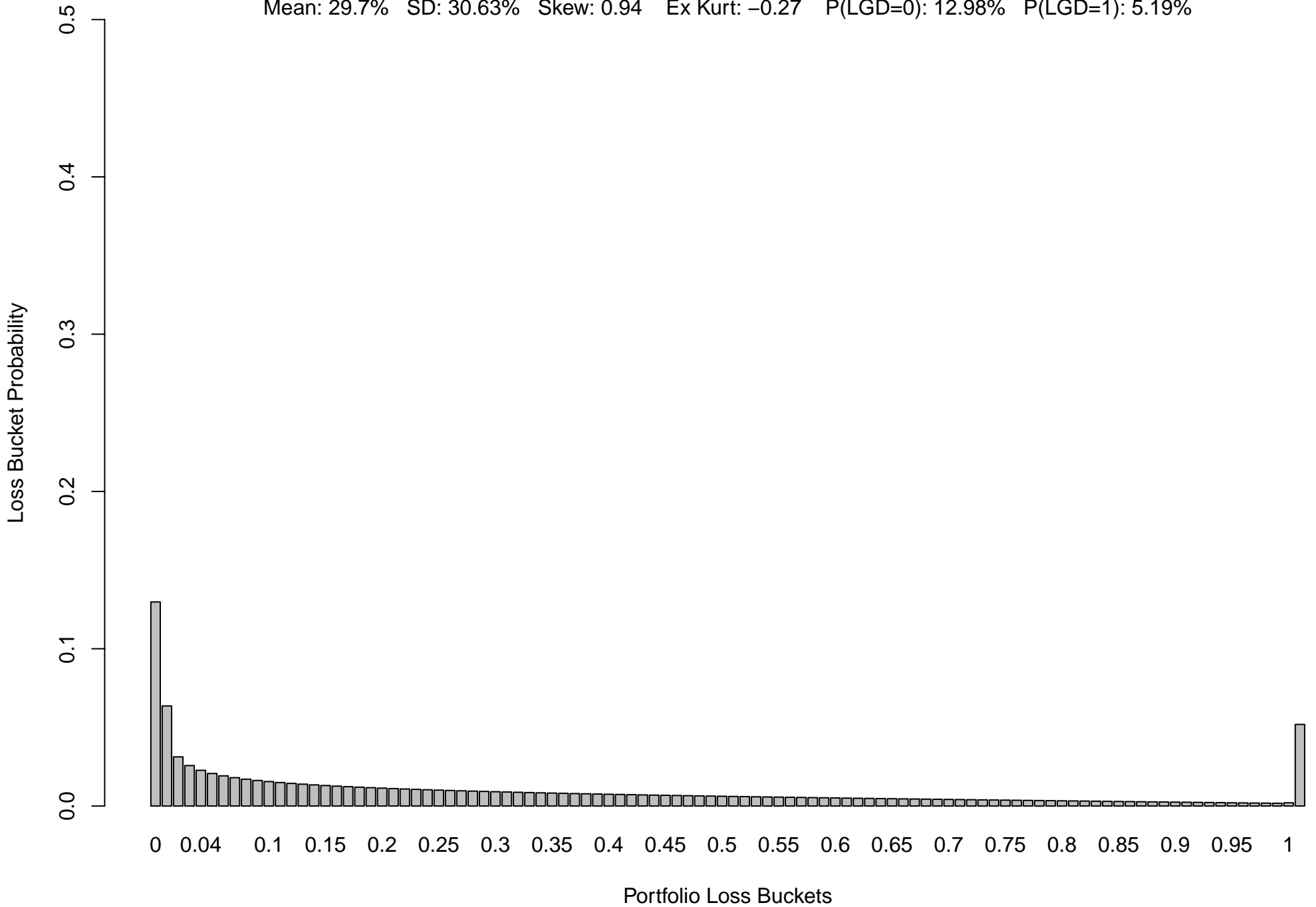


QQ Plot on Test2007 Data



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

Mean: 29.7% SD: 30.63% Skew: 0.94 Ex Kurt: -0.27 P(LGD=0): 12.98% P(LGD=1): 5.19%



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

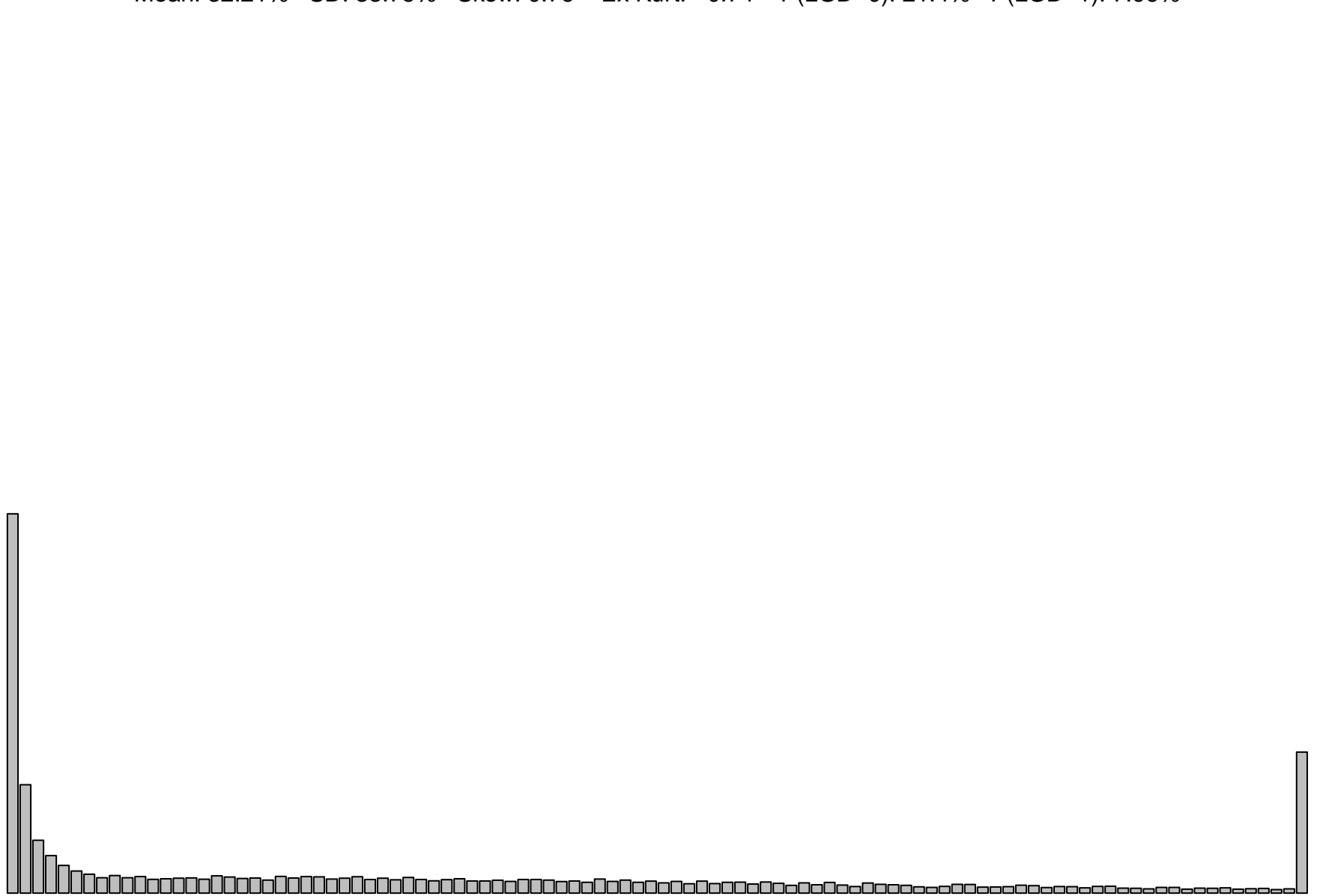
Mean: 32.21% SD: 33.75% Skew: 0.76 Ex Kurt: -0.74 P(LGD=0): 21.4% P(LGD=1): 7.96%

