

# BUSI 525 HW01

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## 1 Part1 - No Skilled Funds

### 1.1 Number of funds are skilled at the 5% sig. level

48

### 1.2 Plots of t-statistic and p-values

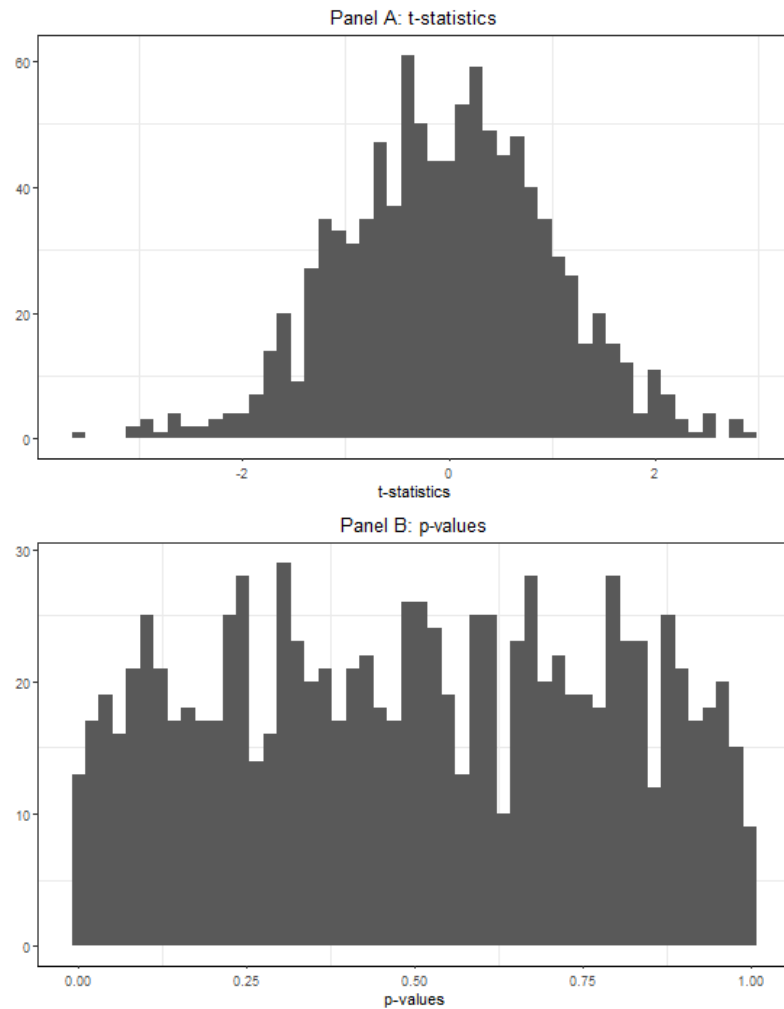


Figure 1: **The distribution of t-statistic and p-values.** This figure plots the distribution of t-statistic and p-values.

### 1.3 Distribution of p-value

Uniform[0,1]

