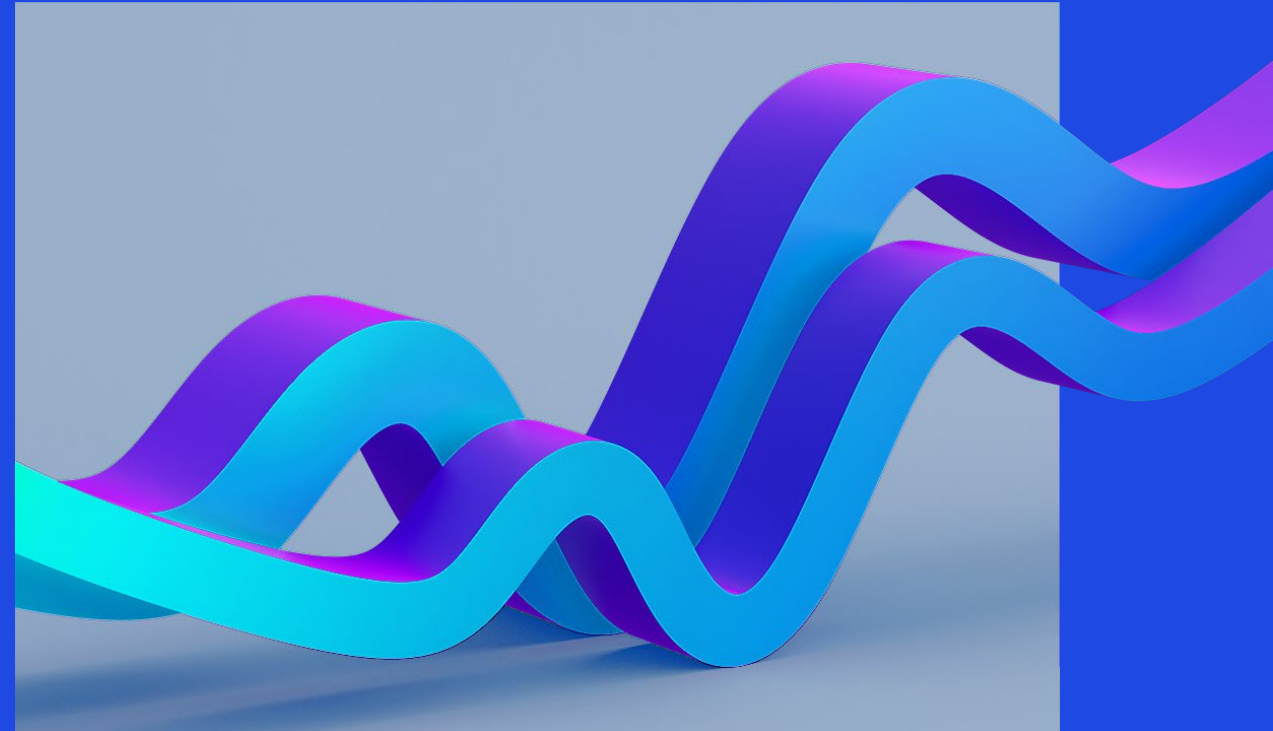# Insights to inform regulation

Adam Rivers – Partner, KPMG Head of Betting and Gaming Consulting

Charlie Leach – Associate Director, Betting and Gaming Consulting

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What have we heard so far today... probably

" It is vital that the gambling industry engages with the consultations to come

" The GC is an evidence based regulator and policy decisions going forward will be based on the most up to date research from a range of stakeholders

" As Latin America regulates it is important for regulation to be informed by evidence
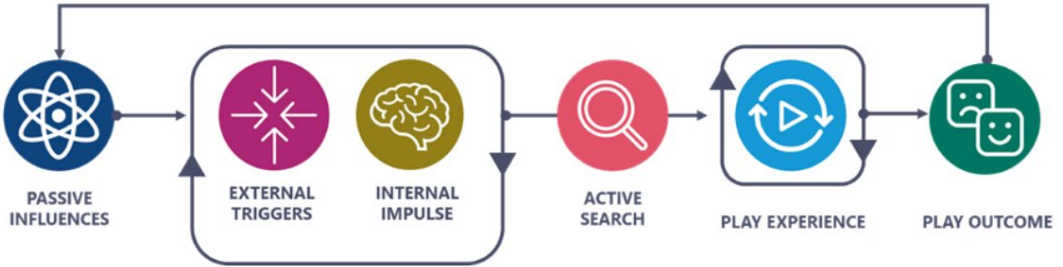
This session