Loss Bucket Probability

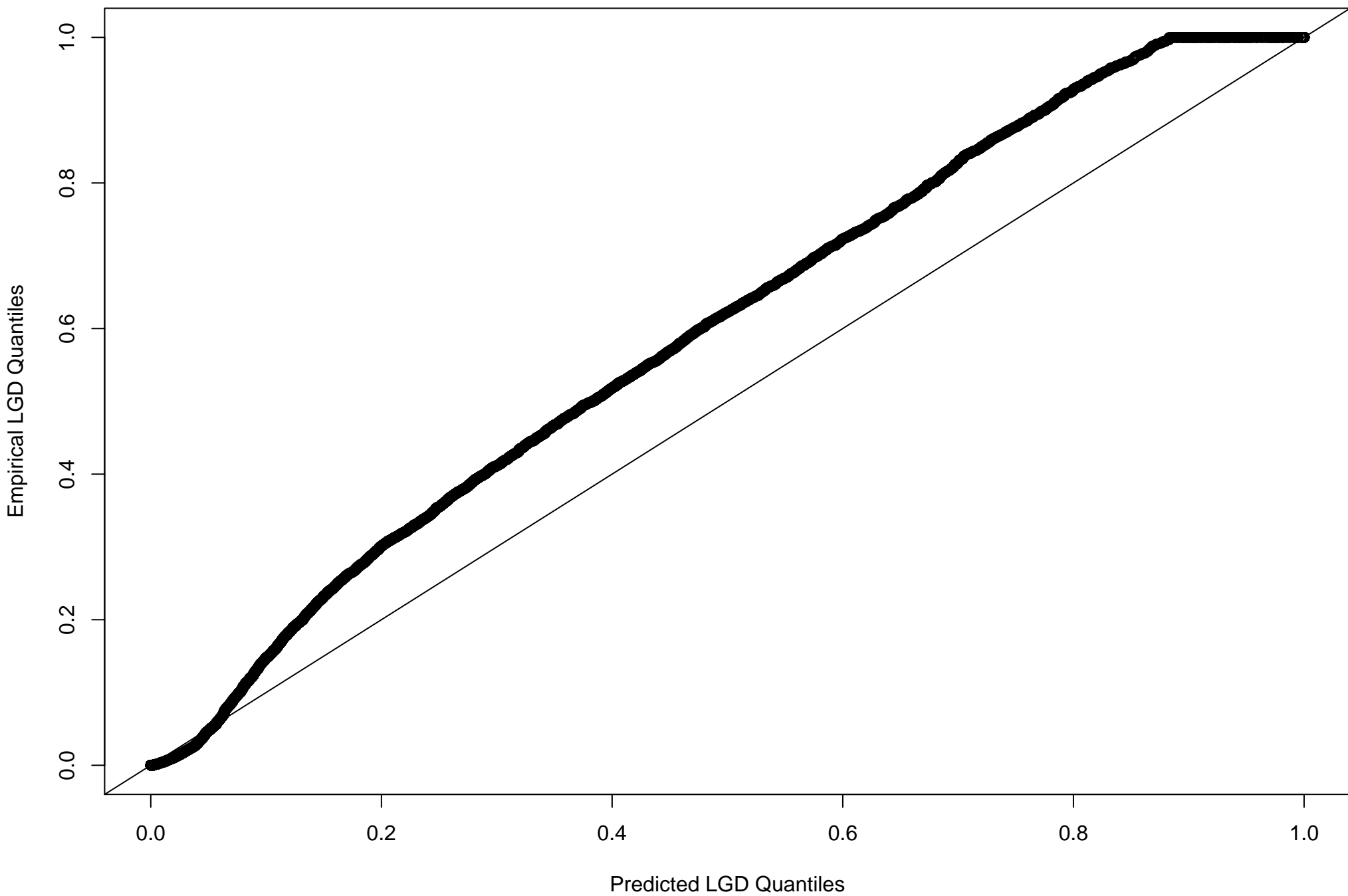
0.5  
0.4  
0.3  
0.2  
0.1  
0.0

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

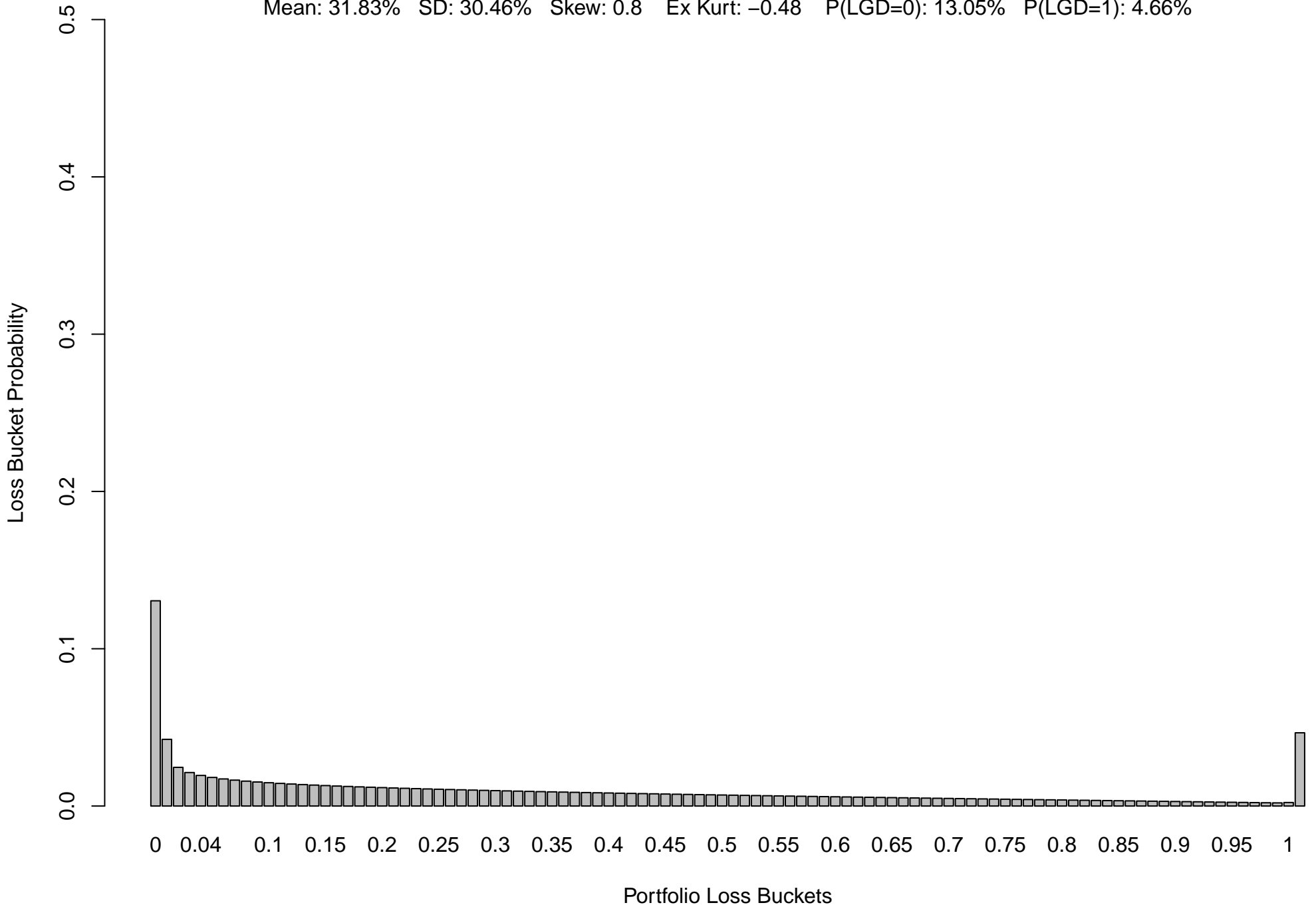


QQ Plot on Test2008 Data



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

Mean: 31.83% SD: 30.46% Skew: 0.8 Ex Kurt: -0.48 P(LGD=0): 13.05% P(LGD=1): 4.66%



# 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%

Loss Bucket Probability

0.5  
0.4  
0.3  
0.2  
0.1  
0.0

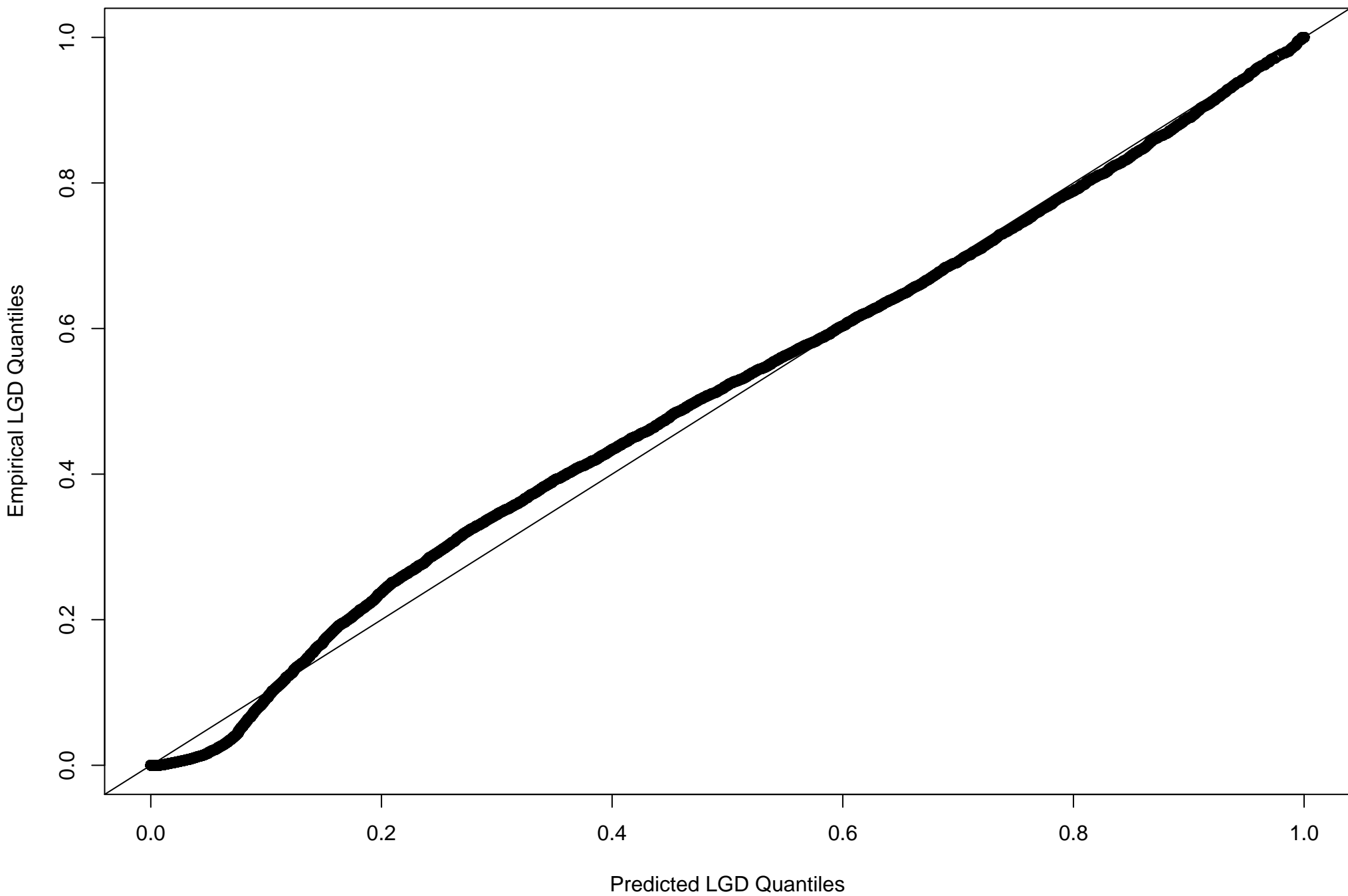
0 0.04 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.75 0.8 0.85 0.9 0.95 1

Portfolio Loss Buckets





QQ Plot on Test2009 Data



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

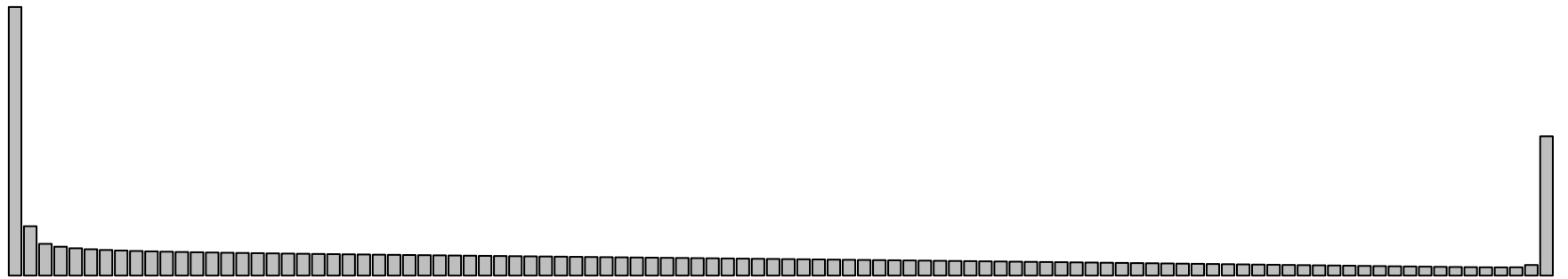
Mean: 39.15% SD: 32.73% Skew: 0.46 Ex Kurt: -1.05 P(LGD=0): 12.78% P(LGD=1): 6.63%

