

:

63  
73

311

2004-1992

-R<sup>2</sup>

(1999)

(Easton, Harris and Ohlson, 1992)

-R<sup>2</sup>

%5

%33

(1999)

)

(2001

1994-1985

.2007/11/22

2006/3/26

/

%15-%10

(1)

Easton and Harris (1991)

" "

(2)

" "

(1999 ) (Easton, Harris and Ohlson, 1992)

(Al-Debi'e and Walker, 1997)

(1999 )

" " " "

" " " "

: :

" "

:

"

"

(2000)

:

.(Shroff , 2002)

:

(1993)

:

"

"

: Strong and Walker (1993)

Kothari and Sloan (1992)

" " (2002 )

(2001)

%42 %8

48 -R<sup>2</sup> 12 %45 (Shroff, 1995)

Easton, Harris and Ohlson (1992)

(Ou, 1990)

%30 -R<sup>2</sup> %63 .%15



( ) " " . . . . . 3

Easto, Harris and Ohlson, )

(OLS)

(1992

$$R_{it,t+\tau} = \alpha_{it,t+\tau} + \beta_{it,t+\tau} Z_{it,t+\tau} + \varepsilon_{it,t+\tau}$$

$i$  :  $R_{it,t+\tau}$   
 $t, t + \tau$  :  $Z_{it,t+\tau}$   
 $t, t + \tau$  :  $\beta_{it,t+\tau}, \alpha_{it,t+\tau}$   
 $t, t + \tau$  :  $\varepsilon_{it,t+\tau}$

( $R_{it,t+\tau}$ )

(Easton, Harris and Ohlson, 1992)

(Shroff, 2002)

:

(4)

$$R_{it,t+\tau} = ((P_{it+\tau} + FVS (d_{it,t+\tau}) - P_{it})) / P_{it}$$

$i$  :  $P_{it+\tau}$   
 $t, t + \tau$  :  $P_{it}$   
 $t$  :  $d_{it,t+\tau}$   
 $t, t + \tau$  :  $FVS$

Easton and Harris, 1991) <sup>(5)</sup>

(1999

$$\begin{aligned}
 & i \\
 & : FVF \\
 & \\
 & F \\
 & : \\
 & FVS(d_{it,t+\tau}) = d_t(R_f^{t+\tau-1}) \\
 & + d_{t+1}(R_f^{t+\tau-2}) + \dots + d_{t+\tau-1}(R_f) + d_{t+\tau} \\
 & : R_f \\
 & FVF(d_{it,t+\tau}) = \\
 & d_t(R_f^{t+\tau-1} - 1) + d_{t+1}(R_f^{t+\tau-2} - 1) \\
 & + \dots + d_{t+\tau-1}(R_f - 1) \\
 & : \\
 & (6)
 \end{aligned}$$

(Shroff, 2002)

( )

(

$$R_{it,t+\tau} = (P_{it+\tau} + \sum_{t=1}^{t+\tau} d_{it} - P_{it}) / P_{it}$$

$$Z_{it,t+\tau} = \{AX_{it,t+\tau} + FVF(d_{it,t+\tau})\} / P_{it}$$

$i$  :  $AX_{it,t+\tau}$   
 $t, t + \tau$

$$Z_{it,t+\tau} = AX_{it,t+\tau} / P_{it}$$

$$AX_{it,t+\tau} = \sum_{t=1}^{t+\tau} x_{it}$$

$i$  (EPS) :  $x_{it}$

Non- )

(Charitou and Clubb,

(overlapping  
1999)

$t$

:  $d_{it,t+\tau}$

(1993-1992)

... (1995-1994)

(2003-1998) (1997-1992)

(Overlapping)

:(7)

$$(g_{it+\tau} - g_{it}) = (P_{it+\tau} - BV_{it+\tau}) - (P_{it} - BV_{it}) \dots(1)$$

... (1994-1993) (1993-1992)

(1997-1992)