- To **educate** on GC evidence and priorities

- To **inform** on emerging literature

- To **reflect** on how to move forward

Key UK documentation in recent months

# The GC "Evidence Gaps and Priorities" (I)

1. **Early gambling experiences and gateway products**

2. **The range and variability of gambling experiences**

3. **Gambling-related harms and vulnerability**

4. **The impact of operator practices**

5. **Product characteristics and risk**

6. **Illegal gambling and crime.**

> Each area has key points where we want to know more, each area has clear actions that the Commission can lead on but equally, they each have work for others: researchers, third sector bodies and the **gambling sector itself.**
>
> A lack of conclusive evidence does not necessarily mean that action shouldn't be taken (for example, we sometimes apply the precautionary principle where we are satisfied that there is sufficient risk of harm), but **we should aim to have as much reliable evidence as possible** on which to base our decision.

The GC "Evidence Gaps and Priorities" (II)
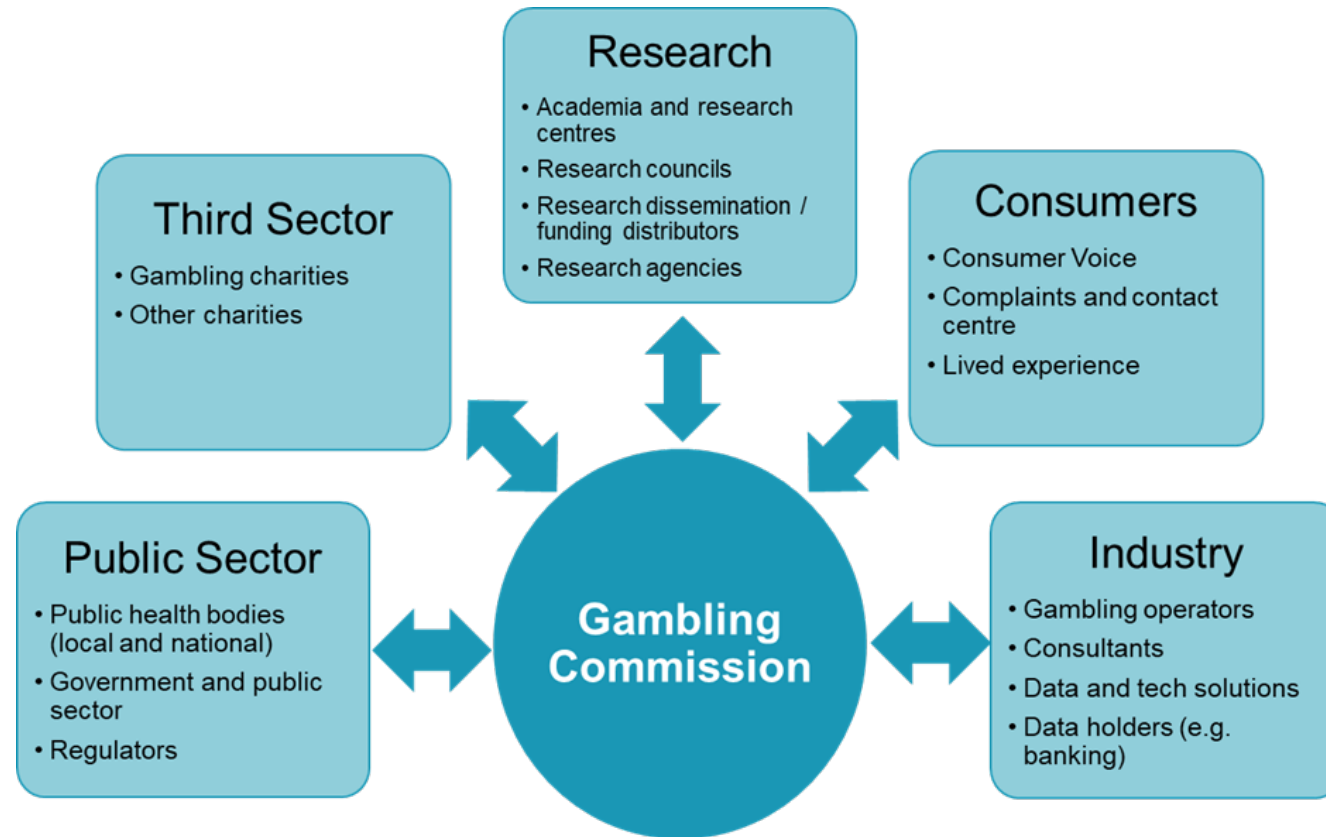
Early gambling experiences and gateway products

Evidence note: a range of evidence covering topics below, incl. international

What is the GC looking to understand?

