

Public investment projects: Perspectives on problems and issues

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Concept Research Programme

Outline

- Public investment projects for as policy implementation tools
- Main challenges in public investment projects
- Role of project models: Structuring the front-end, appraisal and planning processes

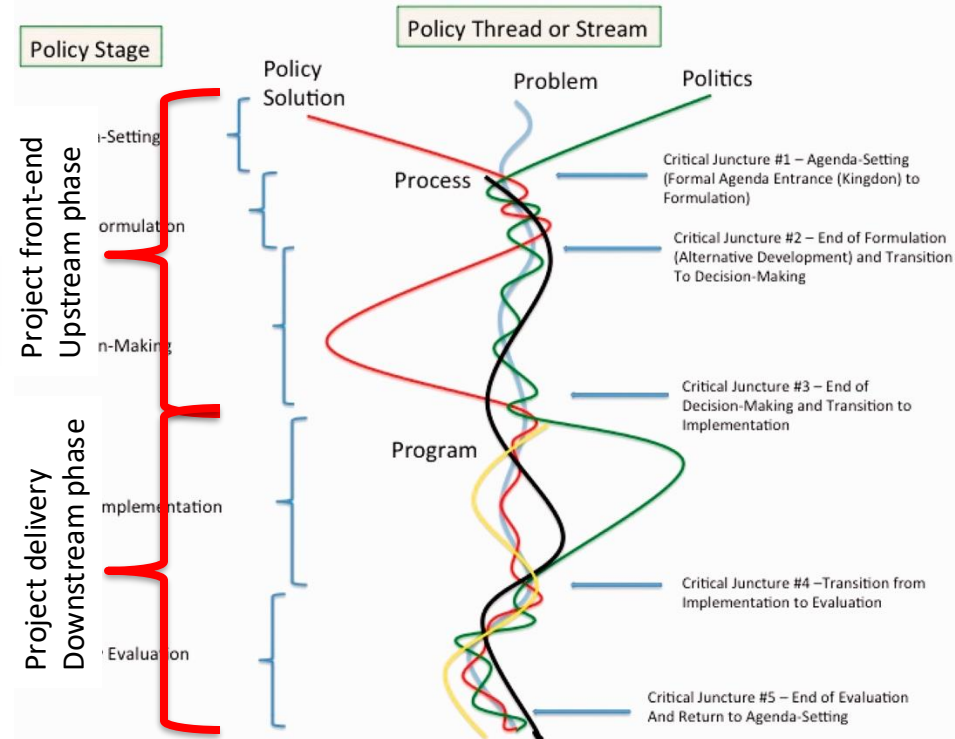
What are Public Investment Projects about?

- Key tool of public investment management
- Implementation of long-term policy and strategic objectives
- Provision of essential services to the society, businesses and consumers (infrastructure, transformation, R&I).
- We like them, but they like to fail and break



Confluence of multiple influences and streams

- Multiple streams:
 - Problem
 - Solution
 - Politics
 - Process
 - Program



Five stream model of policy process: Source: Howlett M (2019) Moving policy implementation theory forward: A multiple streams/critical juncture approach. *Public Policy and Administration* 34(4): 405-430

Main challenges with public investment projects?



1. **Making poor decisions** (errors in judgement)
2. **Social complexity** (interests and complicated relationships)
3. **Technical complexity** (problem-solving is difficult)
4. **Systemic risk** (pulling the rug under our feet)

1. Decision-making

- Optimism bias
 - Overestimate own abilities- unrealistic optimism
- Sunk cost fallacy
 - Continue on the course of action that has been invested in (entrapment)
- Confirmation bias
 - Search and interpret information that favours our beliefs
- Cognitive dissonance
 - Avoidance of conflicting beliefs and attitudes
- Rationality an illusion?



**PRETTY GOOD
AT
BAD
DECISIONS**

2. Social complexity

- Self-interest
- Broken agency
- Collective action problem
 - I won't go until everyone goes

