



Concept Symposium 2016

Governing the Front-End of Major Projects

Agency costs in the privatization of social infrastructure financing



Espen Solheim-Kile

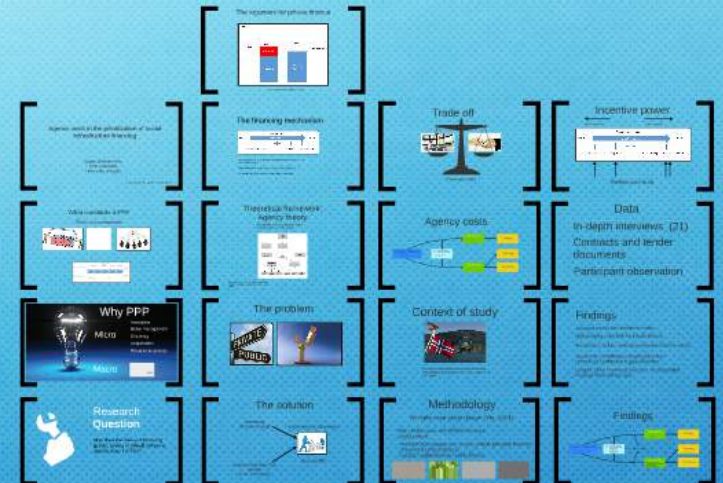
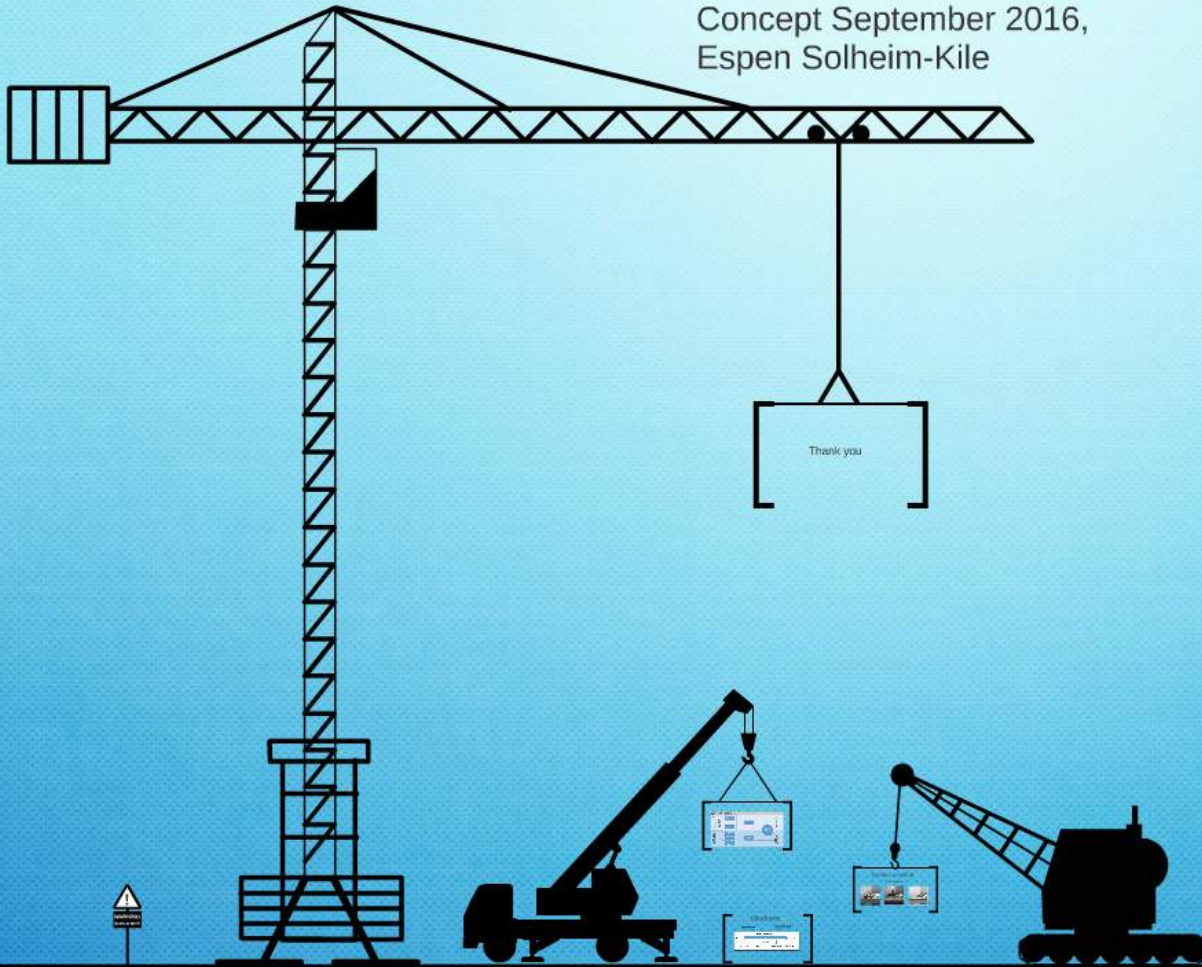
MSc
University of Agder
Norway

The privatization of financing in Public-Private Partnerships (PPPs) has been subject to considerable public debate. However, little research attention has been paid to the question whether private financing is always the best option. Using insights from agency theory, this study aims to develop our theoretical understanding of PPP financing. The following research question is investigated: How does the choice of financing (private, public or mixed) affect agency costs in Public-Private Partnerships? A comparative case study approach comprising four Norwegian construction projects with different financial configurations is undertaken. Norway is an interesting context for understanding the mechanisms of financing in public procurement, as the access to public funding is substantial. The findings suggest that the private sector is risk averse in these projects, increasing the agency costs. This risk aversion stems from a combination of factors, primarily bank risk aversion, long-term equity constraints, limitations on decision rights and exogenous factors. Furthermore, adverse effects of private finance include a disincentive for cost reduction as the most important factor contributing to the bids competitiveness is debt rate. From the cases studied, a range of incentives motivates the contractors. Consequently, a comprehensive and holistic understanding of incentives in Public-Private Partnerships is needed in order to best evaluate financing options. The decision should be evaluated on a project-by-project basis, and should not be considered a necessary mechanism of all PPPs.