- The gambling behaviours of childred (u16), young people (16-17), young adults (18-24) and journeys into gambling
- The "gateways" into gambling for adults including the vulnerable
- How consumers engage with products that are not gambling, but have similarities to gambling

Questions it will ask (e.g.)

- What prompts people to start gambling?
- How does gambling behaviour change as people age?
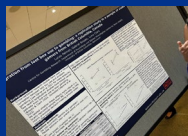- What is the impact of major sporting events on new gamblers?

Initial focus

- Continuing to research children and young people, expanding it to 17yo
- Furthering research on the gambling journeys of young people

Examples – in progress work and new insights

Loot box study – Palmer, Brooks & Clark (2023)

Longitudinal study of gamblers and non-gamblers

Built on existing cross-sectional papers on correlation between loot box usage and problem gambling and more recent causal papers between loot boxes and gambling pathway
Aimed to test whether there were specific impacts in BC, Canada, to inform policy
Used logistic regression to test usefulness of loot box and microtransaction usage as a predictor for gambling behaviour

Loot box spend predicts gambling migration

The authors consider that loot box spend "significantly" predicts non-gamblers migrating to gambling

Loot box spend predicts gambling spend

The authors consider that loot box spend significantly predicted gambling spend. Microtransactions more broadly did not.

Considerations

Correlation and causality
Magnitude of effects

Free-to-play impact on time – LaForge, Kairouz, Savard (2023)

Background

- Free-to-play model has brought mobile gaming to forefront of gaming culture
- Ways in which time, tech and games shape integration of gaming in everyday life

Study methodology

- Semi-structured interviews with players
- Thematic content analysis based on subjective interpretation/experience

Three key dimensions

- Free-to-play characteristics, including stickiness (e.g. paying to extend play duration) and slickness (e.g. temporising functions)
- Mobile technologies, including versatility, portability, connectivity and polychronicity
- Temporal dispositions (daily moments, interstitial time, temporal positioning)

Considerations

- Games can become embedded in players' daily routines
- Importance of time in understanding gaming/gambling addiction

Range and variability of gambling experiences

Evidence note: interestingly, no external literature cited here

What is the GC looking to understand?

- Exploring customer journeys and motivations
- How gambling behaviours change over time
- The different experiences people have with gambling, and how it fits into their lives

Questions it will ask (e.g.)

- What is the spectrum of activity and what constitutes "safe" gambling
- How and why do behaviours change over time
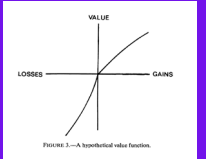- How does gambling fit into wider life?

Initial focus

- Gambling survey for GB – note this includes new questions, e.g. on in-play
- Zooming in on aspects of path to play to add insights
- Longitudinal research

Examples – in progress work and new insights

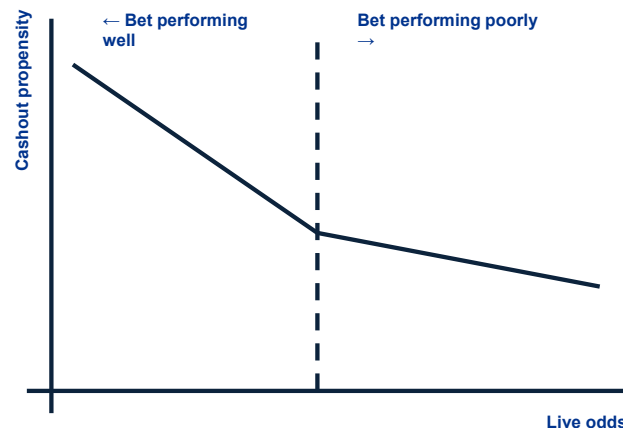## Disposition and cash out betting – Rivers, Bentley & Brown (2023)