Loss Bucket Probability

0.5  
0.4  
0.3  
0.2  
0.1  
0.0

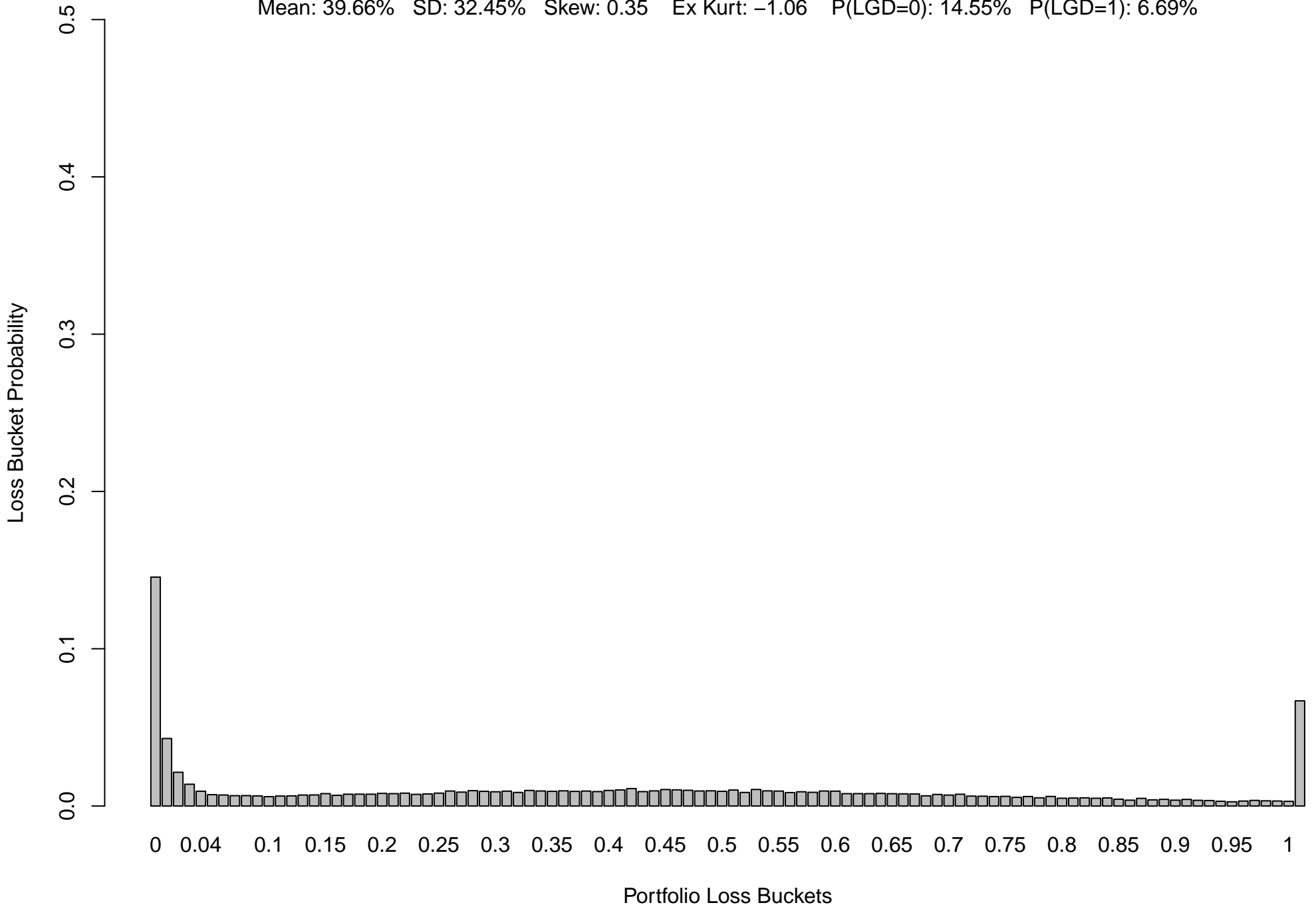
0 0.04 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.75 0.8 0.85 0.9 0.95 1

