

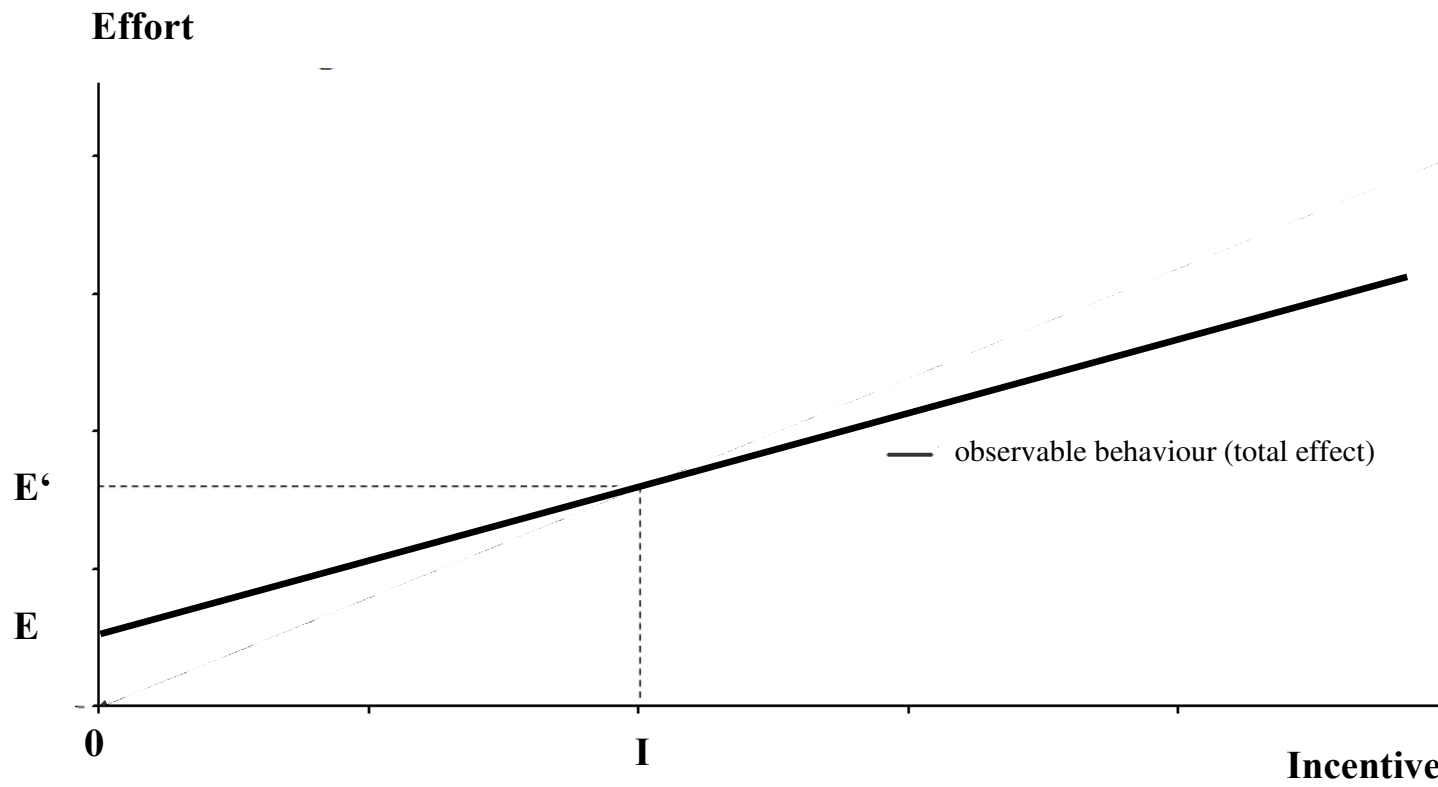
# Crowding Effects in Open Source Communities:

How does money influence open source projects and its contributors?

