d.

```
> summary(iv_inv)

Call:
ivreg(formula = i ~ p + plag + klag | g + w2 + tx + time + plag +
    klag + elag, data = df)

Residuals:
    Min      1Q  Median      3Q     Max
-3.2909 -0.8069  0.1423  0.8601  1.7956

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept) 20.27821    8.38325   2.419  0.02707 *
p            0.15022    0.19253   0.780  0.44598
plag         0.61594    0.18093   3.404  0.00338 **
klag        -0.15779    0.04015  -3.930  0.00108 **
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.307 on 17 degrees of freedom
Multiple R-Squared: 0.8849,     Adjusted R-squared: 0.8646
Wald test:  41.2 on 3 and 17 DF,  p-value: 5.148e-08
```

```
> print(compare_slopes, n = Inf)
# A tibble: 8 x 6
  model term        estimate std.error statistic  p.value
  <chr> <chr>          <dbl>     <dbl>     <dbl>    <dbl>
1 OLS   (Intercept)   10.1       5.47       1.85  0.0814
2 OLS   p              0.480     0.0971     4.94  0.000125
3 OLS   plag           0.333     0.101      3.30  0.00421
4 OLS   klag          -0.112     0.0267    -4.18  0.000624
5 2SLS  (Intercept)   20.3       8.38       2.42  0.0271
6 2SLS  p              0.150     0.193      0.780 0.446
7 2SLS  plag           0.616     0.181      3.40  0.00338
8 2SLS  klag          -0.158     0.0402    -3.93  0.00108
```

OLS的估計結果會有simultaneity bias
例如，當投資多的年份，同時利潤
也高時，OLS會高估兩者關係
而2SLS可解決內生性問題，
但可能會犧牲部份精確度

c.

```
> summary(stage2)

Call:
lm(formula = i ~ phat + plag + klag, data = df)

Residuals:
    Min      1Q  Median      3Q     Max
-3.8778 -1.0029  0.3058  0.7275  2.1831

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept) 20.27821    9.97663   2.033  0.05802 .
phat         0.15022    0.22913   0.656  0.52084
plag         0.61594    0.21531   2.861  0.01083 *
klag        -0.15779    0.04778  -3.302  0.00421 **
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 1.556 on 17 degrees of freedom
Multiple R-squared:  0.837,     Adjusted R-squared:  0.8082
F-statistic: 29.09 on 3 and 17 DF,  p-value: 6.393e-07
```

所有slope的正負值皆沒變.
和standard error有改變。