BMAN30071 Share Prices and Accounting Information

THE UNIVERSITY OF MANCHESTER · SEMESTER 1, 2026/27

Full guide + ask Sia about BMAN30071

SIDE 1 · METHODS & DECISIONS

Model → coefficient → economic meaning → limitation

DESK REFERENCE

1 · Exam map

OFFICIAL FACTS

Exam 100%

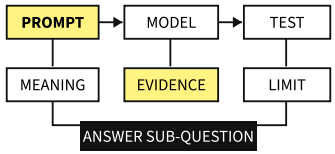
"Assessment Method Exam (100%) in January 2027 examination period" (BMAN30071 course outline 2026/27) · "Students should be capable of completing this open book exam without the use of a calculator." (BMAN30071 exam paper 2025/26)

ONLINE OPEN-BOOK: online, unseen and open book. **48-hour completion window**; answer **two of three** questions, 50 marks each, combined 2,000-word limit.

WHAT THE FINAL REWARDS	VISIBLE WORKING
Regression evidence	DV, base, units, combined slope
Integrated argument	mechanism → model → finding
Evaluation	proxy/design-specific consequence

2 · Question decoder

COURSE FAQ



Decode first; significance symbols never substitute for model orientation or units.

1. **Define the claim:** valuation level, price revision, recognition timing or disclosure effect?
2. **Map the equation:** dependent variable, regressor, benchmark/base category, sign prediction.
3. **Read evidence:** direction and economic magnitude; then precision; then model fit.
4. **Evaluate the path:** timing, proxy noise, omitted traits, selection or forecast structure.

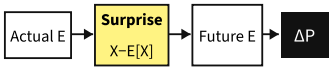
ANSWER ARCHITECTURE

PARAGRAPH JOB	MINIMUM CONTENT
1 · mechanism	why the accounting signal should reach value or return
2 · specification	Y, main X, base group, predicted sign
3 · result	combined coefficient; magnitude and precision separately
4 · evaluation	one model-specific threat and how it changes inference
5 · judgement	answer the wording; keep association inside design limits

Questions can integrate several teaching sessions. Link neighbouring mechanisms explicitly: information timing → disclosure anticipation; recognition → conservatism; book value → adaptation or abnormal earnings; narrative construction → investor response.

3 · Price relevance

C1



Persistence ↑ effect

Expectation is the benchmark; persistence determines how many future periods are revised.

INFORMATION VARIABLE

```
Earnings surprise = realised earnings - expected earnings
Return model: price revision ↔ news during a period
Price model: equity-value level ↔ accounting variables at a date
```

QUESTION	USE	DO NOT CLAIM
Value at date?	Price specification	level = unexpected news
Revision in interval?	Return specification	raw change = surprise
Equal surprises?	compare persistence, risk, prior information	equal price response

Earnings can grow yet disappoint: the year-on-year change and the surprise can have opposite signs. A more persistent innovation revises a longer expected stream and can justify a larger response, subject to discounting, risk and other information.

Earnings-response coefficient = estimated return change for a defined unit of earnings news. Translate its units; association is not causation.

PERSISTENCE DECISION

SURPRISE STORY	FUTURE REVISION	EXPECTED RESPONSE
temporary	few periods affected	relatively weaker
persistent	longer earnings stream revised	relatively stronger
already anticipated	little genuinely new information	weaker at announcement

A complete comparison holds the current surprise constant, varies the persistence or prior-information assumption, traces the altered future stream, then qualifies the response for discounting and risk. Do not jump directly from a reported earnings level to return.

Safe synthesis: price models explain value at a date; return models explain revisions during an interval using a defensible news proxy.

3b · Fit is not usefulness

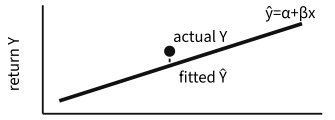
C1 FAQ

A low R^2 says the fitted model associates earnings with a limited share of return variation *in that sample*. Timely non-earnings information, noisy surprise proxies and heterogeneous persistence can weaken contemporaneous fit without proving earnings irrelevant.

EXAM TIP *State the expectation benchmark before calling any accounting number "news".*

4 · Regression toolkit

C2



OLS selects coefficients to minimise squared vertical residuals, e = Y − Ŷ.