Keywords: Public-Private Partnership, Incentives, Principal-Agent Theory, Privatization

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Agency costs in Public-Private Partnerships



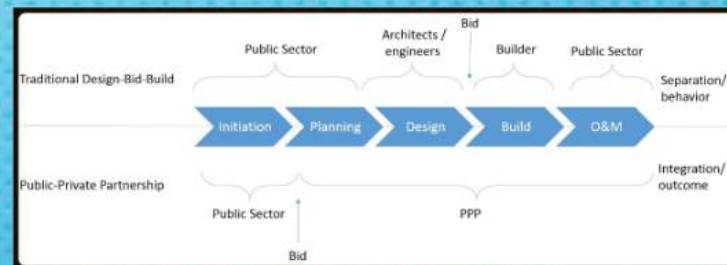
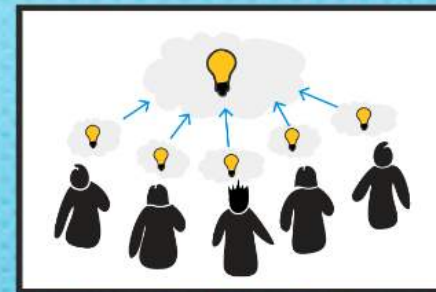
Agency costs in the privatization of social infrastructure financing

Espen Solheim-Kile,
PhD Candidate
University of Agder

Co-authors; Ola Lædre, Jardar Lohne

What constitute a PPP

Three core components



Why PPP

Micro

Innovation

Better management

Efficiency

Cooperation

Powerful incentives

Macro



The core idea of PPP at the micro level:

Having the contractor make investment choices aligned with the governments long term interest by having him take outcome risk over a long period. Private finance is simply the mechanism by which risk is transferred

The core idea of PPP at the macro level

Draw on private capital in order to start
economical projects without being limited by fiscal
constraints

Heavily criticized in the literature:

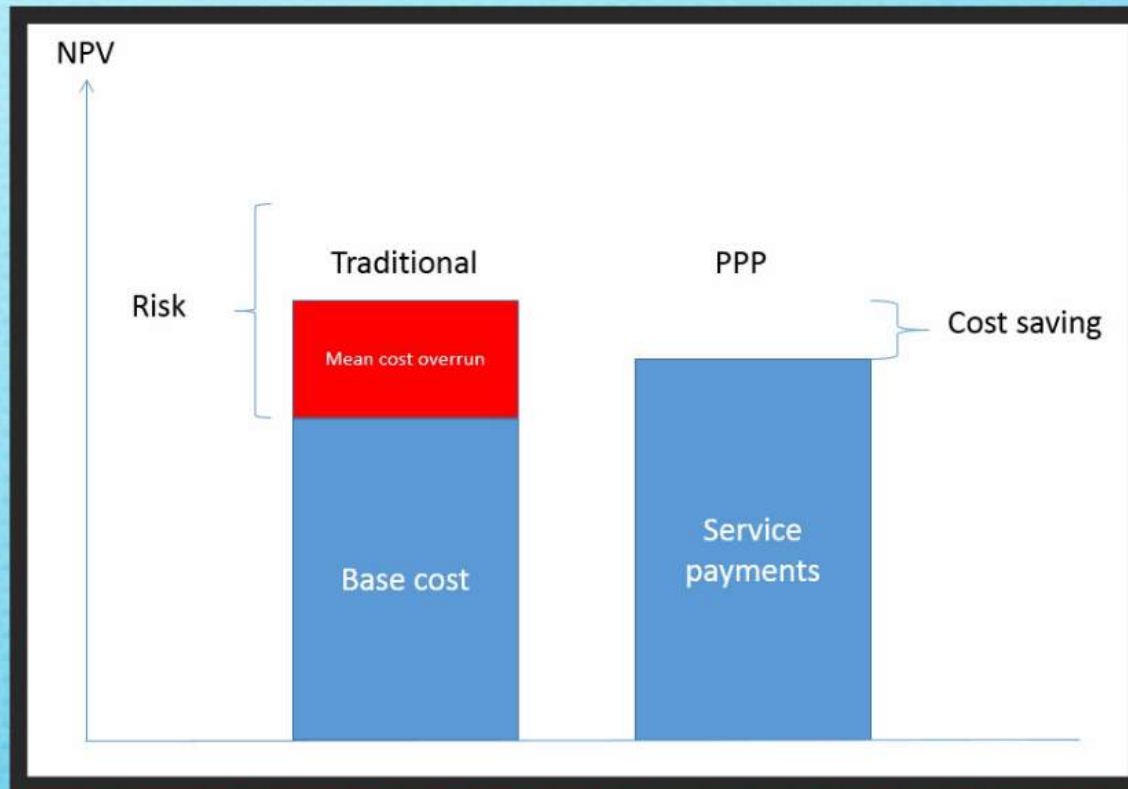
(de Bettingnies & Ross, 2009; Dewatripont &
Legros, 2005; Hodge & Greve, 2007; Davies &
Eustice, 2005; NAO, 2009)



Research Question

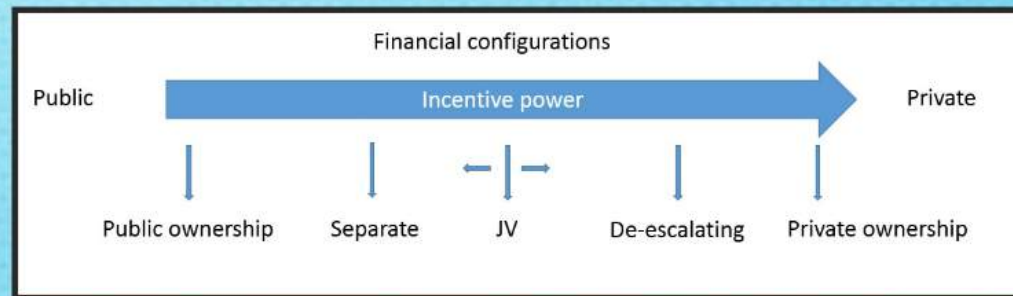
How does the choice of financing (public, private or mixed) influence agency costs in PPPs?

The argument for private finance



Grimsey and Lewis, 2004

The financing mechanism



(Grimsey and Lewis, 2007; de Bettingnies & Ross, 2009; HM treasury, 2012; State of Victoria, 2001)

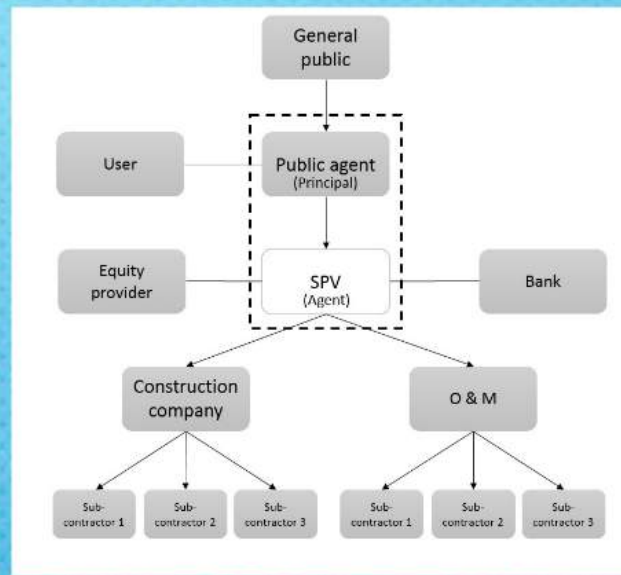
PPP financing based on neo-classical view of markets (Reeves, 2008)