Portfolio Loss Buckets

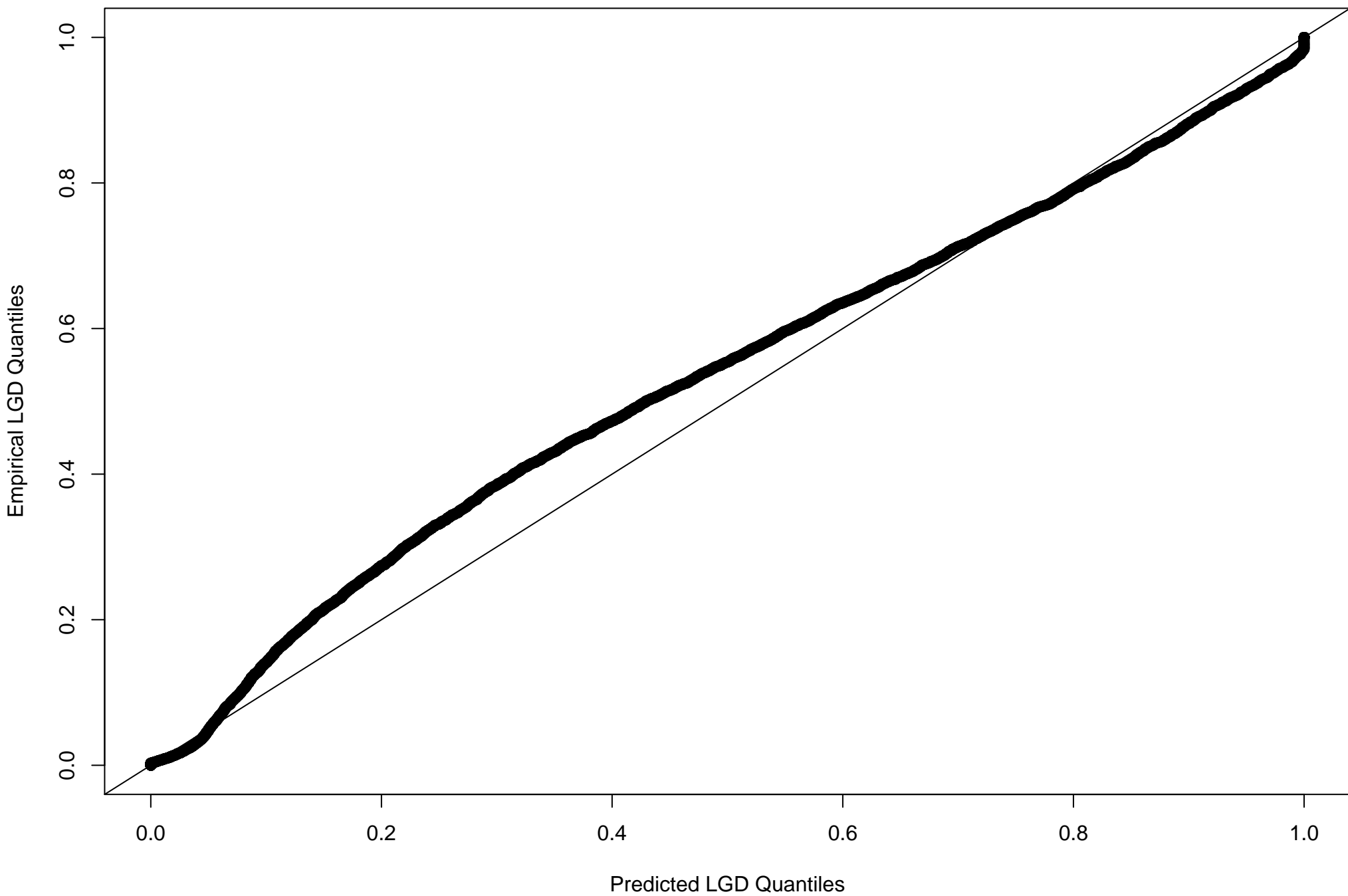


# Empirical LGD (EAD=1) Bucket Probability on Test2009 Data

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

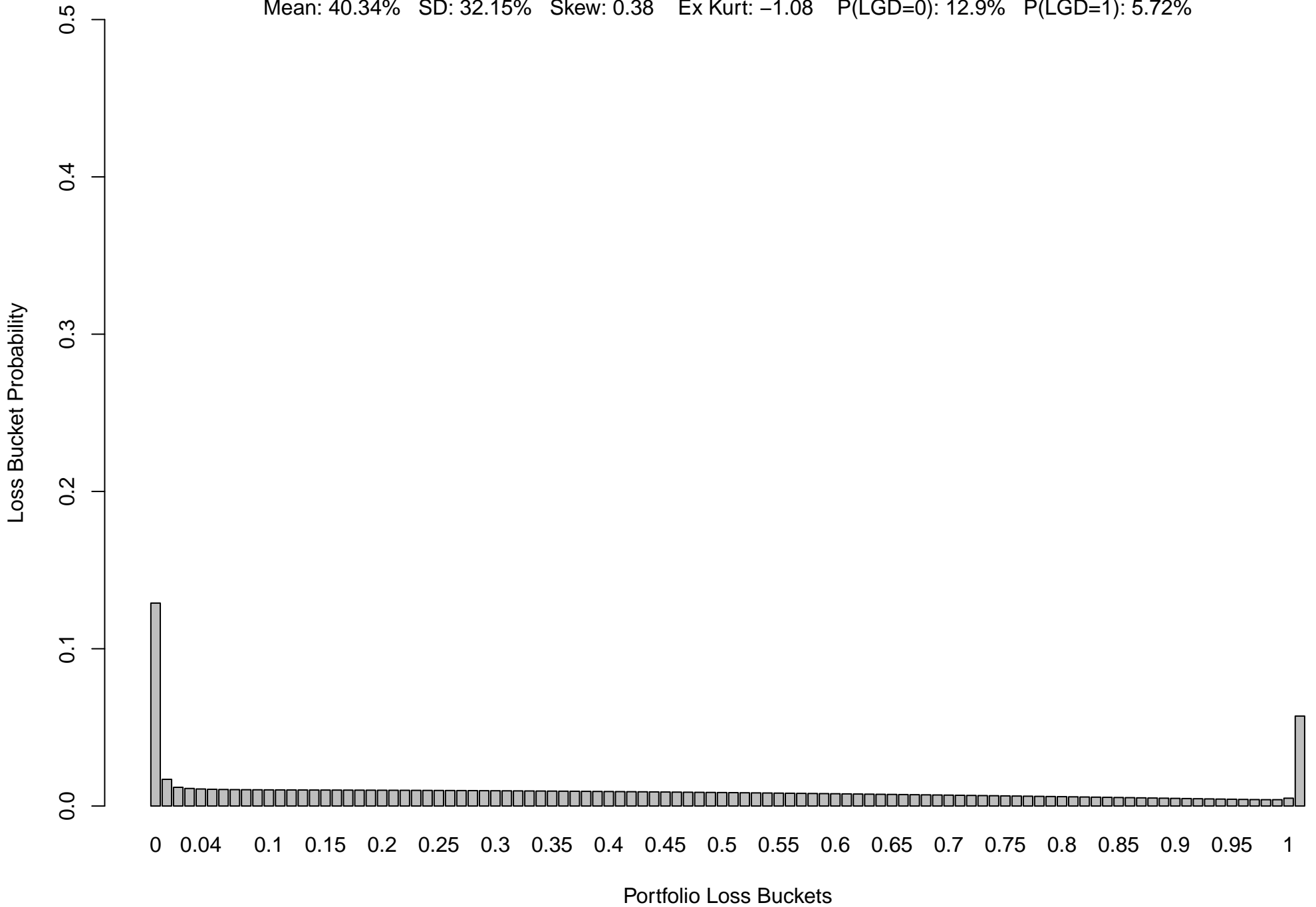


QQ Plot on Test2010 Data



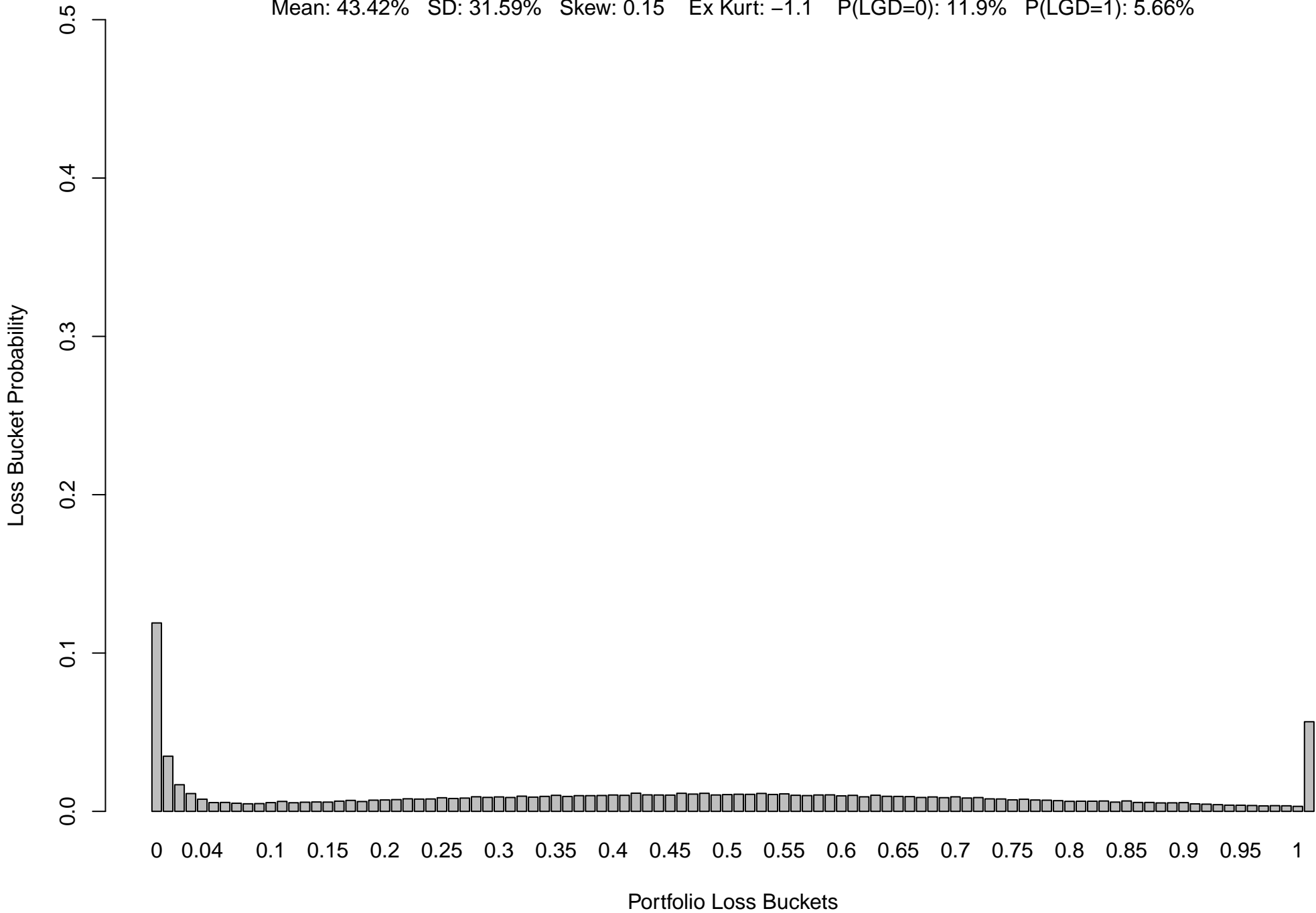
# Predicted LGD (EAD=1) Bucket Probability on Test2010 Data

Mean: 40.34% SD: 32.15% Skew: 0.38 Ex Kurt: -1.08 P(LGD=0): 12.9% P(LGD=1): 5.72%