## 2 Part2 - No Skilled Funds

### 2.1 Plots of estimated alpha, t-statistic and p-values

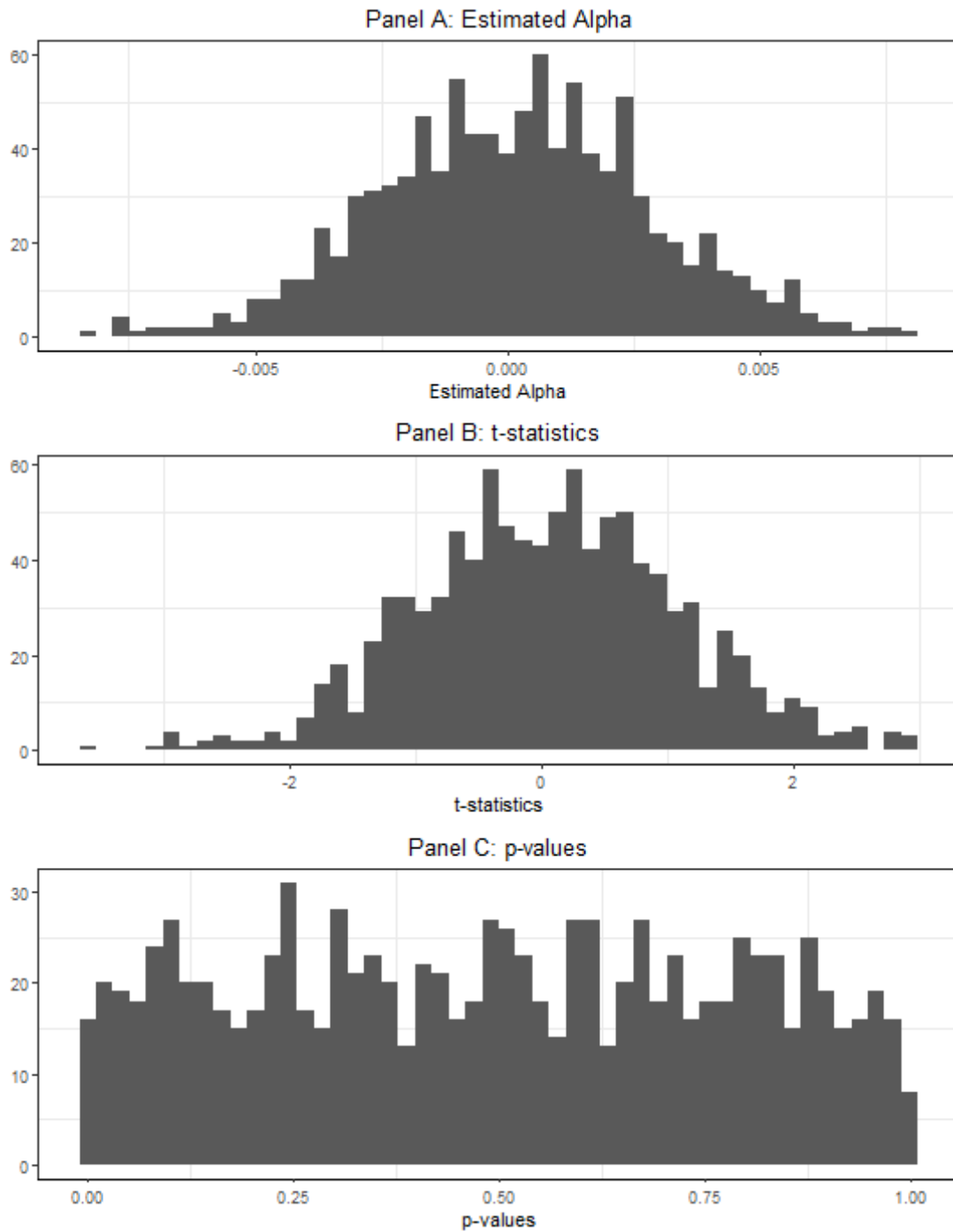


Figure 2:  $\lambda = 0.10$ . This figure plots the distribution of estimated alpha, t-statistic and p-values with  $\lambda = 0.10$ .