General intuition; PPP rhetoric on finance neglect agency costs

Theoretical framework:

Theoretical framework: Agency theory

Surprisingly, few authors have linked both concepts (Leruth, 2012)



Exceptions; De Palma et al., 2009; Dewatripont & Legros, 2005; Leruth, 2012; Martimont & Pouyet, 2008)

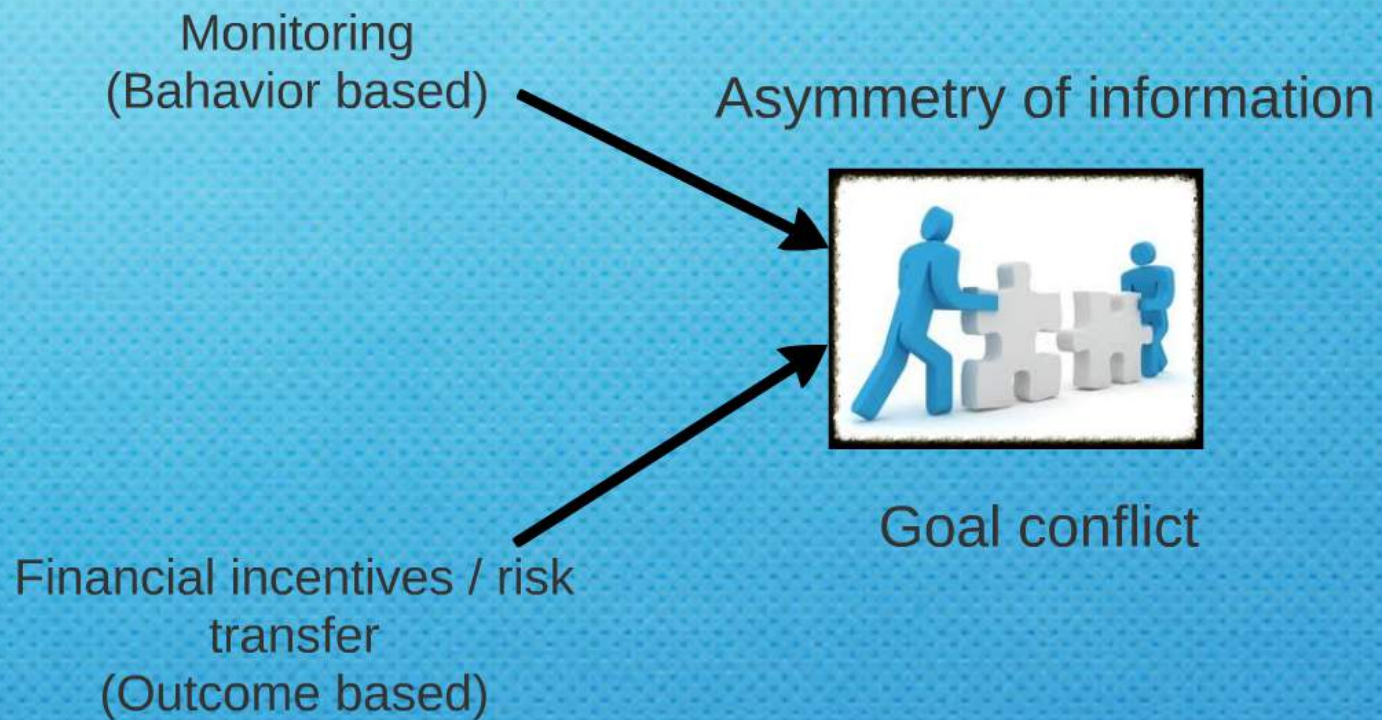
The problem

The problem



The solution

The solution

