

# Atlanta Conference on Science and Technology Policy 2006

*What U.S. Innovation Studies Have to Offer to  
Innovation Policy*

Session 2  
May 18, 2006

Rosalie T. Ruegg  
Managing Director  
TIA Consulting, Inc.  
ruegg@ec.rr.com

# Ideas Drive Actions

There is no doubt that U.S. innovation studies drive U.S. innovation policy,

--but not always directly, logically, or promptly, and always within a political context.

*...Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back." (J.M. Keynes, 1936)*

# Innovation – too important to leave to chance

- What factors are needed?
- When?
- Where?
- In what mix?
- Over what period of time?
- Who?

Policy analysts and evaluators study empirical evidence from past policies and construct theories and models to try to explain what is needed.

# Theories and Models of Innovation have Evolved

- Linear Supply-side Innovation Model

“take care of basic research and the rest will take care of itself.”

- Vannevar Bush, Science the Endless Frontier, 1945
- Prevalent model from 1945 through the 1960s

# Theories and Models of Innovation have Evolved

- Linear Demand-pull Innovation Model

consumer and user demand triggered the motivation to innovate

- 1960s and 1970s

# Theories and Models of Innovation have Evolved

- Nonlinear Chain-linked Process with Feedback loops

combined supply-push and demand-pull  
with complex interactions

- 1980s

# Theories and Models of Innovation have Evolved

1990s:

- a growing body of evaluation studies spawning innovation theories/models:
  - Network Innovation Model
  - National and Regional Systems Model of Innovation
  - Social Capital Model
- Innovation policy a central issue
- Policy sometimes leading theory

# Innovation Models Co-exist

- While one model gradually displaces another in terms of understanding of analysts and researchers, the earlier models have continued to influence policy.

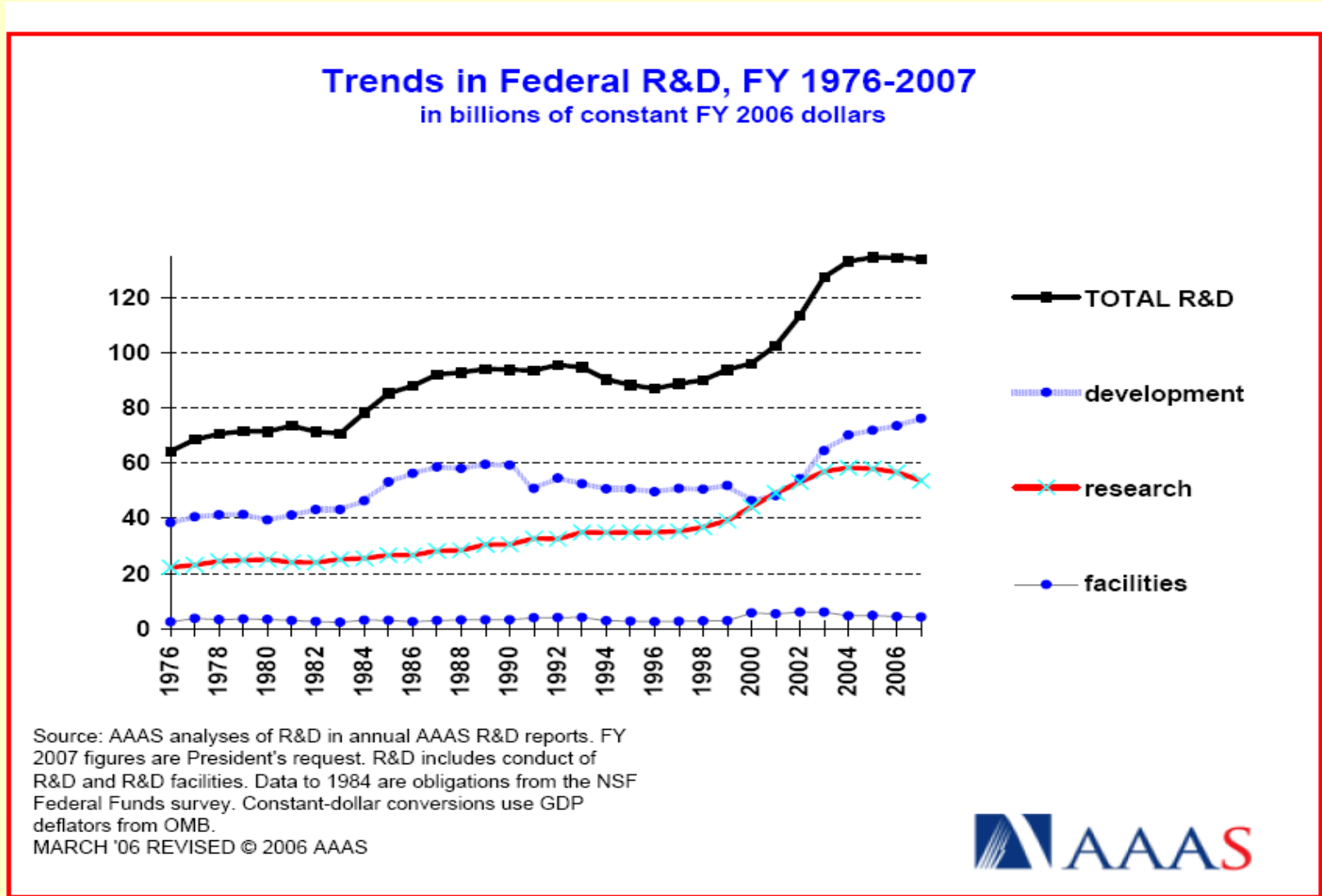
## Factors that May Widen the Gap between Studies and Policy

- Ideological differences may cause rejection of study findings
- When study findings are inconsistent with policy views of those in an oversight position, findings offered as evidence may be ignored, discredited, or misrepresented
- When study findings are complex, they may be left out of accounting oversight schemes

# Has U.S. Innovation Policy Kept Pace with Innovation Policy Studies?

- Recent years have seen increasing concerns about U.S. innovation
- R&D has flattened
- Innovation policy has not received emphasis
- As a result, there are a growing number of organizations that have put forth innovation action agendas in the past few months
- Several innovation/competitiveness bills are pending

# Trends in Federal R&D



# Conclusion

U.S. innovation policy has not in kept pace with innovation policy studies in the 2000s.

Our body of innovation studies positions us (U.S.) to do better at innovation policy than we are doing now.