

# Enterprise Risk Management as Part of the Organizational Control Package: Review and Implications for Management Accounting Research

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# In this review paper, we adopt a management control perspective on ERM (1/2)

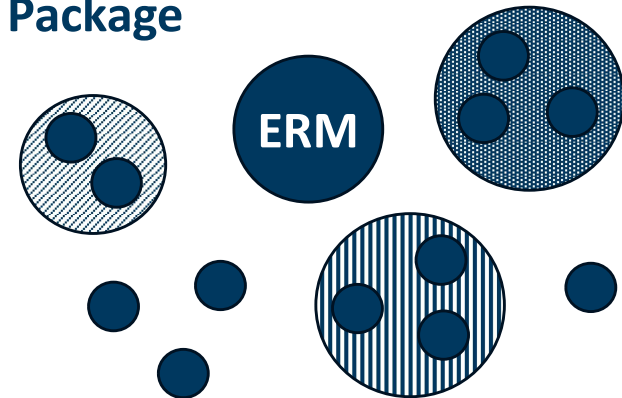
## Rise of interest in ERM and reviews of ERM research

- Financial crisis of 2008 and several corporate scandals have increased the interest in enterprise risk management (ERM)
- Several practitioner frameworks now available

- ERM research has grown swiftly
- Several reviews of ERM research published, including Bromiley et al. (2015), Crawford and Jabbour (2023), Gatzert and Martin (2015), Horvey and Odei-Mensah (2023), and McShane (2018)

... but ...

### Organizational Control Package



... although ERM is an important part of the organizational control package and management accounting scholars having contributed several important insights to ERM research, no review has adopted a management control perspective on ERM.

# In this review paper, we adopt a management control perspective on ERM (2/2)

## Why a management control perspective?

ERM is an important device to steer employee behavior (and thus, a management control practice)

Performance – a central focus of MACS<sup>1</sup> – and risk are “two sides of the same coin” (Van der Stede, 2011, p.616)

Today, risk management is as an integral part of core competencies models for management accountants

+ Several unresolved issues in the management control literature on ERM

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**Research Question: How can complementary-inspired management accounting and control research enhance current evidence on ERM as part of the organizational control package?**

We address this question by means of a systematic literature review and suggest several avenues for future research based on complementarity theory

Note: 1 MACS = management accounting and control systems

# What is ERM and how can it be included in the organizational control package?

**Working definition of ERM in this paper**

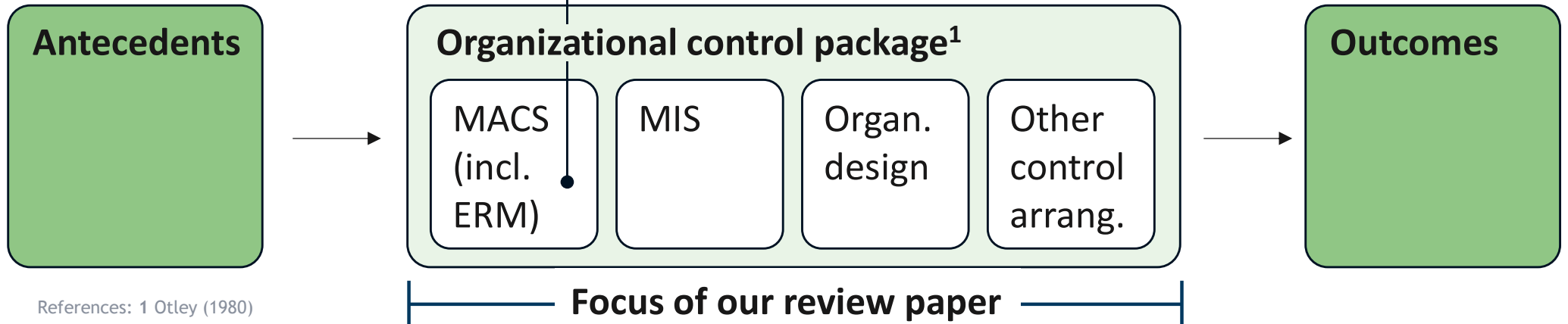
*ERM is an approach of managing all risks and opportunities faced by an organization in an integrated, holistic way to provide reasonable assurance regarding the achievement of the organization's objectives.*

**ERM development**

umbrella term to refer to the adoption and further growth of ERM-related processes.