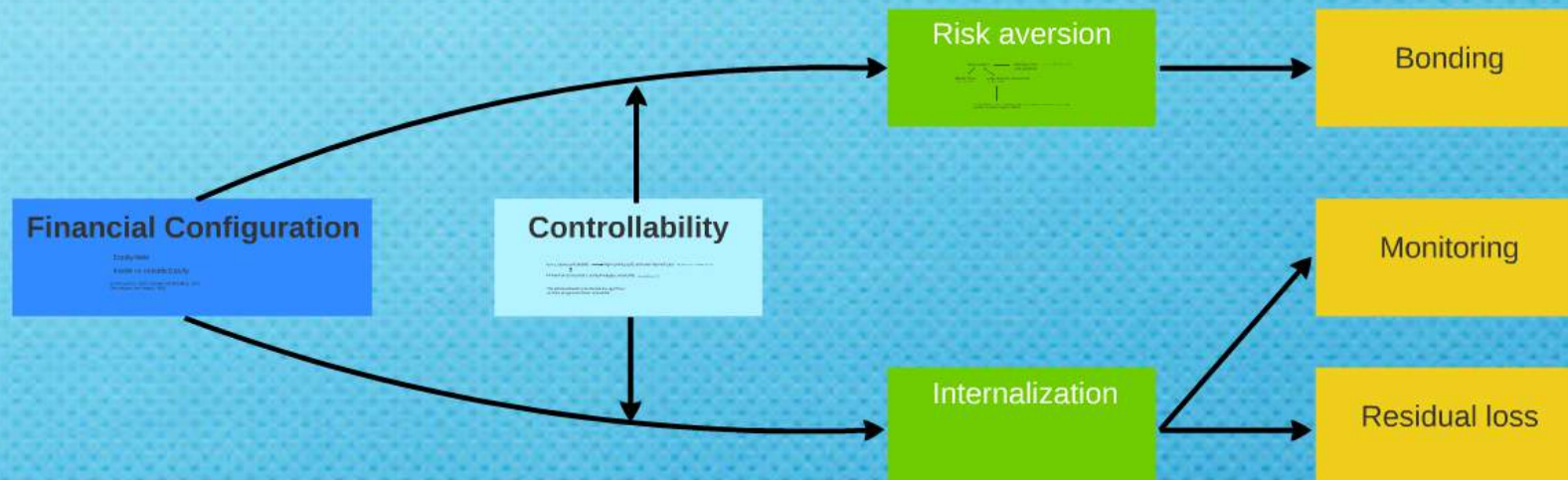


Trade off

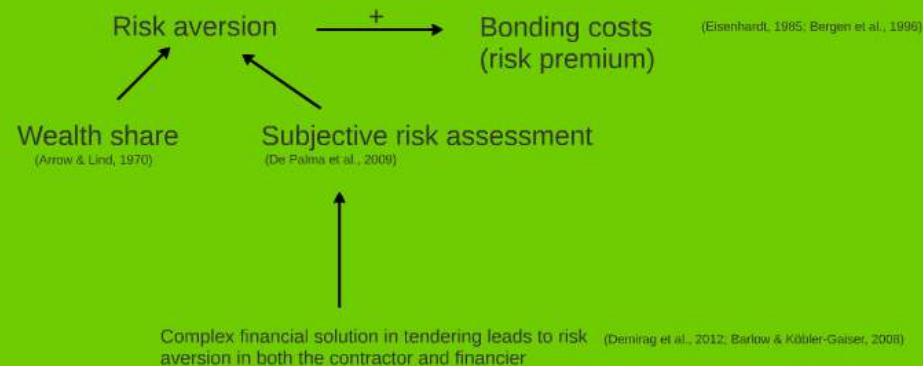


(Eisenhardt, 1985)

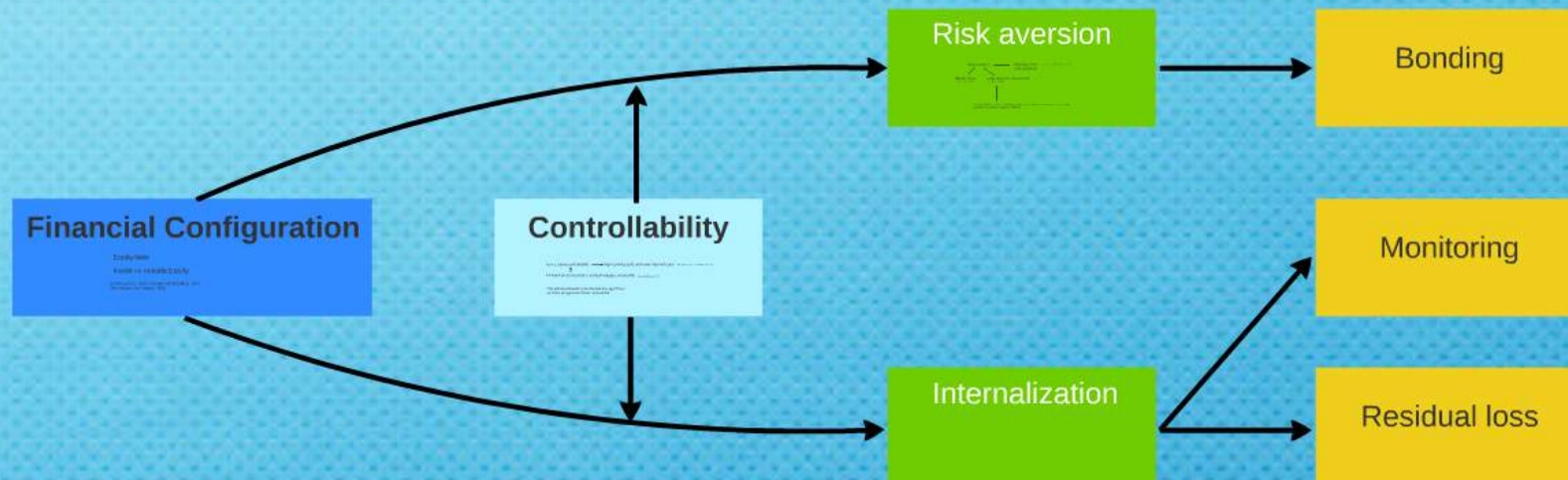
Agency costs



Risk aversion



Agency costs



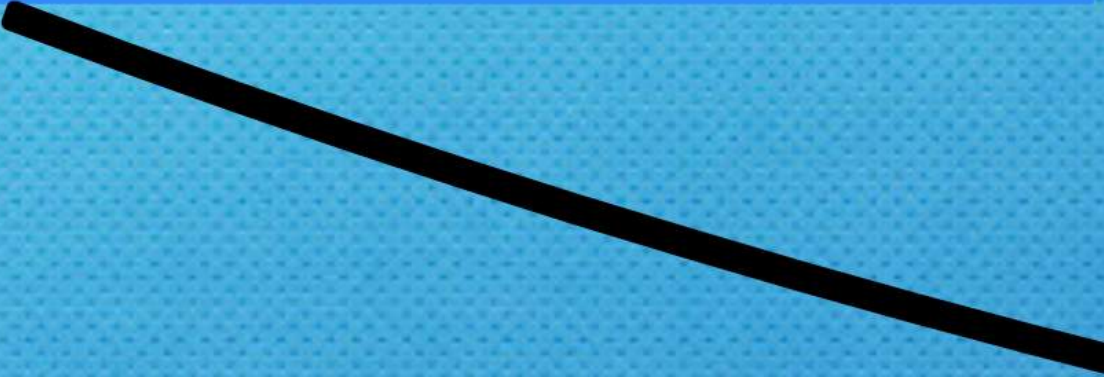


Financial Configuration

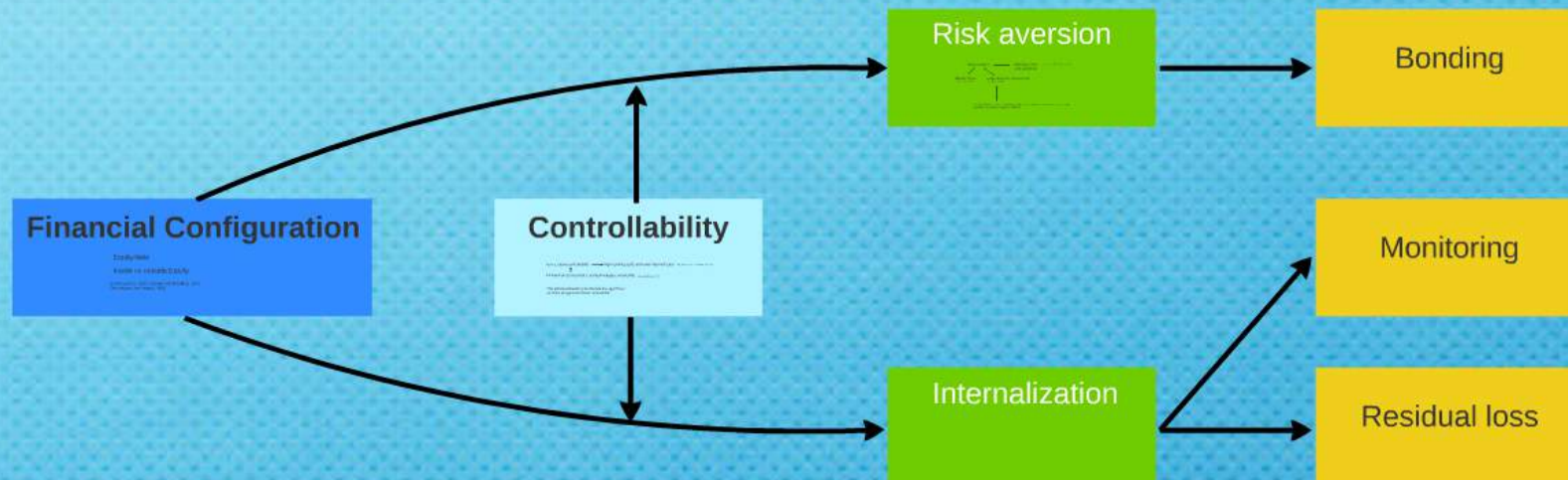
Equity/debt

Inside vs outside Equity

(Demirag et al., 2012; Jensen and Meckling, 1976;
Dewatripont and Legros, 2005)