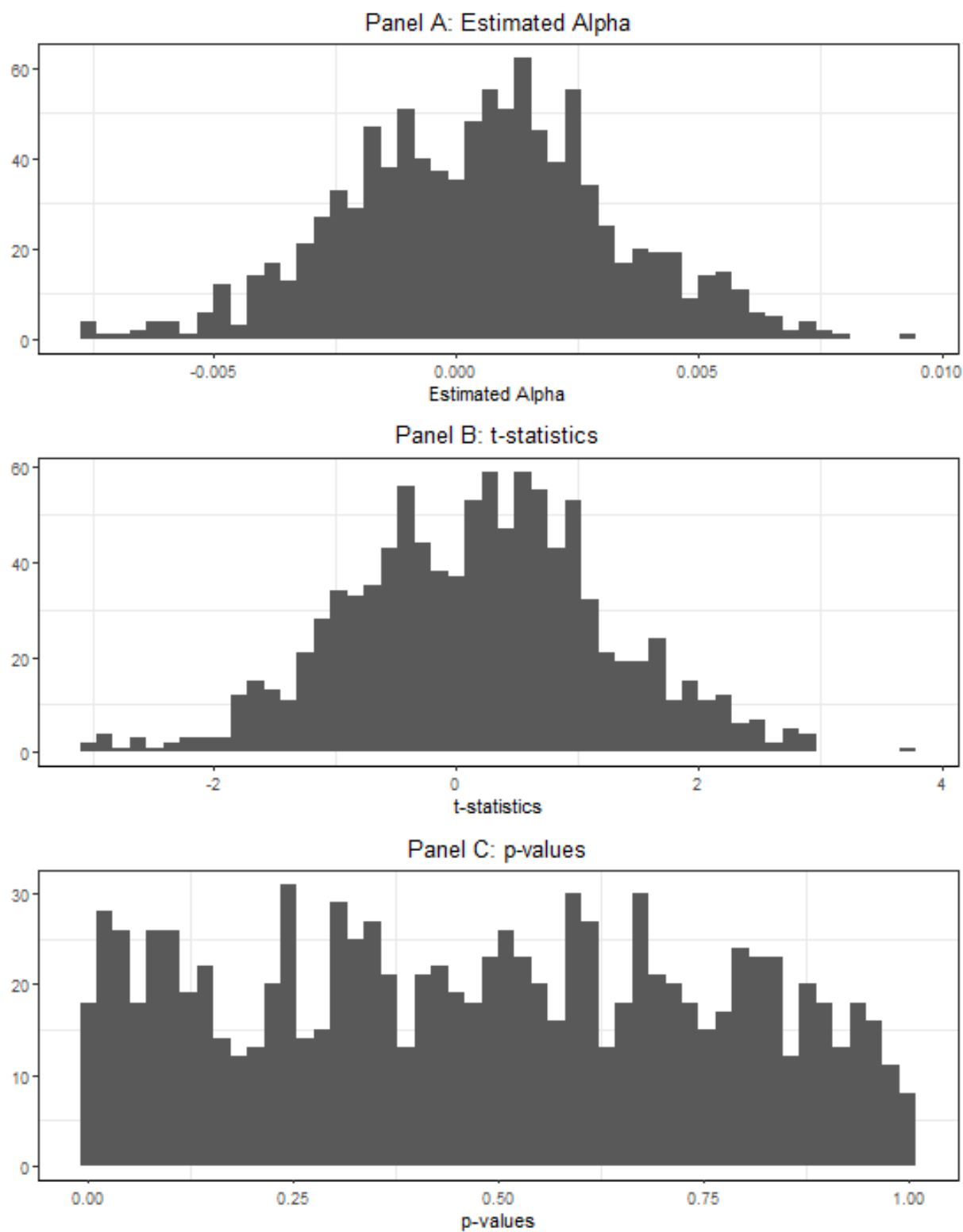


Figure 3:  $\lambda = 0.25$ . This figure plots the distribution of estimated alpha, t-statistic and p-values with  $\lambda = 0.25$ .

