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Governance of scope and costs in the front-end phase of investment projects

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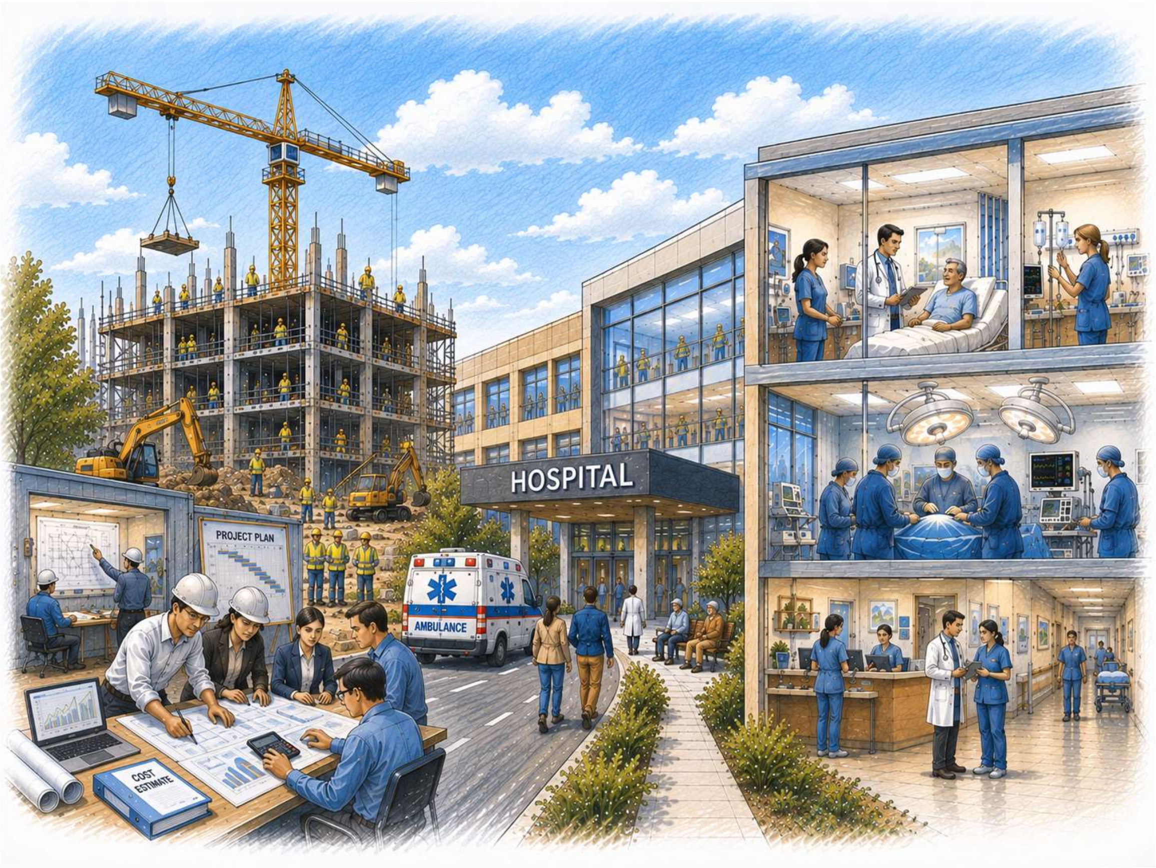
Governance of investment projects

The goal of project governance; Müller (2009):