A new study of gambling behaviour in online markets
- The disposition effect is well understood in financial markets
- Limited study in the gambling sector
- Potential to establish insights not previously seen

An extensive dataset to explore
- Hundreds of thousands of football accumulators from UK customers
- Player account histories over time

Initial findings
- Primary cash out motivator is significant in-game events
- Propensity to cash out increasingly over time / as certainty narrows
- Bets performing well are more likely to be cashed out

Further areas to test
- The impacts of bet complexity (hypothesis is increasing bias)
- Testing whether customers have learning effects
- Testing the impacts of recency on biases – has tangents to loss chasing literature

Considerations
- This type of research is important to start building better understanding of gambling behaviour beyond harm
- While limited direct policy implications, indirect policy implications of this type of work are substantial – e.g. informing simulation work when interfering with product design

Gambling related harms and vulnerability

Evidence note: predominantly public health cited (as expected)

What is the GC looking to understand?

- Understanding the different ways that consumers can experience harms
- Being able to identify customers who may be more vulnerable or at risk of experiencing harms

Questions it will ask (e.g.)

- What increases vulnerability to harm?
- Relationship with co-morbidities
- Impact on affected others?
- What interventions are effective?

Initial focus

- New survey to produce robust estimates on who and how
- Qualitative lived experience work
- Using wider evidence on identification

Examples – in progress work and new insights

Big wins (Edson, Louderbeck, LaPlante, Philander, Tom 2023)

Impact of a "big win" on future involvement and risks

- Used European sports betting data from a multinational operator
- "Big win" defined as large amount based on discretionary income (€1k) or large multiplier (3.7x)
- Big winners matched with similar customers (without a big win), behaviour (persistence and frequency) monitored over following weeks

Several findings

- Big winners placed more bets at higher stakes with greater net losses (less so for large multiplier wins)
- Effect dissipates over time (less so for large multiplier wins)
- Timing of big win has little effect
- Immediate withdrawers exhibited less persistence
- Impact on harm/problem gambling not measured

Next steps

- Does big win size matter?
- How do big wins affect problem gamblers?

One week identification (Auer and Griffiths 2023)

### Attempting to predict risky behaviour within a short space of time

- Built on existing papers that use ML algorithms to understand key behavioural indicators that could be used to predict harm
- GC cites the previous Auer paper on these predictors
- This paper focuses on early intervention – whether 1 week of data is enough to predict later harmful play

Four key variables can predict high risk gambling

- Total monetary value of deposits
- Number of deposits
- Net losses
- Deposits per session

Considerations

- Broadly supportive of the use of certain limits for EDD
- Authors discuss a need to interact – question on messaging efficacy of interactions

No Skill: ROC AUC=0.500
Random Forest: ROC AUC=0.867
Gradient Boost: ROC AUC=0.888
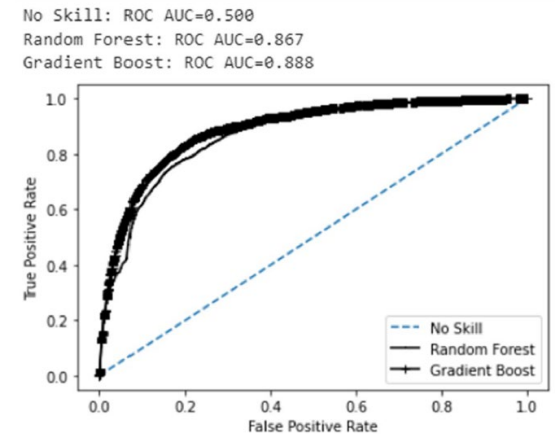
Impact of operator practices

Evidence note: predominantly academics, a couple of industry papers

What is the GC looking to understand?

- Understanding how common operator practices influence consumer behaviour
- Assessing the effectiveness of interventions designed to detect and reduce gambling harms

Questions it will ask (e.g.)

- How effective are identification algorithms
- How well do consumers understand information (e.g. offers and products)
- Drivers / influences of fairness and trust?
- Can marketing and safer gambling become a seamless experience?

