

Financing in higher education and agency theory

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Objectives

1. To introduce the **basic structure** of agency theory.
2. To discuss the **perspectives that agency theory can offer** for an examination of relationship between public authorities and higher education institutions.
3. To discuss the **strengths** and **weaknesses** of **agency theory** in offering insights for in these relationships.

Two questions, one answer

- Why public authorities need **hold higher education institutions (HEI) accountable** in terms of monitoring the behaviour and measuring performance of HEIs?
- Why public authorities **cannot trust** HEIs without monitoring and measurement?
- According to **agency theory**, public authorities cannot trust HEIs, because they are likely to **behave opportunistically** (waste public money by pursuing less meaningful goals and achieving sub-optimal outcome).

Agency theory in short

- Agency theory (a.k.a principal-agent theory) analyzes **relationships** in which one party, the “**principal**”, engages another party, “**the agent**”, to perform some **task** on the behalf of the principal.
- The theory assumes that once principals **delegate the task** to agents, they face **problems task accomplishment**
- Agency theory focuses on the ways principals try to mitigate this problem by **monitoring** agent actions, and by offering **economic incentives**.
- Background in economics and political science, but agency theory is not exclusive property of any particular discipline
- Applied more and more frequently in the field of higher education studies

Agency Theory in short

Setting:

- Principal = **Public authority**
 - Agent = **HEI** receiving public funding
 - Task = To produce **teaching, research** and **service** *as an exchange for receiving public funds*
- Relevant in all hierarchical or contractual relationships, where the following two conditions surrounding the relationship exist:
 - a) goal conflicts*
 - b) informational asymmetries*
- ...which are both inherently present in PA-HEI relationships*

Why informational asymmetries and goal conflicts are essential?

- Because **together** they create favourable conditions to for **agent opportunism** to emerge
 - If there are **no informational asymmetries**, principal could detect automatically all attempts of agent opportunism
 - If there are **no goal conflicts**, agents do not have motivation to behave opportunistically
- Agency theory calls agent opportunism “**moral hazard**” problem, which means “**shirking**” or other forms of behaviour which are not in the best interests of the principal when completing the given task

Moral hazard

- Moral hazard opportunism is **intended self-interested action**
- **Mistakes, misfortune** or **incompetence are not** forms of opportunism, if they are unintended
- “Shirking”
- In HE context: Various forms of institutional and individual actions resulting over-spending and/or under achieving and actions that are intended to hide this



How to control agent opportunism?

- By taking care of the two essential conditions triggering opportunistic behaviour:
 - Reducing **informational asymmetries** → observe agent behaviour and outcomes → pay on what you **observe** = “**BEHAVIOUR-BASED CONTRACT**”
 - Reducing **goal conflicts** → incentivize agent to overcome divergent self-interest → pay on what is **produced** = “**OUTCOME-BASED CONTRACT**”
- **In HE context:**
 - **Behaviour-based contracts:** input-based budgeting (line-item, historical, lump sum grants with formula based on student/staff numbers) + reporting and evaluations
 - **Outcome-based contracts:** performance measurement, performance-based contracts, funding and bonuses (publications, external funding, awarded degrees, study credits, employability)

Universities Core Funding From 2021

42% Education

30% Bachelor's degrees and Master's degrees

- Master's degrees 19%, Bachelor's degrees 11%
- Coefficients: graduation times, multiple similar degrees, fields of education
- Funding up to the agreed target (Master's degrees)

5% Continuous learning

- ECTS based on cooperation 1%

4% Number of employed graduates and quality of employment

- Number of employed graduates 2%, graduate tracking 2%

3% Student feedback

34% Research

8% PhD degrees

14% Scientific publications

- Refereed scientific publications: Rating of publications Level 0 (coefficient 0.1), Level 1 (1), Level 2 (3) and Level 3 (4)
- Other publications: 0.1
- Coefficient for open publications: 1.2

12% Competitive research funding

- International competitive research funding
- National competitive research funding and corporate funding

24% Other education and science policy considerations

15% Strategic development

- Part A. Strategy of the University, implementation of the strategy, profiling, internationalisation
- Part B. National education and science policy aims
- Emphasis on part A

9% National duties

- Special national duties, teacher training schools, National Library of Finland, University of Arts

How to choose what is optimal: agency variables

A. Outcome measurability

- low > monitoring
- high > outcomes

B. Outcome uncertainty

- low > outcomes
- high > monitoring

C. Task programmability

- low > outcomes
- high > monitoring

D. Goal conflict

- low > monitoring
- high > outcomes

In HE context:

A. Output measurability = **Low**

- definition, goal displacement

B. Output uncertainty = **Moderate/High**

- student contributions beyond HEI influence, research unpredictable

C. Task programmability = **Low**

- work, processes, structures

D. Goal conflict = **Moderate/High**

- accountability vs. academic freedom, autonomy, revenue & prestige maximization, leisure

How to choose what is optimal: agency costs

Agency costs = opportunism costs AND governance costs

Opportunism costs = the loss borne by the public authority which is caused by HEI acting opportunistically

- Difficult to calculate due to the invisibility of opportunistic behavior
- Can still offer perspectives in speculating on the meaningfulness and effects of governance of HEIs

Governance costs = the direct costs of governing and indirect costs incurred because of their dysfunctional effects

- Difficult to calculate, but estimation possible

How to choose what is optimal: hard trade-off

- If **opportunism costs** remain lower than the **governing costs**, the efficient solution for the public authority could be to reduce its governing efforts
 - Problem: both of these costs are often **unknown**
- Despite the governance problems, **HEIs are not in a good position as agents**
 - Governance procedures make the HEIs' opportunistic behavior more difficult
 - **Dysfunctional effects** of governance procedures are likely to create operating difficulties for both opportunistic and non-opportunistic HEIs
- At worst, PA-HEI relationship can be a '**lose-lose relationship**', where both parties could do more than without using the governance procedures and (potential or actual) opportunistic behavior.

Main strengths of agency theory

- Simplicity and **generic nature**: allows wider possibilities of application
- **Descriptive capacity**: generates unique insights on on HE governance
- **Explanatory potential**: offers explanation for HEI under-performance and the public authority's need to use governance mechanisms
- **Predictive potential**: can predict most efficient contract (governance) choice by using agency variables

Main weaknesses of agency theory

- **Narrowness of behavioral assumptions:** most people might behave opportunistically at times, but not all the people all the time (**too negative and cynical moral evaluation of motivation**)
- Narrowness of **focus: economic aspects** only and it ignores e.g. cultural, social, and political factors and so it **fails to explain** principal's utility losses by any other factor than agent opportunism
- Narrowness of **scope: ignores** the existence of other **competing principals and legitimate other incentives** (e.g. in HE students, private donors, other public and private research financiers, supranational actors)
- Takes **principal's goals as given**, whether these are legitimate or not (what if HEIs know better what goals should be promoted/prioritized?)



What are the impacts of production processes / work to performance?



What are the impacts of incentives and monitoring on production processes and work?



Conclusion

*Agency theory is not perfect, but neither is any other theory.
Just understand its limitations before using it.*

Thank you.

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