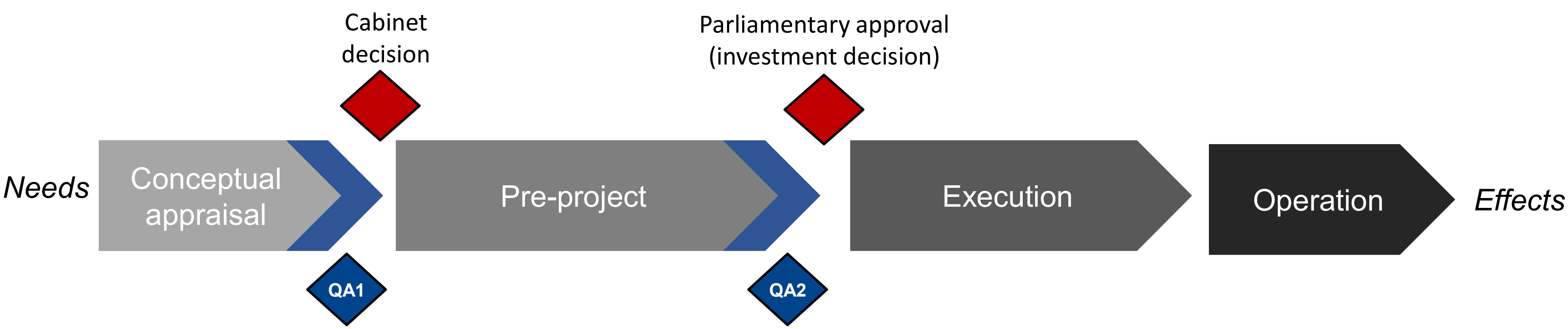
- *Ensuring effectiveness – by «doing the right projects»*
- *Ensuring efficiency – by «doing the projects right»*



…how do we ensure that the **right project actually becomes the right**?

Stage gate model

The stage gate model – a well-known framework for project governance



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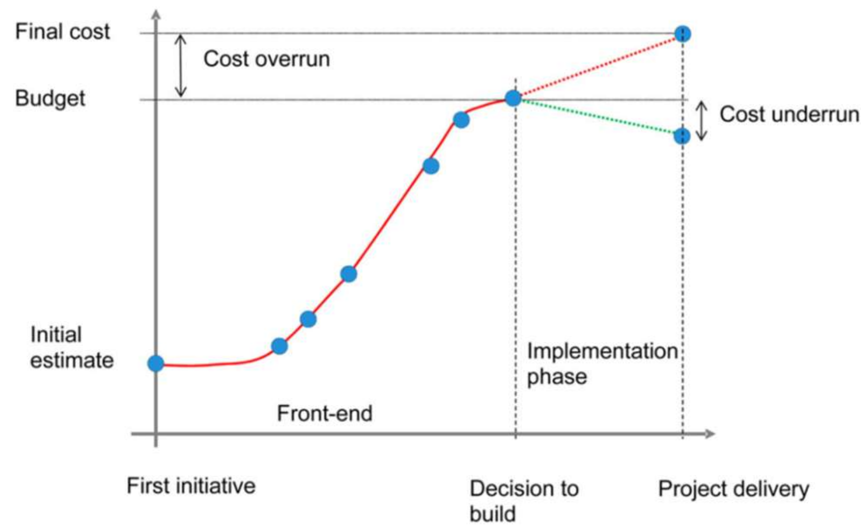
Experiences: Cost development in the FE phase

- Large increases in cost estimates before investment decision
  - Welde & Odeck (2017): more than 90 % of early estimates were too low
  - …an average increase of 40 – 50 % relative to final cost
- Reasons?
  - The simple answer: unrealistic (low) estimates and scope creep
  - But what chain of cause-and-effect? Key drivers?
- Potential consequences
  - wrong prioritization on project- and portfolio level
  - financing challenges
  - reputational damage…

➢ Unpleasant surprises



Project goals and benefits of the investment?

- Expected benefits are often **overstated** in the front-end phase (Flyvbjerg & Bester 2021)

- Benefits are **not systematically** managed and **governed** (Larsen, Langlo et. al. 2024)

➢ Lack of realism and lack of proper project governance

Our (broad) question

What role can the project owner and project governance play in managing scope, costs, and benefits during the front-end phase?