CORE RELATIONS

```
Ŷᵢ = α̂ + β̂Xᵢ  ·  eᵢ = Yᵢ - Ŷᵢ
OLS chooses α̂, β̂ to minimise Σeᵢ²
R² = variation in Y associated with the fitted model / sample variation in Y
t = estimated coefficient / standard error
```

TABLE READING ORDER

1. **Dependent variable** and event/window; sample and scaling.
2. **Base group**; set each dummy to 0 and 1.
3. **Direction + magnitude** in stated units; combine interactions.
4. **Precision:** t-statistic/test evidence is distinct from economic size.
5. **Explanatory power:** R^2 is fit, not the coefficient or causal strength.
6. **Specific limitation:** name the noisy proxy/path and predicted consequence.

DUMMY INTERACTION

```
Y = α + βX + γD + δ(X×D) + ε
D=0: intercept α; slope β
D=1: intercept α+γ; slope β+δ
δ tests the slope difference; the full D=1 slope may require a joint test.
```

NOISE ENTERS	LECTURE CONSEQUENCE
Dependent variable Y	larger residual variation; weaker fit
Independent variable X	slope may attenuate toward zero under maintained conditions

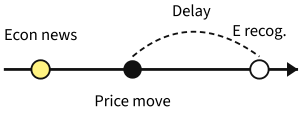
Never collapse: statistical precision ≠ economic importance ≠ explanatory power. A small coefficient can matter if the unit change is large; a precise coefficient can still be economically slight.

SIX-SENTENCE TABLE TRANSLATION

1. "The dependent variable is … measured over …".
2. "The omitted/base category is …".
3. "A one-unit increase in X is associated with β units of Y for the base group."
4. "For D=1, the slope is β+δ; δ is the group difference."
5. "The reported test gives evidence about …, while R^2 describes sample fit."
6. "Interpretation is limited by [named proxy/design path], which may [specific consequence]."

5 · Prices lead earnings

C3



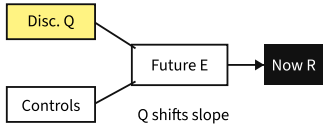
One economic event can be split across periods, weakening a same-period relation.

Prices need not know the future perfectly. Alternative information can update expectations before accounting verification recognises the consequence. Earlier return then contains news without later earnings; later earnings contains recognition after the main price move.

EMPIRICAL REMEDY	GAIN	COST
Longer return window	captures earlier price response	admits unrelated firm/market news
Future earnings variables	represents delayed accounting consequences	future variables/proxies remain noisy

6 · Disclosure anticipation

C4



The hypothesis concerns the current-return slope on future earnings, conditional on controls.

ANTICIPATION TEST

```
Current return = … + β(Future earnings) + δ(Future earnings×High disclosure) + controls + ε
Low disclosure slope = β
High disclosure slope = β+δ
```

A positive δ is consistent with stronger anticipation only if it is estimated precisely and the design is credible. It does not prove disclosure caused the full association: disclosure groups may differ in predictability, industry, size or incentives.

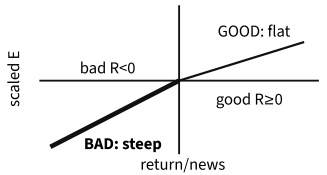
Controls have jobs: future returns address price-related measurement effects in future earnings; earnings yield, growth and firm traits address specified alternative paths. Explain each from the design, never as generic "controls".

JOINT-EVIDENCE TEST

Show why later earnings can represent consequences priced today; show that disclosure changes that slope; then ask whether disclosure merely sorts firms by underlying predictability. A positive, precise δ is consistent with stronger anticipation, while systematic group differences still threaten a causal claim.

7 · Earnings conservatism

C5



The reverse regression asks how earnings responds to market news; the bad-news branch is steeper.

BASU-STYLE ORIENTATION

```
Earnings = α + βR + γD + δ(R×D) + ε
D=0 good-news slope = β
D=1 bad-news slope = β+δ
Prediction: δ>0 under the stated negative-return dummy convention.
```

CORRECT READING	TRAP
δ is the incremental bad-news sensitivity	δ is the full bad-news slope
earnings responds to return as news proxy	return responds to earnings
larger magnitude reflected more promptly	bad news raises income
timeliness = when recognised	persistence = how long it lasts

Verification can delay favourable developments while losses enter sooner. The result is a recognition-timing claim, not a claim that losses are beneficial or permanent.

EVALUATION POINTS

- Is return a clean proxy for economic news?
- Is the dummy coding stated rather than assumed?
- Do scaling and cross-firm recognition differences change the comparison?
- Does test evidence support the slope difference and/or the combined slope?