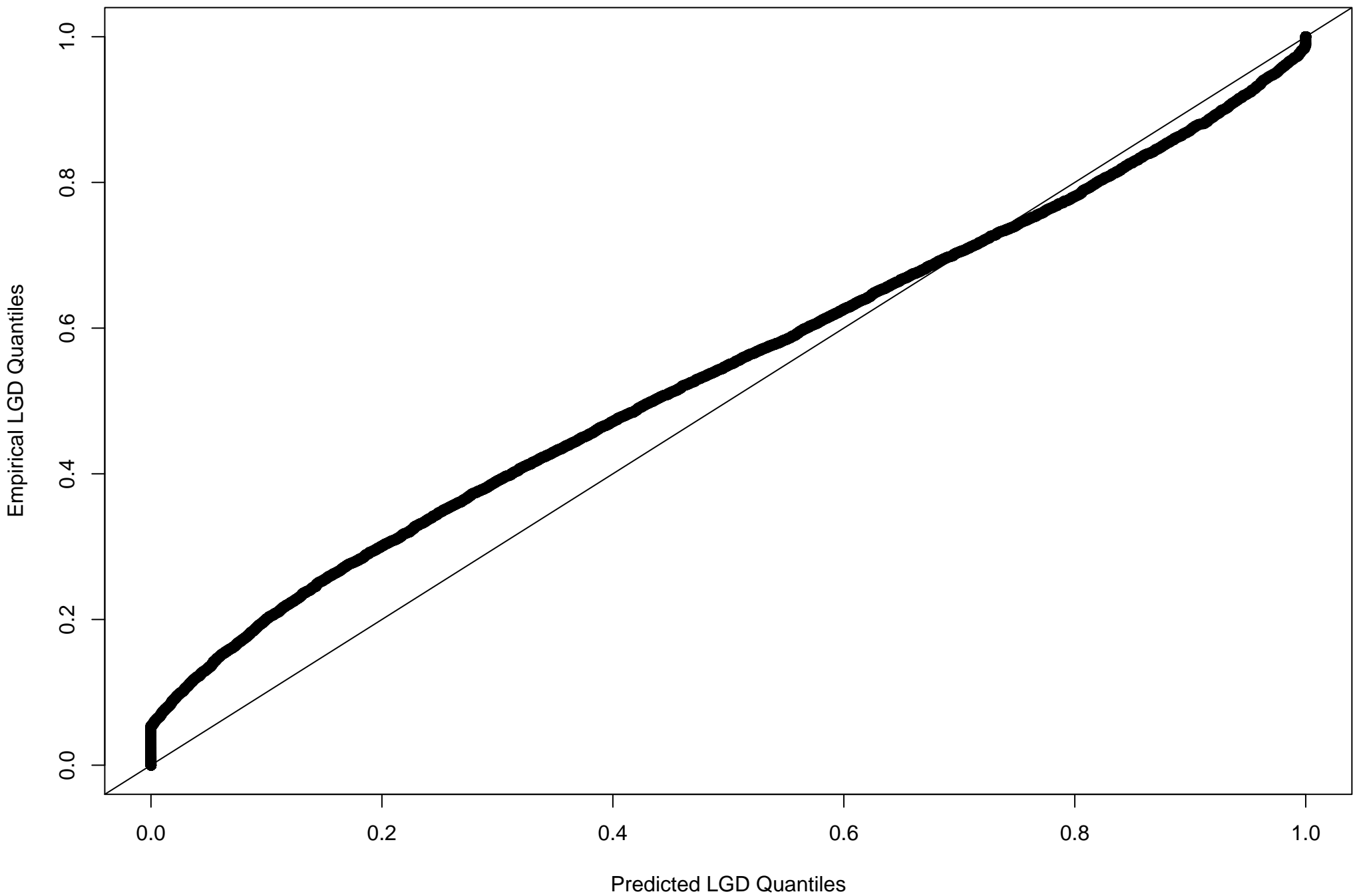


## Empirical LGD (EAD=1) Bucket Probability on Test2010 Data

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

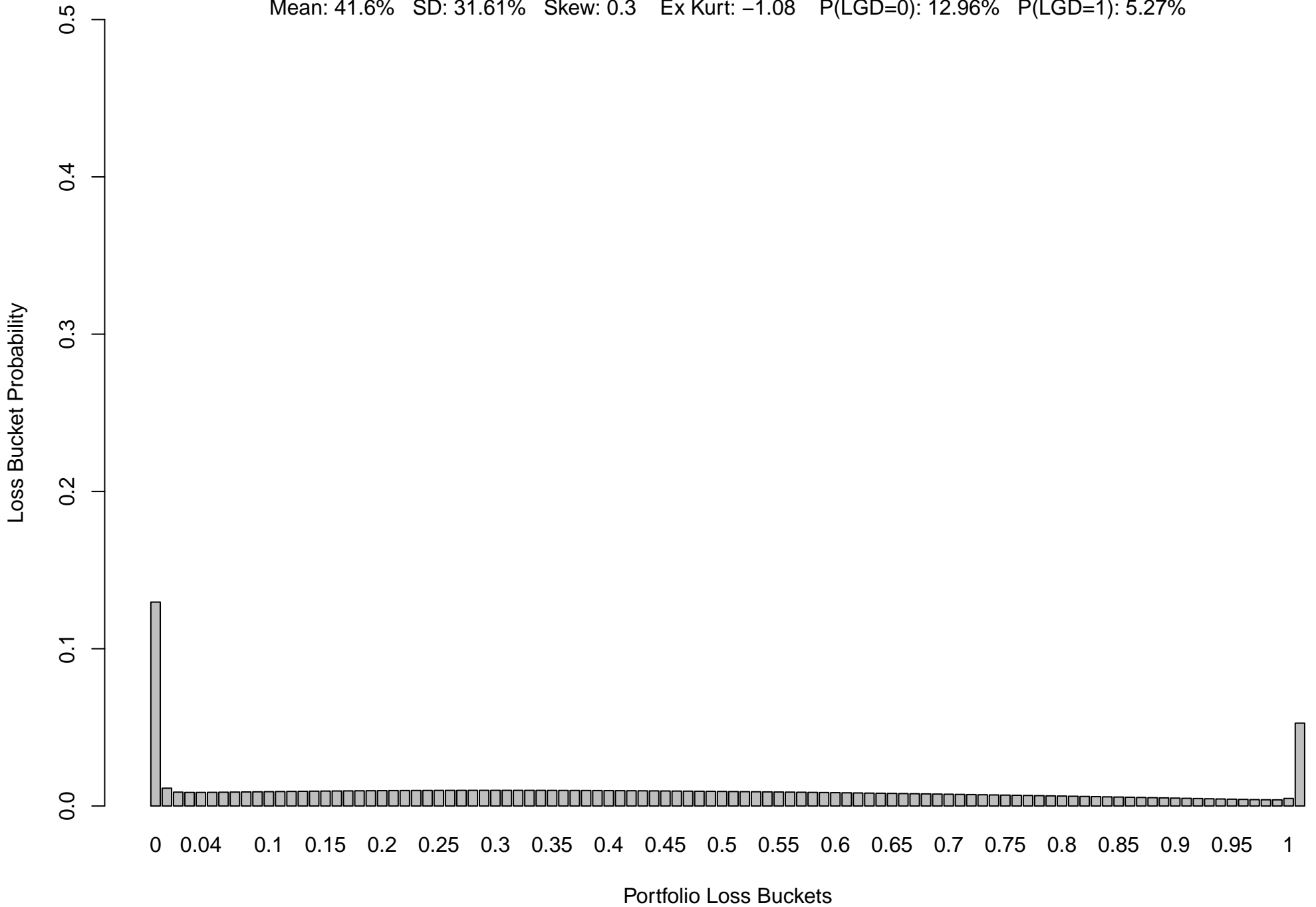


QQ Plot on Test2011 Data



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

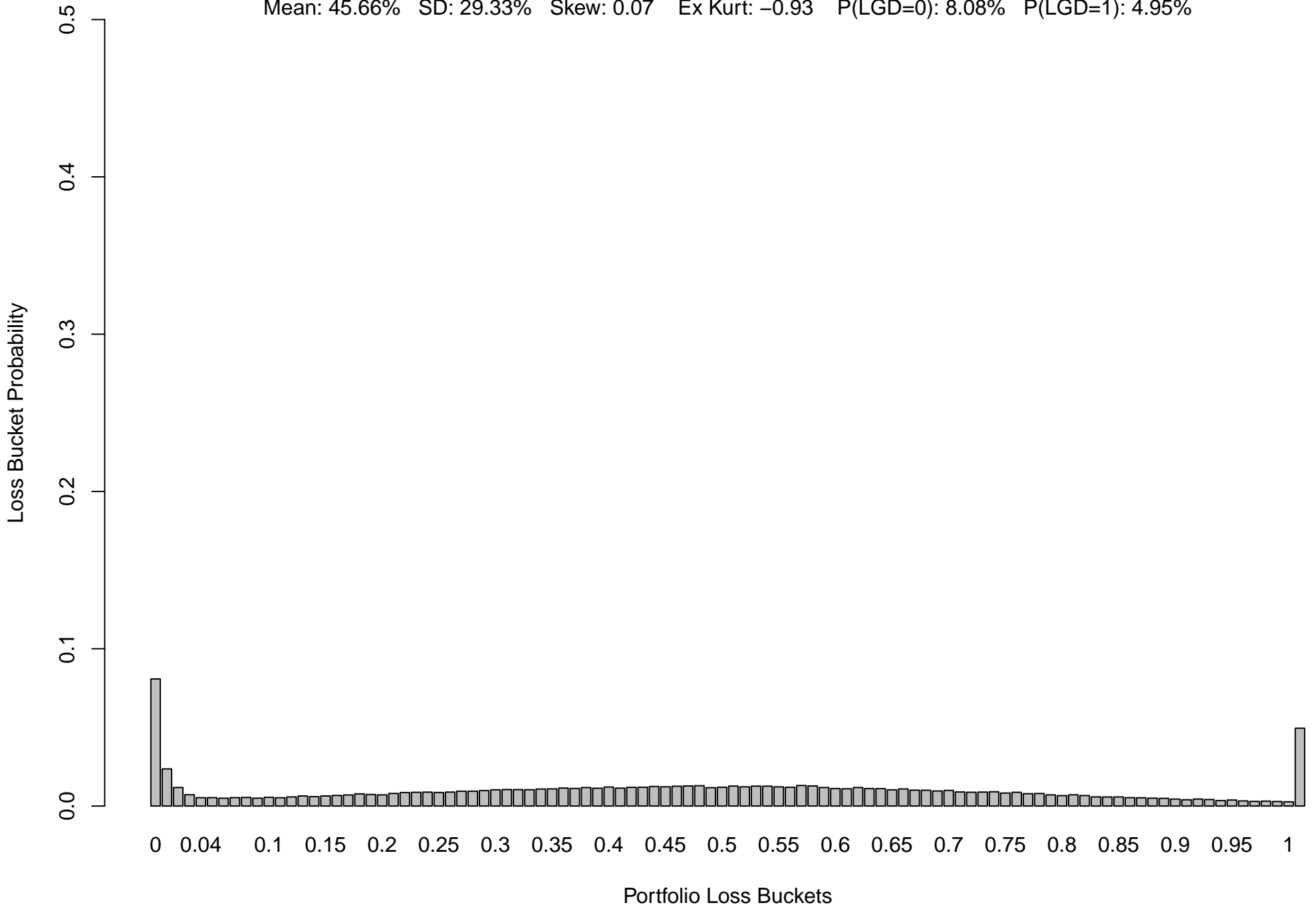
Mean: 41.6% SD: 31.61% Skew: 0.3 Ex Kurt: -1.08 P(LGD=0): 12.96% P(LGD=1): 5.27%