Initial focus

- Gaining access to operator level account data to further explore impact of practices
- Consumer research to understand operator practices in the broader journey
- Consumer voice research to understand factors influencing trust

Examples – in progress work and new insights

Online choice architecture continues to be a focus for regulators, including in gambling policy

OCA is cited across the White Paper, GC submissions and the GC's evidence strategy
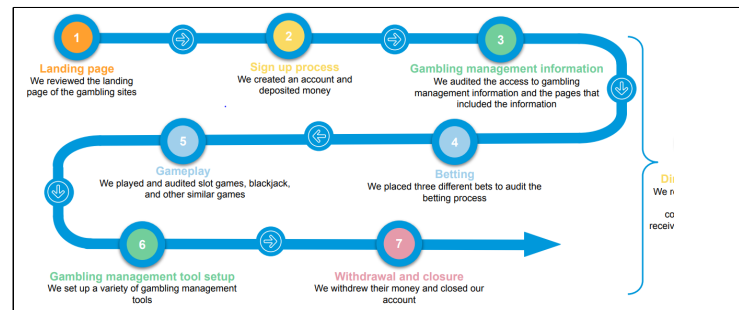
- While communication will be a focus for the GC, it cites OCA as an area of interest too.
- White Paper contains references to so called dark patterns and OCA practices
- The journey here is only just beginning….

The OCA debate has moved on substantially since we were last here

- BIT draft paper and eventual recommendations
    - Removal of marketing sludge
    - Mandatory activity emails
    - Improved management tool access
    - Account closure sludge
    - Contribution of data, testing and insight
- CMA enforcement
- EU legislation

Considerations

- There is a substantial information asymmetry here – industry should be proactive
- OCA contains a lot of "force for good" elements – use them

1 Landing page — We reviewed the landing page of the gambling sites

2 Sign up process — We created an account and deposited money

3 Gambling management information — We audited the access to gambling management information and the pages that included the information

5 Gameplay — We played and audited slot games, blackjack, and other similar games

4 Betting — We placed three different bets to audit the betting process

6 Gambling management tool setup — We set up a variety of gambling management tools

7 Withdrawal and closure — We withdrew their money and closed our account

THE BEHAVIOURAL INSIGHTS TEAM

THE GAMBLING POLICY & RESEARCH UNIT

CMA Competition & Markets Authority

From: **Jennifer Dinmore**
Director, Consumer Protection

29 March 2023

Dear online business

Urgency claims and price reduction claims: compliance advice for online businesses

Redesign gambling websites to reduce harm

Five recommendations for immediate action - 11/2022

Product characteristics and risk

Evidence note: not much new material outside of £10 s/c

What is the GC looking to understand?

- Which products / behaviours carry a greater risk of harm, for whom and why
- How consumers interact with different products and links to harm
- New/emerging risks and building understanding of market changes

Questions it will ask (e.g.)

- Characteristics associated with harms
- Do some product characteristics disproportionately impact individuals
- How can products be designed to mitigate risk without compromising enjoyment
- Patterns of play variation between products

Initial focus

- Gaining access to operator level account data to further explore patterns of play
- Secondary analyses of existing datasets to further understanding of risk

Examples – in progress work and new insights

Products and riskier forms of gambling (Gooding & Williams, 2023)

Positive play and literacy (Connolly et al 2023)
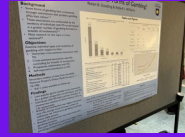
Cross-sectional research on product participation and PG

- Sample of 10k+ considering participation in different gambling products and PG
- Builds on a host of previous research in the area

Four key analyses

- Univariate cross section
- Cross section controlling for breadth and involvement
- Self-reported contribution to PG
- Prospective relationship with PG

Product riskiness findings

- Lottery / IWGs lowest
- EGMs and table games highest
- Once at 4+ products risk converges
- Very high findings in some forms of gambling for monthly + participation

Interesting logit findings

- Stepwise logit model 2022 found EGM greatest predictor at product level
- Behavioural factors that impact include impulsivity, household income, gambling fallacies measure
- Strong and significant finding on illegal market play predicting PG

Considerations
Still a WIP but a potentially helpful example of the secondary insights that can be gathered from research

Measuring impact of gambling literacy on gambling behaviour

- A novel paper looking at how consumer understanding impacted broader gambling behaviours
- Uses positive play scale across ~3k respondents in the US

Gambling literacy materially impacts betting types

- Odds ratios from logistic regressions show moneylines assd with high literacy
- Player props and parlays lower literacy

Positive play factors materially impacts use of offshore

- Those with high gambling literacy were materially more likely to use offshore books vs. onshore regulated
- A similar finding was observed for pre-commitment betting

Considerations

- In the US market incl. states without gambling regulation, so offshore read across may be more limited vs. UK
- Another example of needing to understand broader policy landscape and by products of research

Illegal gambling and crime

Evidence note – a few papers + media cites

What is the GC looking to understand?