... (1998-1993)

$$\begin{array}{ccc}
 & i & \\
 & : & BV_{it+\tau} \\
 .t & & .t + \tau \\
 & i & : BV_{it} \\
 & i & : g_{it+\tau} \\
 .t & i & .t + \tau \\
 & & : g_{it}
 \end{array}$$

(Shroff,

2002)

(Unrecorded Economic Goodwill)

$$(g_{it+\tau} - g_{it}) = (P_{it+\tau} - P_{it}) - (BV_{it+\tau} - BV_{it}) \dots(2)$$

(Residual Income

or Clean Surplus Relation)

(Measurement Error)

(Accounting Lag)

$$(BV_{it+\tau} - BV_{it}) = AX_{it,t+\tau} - d_{it,t+\tau} \dots(3)$$

:(1)

(3)

(Covariance)

$$(g_{it+\tau} - g_{it}) = P_{it+\tau} - P_{it} - AX_{it,t+\tau} + d_{it,t+\tau} \dots(4)$$

: (4)

$$Cov(R_{it,t+\tau}, Z_{it,t+\tau}) = Cov(Z_{it,t+\tau}, g^*_{it,t+\tau}) + Var(Z_{it,t+\tau})$$

$$(g_{it+\tau} - g_{it}) = (P_{it+\tau} + d_{it,t+\tau} - P_{it}) - AX_{it,t+\tau} \dots(5)$$

(5)

:

$$\beta = Cov(R_{it,t+\tau}, Z_{it,t+\tau}) / Var(Z_{it,t+\tau})$$

$$( \quad )$$

:

$$Cov(R_{it,t+\tau}, Z_{it,t+\tau})$$

$$(g_{it+\tau} - g_{it}) / P_{it} =$$

$$\{(P_{it+\tau} + d_{it,t+\tau} - P_{it}) / P_{it}\} + \{AX_{it,t+\tau} / P_{it}\} \dots(6)$$

$$\beta = \{Cov(Z_{it,t+\tau}, g^*_{it,t+\tau})$$

$$+ Var(Z_{it,t+\tau})\} / Var(Z_{it,t+\tau})$$

(6)

$$( \quad )$$

:

$$\beta_{it} = 1 + \{Cov(Z_{it,t+\tau}, g^*_{it,t+\tau}) / Var(Z_{it,t+\tau})\}$$

$$g^*_{it,t+\tau} = R_{it,t+\tau} - Z_{it,t+\tau} \dots(7)$$

i

: g^\*\_{it,t+\tau}

β

. t, t + τ

β

β

β

ρ

:

$$R_{it,t+\tau} = Z_{it,t+\tau}$$

:

$$\rho = Cov(R_{it,t+\tau}, Z_{it,t+\tau}) / \{(\sigma(Z_{it,t+\tau}) * \sigma(R_{it,t+\tau}))\}$$

$$\rho = \{Cov(Z_{it,t+\tau}, g^*_{it,t+\tau})$$

$$+ Var(Z_{it,t+\tau})\} / \sigma(Z_{it,t+\tau}) * \sigma(R_{it,t+\tau})$$

)

(

$$\rho = \{Cov(Z_{it,t+\tau}, g^*_{it,t+\tau}) / \sigma(Z_{it,t+\tau}) * \sigma(R_{it,t+\tau})\}$$

$$+ \{Var(Z_{it,t+\tau}) / \sigma(Z_{it,t+\tau}) * \sigma(R_{it,t+\tau})\}$$

(7)

$$\rho = \{Cov(Z_{it,t+\tau}, g^*_{it,t+\tau}) / \sigma(Z_{it,t+\tau}) * \sigma(R_{it,t+\tau})\} + \{\sigma(Z_{it,t+\tau}) / \sigma(R_{it,t+\tau})\}$$

(2) (1) :