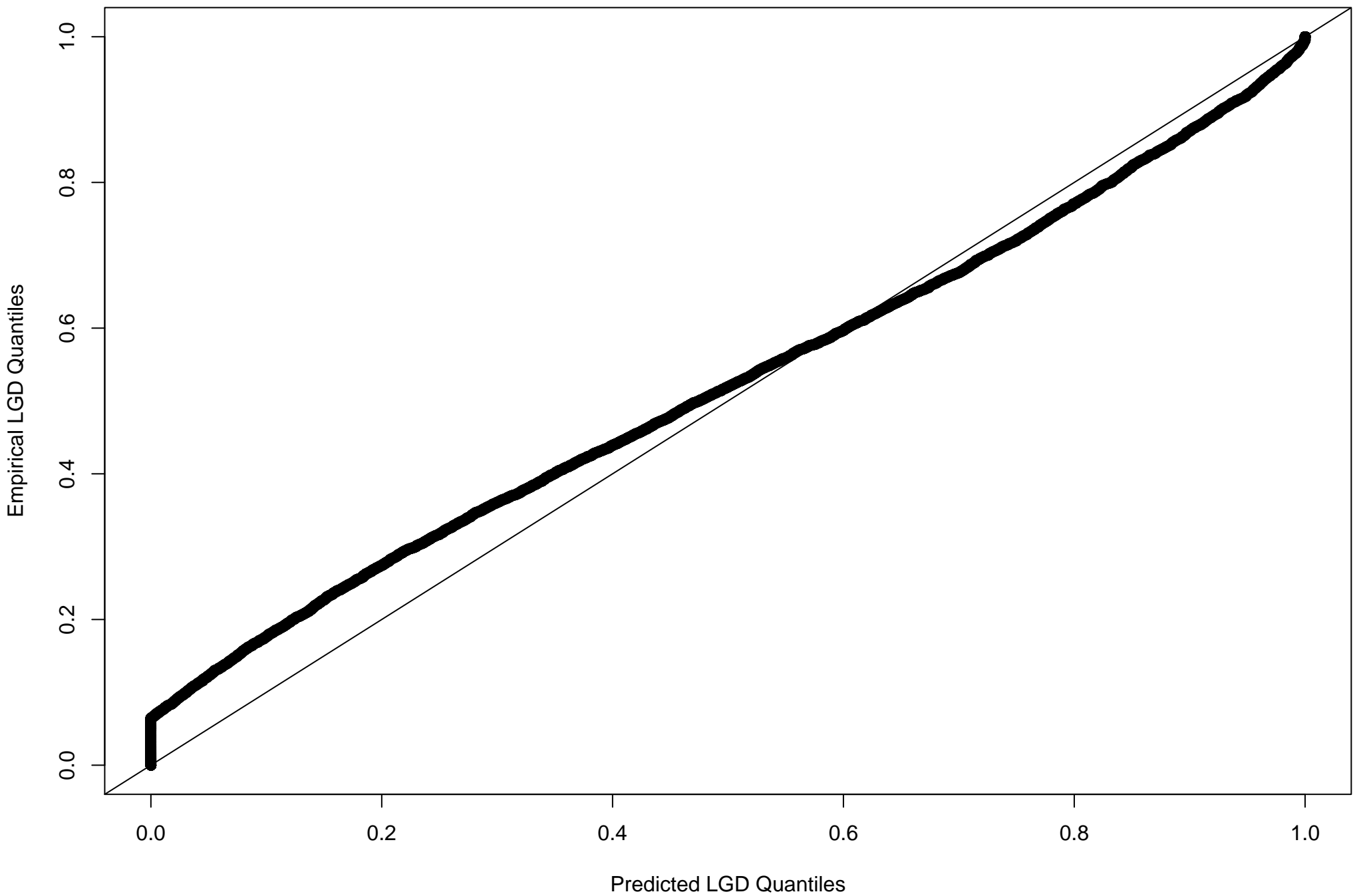


# Empirical LGD (EAD=1) Bucket Probability on Test2011 Data

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

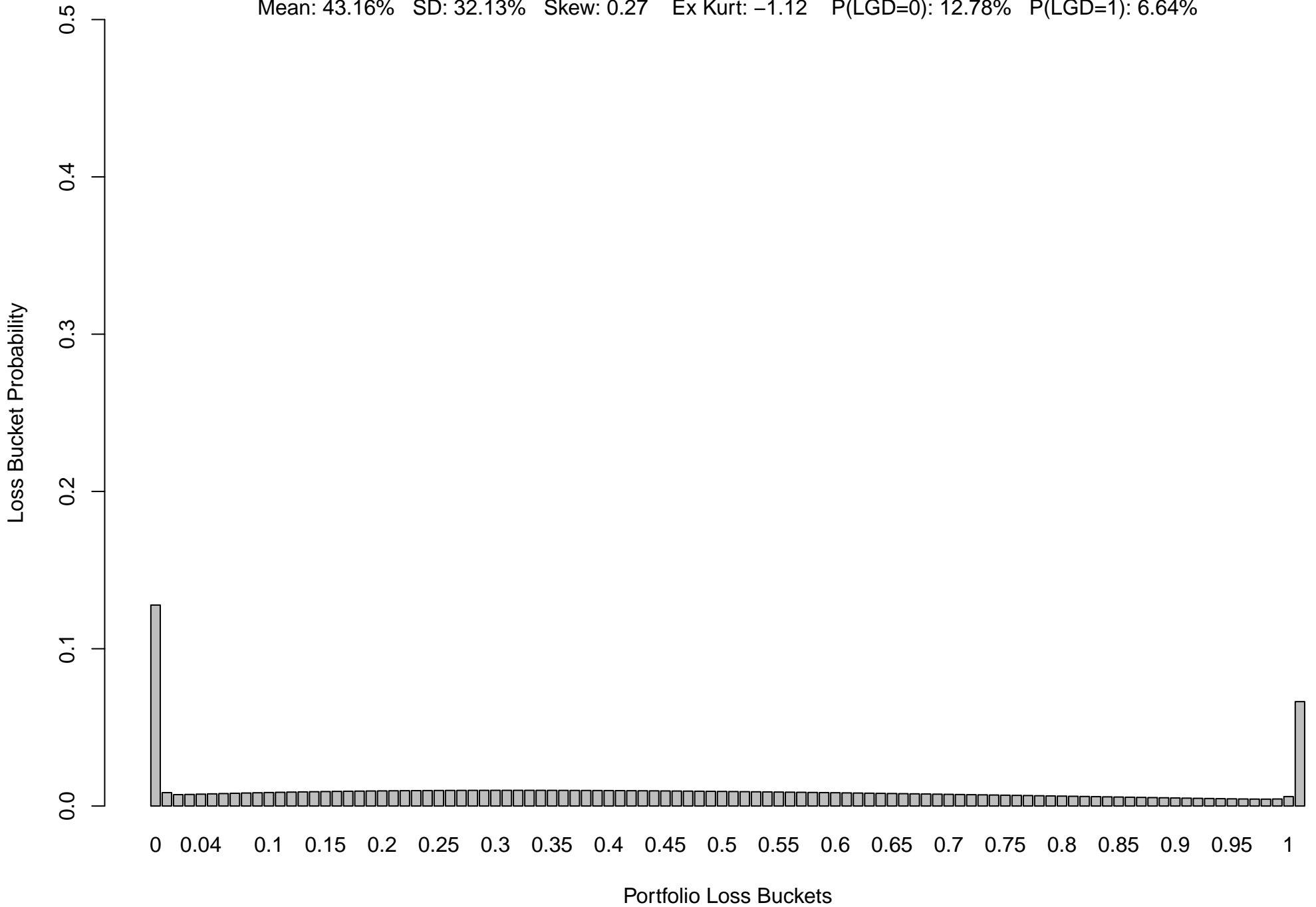


QQ Plot on Test2012 Data



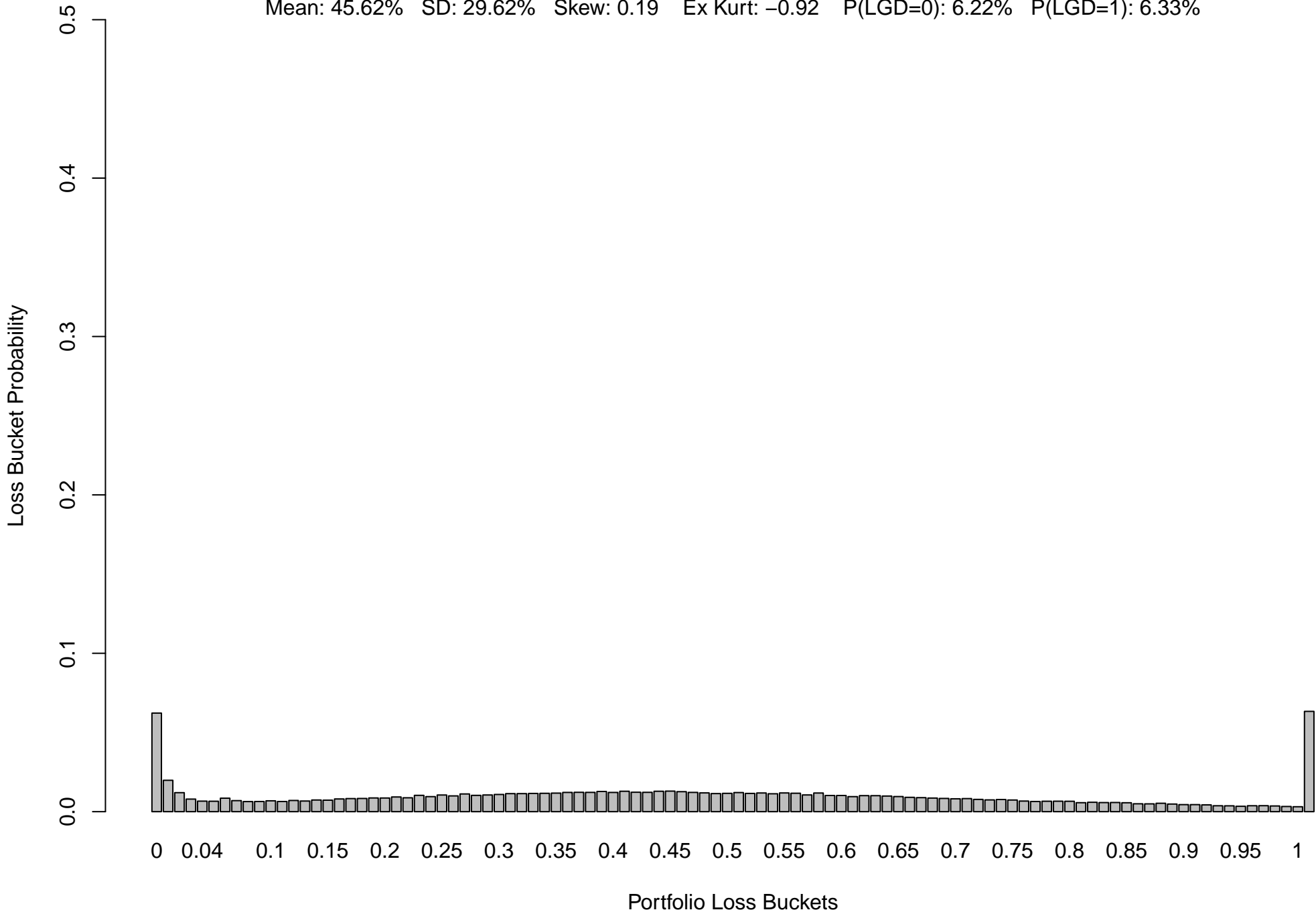
# Predicted LGD (EAD=1) Bucket Probability on Test2012 Data

Mean: 43.16% SD: 32.13% Skew: 0.27 Ex Kurt: -1.12 P(LGD=0): 12.78% P(LGD=1): 6.64%