Agency costs



Controllability

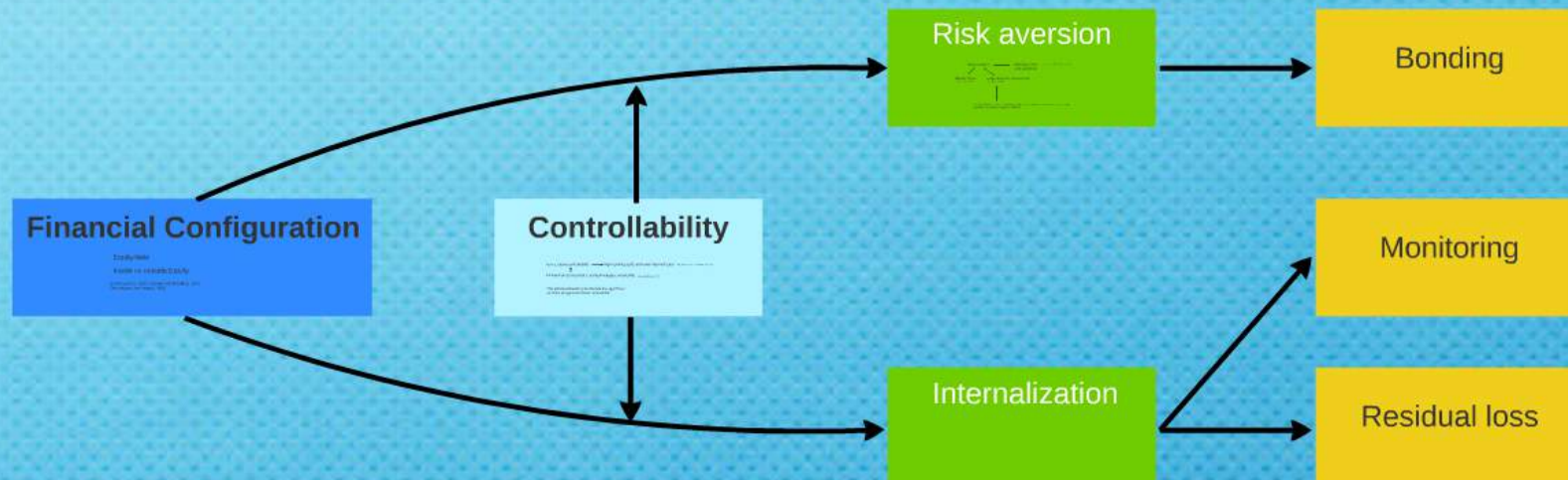
Low outcome controllability → High bonding costs and lower internalization (Bergen et al., 1992; Eisenhardt, 1989a)



Environmental uncertainty and technological uncertainty (Grimsey and Lewis, 2007)

The principal should try to insulate the agent from as many exogenous factors as possible

Agency costs



Context of study



Norway has substantial access to public funding.
The disturbance of the macroeconomic argument is minimized

Methodology

Methodology

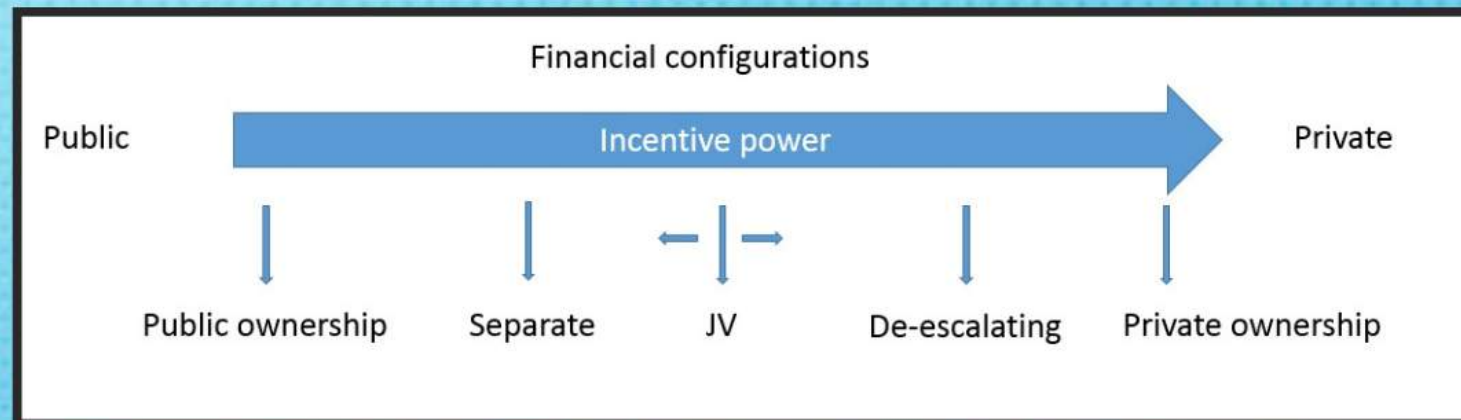
Multiple case study design (Yin, 2014)

Four similar cases with different financial configurations:

- Arendal Brannstasjon and Justvik school / privately financed
- Aquarama / shared finance
- Lyngdal ungdomsskole / public finance



Incentive power



Multiple case study

Data

Data

In-depth interviews (21)