The research object – a great opportunity

New requirements from the Norwegian Ministry of Finance in 2017:

1. Establish a **cost target** for the front-end phase

2. **Scope management** – systematic change management

3. Use a **change log** for changes

➢ The principles of the management control cycle

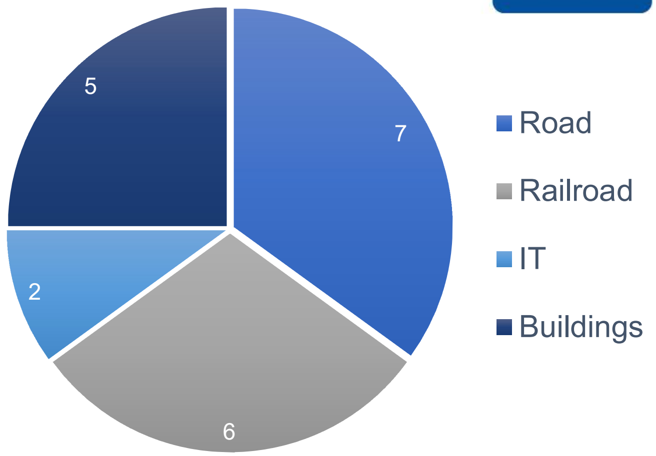
➢ *Could the use of traditional project management tools and methods in the front-end phase enable better "active governance" of projects?*

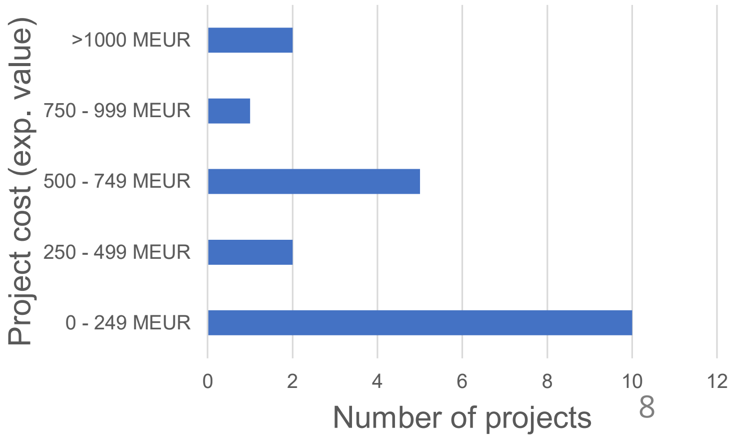
Data and method

- «Mixed-methods» approach

- Quantitative data from 20 investment projects
  - Road-, rail-, building- and IT-projects
  - Data on cost development – estimates,
  - Data from change logs
  - ➢ The outcome/results

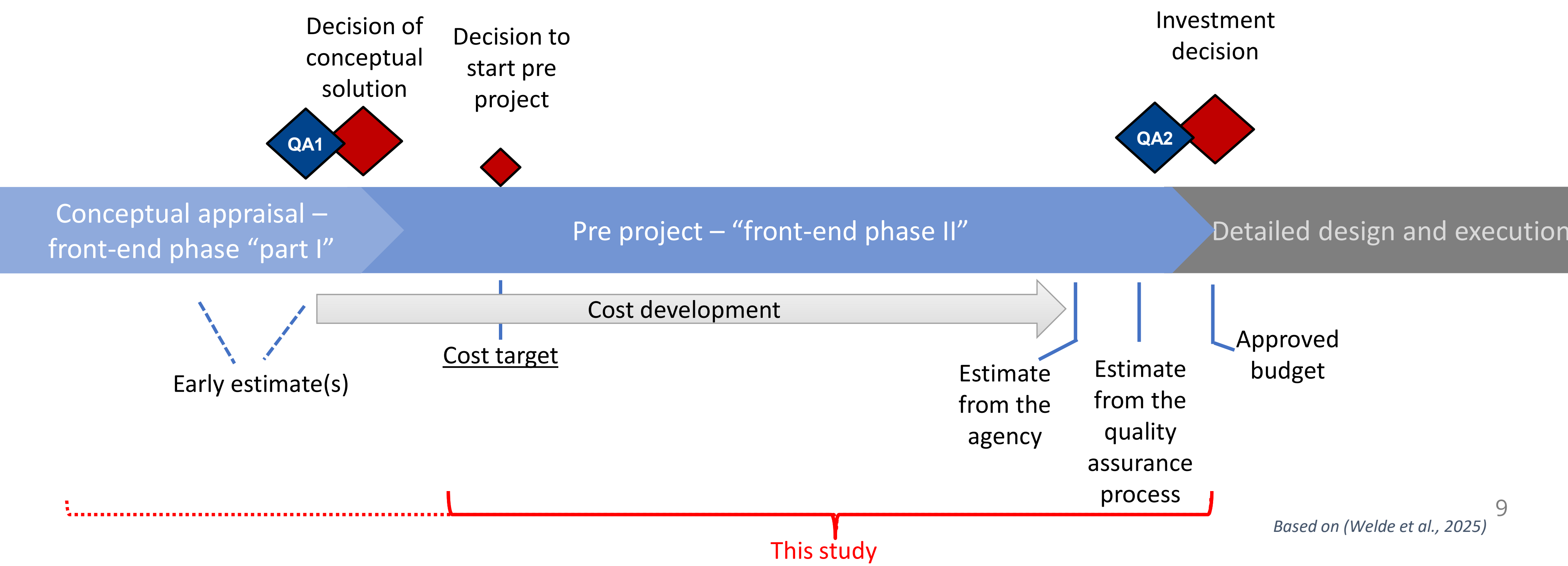
- Qualitative data from 12 interviews
  I. Project level – project managers etc.
  II. Project owner level – project governance function
  III. Staff / stewards of the project governance framework
  ➢ The mechanisms behind the results