RECONSTRUCTION GRID

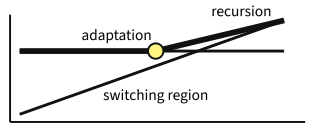
SET	EQUATION PIECE	MEANING
D=0	α + βR	good-news base relation
D=1	(α+γ) + (β+δ)R	bad-news intercept and slope
δ>0	bad slope − good slope	predicted asymmetric timeliness

Keep sign and magnitude distinct. Negative returns proxy adverse news, so earnings generally moves downward; the steeper branch means the magnitude is reflected more strongly. A positive δ supports asymmetry only under the stated coding and with adequate precision.

Essay bridge: conservatism helps explain why current earnings can lag some value-relevant developments and why equal reported earnings may have different implications when recognition histories differ. Keep this connection distinct from the persistence of the recognised component.

8 · Adapt or continue?

C6



Market value follows the better opportunity: alternative use for weak operations, continuation for strong ones.

PROFITABILITY REGION	RELATIVE ANCHOR	LOGIC
low E/BV	book/adaptation value ↑	resources poorly used now
switching	both matter	options are close
high E/BV	earnings/recursion value ↑	continuation produces more

Adaptation includes restructuring, sale, takeover or internal redeployment—not only liquidation. ***Recursion*** capitalises sustainable earnings from the existing business technology. Scale earnings by book value before ranking operating success.

Proxy limits: recorded equity may differ from recoverable resources; current earnings may not be sustainable; discrete profitability groups approximate a continuous switching process.

9 · Abnormal-earnings value

C7

Opening BV × required r | Reported earnings | Abnormal earnings

Current BV + PV expected future abnormal earnings

Value starts at current book value; only expected performance above the capital charge is added.

PERIOD DISCIPLINE

```
Clean surplus: BVt = BVt-1 + Et - dt
Normal earningst = r × BVt-1
Abnormal earningst = Et - rBVt-1
Vt = BVt + PV(expected future abnormal earnings)
```

Use opening book value for the capital charge. Dividends reduce closing book value through clean surplus; they are not deducted again from earnings. Zero abnormal earnings means the firm earned exactly the required return, not zero accounting profit.

Information dynamics forecast persistence and other information. Separate the clean-surplus identity from linear forecasting assumptions: structural change or conservative recognition may weaken the dynamics without erasing the book-value anchor.

BMAN30071 Worked drills, traps & fast recall

SHARE PRICES AND ACCOUNTING INFORMATION · THE UNIVERSITY OF MANCHESTER

SIDE 2 · WORKED STEPS — Calculate → interpret → qualify — 5 WORKED DRILLS

W1 · Growth ≠ surprise C1 WORKED

Given: prior earnings 40; realised earnings 46; investors expected 45.



The information benchmark is expected earnings, not last year's amount.

1. **Raw change:** 46 − 40 = +6.
2. **Surprise:** 46 − 45 = +1.
3. For a return model about new information, use the surprise; the expected 45 was already incorporated in beliefs.
4. Then ask whether the +1 is temporary or persistent before predicting price response.

ANSWER LINE

```
Earnings grew by 6, but only 1 exceeded
the prior expectation. The return-news
interpretation therefore concerns +1,
conditional on the expectation proxy
and persistence.
```

VARIANT	CORRECT DIAGNOSIS
actual 72, prior 68, expected 75	growth +4; surprise −3
equal current surprises	compare persistence, risk, information already known

Fast traps · News C1/C3

- Reported amount ≠ unexpected component.
- Prices leading earnings ≠ perfect foresight.
- Longer windows gain timing coverage but lose event specificity.
- Low contemporaneous R^2 ≠ accounting information is useless.

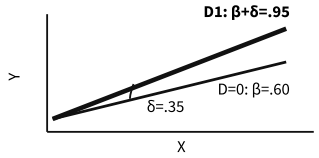
WRITE THE MECHANISM, NOT A SLOGAN

Return-model chain: prior expectation → realised outcome → unexpected component → revised future earnings/cash-flow beliefs → price revision. Locate persistence between the surprise and the future revision; locate discounting and risk between that revision and price.

Lead–lag chain: economic development → non-earnings information → earlier price response → later accounting recognition. A contemporaneous regression can then place related return and earnings effects in different observations, creating measurement mismatch.

WEAK ANSWER	MARKER-USEFUL REPAIR
"earnings rose"	state realised, expected and surprise
"price knew first"	name the earlier information and recognition delay

W2 · Rebuild interactions C2/C4 WORKED



The interaction rotates the slope away from the base relation; it is not the full indicated-group slope.