Contracts and tender documents

Participant observation

Findings

Less goal conflict than traditional models

High bonding costs with full private finance

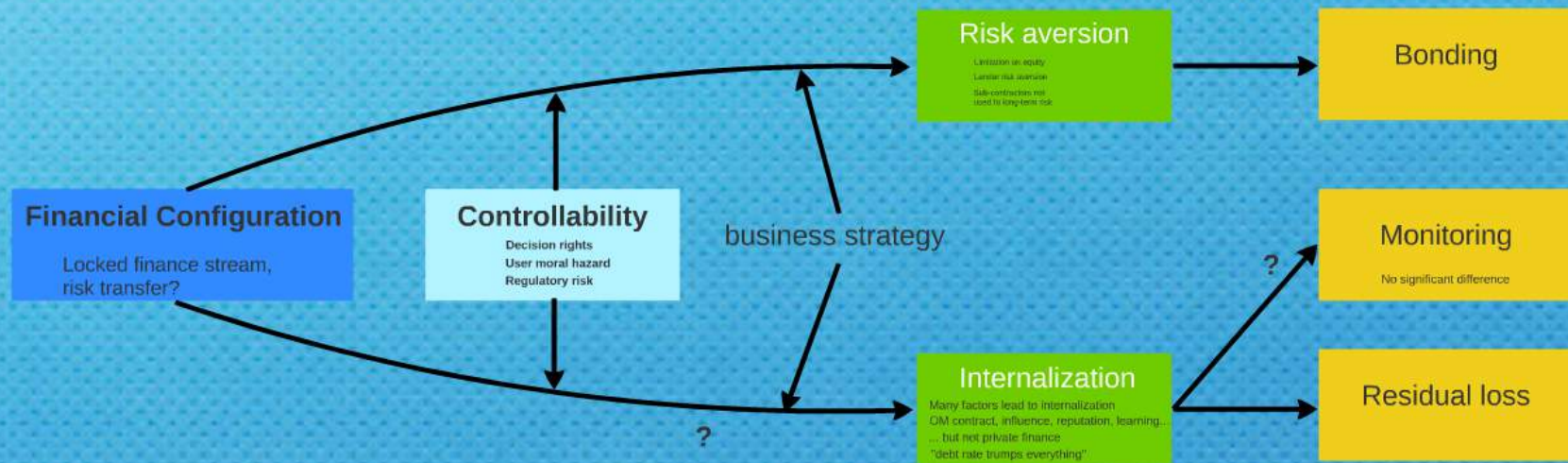
Measures to reduce bonding costs lower incentive effect

Aquarama: Combining commercial and non-commercial contributed to goal alignment

Lyngdal: Other incentives important. No substantial increase in monitoring costs



Findings

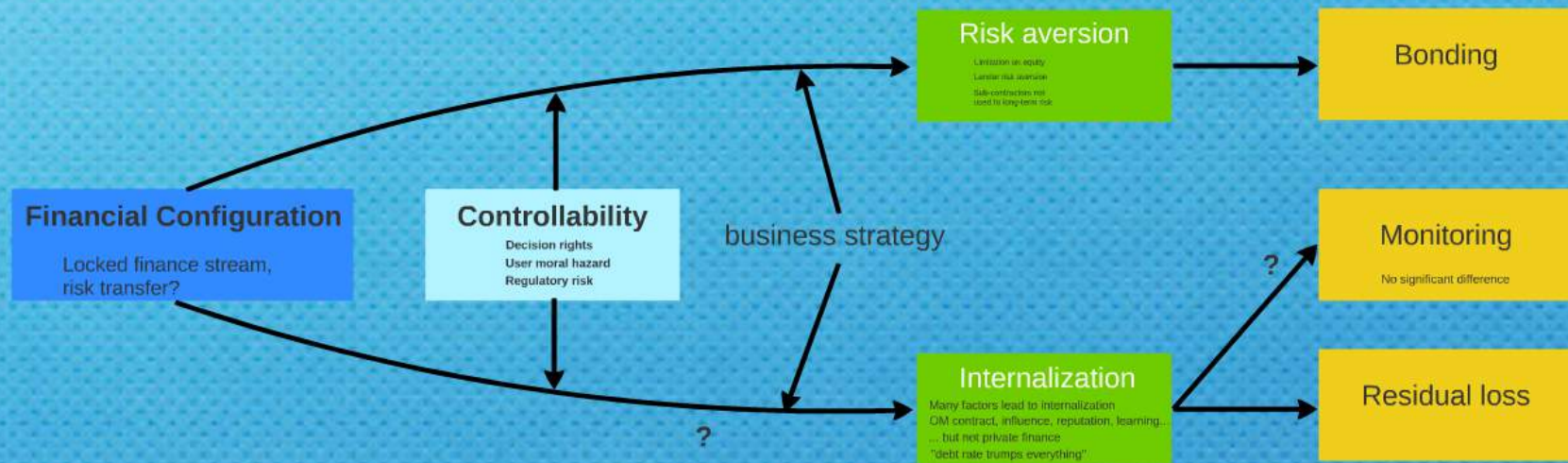


Risk aversion

Limitation on equity

Lender risk aversion

Sub-contractors not
used to long-term risk



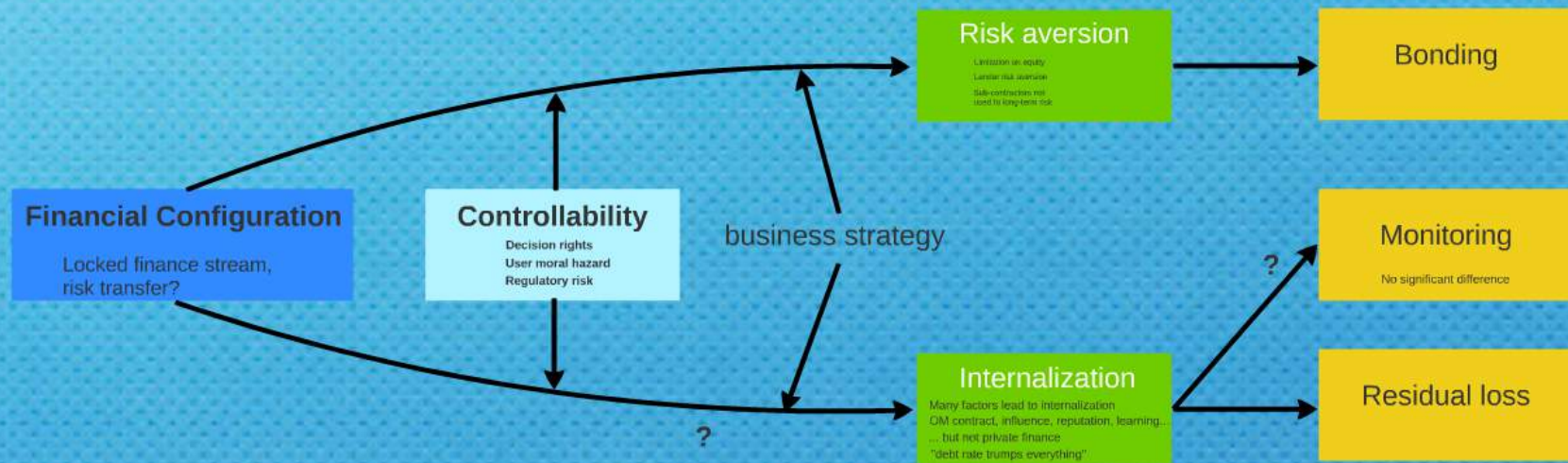
Internalization

Many factors lead to internalization

OM contract, influence, reputation, learning...