- The links between gambling and criminal activity
- Understanding crime as a dimension of gambling related harm
- Improving knowledge of the extent and impact of unregulated market

Questions it will ask (e.g.)

- Criminal activity to fund gambling activities
- Size of illegal market and impact on British consumers
- Motivations to gamble on illegal market
- Ability to tell if operator is unregulated

Initial focus

- Research into consumers' use and understanding of illegal operators
- Use of new Gambling Survey to understand how people commit/victim of crime as a dimension of harm

Examples – in progress work and new insights

In contrast to other topics, there was very little research presented on crime and illicit gambling…

Number of academic papers on gambling related subjects at UNLV conference		
Topics	**No. papers**	**% papers**
Safer gambling	118	61%
Crime/illicit gambling	4	2%
Commercial	12	6%
Pure "gambling"	12	6%
Behavioural (non-SG)	12	6%
Marketing	7	4%
Legal/regulatory	9	5%
Other	19	10%
Total	**193**	
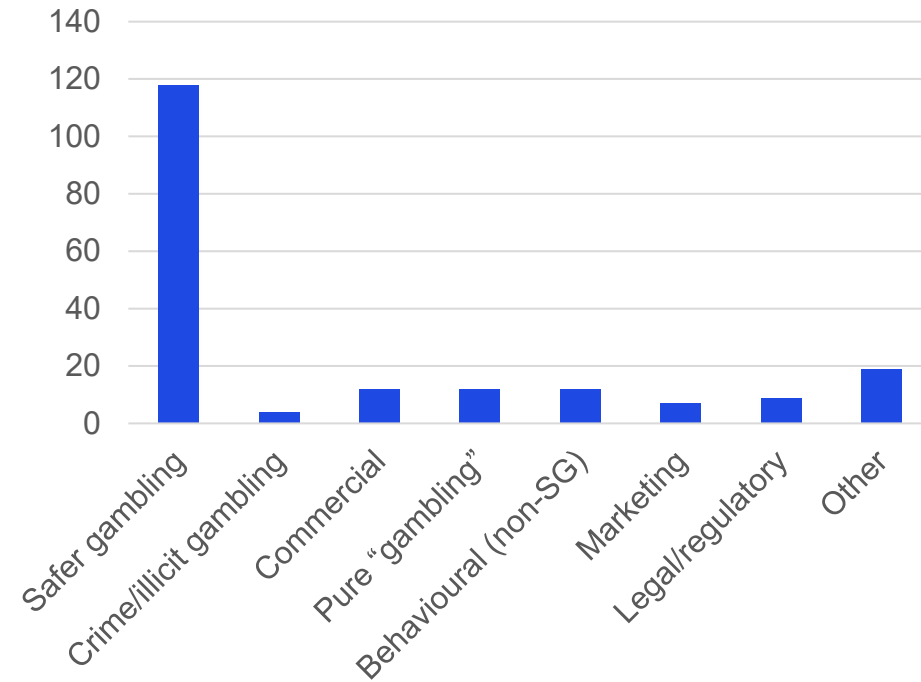
- Evidence of gambling expert witness in prosecuting online gambling (Balqish, 2023) – limited applicability outside Malaysia
- Analysis of use of offshore online gambling sites in the US (Choi, 2023) – explanation of structural and operational characteristics of illegal sites
- The house doesn't always win: market failure (Owen, 2023) – discussion of statutory reviews into failures by operators and regulators in Australia
- Monetary thresholds in AML and safer gambling (Leach, 2023) – discussed at 16:45 in the breakout room!

Wrapping up

Important to **understand the breadth** of work out there and how it will **inform policy going forward**

While **weighted towards harm**, building a **broader understanding of the gambler** is vital and also helps to inform that debate

Information asymmetry is substantial – the **regulators will be requesting detailed data**, understanding it now has benefits