**ERM components**

Building blocks of ERM development, including ERM practices



References: 1 Otley (1980)

# Review methods (1/2)

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## Review approach

- Systematic literature review<sup>1</sup>
  - Data-base focused search approach to capture research from accounting *and* other fields<sup>2</sup>
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## Sample selection

- Searched five multi-publisher databases (last update in April 2022): EBSCO Business Source, Premier, JSTOR, Web of Science, Scopus, ABI Inform Global
  - Initial search resulted in 2,891 search hits
  - Removed duplicates, and only left research items in the preliminary sample that feature a grade of 3 or higher in the 2018 ABS ranking, or an A\* ranking as of ABDC 2019 → 214 items left
  - All three authors judged 21 randomly selected articles for their fit; those articles were assigned an A (particularly relevant), B (potentially relevant), or C (not relevant, including non-empirical ERM papers)
  - Discussed the classification, worked through the remaining 193 articles, and then jointly discussed the A and B papers → 65 left
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References: 1 Tranfield et al. (2003); 2 Hiebl (2023)

# Review methods (2/2)

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## Sample validation

- An independent research assistant coded the 214 articles independently, but was given our working definition of ERM
  - Only in three cases, his assessment of the papers differed from ours (1.4% of all items, Cohen's kappa of 0.95) → those were resolved
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## Snowballing

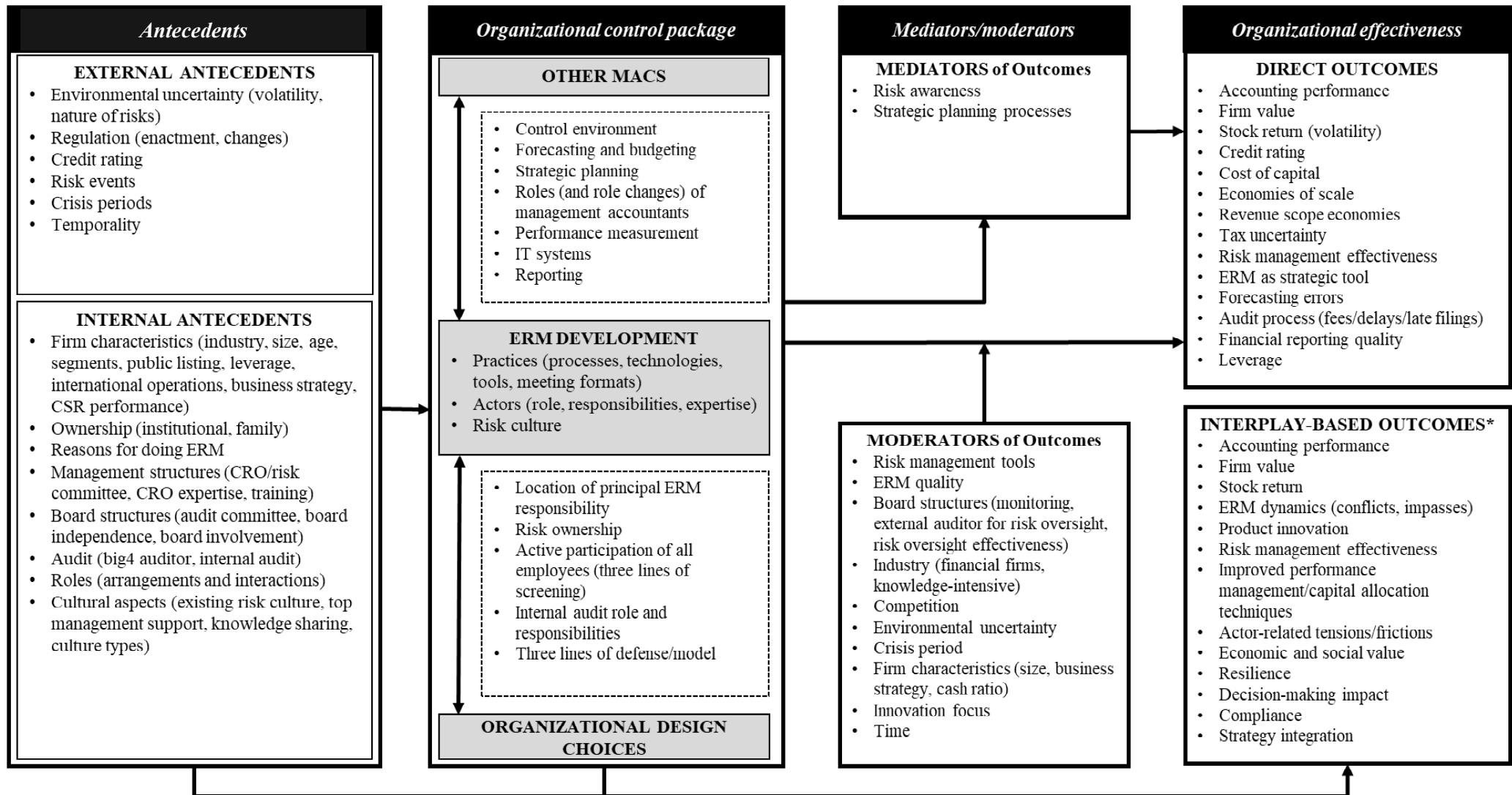
- We applied forward snowballing (via Google Scholar's „cited by“ functionality) and backward snowballing (going through references)
  - Added 4 articles to our sample → **final sample of 69 papers**
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## Analysis