(Covariance Effect; CE)  
(Variance Effect, VE)

$$CE = Cov(Z_{it,t+\tau}, g^*_{it,t+\tau}) / \sigma(Z_{it,t+\tau}) * \sigma(R_{it,t+\tau})$$

$$VE = \sigma(Z_{it,t+\tau}) / \sigma(R_{it,t+\tau})$$

(1)  
(2004-1992)

|                 |           |            |            |    |
|-----------------|-----------|------------|------------|----|
|                 |           |            |            |    |
| $Z_{it,t+\tau}$ |           |            |            |    |
| 0.900-          | 0.750-    | 1.220-     | 0.75-      |    |
| 0.891-          | 0.743-    | 0.996-     | 0.623-     | 1  |
| 0.321           | 0.171     | 0.062      | 0.046      |    |
| 0.329           | 0.192     | 0.102      | 0.066      |    |
| 0.508           | 0.329     | 0.266      | 0.124      |    |
| 1.806           | 0.953     | 0.623      | 0.780      | 99 |
| 1.810           | 0.96      | 0.73       | 0.701      |    |
| <b>73</b>       | <b>99</b> | <b>249</b> | <b>311</b> |    |
| $R_{it,t+\tau}$ |           |            |            |    |
| 0.840-          | 0.790-    | 0.720-     | 0.600-     |    |
| 0.832-          | 0.788-    | 0.688-     | 0.521-     | 1  |
| 0.566           | 0.134     | 0.047      | 0.037-     |    |
| 0.217           | 0.105     | 0.026      | 0.049-     |    |

|           |           |            |            |    |
|-----------|-----------|------------|------------|----|
|           |           |            |            |    |
| 1.189     | 0.809     | 0.553      | 0.275      |    |
| 4.643     | 2.452     | 2.089      | 1.112      | 99 |
| 4.65      | 2.460     | 2.250      | 1.180      |    |
| <b>73</b> | <b>99</b> | <b>249</b> | <b>311</b> |    |

$$Z_{it,t+\tau} = [AX_{it,t+\tau} + FVF(d_{it,t+\tau})] / P_{it}$$

$$R_{it,t+\tau} = (P_{it+\tau} + FVS(d_{it,t+\tau}) - P_{it}) / P_{it}$$

(2) ( )

|                    |                    |                    |                    |  |
|--------------------|--------------------|--------------------|--------------------|--|
|                    |                    |                    |                    |  |
|                    |                    |                    | *0.316<br>*(0.338) |  |
|                    |                    | *0.422<br>*(0.563) |                    |  |
|                    | *0.476<br>*(0.548) |                    |                    |  |
| *0.547<br>*(0.563) |                    |                    |                    |  |

73 97 249 311 .001 \*

(3)



(5)

(6)

(5)

(6 5)

-R<sup>2</sup>

(4)

-R<sup>2</sup>

)

(

(0.289)

-R<sup>2</sup>

(0.291)

(0.186)

-R<sup>2</sup>

(0.192)

(Easton, Harris and Ohlson, 1992)

-R<sup>2</sup>

(4)

|         |         | $-R^2$ | $\beta$            |        |
|---------|---------|--------|--------------------|--------|
| * 0.563 | * 0.547 | 0.289  | * 0.547<br>(5.543) |        |
| * 0.522 | * 0.442 | 0.181  | * 0.442<br>(3.688) |        |
|         |         | .t     |                    | 0.01 * |

(5)

|         |         | $-R^2$ | $\beta$            |        |
|---------|---------|--------|--------------------|--------|
| * 0.563 | * 0.547 | 0.289  | * 0.547<br>(5.543) |        |
| * 0.655 | * 0.548 | 0.291  | * 0.548<br>(5.632) |        |
|         |         | .t     |                    | .001 * |

(6)

|         |         | $-R^2$ | $\beta$            |        |
|---------|---------|--------|--------------------|--------|
| * 0.474 | * 0.448 | 0.186  | * 0.448<br>(3.75)  |        |
| * 0.555 | * 0.452 | 0.192  | * 0.454<br>(3.878) |        |
|         |         | .t     |                    | .001 * |

