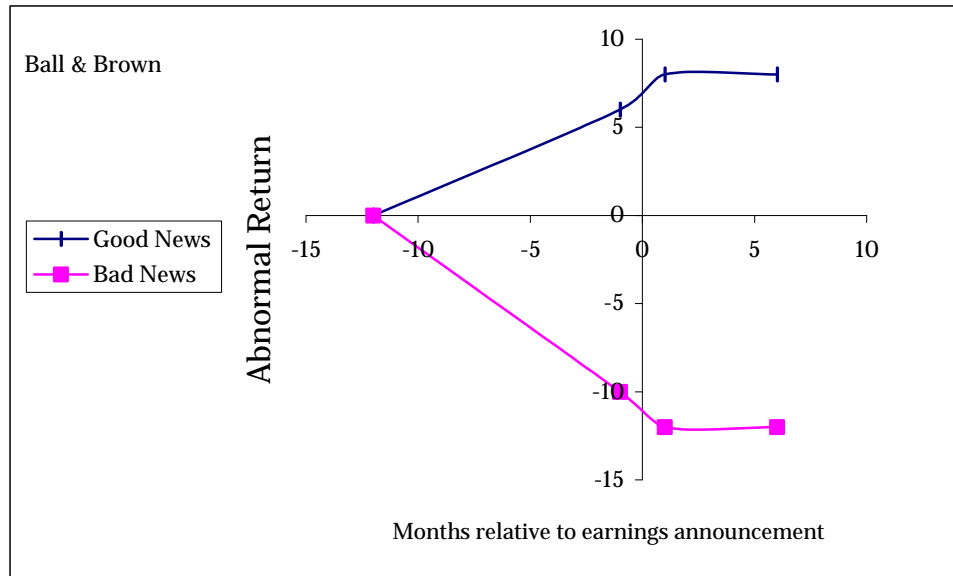
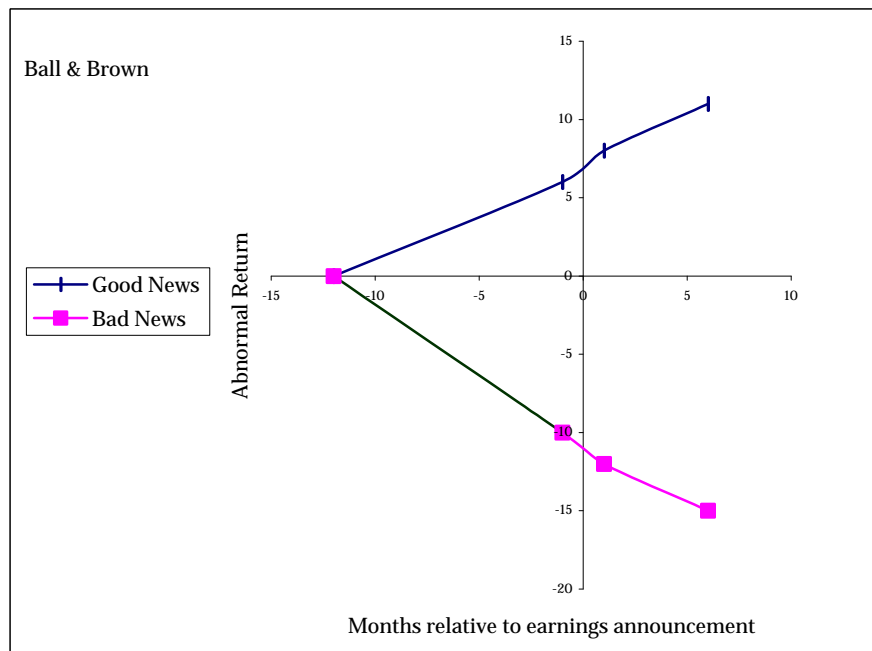


Evidence that stock prices do not fully reflect the implications of current earnings of future earnings

Expected



Actual



Time Series Properties of Quarterly Earnings

Seasonal differences in quarterly earnings are correlated.		Correlation
Earnings in t	- Earnings in t-4	are positively correlated 0.34
Earnings in t+1	- Earnings in t-3	
Earnings in t	- Earnings in t-4	are negatively correlated (0.24)
Earnings in t-4	- Earnings in t-8	

Autocorrelations in seasonally differenced quarterly earnings.
 Net Income before extraordinary items and discontinued operations

Market Expectations

Earnings in t = Earnings in t-4

True expectations

Earnings in t = Earnings in t-4
 + (Earnings in t-1 - Earnings in t-5) x phi
 + Shock in t-4 x theta

	Qtr	Last year	Ch EPS		Expectation	Shock
Year 1	1	\$ 10.00				\$ 1.00 \$ 11.00
	2	\$ 10.00	\$ 1.00 x	0.34	\$ 0.34	\$ 10.34
	3	\$ 10.00	\$ 0.34 x	0.34	\$ 0.12	\$ 10.12
	4	\$ 10.00	\$ 0.12 x	0.34	\$ 0.04	\$ 10.04
Year 2	1	\$ 11.00	\$ 0.04 x	0.34	\$ 0.01	
			\$ 1.00 x	(0.24)	\$ (0.24)	\$ 10.77
	2	\$ 10.34	\$ (0.23) x	0.34	\$ (0.08)	
			\$ - x	(0.24)	\$ -	\$ 10.26

Abnormal Market Return in t = [Earnings in t-1 - Earnings in t-5] and
 Positively related to Shock in t-4

	Qtr	Expectations		Actual Earnings	Actual Shock
		Market	Correct		
Year 1	1	\$ 10.00		\$11.00	\$1.00
	2	\$ 10.00	\$ 10.34	\$ 10.34	\$0.34
	3	\$ 10.00	\$ 10.12	\$ 10.12	\$0.12
	4	\$ 10.00	\$ 10.04	\$ 10.04	\$0.04
Year 2	1	\$ 11.00	\$ 10.77	\$10.77	(\$0.23)

Consistent across industries and size.

Abnormal Market Return in t = Size adjusted return over -2, -1, 0
 SUE = forecast errors from a seasonal random walk / standard deviat