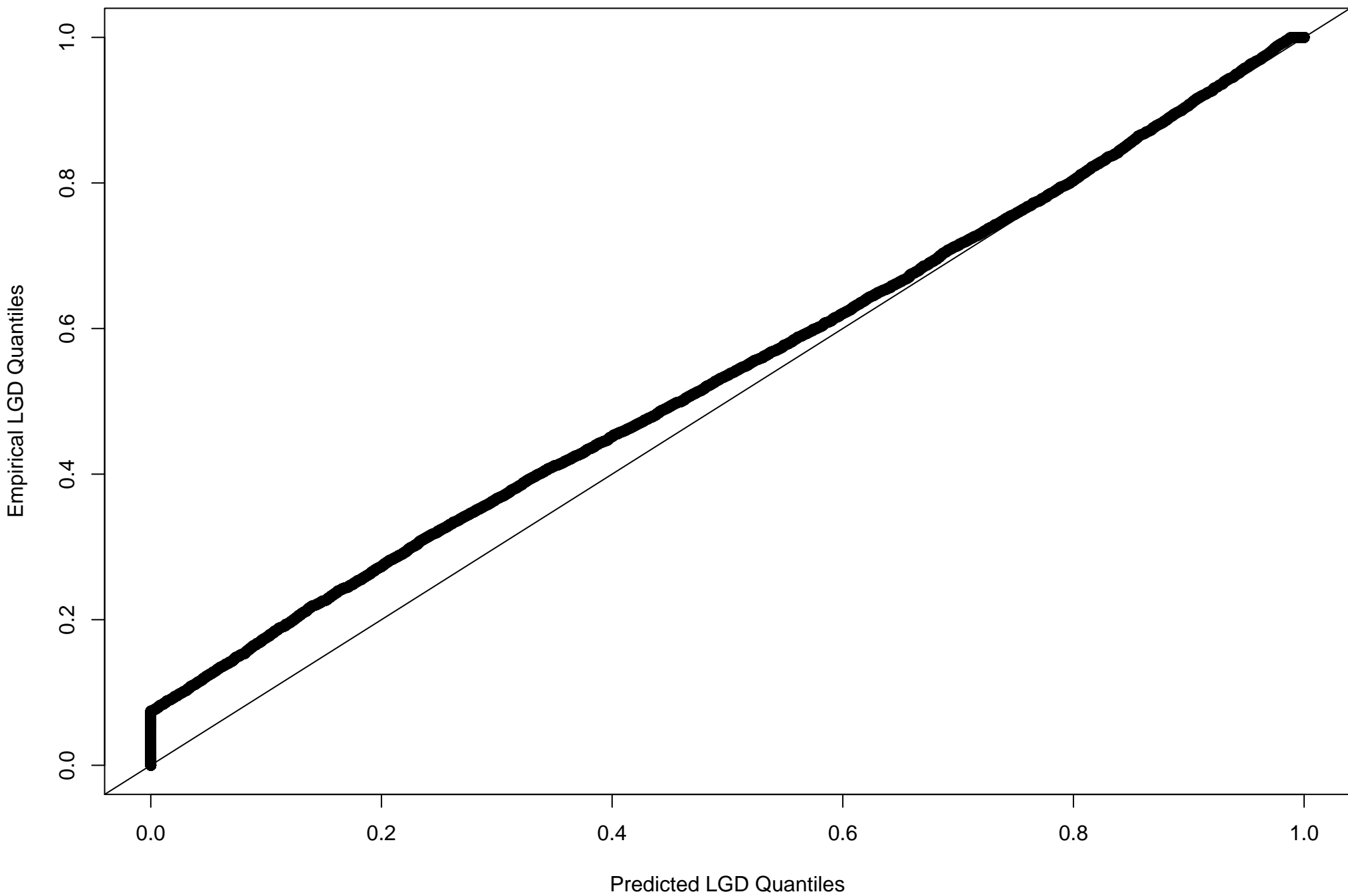


## Empirical LGD (EAD=1) Bucket Probability on Test2012 Data

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

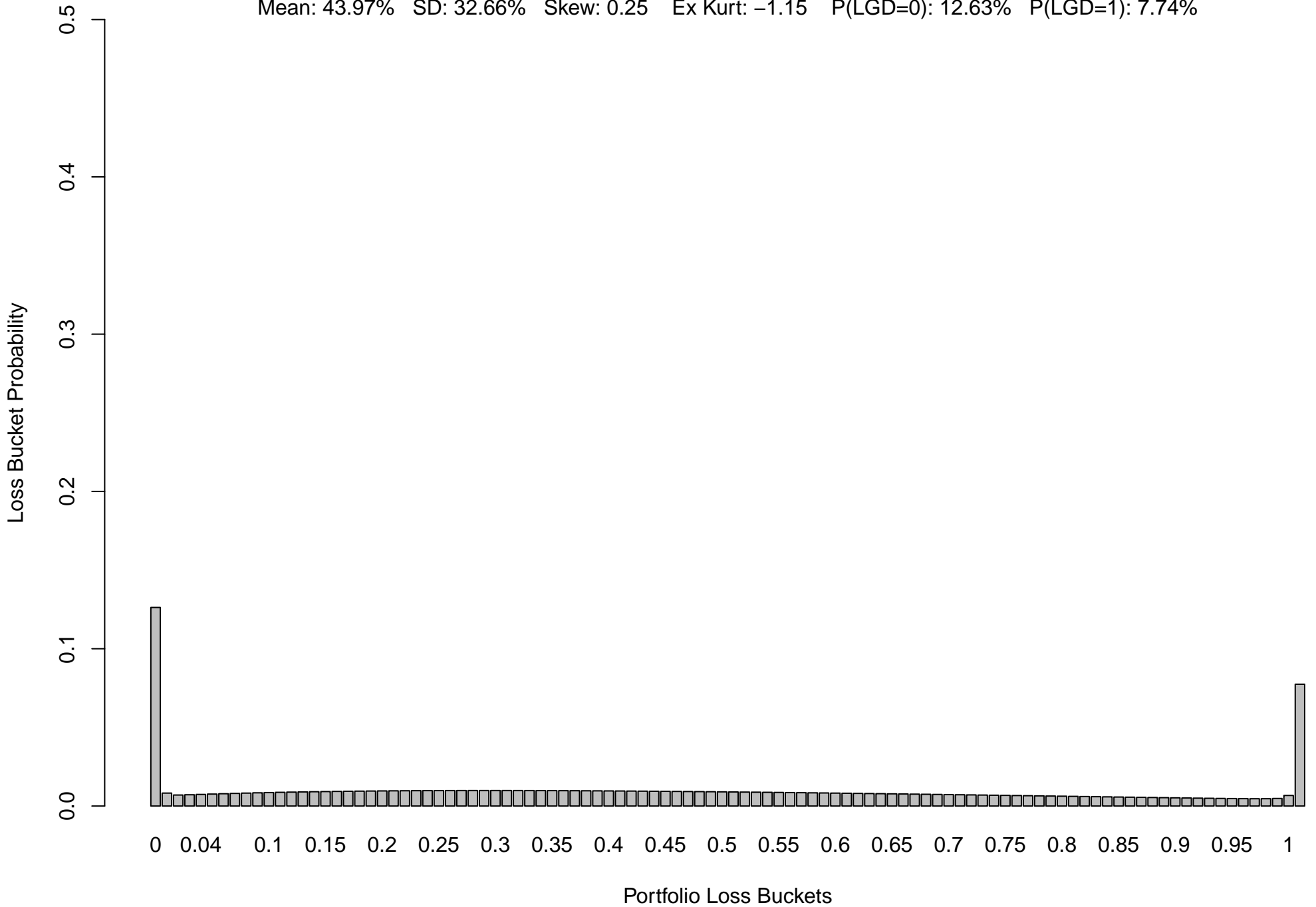


QQ Plot on Test2013 Data



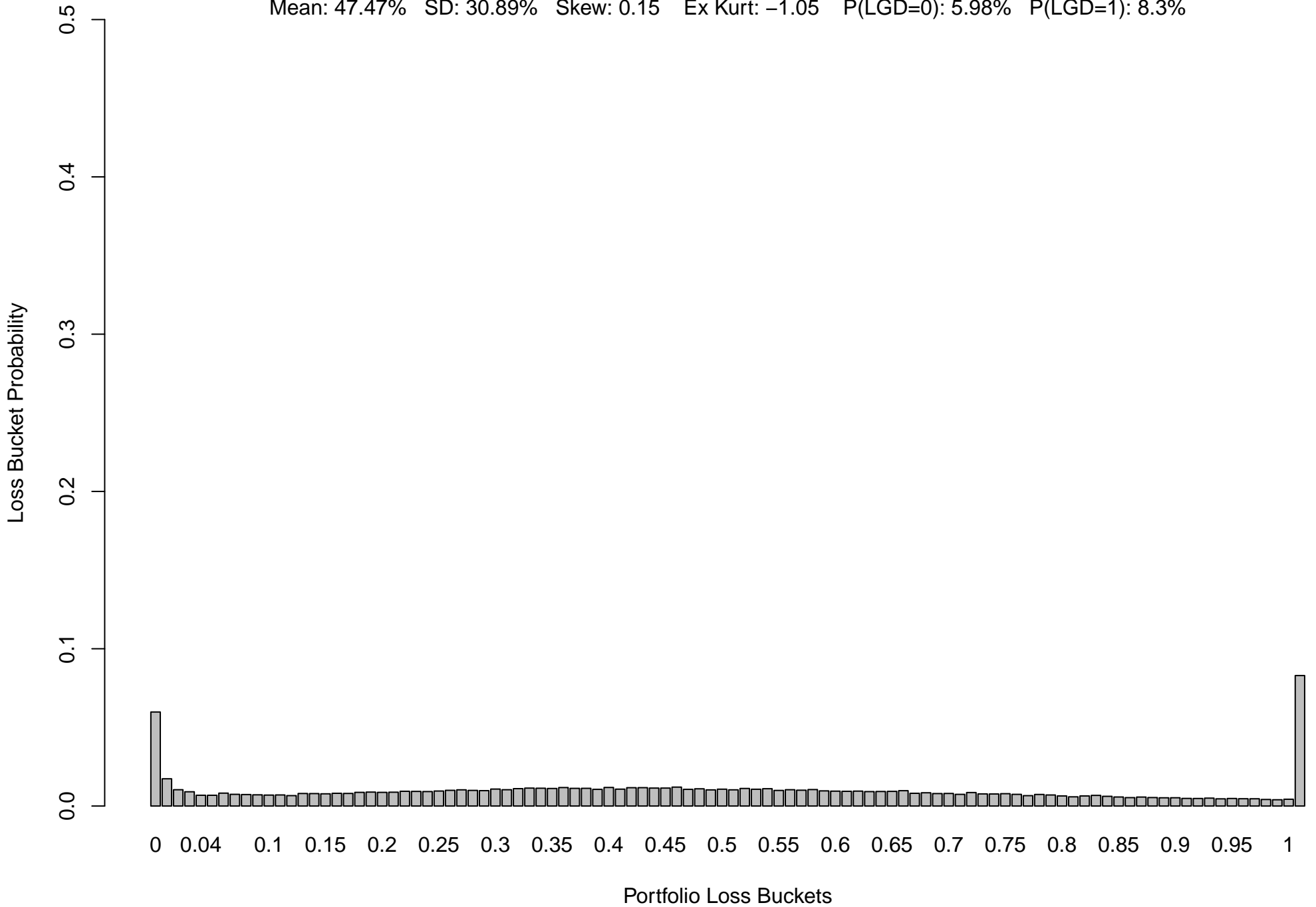
# Predicted LGD (EAD=1) Bucket Probability on Test2013 Data

Mean: 43.97% SD: 32.66% Skew: 0.25 Ex Kurt: -1.15 P(LGD=0): 12.63% P(LGD=1): 7.74%

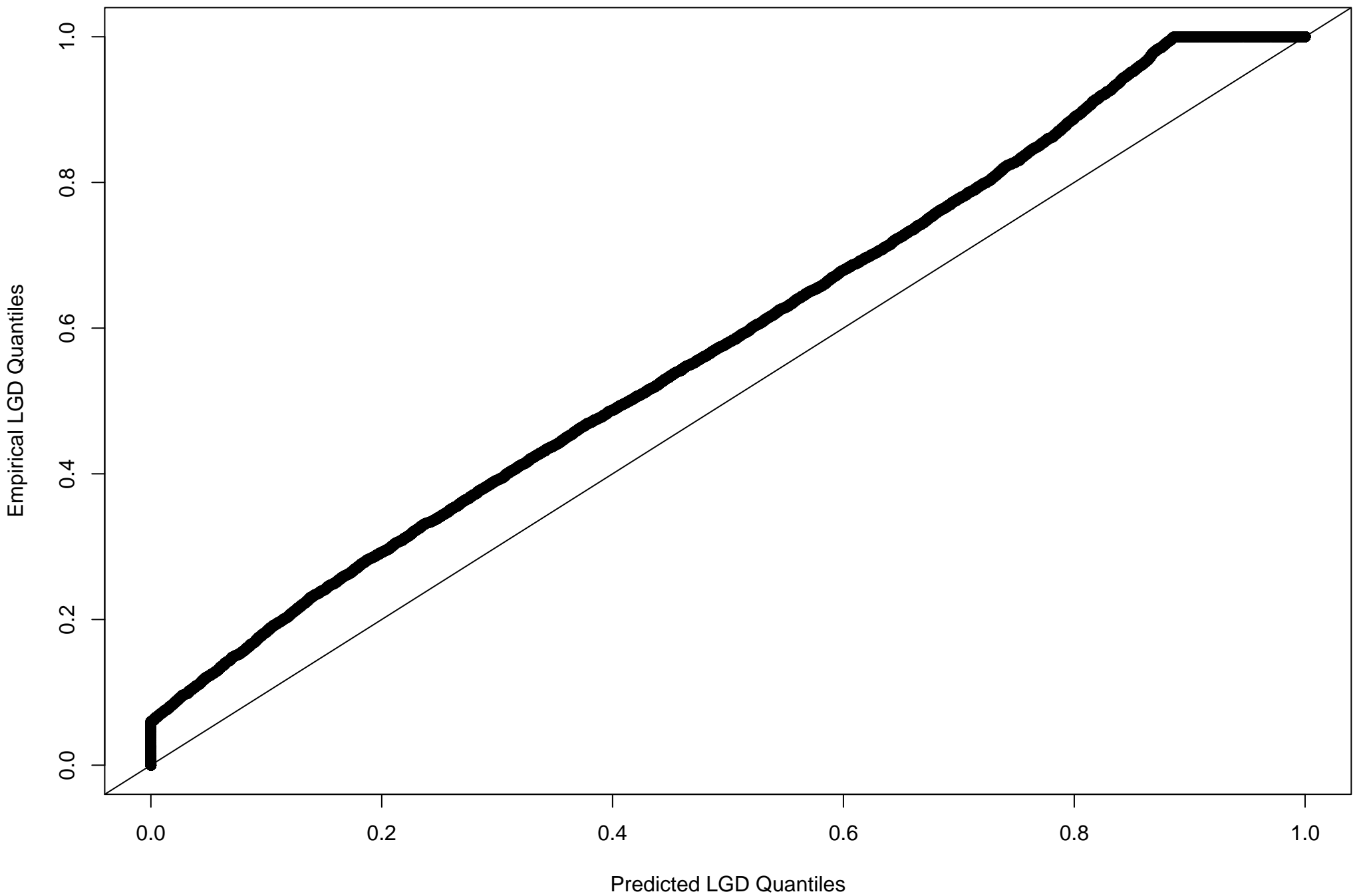


# Empirical LGD (EAD=1) Bucket Probability on Test2013 Data

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



QQ Plot on Test2014 Data





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

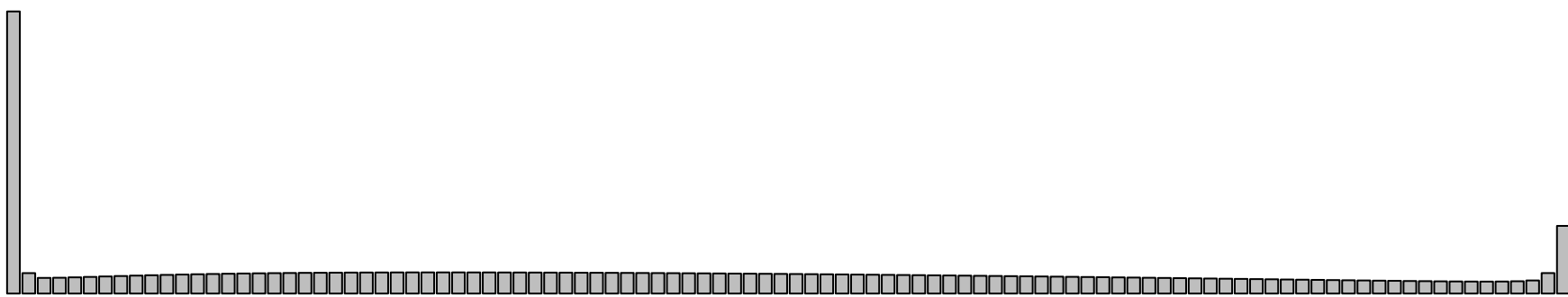
Mean: 42.09% SD: 31.48% Skew: 0.25 Ex Kurt: -1.13 P(LGD=0): 13.25% P(LGD=1): 3.18%