-1985)

(1999 )

(1994

(7)

(1999 )

-R<sup>2</sup>

(1999 )

1989  
 (8)  $-R^2$   
 (1999)  $-R^2$   
 (7) (1994-1990)  
 (1999)  $-R^2$   
 $-R^2$

(7)  
 (1999)

| $R^2$ (1994-1990) |       | $\beta$ (1994-1985) |                    |
|-------------------|-------|---------------------|--------------------|
| 0.008             | 0.007 | 0.02<br>(0.587)     | 0.012<br>(0.517)   |
| 0.038             | -     | 0.059<br>(1.238)    | -                  |
| 0.074             | -     | 0.057<br>(1.769)    | -                  |
| -                 | 0.030 | -                   | 0.045-<br>(0.336-) |
| -                 | 0.017 | -                   | 0.043<br>(0.813)   |
| -                 | 0.028 | -                   | 0.072<br>(1.06)    |
| -                 | 0.021 | -                   | 0.058<br>(0.910)   |

.t

(9)

(Covariance)

(8)

| (1999)          |       | -R <sup>2</sup> |  |
|-----------------|-------|-----------------|--|
| -R <sup>2</sup> |       | -R <sup>2</sup> |  |
| -               | -     | 0.097           |  |
| -               | -     | 0.174           |  |
| 0.008           | 0.007 | -               |  |
| 0.038           | -     | 0.218           |  |
| 0.074           | -     | -               |  |
| -               | 0.030 | 0.289           |  |
| -               | 0.017 | -               |  |
| -               | -     | 0.548           |  |
| -               | 0.028 | -               |  |
| -               | 0.021 | 0.638           |  |

(9)

| <i>Var Effect</i> | <i>Cov Effect</i> | <i>(Z<sub>it,t+τ</sub>, g*<sub>it,t+τ</sub> Cov</i> |  |
|-------------------|-------------------|---|--|
| 0.458             | 0.481-            | 0.0391-   |  |
| 0.396             | 0.148-            | 0.0352-   |  |
| 0.37              | 0.064-            | 0.0319-   |  |
| 0.433             | 0.035-            | 0.029-  |  |

$Z_{it,t+\tau}$   
 $g^*_{it,t+\tau}$   
*Cov Effect*  
  
*Var Effect*

(10)

(10)

| <i>Var Effect</i> | <i>Cov Effect</i> | $(Z_{it, t+\tau}, g^*_{it, t+\tau} Cov$ |  |
|-------------------|-------------------|---|--|
| 0.367             | 0.058-            | 0.003-                                  |  |
| 0.416             | 0.241-            | 0.072-                                  |  |
| 0.310             | 0.320             | 0.065                                   |  |
| 0.351             | 0.351             | 0.082-                                  |  |

$Z_{it, t+\tau}$   
 $g^*_{it, t+\tau}$   
*Cov Effect*  
*Var Effect*

(11)

(11)

| <i>Var Effect</i> | <i>Cov Effect</i> | $(Z_{it, t+\tau}, g^*_{it, t+\tau} Cov$ |  |
|-------------------|-------------------|---|--|
| 0.458             | 0.481-            | 0.0391-                                 |  |
| 0.631             | 0.366-            | 0.0383-                                 |  |
| 0.612             | 0.144-            | 0.0367-                                 |  |
| 0.592             | 0.048-            | 0.0247-                                 |  |

$Z_{it, t+\tau}$   
 $g^*_{it, t+\tau}$   
*Cov Effect*  
*Var Effect*

(12)

(12)

| <i>Var Effect</i> | <i>Cov Effect</i> | <i>Cov (Z<sub>it,t+τ</sub>, g<sup>*</sup><sub>it,t+τ</sub>)</i> |  |
|-------------------|-------------------|---|--|
| 0.367             | 0.058-            | 0.0029-   |  |
| 0.577             | 0.218-            | 0.025-  |  |
| 0.604             | 0.215-            | 0.048-  |  |
| 0.519             | 0.037             | 0.024   |  |