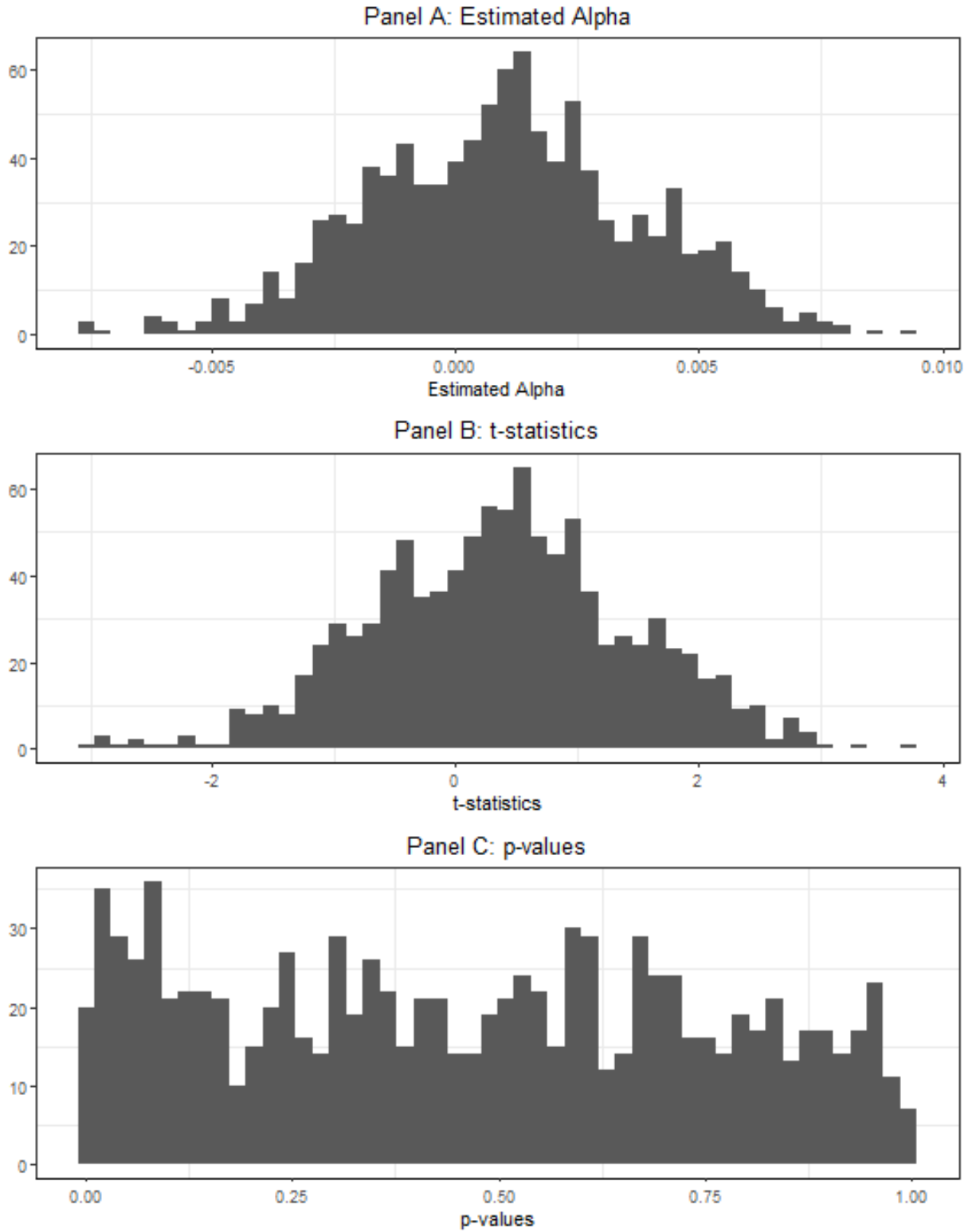


Figure 4:  $\lambda = 0.50$ . This figure plots the distribution of estimated alpha, t-statistic and p-values with  $\lambda = 0.50$ .