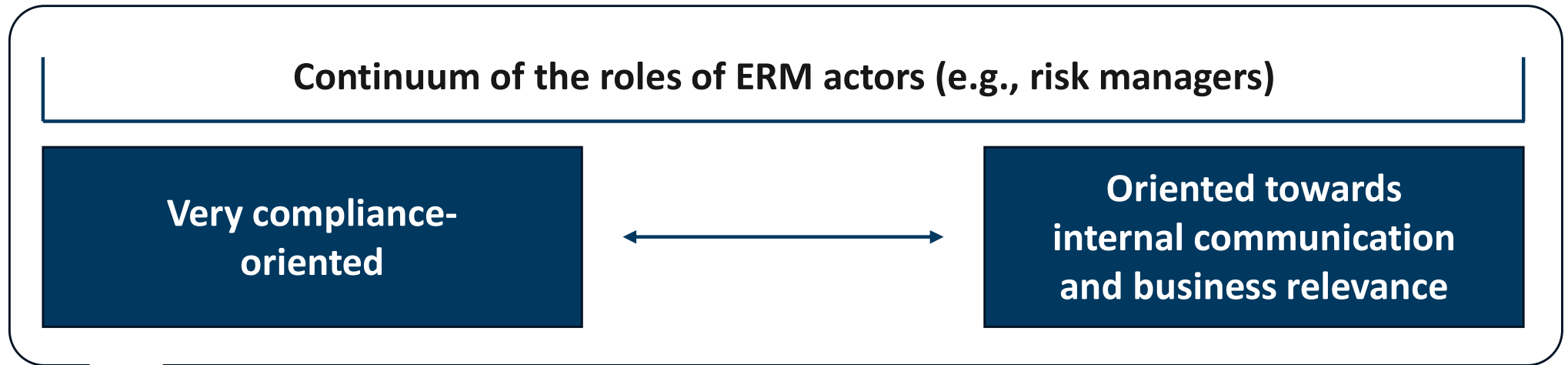
- We extracted bibliographic information and classified the 69 articles into three categories: antecedent studies (49 studies), outcome studies (48), and ERM development studies (34)
  - While we coded the „pure-play“ antecedent and outcome studies, too, **our analytical focus was on those studies that offered empirical insights into ERM as part of the organizational control package**
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# Review findings (1/4): Overview of ERM research