Loss Bucket Probability

0.5  
0.4  
0.3  
0.2  
0.1  
0.0

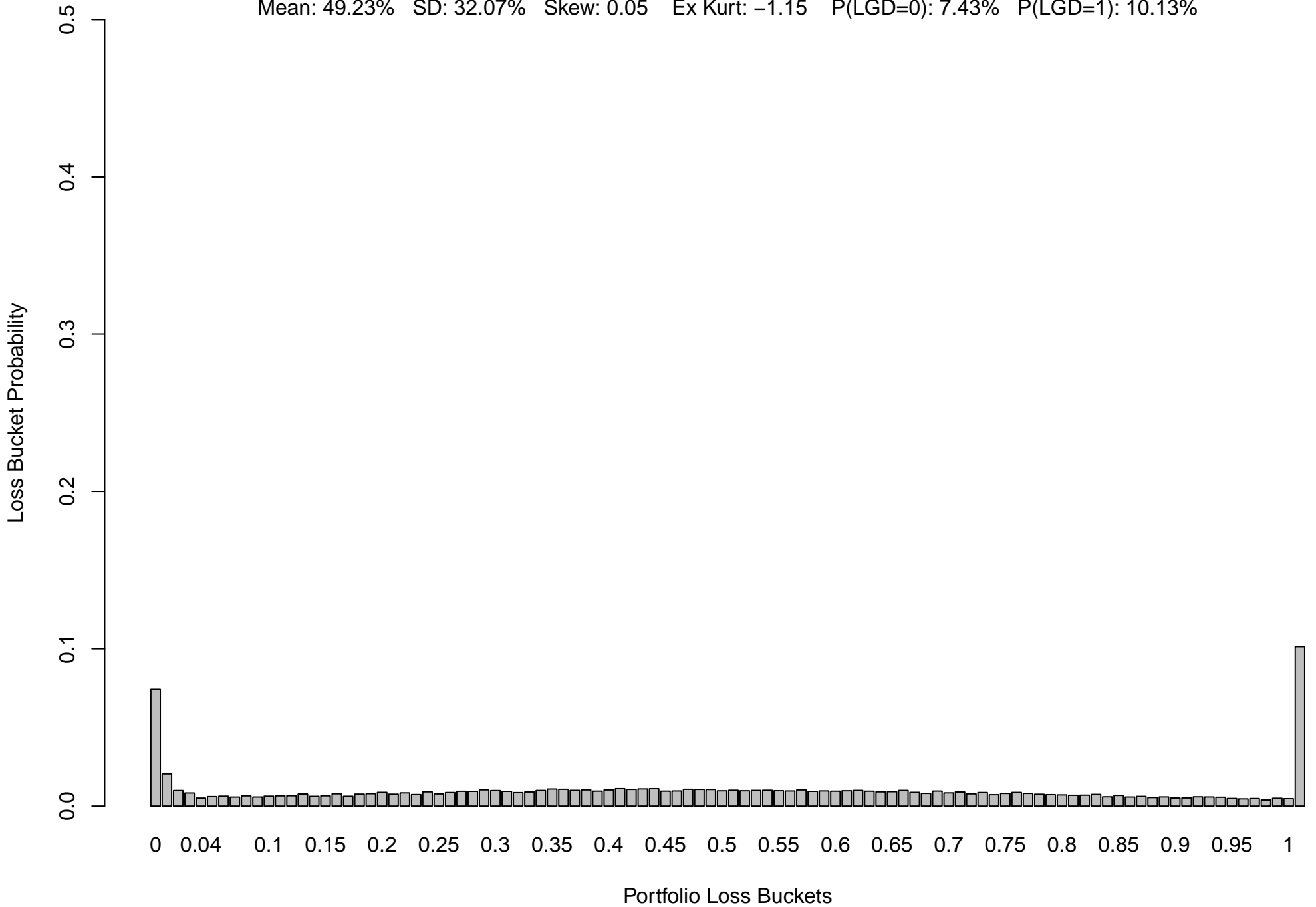
0 0.04 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.75 0.8 0.85 0.9 0.95 1

Portfolio Loss Buckets

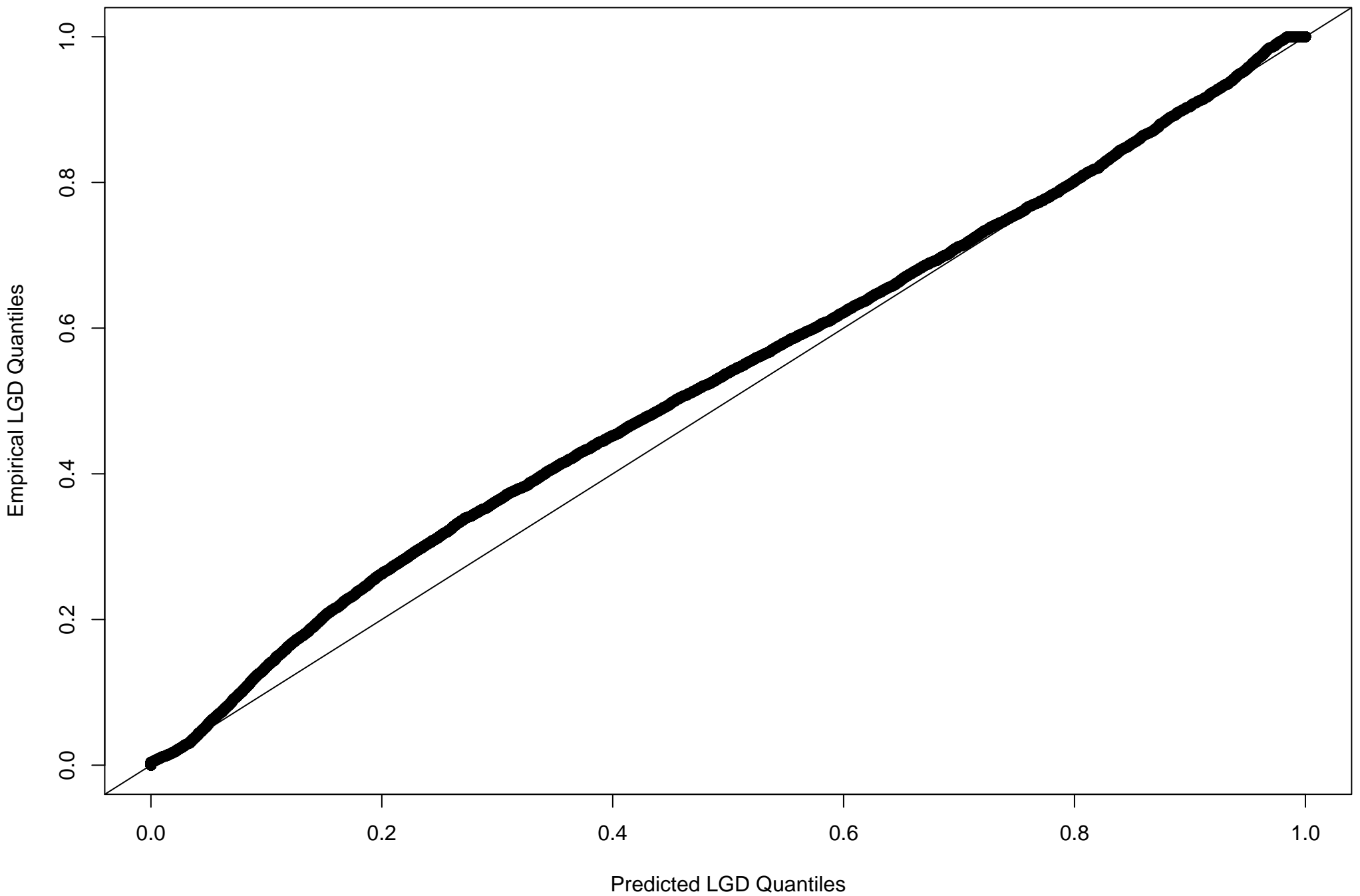


# Empirical LGD (EAD=1) Bucket Probability on Test2014 Data

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

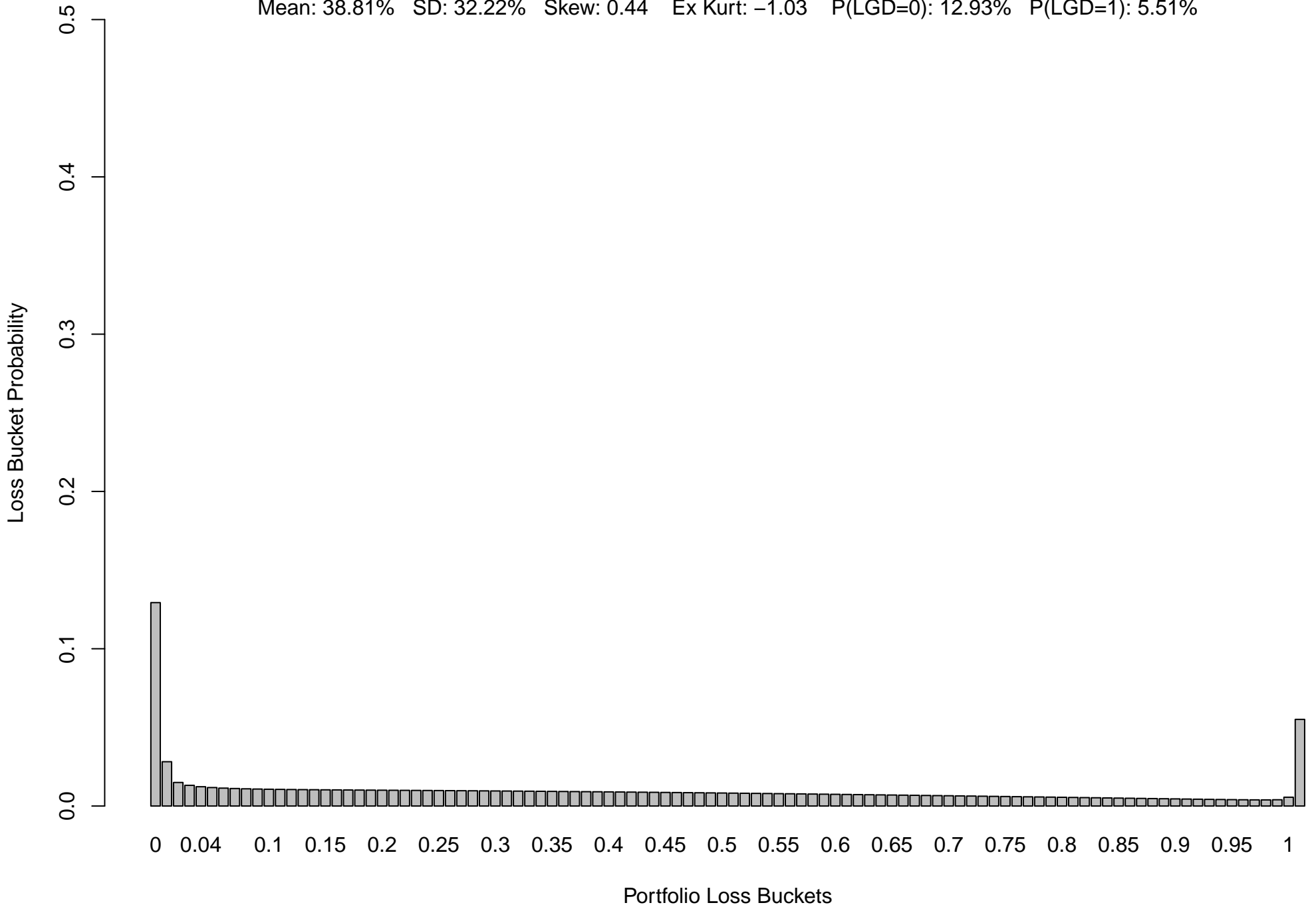


QQ Plot on All Data Data



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

Mean: 38.81% SD: 32.22% Skew: 0.44 Ex Kurt: -1.03 P(LGD=0): 12.93% P(LGD=1): 5.51%



## 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%