A · POSITIVE-NEWS GROUP

```
Base slope β = 0.60
Interaction δ = +0.35
D=0 slope = 0.60
D=1 slope = 0.60 + 0.35 = 0.95
```

0.35 is the estimated **difference between slopes**; it is not the entire positive-news response.

B · DISCLOSURE ANTICIPATION

```
Low-disclosure base = 0.20
High-disclosure interaction = +0.30
High-disclosure slope = 0.20 + 0.30 =
0.50
```

The future-earnings association is 0.30 larger for high-disclosure firms, consistent with stronger anticipation if precise and credibly identified. It is **not** proof that disclosure causes the entire 0.50.

C · COURSE OVERVIEW VARIANT

```
Low-disclosure slope = 0.18
High-disclosure increment = 0.27
High-disclosure slope = 0.18 + 0.27 =
0.45
```

The 0.27 coefficient answers the *difference* question. The 0.45 combined slope answers the *high-disclosure association* question. Evidence that δ differs from zero does not automatically test whether β+δ differs from zero; identify the test the table actually reports.

COEFFICIENT	QUESTION ANSWERED
β	base-group slope
δ	difference between slopes
β+δ	indicated-group slope
t on δ	evidence about the difference

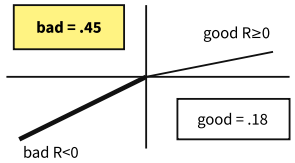
1. Write base group and dummy coding.
2. Substitute D=0, then D=1.
3. Add coefficients with signs intact.
4. Translate into variable units.
5. Separate estimate, test evidence and causal credibility.

DIAGNOSTIC QUESTIONS

- Does D change the intercept, the slope, or both?
- Is X centred or scaled, changing the intercept's practical meaning?
- Do group traits make the interaction a sorting result rather than a treatment effect?

W3 · Bad-news sensitivity C5 WORKED

Given: reverse-regression good-news slope 0.18; bad-news interaction 0.27.



Negative-return observations have the 0.45 slope; the 0.27 interaction is only the increment.

1. Orient the equation: **earnings is Y**; return is the news proxy.
2. For D=0 good news, slope = 0.18.
3. For D=1 bad news, slope = 0.18 + 0.27 = 0.45.
4. Because 0.45 > 0.18, earnings is more sensitive to the magnitude of bad news—consistent with more timely recognition, subject to test evidence.

ANSWER LINE

```
The bad-news slope is 0.45, exceeding
the good-news slope of 0.18. This is
consistent with asymmetric timeliness;
it does not mean adverse news raises
earnings.
```

ERROR	REPAIR
"bad slope = .27"	add the .18 base slope
"bad news raises earnings"	larger response to adverse-news magnitude
"timely means persistent"	timing and duration are separate
assume D=1	read coding stated in the model

Recognition argument C5

Mechanism: favourable developments may await realisation or verification; adverse developments can enter through loss recognition sooner. **Limit:** return is an imperfect news proxy, and scaling/recognition differs across firms.

SECOND COEFFICIENT CHECK

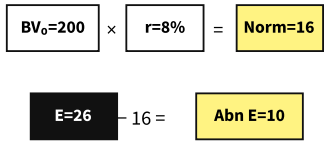
```
Base return slope = 0.22
Bad-news interaction = 0.31
Negative-return slope = 0.22 + 0.31 =
0.53
```

Again, 0.31 is the increment. The 0.53 relation applies only after confirming negative-return observations are coded D=1. A negative interaction would contradict the predicted steeper bad-news branch rather than becoming evidence of conservatism by relabelling.

CONCEPT	QUESTION	NOT THE SAME AS
timeliness	when does news enter earnings?	duration of the component
persistence	how long does it continue?	speed of first recognition

W4 · Valuation ledger C6/C7 WORKED

Given: opening BV = 200; required return = 8%; reported earnings = 26.



The capital charge uses opening book value; abnormal earnings is not total firm value.

1. Normal earnings = 200 × 0.08 = **16**.
2. Abnormal earnings = 26 − 16 = 10.
3. Interpret 10 as performance above the period's required return. If expected to persist, its discounted future stream contributes value above the current book-value anchor.

KEEP THE TWO LINES SEPARATE

```
BV closing = BV opening + earnings -
dividends
Abnormal E = earnings - r × BV opening
```

CHECK	CORRECT ANSWER
Which BV in charge?	opening BV for that period
Dividends?	reduce closing BV; do not deduct twice
AE = 0?	earned normal required return, not zero profit
AE = 10?	one-period excess performance, not V

ADAPTATION CROSS-CHECK

Two firms each have BV 100. Sustainable earnings are 4 and 18. E/BV is 4% versus 18%: the 4 firm is closer to the **adaptation** region; the 18 firm to **recursion**. This is a relative-anchor judgement, not a complete price formula.