# Review findings (2/4): ERM Actors and MACS



Integration of ERM in the org. control package

Relationship with management accountants

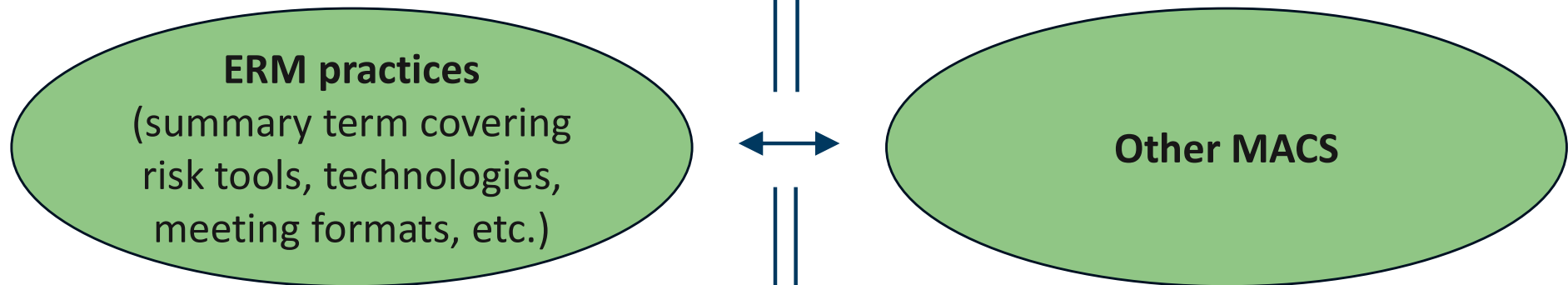
- More focus on internal communication related to more board-level visibility of ERM → fosters the integration with strategic MACS such as strategic planning
- Compliance-oriented risk experts → lower board-level visibility of ERM → not in line with most ERM frameworks' objectives
- Very business-oriented risk actors competing with management accountants for management advisory roles (?)
- Management accountants as risk experts with potential limitations due to missing risk management expertise (amongst others, caused by missing integration of ERM with other MACS)



# Review findings (3/4): ERM Practices and other MACS

Little quantitative evidence (except Lundqvist 2014 or Ittner and Michels 2017 → both indicating positive effects of integration)

Several qualitative field studies highlight tensions and missing integration of ERM practices and other MACS



For instance, benefits of ERM are limited if risk management information compressed into “usual” MACS dimensions (such as EBIT impact → ERM less strategic)<sup>1</sup>

The strategic relevance of ERM information may also be reduced by MACS-related IT tools that just do not offer the possibility to display complex risk information<sup>2</sup>

References: 1 E.g., Tekathen and Dechow (2013, 2020) 2 Thomsen and Skærbæk (2018)

# Review findings (4/4): Risk culture and MACS



**Both views are present in the literature and it seems accepted that risk culture impacts/shapes ERM, and ...**

**... risk culture impacts and is impacted by the relationship between ERM and MACS**

For instance, Jabbour and Abdel-Kader (2015) illustrate how risk culture was strengthened through ERM development, which strengthened capital allocation processes (i.e., a MACS)

**... risk culture seems hard to change**

Review revealed no clear evidence of successful and intended risk cultural change (rather through external shocks), but risk culture important for successful ERM development

# Overarching suggestions for future research

**Start from the control problem that should be addressed through ERM as part of the organizational control package**

## **Decision-*facilitating* role of MACS**

Provision of information to reduce decision uncertainty

## **Decision-*influencing* role of MACS**

Foster employees' goal-congruent behavior despite potential control problems:

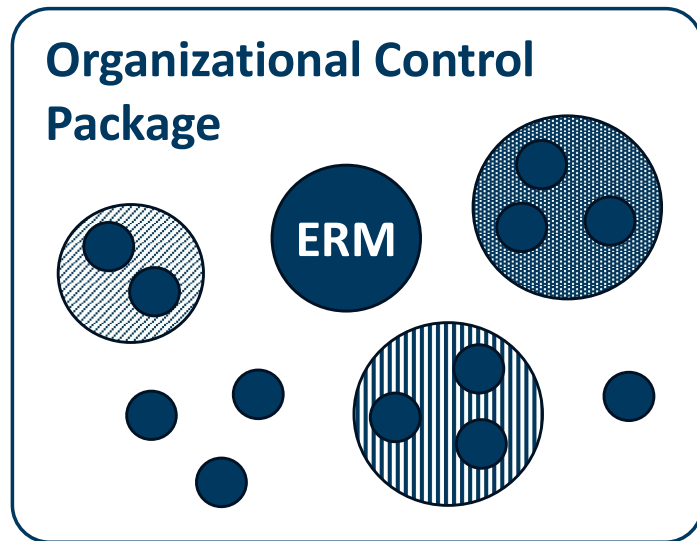
**Lack of direction**

**Lack of motivation**

**Personal limitations**

**Use complementarity theory to study the interplay between ERM actors, ERM practices, and risk culture to better understand the (successful) integration of ERM in the organizational control package**

# Why complementarity theory?



In the context of management control research, complementarity theory examines how a decision maker takes account of interdependencies between control practices to arrive at internal consistency and to maximize performance (Grabner and Moers 2013).

- Two control practices are complements (substitutes) when the benefits of one control practice increase (decrease) with the use of the other control practice and vice versa.
- In the case of independence, the respective benefits of the individual control practices do not depend on each other.
- We argue that complementarity cannot only exist between elements of the control package such as ERM, but also between ERM actors, ERM practices, risk culture, and other MACS

# Exemplary suggestions on the decision-facilitating role

**How can organizations generate relevant risk information that enables them to align their actual risk taking with their risk appetite?**

- The integration of ERM practices with other MACS/practices is likely to impact the provision of such information
- But how can risk information not become too compressed (or semantically narrowed) and coupled with (existing) MACS?

**Three potential solutions (but all not yet extensively examined in research)**

**Single integrative tool  
(e.g., BSC, scenario  
budgeting)**

**Combine separate ERM  
practices and other MACS**

**Combine integrative tool  
with other MACS**

# Exemplary suggestions on the decision-influencing role

## Lack of direction

How can ERM practices be combined with other MACS (e.g., ERM information, interactive forms of control) to make sure that all employees' get to know the organization's risk appetite and understand the risk-taking implications of their work?

## Lack of motivation

How can ERM practices be combined with other MACS to avoid excessive risk taking? (e.g., linking compensation to financial performance and the avoidance of strategic risks)