$.t, t+\tau$   $i$   $:Z_{it, t+\tau}$   
 $.t, t+\tau$   $i$   $:g^*_{it, t+\tau}$   
 $:Cov Effect$   
 $:Var Effect$

-9)

(12)

Shroff

(2002)

$$(0.638) \quad (13)$$

$$(0.289)$$

$$(0.806)$$

$$(0.547)$$

$$-R^2$$

(13)

|    | $-R^2$ | $\beta$           | $\alpha$          |  |
|----|--------|-------------------|-------------------|--|
| 31 | 0.548  | *0.750<br>(6.215) | 0.455-<br>(8.478) |  |
| 31 | 0.638  | *0.806<br>(7.463) | 0.467<br>(8.379)  |  |

$$.t \quad \beta \quad \alpha$$

$$.0001 \quad *$$

(14)

(13) (12)

(14)

| <i>Var Effect</i> | <i>Cov Effect</i> | $(Z_{it, t+\tau}, g^*_{it, t+\tau} Cov$ |  |
|-------------------|-------------------|---|--|
| 0.748             | 0.144-            | 0.037-                                  |  |
| 0.588             | 0.087-            | 0.016-                                  |  |

$$.t, t+\tau \quad i \quad :Z_{it, t+\tau}$$

$$.t, t+\tau \quad i \quad :g^*_{it, t+\tau}$$

$$:Cov Effect$$

$$:Var Effect$$

---

-R<sup>2</sup> (0.638) (0.316) (0.097) (0.806) -R<sup>2</sup> 0.901 0.784 (0.003)<sup>(8)</sup>

- R<sup>2</sup>

(Shroff, 2002)

49 (2004-1992) (4) (2002 ) (1)  
 (Kothari, (Strong and Walker, 1993) (5) (Lev, 1989) (2)  
 .1992) (6) " " "  
 .(1988) (7) " "  
 .(Shroff, 2002) (8) (Shroff, 2002), (Easton, Shroff and Taylor, (3)  
 2000), (Easton, Harris and Ohlson, 1992), and  
 (Kothari and Sloan, 1992).

2000

27 : 2 26 1999  
 .431-410 2 .365-358

|       |       |          |          |
|-------|-------|----------|----------|
| 2     | 26    |          | 2001     |
|       |       | .329-312 |          |
|       | 1993  |          | 1 28     |
| .21-1 | 9     |          | .67-54   |
|       | 1988  |          | 2002     |
|       |       |          | 1 29     |
| 15    |       |          | .145-134 |
|       | .22-9 | 2        | 1999     |

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## **The Relation between Earnings and Stock Returns in the Long Run: Replication and Extension**

*Muath B. Abdelqader, Mamoun M. Al-Debi'e and Fawzi A. Gharaibeh*

### **ABSTRACT**

The study aims at examining the effect of expanding the measurement window of the relationship between accounting earnings and stock returns on the explanatory power of the model and the earnings response coefficient. Furthermore, it provides an interpretation of the value and behavior of the earnings response coefficient over various measurement windows. The study sample consists of sixty three public industrial and service companies over the period 1992-2004, with a number of observations ranging between 311, for a measurement window of twelve months, and 73 observations, for a measurement window of seventy two months. The results indicate that expanding the measurement window enhances the explanatory power of accounting earnings in regard to variations in stock market prices. Moreover, it has been noticed that the value of the earnings response coefficient increases as the covariance between accounting earnings and unrecorded goodwill increases. Finally, it has been noticed that, for a ten-year measurement window, the value of the earnings response coefficient approaches one as the value of the covariance approaches zero.

**Keywords:** Accounting earnings, Stock market returns, Earnings response coefficient, Length of measurement.

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