Data and method – reference points

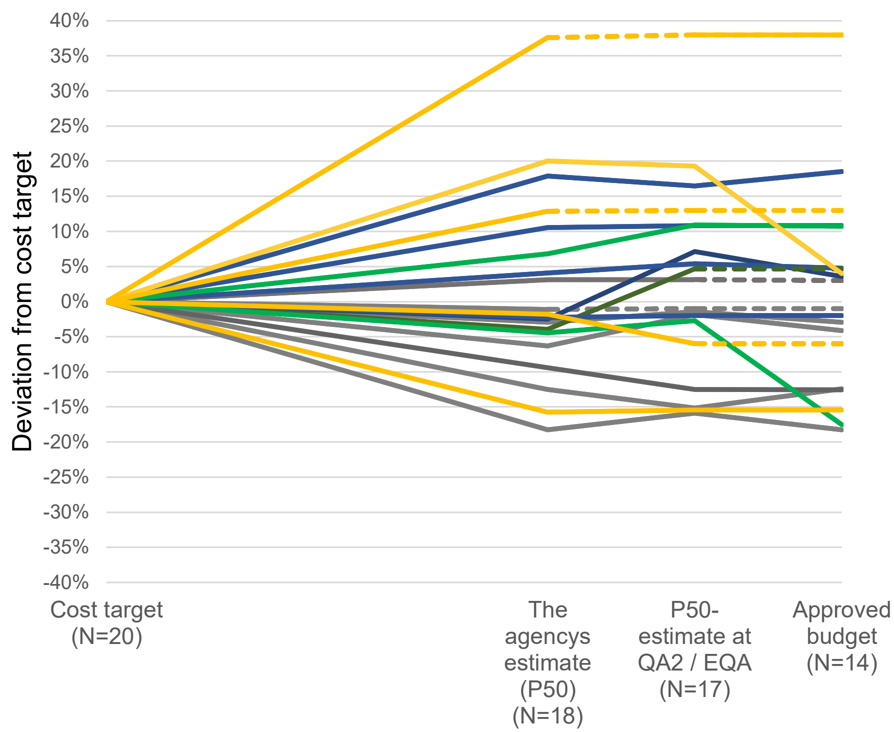
Reference points for measuring cost development