... but not private finance

"debt rate trumps everything"

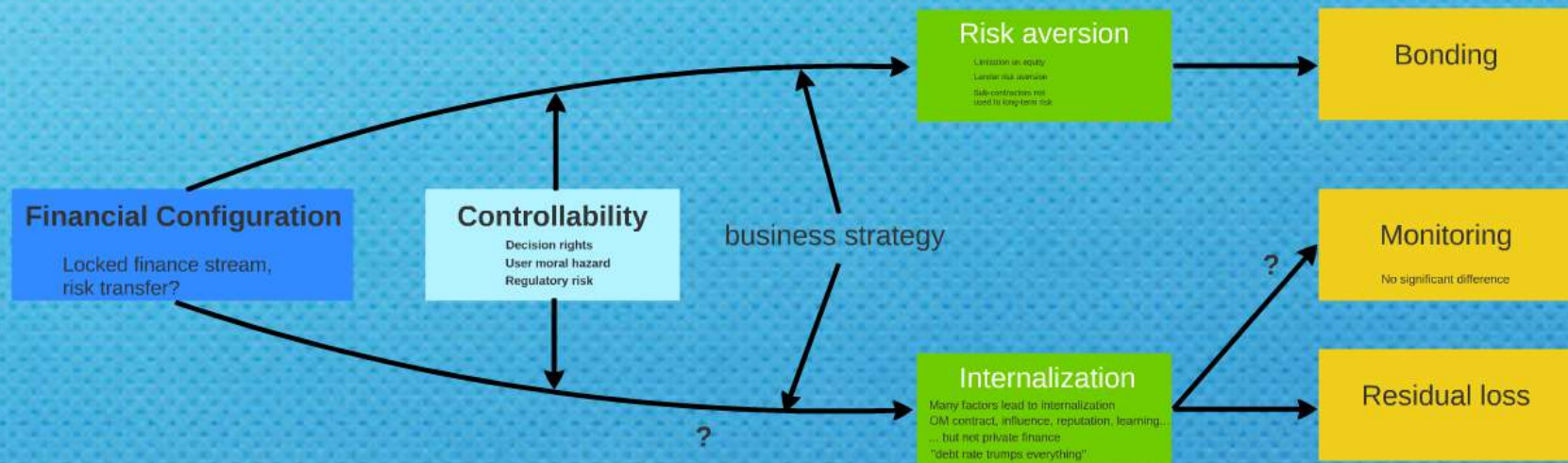


Controllability

Decision rights

User moral hazard

Regulatory risk

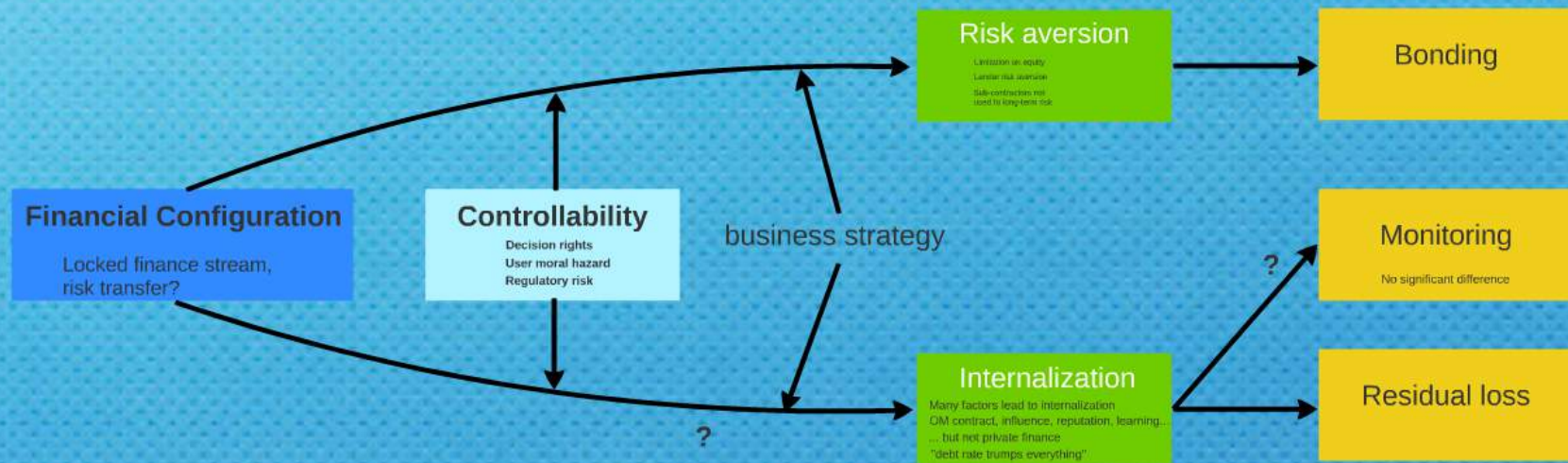




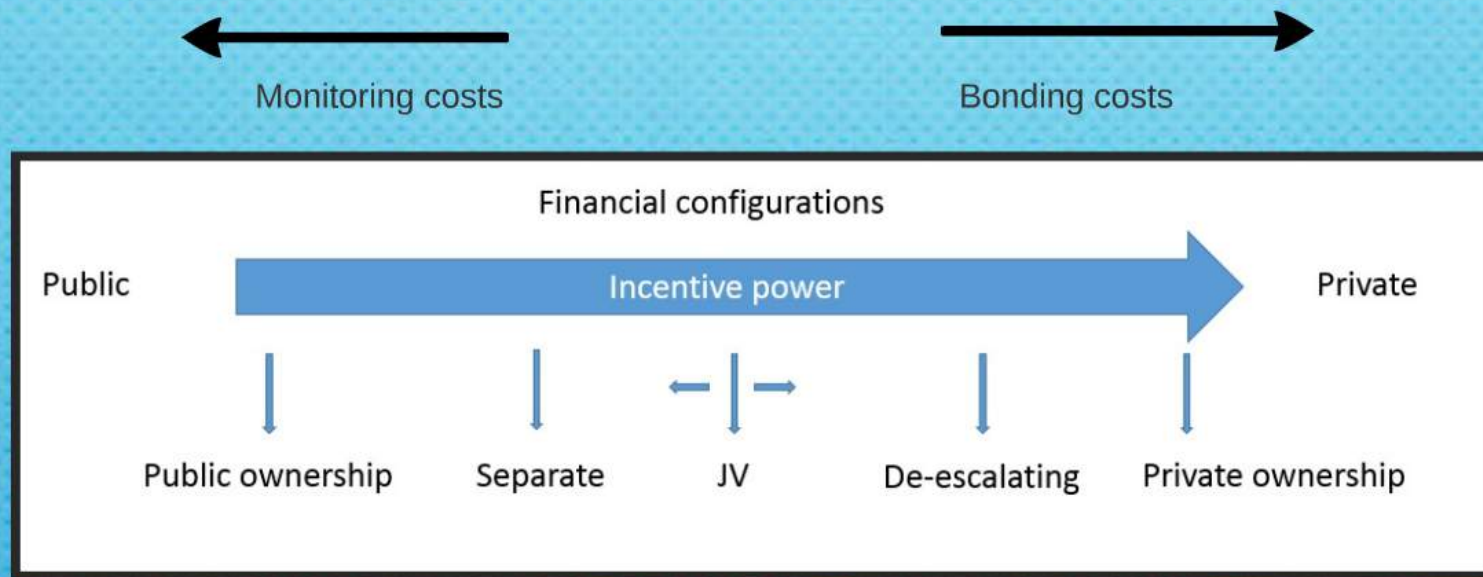
Financial Configuration

Locked finance stream,