NEGATIVE ABNORMAL EARNINGS CHECK

```
Opening BV = 150; required return =
10%; earnings = 12
Normal earnings = 150 × .10 = 15
Abnormal earnings = 12 - 15 = -3
```

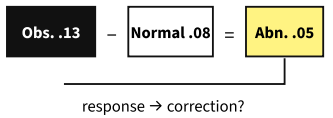
The firm made positive accounting profit of 12 but fell 3 below the required capital charge. Do not call −3 total value or deduct a dividend from earnings again. Current value still begins with book value; expected future abnormal earnings adjust that anchor.

FORECAST AND IDENTITY AUDIT

COMPONENT	STATUS	EXAM IMPLICATION
clean surplus	accounting identity	roll BV with E and dividends
capital charge	required-return calculation	use opening equity
persistence rule	forecast assumption	changes PV of future AE
other information	forecast input	captures news not yet in accounting variables

W5 · Tone & disclosure curve C8/C9 WORKED

A · ABNORMAL TONE RESIDUAL



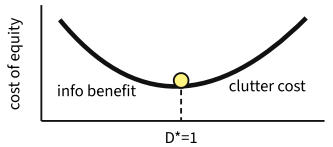
Abnormal tone is the residual from a fitted normal-tone model, not automatic evidence of intent.

```
Abnormal tone = observed net tone -
predicted normal tone
= 0.13 - 0.08 = 0.05
```

Interpret 0.05 as unexplained positive tone *under the fitted model*. Legitimate omitted drivers can enter the residual. Stronger evidence joins a favourable immediate response with weaker later returns/performance or another correction pattern.

Four-stage check: measure raw wording; predict normal tone from fundamentals; call the remainder a model-dependent residual; then compare immediate and later outcomes. Positive wording alone does not establish manipulation, and one market window does not establish correction.

B · QUADRATIC TURNING POINT



A negative linear and positive squared term imply a U-shape only when read jointly.

```
Fitted component = -0.24D + 0.12D²
Derivative = -0.24 + 0.24D
Set to 0 ⇒ D* = 1
0.12>0 ⇒ stationary point is a minimum.
```

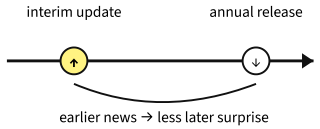
State the disclosure scale and check D*=1 lies within the observed range. It is model- and sample-specific, not a universal report length; incentives may drive both narrative volume and financing cost.

TURNING-POINT CHECKLIST

1. Read linear and squared coefficients jointly; differentiate.
2. Set the marginal effect to zero and solve in the stated units.
3. Use the squared-term sign to classify the point.
4. Check it lies inside the observed range; outside is not an observed optimum.

Controls do not by themselves remove the possibility that higher-risk firms choose longer narratives.

10 · Interim substitution C10

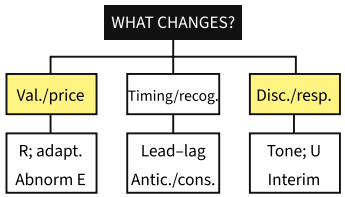


Claim substitution only from the joint early-and-late pattern and incremental content.

OBSERVED PATTERN	INTERPRETATION
strong update response	incremental information moved forward
smaller annual response	less surprise remained later
little update response	statement may be repetitive
return movement	price revision
trading activity	processing/disagreement, not the same construct

Withdrawal of informative statements may remove timely firm-specific news and increase later surprise; withdrawal of repetitive statements need not. Evaluate content classification, other disclosures, and selection into voluntary reporting.

11 · Method chooser C1–C10



Choose the model by the economic question, then identify its dependent variable and comparison.

TOPIC	REMEMBER	MAIN CAVEAT
price relevance	surprise + persistence	benchmark/timing noise
regression	base + interaction	units; association
conservatism	reverse regression	news proxy/coding
adaptation	upper value envelope	BV and E are proxies
abnormal earnings	BV + PV future AE	forecast dynamics
tone	observed − normal	omitted drivers
narrative volume	linear + squared jointly	range/endogeneity
interim reporting	early + late windows	content/selection

FINAL PASS *Claim only what the coefficient, timing window and design can support.*