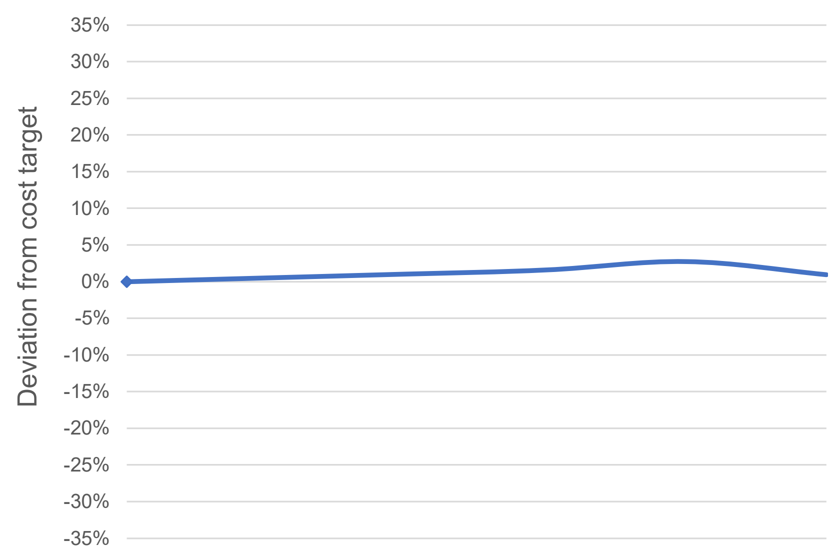


Based on (Welde et al., 2025)