April 27<sup>th</sup> 2007, Panel Discussion, Colloquium Science Meets Practice, ETH Zurich  
Matthias Stuermer, ETH Zurich, [mstuermer@ethz.ch](mailto:mstuermer@ethz.ch)



# The Stimulus-Response Relation in the Standard Economic Model



Source: Weibel, Rost and Osterloh 2007 working paper

# Intrinsic vs. Extrinsic Motivation

- **Intrinsic Motivation**
  - Enjoyment-based
  - Obligation-based
- **Extrinsic Motivation**
  - Non-monetary: reputation, career options...
  - Monetary: performance-contingent salary

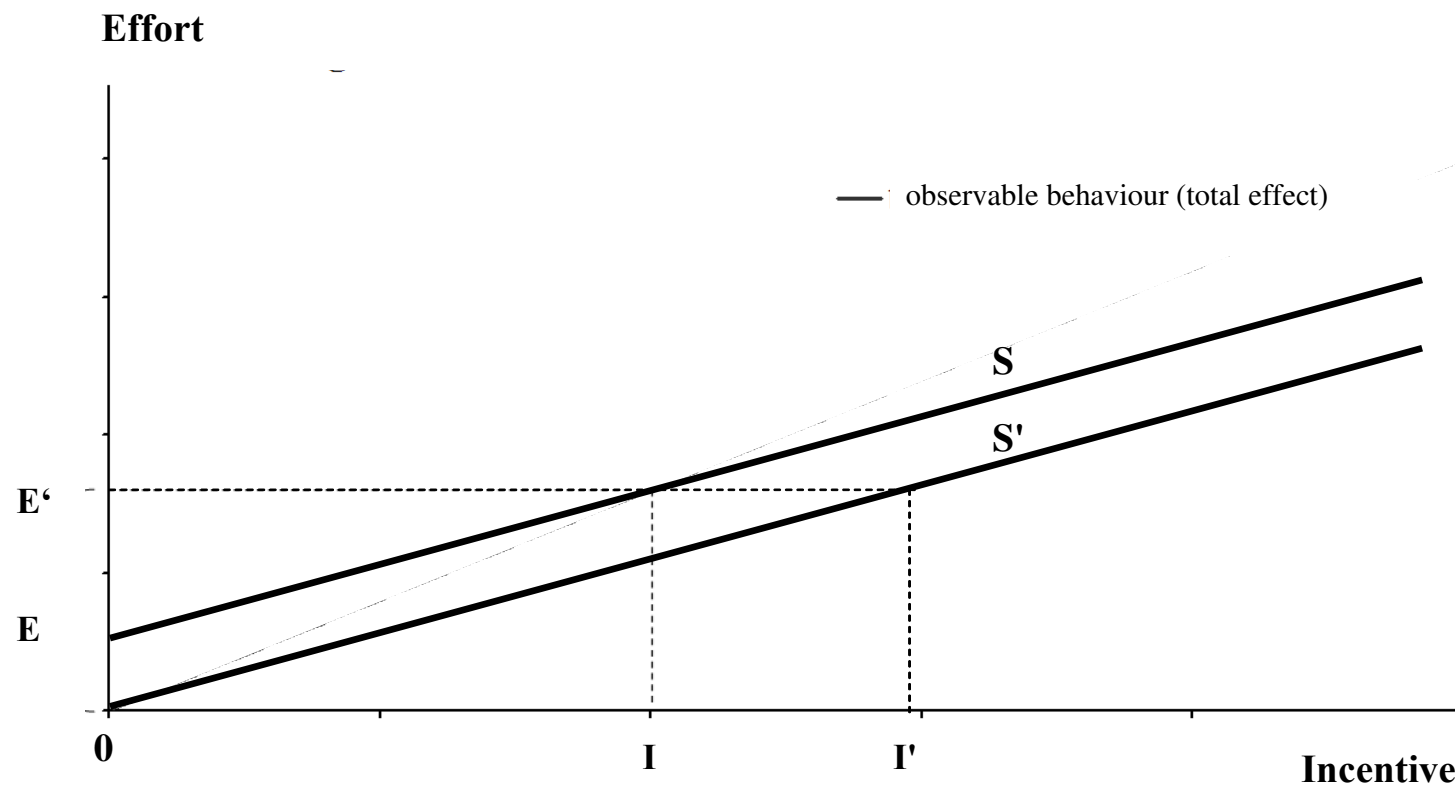
# Crowding-out of Intrinsic Motivation

Extrinsic incentives may lead to:

- decreasing **self-determination**.
  - “External interventions crowd out intrinsic motivation if the individuals affected perceive them to be controlling.”
- decreasing **self-esteem**.
  - “The person affected feels that his or her involvement and competence is not appreciated, which debases its value.”