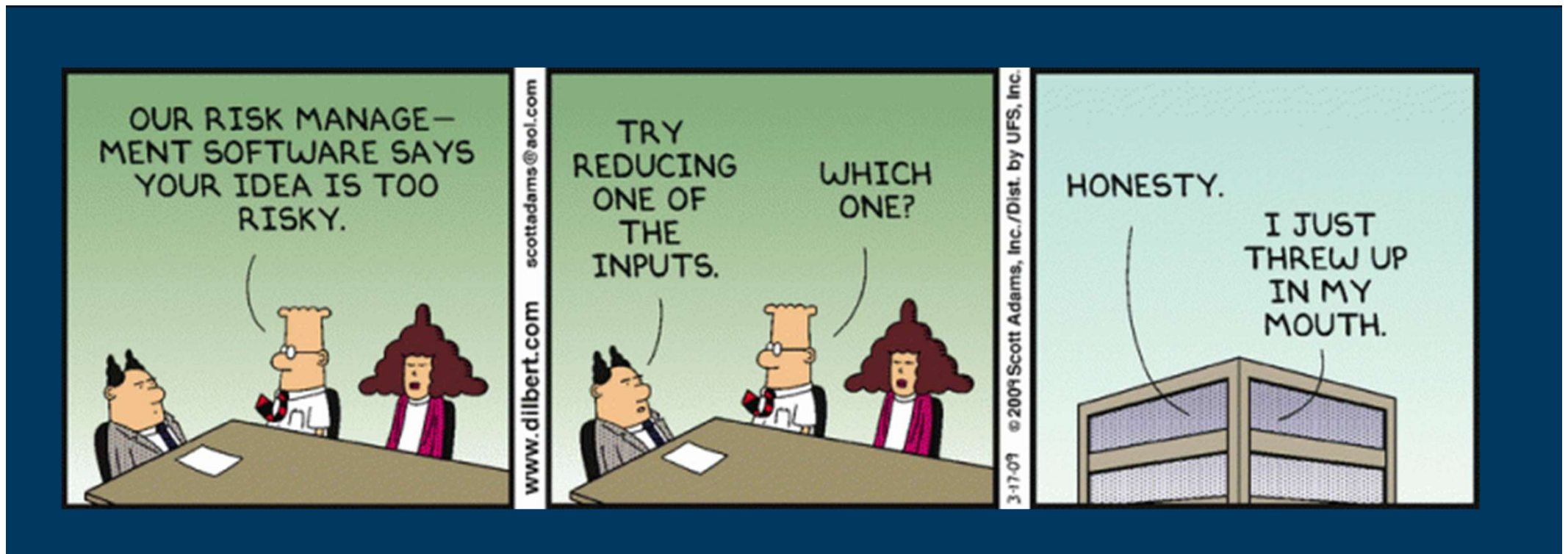
## Personal limitations

If management accountants take over ERM-related roles, how can be made sure that their personal competencies and skills fit the tasks? (such research could, for instance, build upon the literature how new controller roles are enabled)



# Conclusions

- Our review is the first to take a management control perspective on ERM and suggest several ways how MACS scholars can contribute to furthering our collective understanding of (successful) ERM
- The intersection between ERM and MACS represents a very promising area for both ERM and MACS scholars (and, of course, “integrative scholars”)



# References

- Bromiley, P., McShane, M., Nair, A., & Rustambekov, E. (2015). Enterprise risk management: Review, critique, and research directions. *Long range planning*, 48(4), 265-276.
- Crawford, J., & Jabbour, M. (2023). The relationship between enterprise risk management and managerial judgement in decision-making: A systematic literature review. *International Journal of Management Reviews*, in press.
- Gatzert, N., & Martin, M. (2015). Determinants and value of enterprise risk management: Empirical evidence from the literature. *Risk Management and Insurance Review*, 18(1), 29-53.
- Grabner, I., & Moers, F. (2013). Management control as a system or a package? Conceptual and empirical issues. *Accounting, Organizations and Society*, 38(6-7), 407-419.
- Hiebl, M. R. (2023). Sample selection in systematic literature reviews of management research. *Organizational research methods*, 26(2), 229-261.
- Horvey, S. S., & Odei-Mensah, J. (2023). The measurements and performance of enterprise risk management: a comprehensive literature review. *Journal of Risk Research*, 26(7), 778-800.
- Jabbour, M., & Abdel-Kader, M. (2015). Changes in capital allocation practices—ERM and organisational change. *Accounting Forum*, 39(4), 295-311.
- McShane, M. (2018). Enterprise risk management: history and a design science proposal. *The journal of risk finance*, 19(2), 137-153.
- Otley, D. T. (1980). The contingency theory of management accounting: achievement and prognosis. *Accounting, organizations and society*, 5(4), 413-428.
- Tekathen, M., & Dechow, N. (2013). Enterprise risk management and continuous re-alignment in the pursuit of accountability: A German case. *Management Accounting Research*, 24(2), 100-121.
- Tekathen, M., & Dechow, N. (2020). Semantic narrowing in risk talk: The prevalence of communicative path dependency. *Management Accounting Research*, 48, 100692.
- Themsen, T. N., & Skærbæk, P. (2018). The performativity of risk management frameworks and technologies: The translation of uncertainties into pure and impure risks. *Accounting, Organizations and Society*, 67, 20-33.
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British journal of management*, 14(3), 207-222.
- Van der Stede, W. A. (2011). Management accounting research in the wake of the crisis: Some reflections. *European Accounting Review*, 20(4), 605-623.