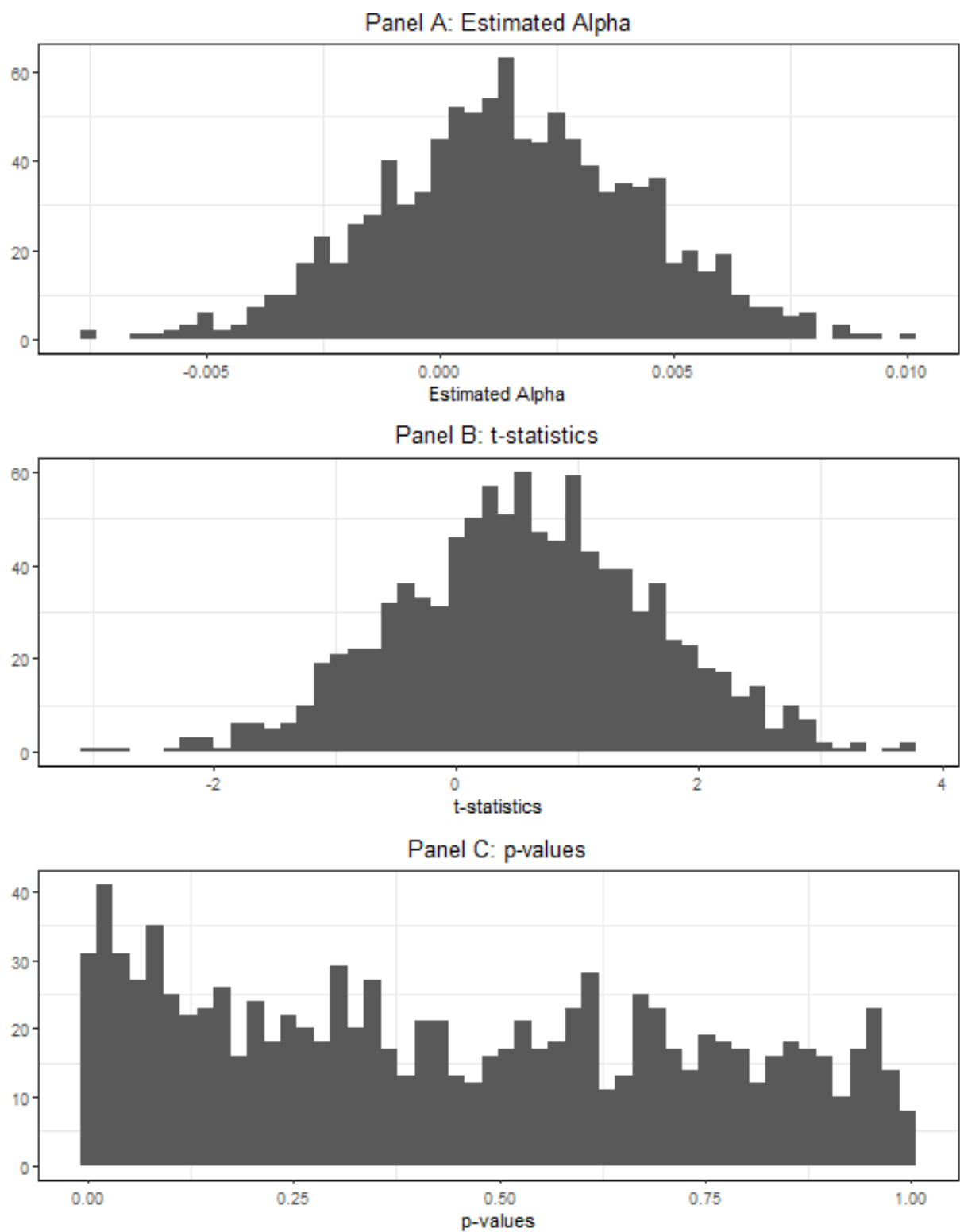


Figure 5:  $\lambda = 0.75$ . This figure plots the distribution of estimated alpha, t-statistic and p-values with  $\lambda = 0.75$ .

When the fraction of truly skilled funds are larger, the p-value is more concentrated towards 0, indicating more and more truly skilled funds are recognized.

## 2.2 Accuracy Matrix

Table 1: **Accuracy Matrix.** This table reports Accuracy Matrix.

Panel A: $\lambda = 0.10$		
	Estimated Skill: Y	Estimated Skill: N
True Skill: Y	11.00	89.00
True Skill: N	4.78	95.22
Panel B: $\lambda = 0.25$		
	Estimated Skill: Y	Estimated Skill: N
True Skill: Y	13.20	86.80
True Skill: N	5.07	94.93
Panel C: $\lambda = 0.50$		
	Estimated Skill: Y	Estimated Skill: N
True Skill: Y	11.40	88.60
True Skill: N	5.40	94.60
Panel D: $\lambda = 0.75$		
	Estimated Skill: Y	Estimated Skill: N
True Skill: Y	12.00	88.00
True Skill: N	4.80	95.20