risk transfer?





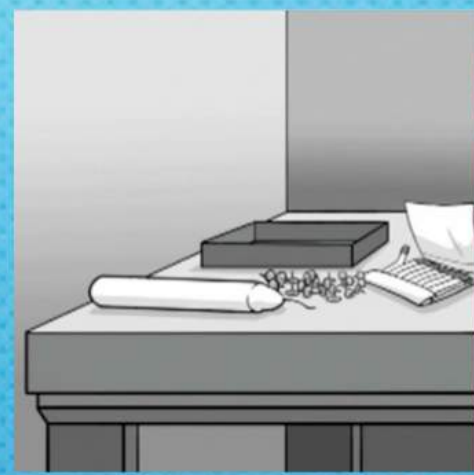
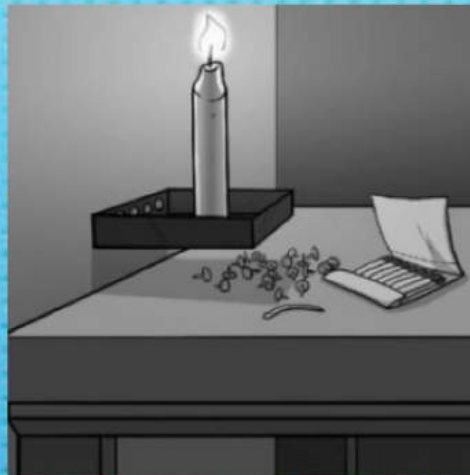
Conclusion

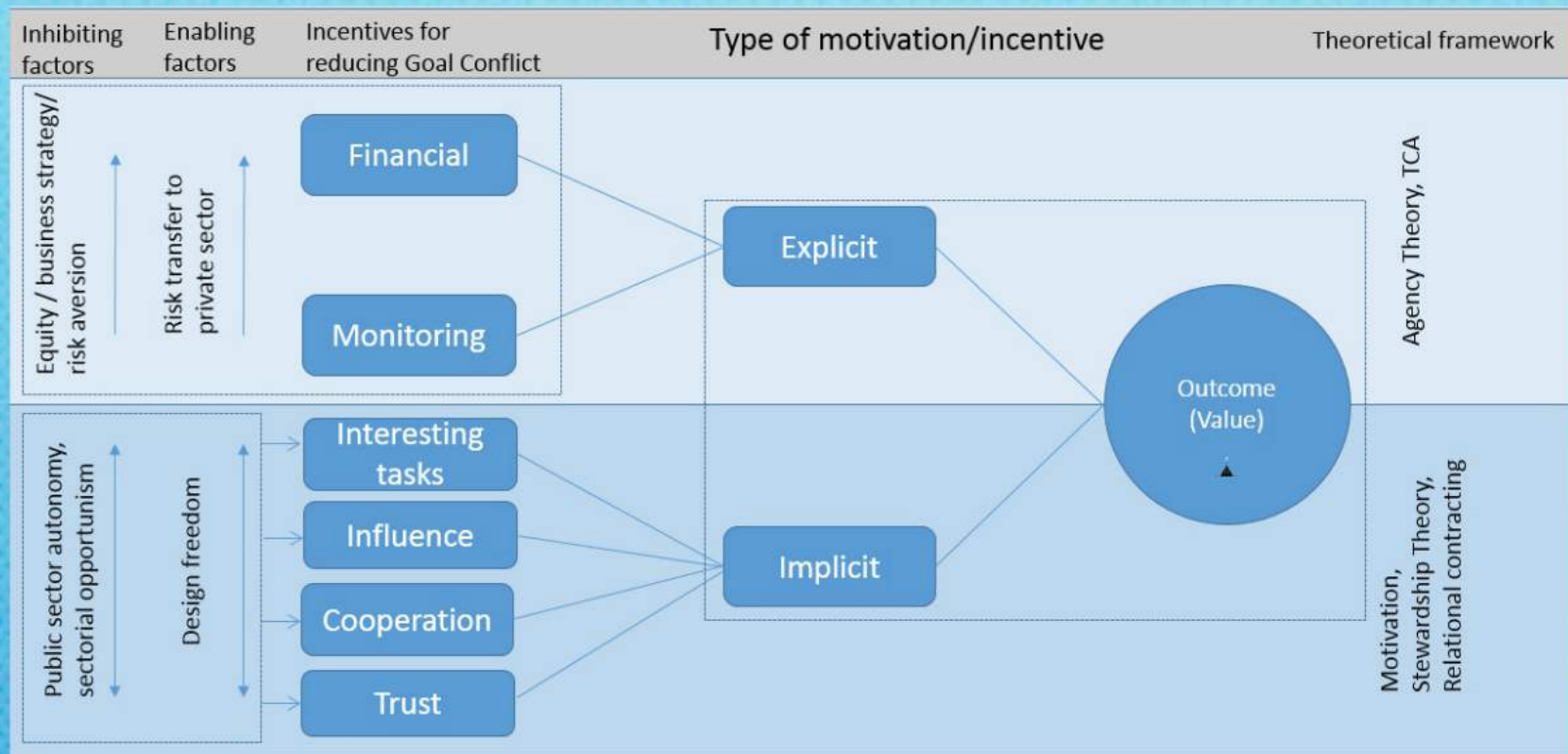


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Incentives are difficult

The candle problem







Thank you

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