Results

Results – cost development



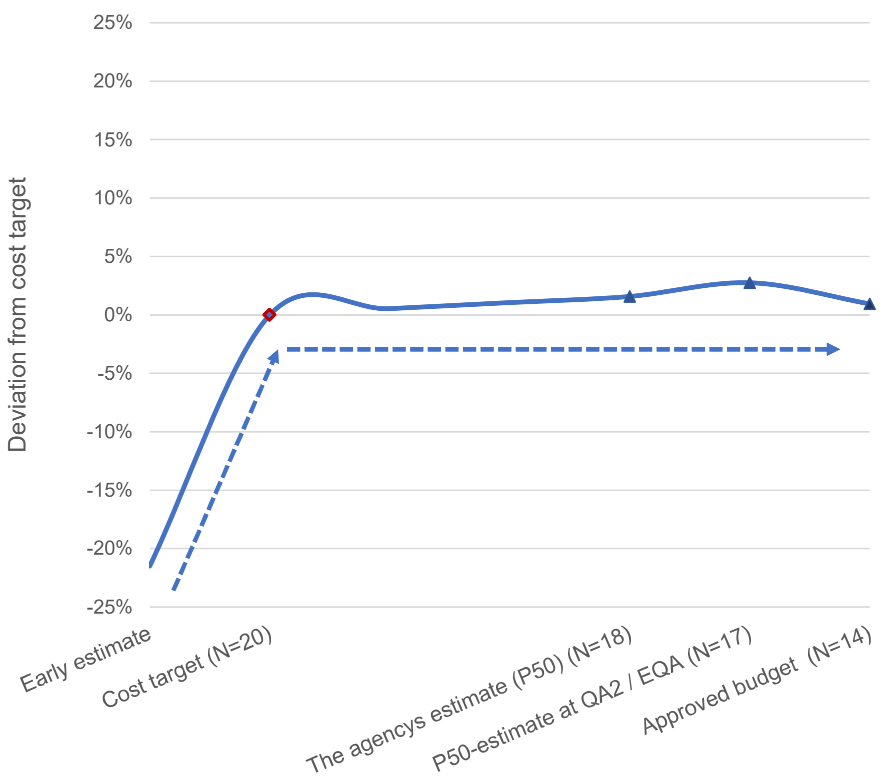


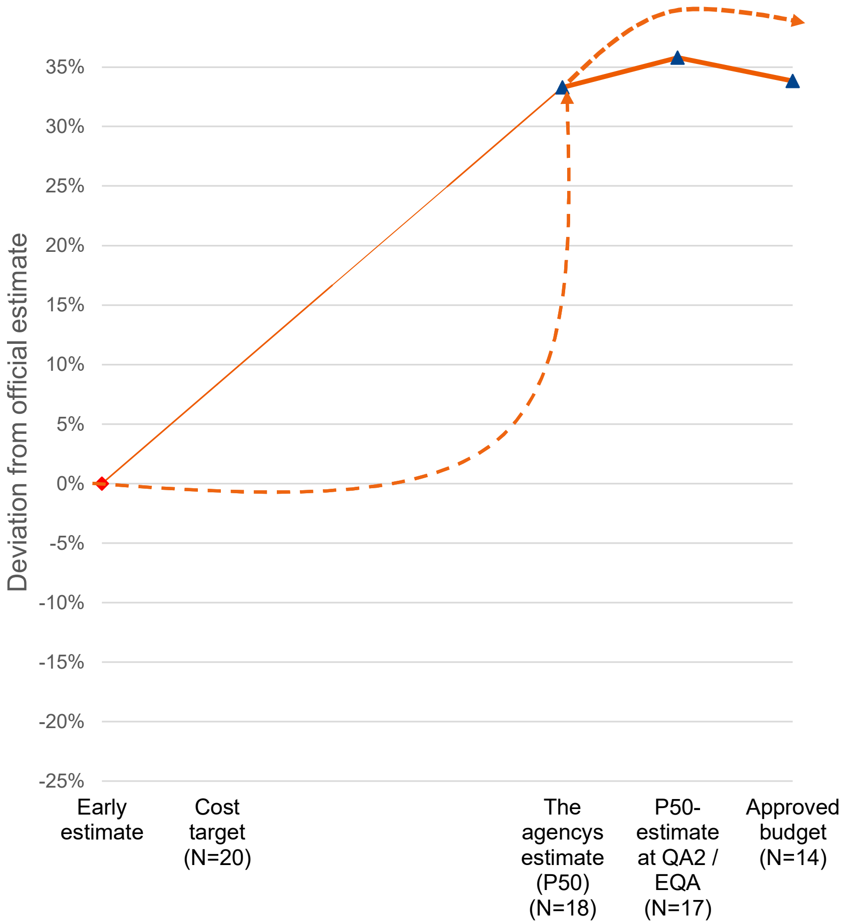
Cost target/expected cost after FE-phase (N=20)				
Min	Max	Average	Median	St. dev
- 16%	+38%	+3%	+1%	13%

- Project: Substantial variance – high degree of uncertainty
- Portfolio: Deviations center around zero – cost control

The counterfactual perspective

A realistic cost target → enhanced predictability





Results – What happens?

- The cost target is established based on a **realistic estimate**
  - **project management experience** is involved**–** «The investment idea becomes a project»
  - **accountability** is introduced – «its your(!) estimate»
- Cost target promotes **discipline** during the front-end phase
  - project level
  - project owner-side
  - external stakeholders

➢ Provides a mechanism for **handling proposals and changes** that affect costs and benefits

Results – some observations

Some more observations from the interviews and change logs:

- The **maturing** of project scope is a key driver for cost increases
- Initiatives to reduce costs require **active involvement**
- Decision processes need to be **efficient, timely and evaluate benefits against costs** properly
- Some changelogs have numerous changes – **what defines a change**?

So what?

Governance in the front-end phase?

- The front-end phase is where the project's **functional scope is developed** to address the needs and objectives that justify the investment.

- We find that even though the cost-targets are based on realistic unbiased estimates (~Ex), the **variance is still (inevitable?) high** on the project level.

- To balance costs against benefits might call for active and **continuous** involvement from the project owner side throughout this phase – not only at the formal decision gates.

- The project owner seems to have an **authoritative** role in setting the direction for what is to be achieved, the expected investment cost, and the constraints for the project.

Conclusion

- An active project owner plays an important role in coping with the **uncertainty** in costs, scope and benefits that characterizes the front-end phase.

- Project governance provides the **authority** needed to steer the project, which is particularly important for keeping costs under control.

- Project governance during this phase is crucial to achieving **effective** and **cost-efficient investments**, both at the project and portfolio levels, balancing costs against benefits

…making the right project right

Conclusion – for practitioners

A governance framework based on traditional project management principles can serve as an effective tool for active project owner governance.

Some prerequisites for this to work:

- Clarity regarding what objectives are to be **achieved** and which **fixed assumptions** apply (i.e., what constitutes a change).
- **Clearly defined roles, responsibilities, and authority** between the project organization, stakeholders, and the organizational levels on the owner side.
- **Efficient decision-making processes** – timely decisions based on proper cost-benefit assessments (time is money).

➢ *The parent organization and its project management systems and governance frameworks must be adapted to facilitate project governance in the front-end phase.*

Thank you!

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