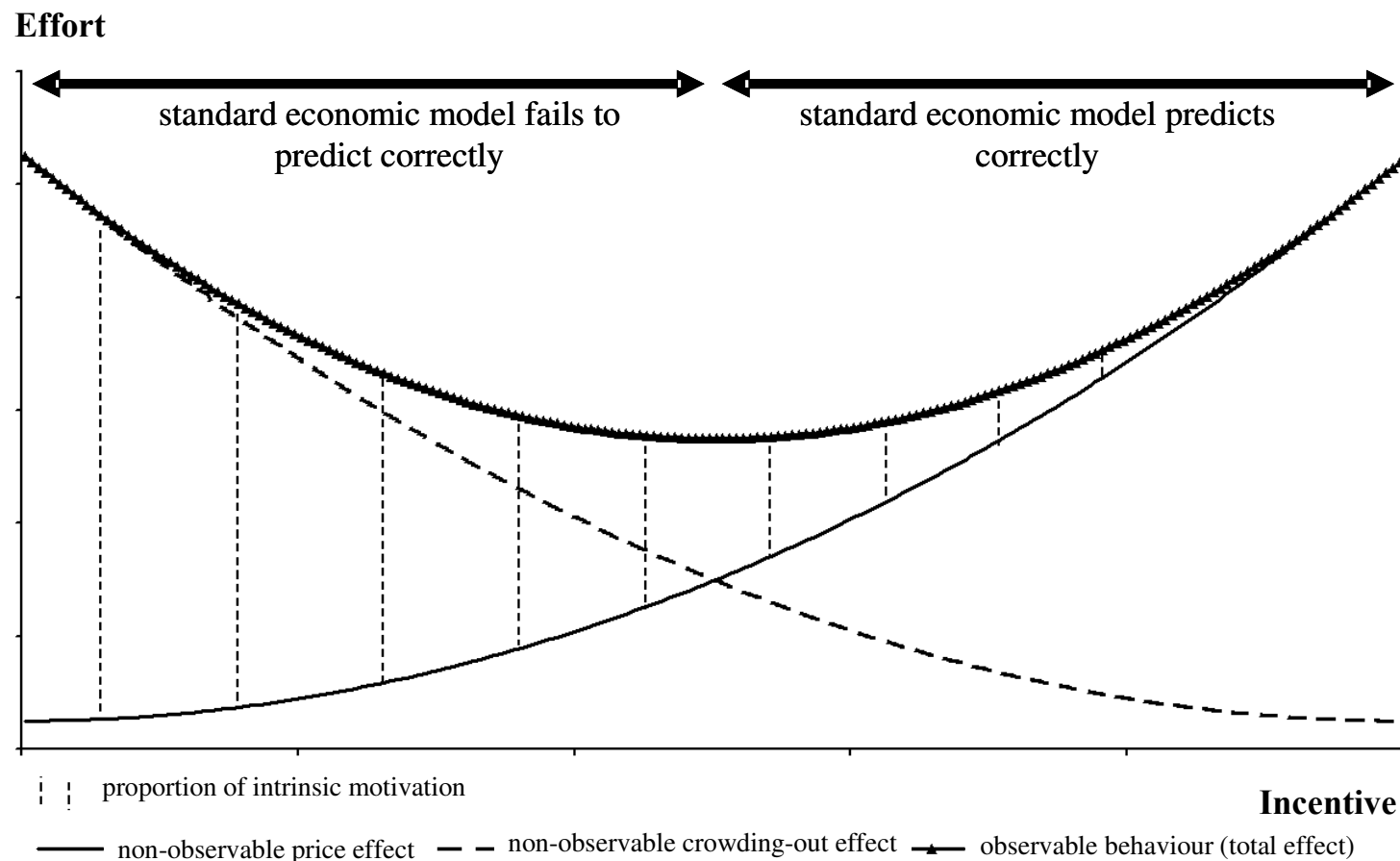
Source: Frey and Jegen 2001 'Motivation Crowding Theory'

# Crowding-Out Effect with a Negative Net Effect



Source: Weibel, Rost and Osterloh 2007 working paper

# Scope of the Standard Economic Model for Predicting Behaviour



Source: Weibel, Rost and Osterloh 2007 working paper

# Panel Discussion

## Your personal experience:

- Why do you participate in open source projects?
- What extrinsic (reputational or monetary) incentives are present in your open source project?
- What effects did you perceive caused by extrinsic incentives?
- What type of extrinsic incentives do you support, which not?

## Panel Discussion

### More questions on motivational crowding effects:

- How much are open source developers really motivated intrinsically?
- What motivation do people have for “The Last Mile”?
- How does motivation of a task change over time?
- How do different extrinsic incentives vary?
- What role does jealousy play?