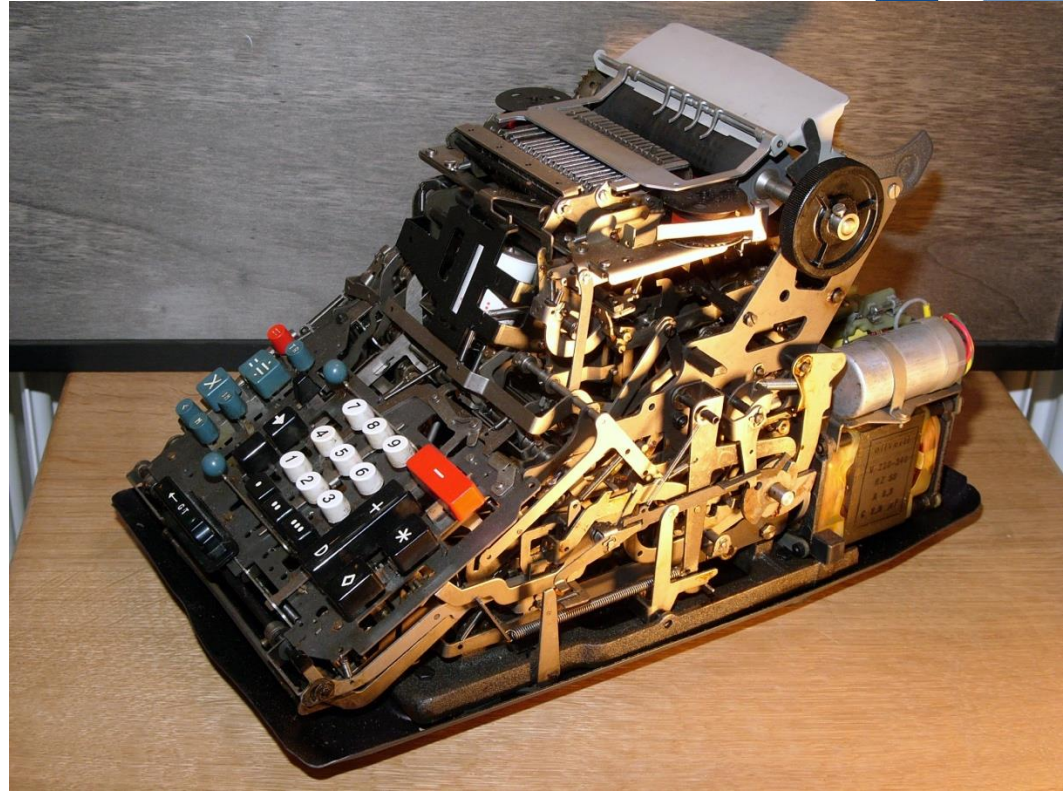
- Ambiguity



Greek tragedy mask. 4th cent. B.C. Inv. No. 4640. Archaeological Museum of Piraeus by [George E. Koronaiois](https://commons.wikimedia.org/wiki/File:George_E._Koronaiois)
[https://commons.wikimedia.org/wiki/File:Greek_tragedy_mask,_4th_cent._B.C._\(PAM_4640,_1-6-2020\).jpg](https://commons.wikimedia.org/wiki/File:Greek_tragedy_mask,_4th_cent._B.C._(PAM_4640,_1-6-2020).jpg)

3. Problem-solving and technical complexity

- Problems are technically difficult
- They evolve over time
- Uncertainty



Hannes Grobe (Hgrobe 06:16, 26 April 2006 (UTC)), CC BY-SA 2.5 <<https://creativecommons.org/licenses/by-sa/2.5>>, via Wikimedia Commons

4. Systemic risk

- Market (and government?) failure
- Allocation of risks to wrong parties
- Project capture by political and commercial interests

The New York Times.

TWO CENTS
NEW YORK, WEDNESDAY, OCTOBER 30, 1929.
Copyright, 1929, by The New York Times Company.

STOCKS COLLAPSE IN 16,410,030-SHARE DAY, BUT RALLY AT CLOSE CHEERS BROKERS; BANKERS OPTIMISTIC, TO CONTINUE AID

LEADERS SEE FEAR WANING

Point to 'Lifting Spells' in Trading as Sign of Buying Activity.

GROUP MEETS TWICE IN DAY

But Resources Are Unable to Stem Selling Tide—Lamont Reassures Investors.

HOPE SEEN IN MARGIN CUTS

Banks Reduce Requirements to 25 Per Cent—Sentiment in Wall St. More Cheerful.

Resources of the banking group which was organized last Thursday to stabilize conditions in the stock market were utilized yesterday to break the force of the terrific flood of selling which accompanied the biggest day from the point of view

**240 Issues Lose \$15,894,818,894 in Month;
Slump in Full Exchange List Vastly Larger**

The drastic effects of Wall Street's October bear market is shown by valuation tables prepared last night by THE NEW YORK TIMES, which place the decline in the market value of 240 representative issues on the New York Stock Exchange at \$15,894,818,894 during the period from Oct. 1 to yesterday's closing. Since there are 1,279 issues listed on the New York Stock Exchange, the total depreciation for the month is estimated at between two and three times the loss for the 240 issues covered by THE TIMES table.

Among the losses of the various groups comprising the 240 stocks in THE TIMES valuation table were the following:

Group	Number of Stocks	Decline in Value
Genp.	.25	\$1,128,686,488
Railroads	.29	5,135,734,827
Public utilities	.15	1,899,840,902
Miners	.22	1,382,617,776
Oils	.13	824,469,820
Coppers	.9	1,421,997,997
Chemicals	.00	0

The official figures of the New York Stock Exchange showed that the total market value of its listed securities on Oct. 1 was \$87,073,209,425. The decline in the 240 representative issues therefore cut more than one-sixth from the total value of the listed securities. Most of this loss was inflicted by the wholesale liquidation of the last week.

CLOSING RALLY VIGOROUS

Leading Issues Regain From 4 to 14 Points in 15 Minutes.

INVESTMENT TRUSTS BUY

Large Blocks Thrown on Market at Opening Start Third Break of Week.

BIG TRADERS HARDEST HIT

Bankers Believe Liquidation Now Has Run Its Course and Advise Purchases.

Stock prices virtually collapsed yesterday, swept downward with gigantic losses in the most disastrous trading day in the stock market's history. Billions of dollars in open market values were wiped out as prices crumbled under the pressure of

U. S. STEEL TO PAY \$1 EXTRA DIVIDEND

RESERVE BOARD FINDS ACTION UNNECESSARY

Front page

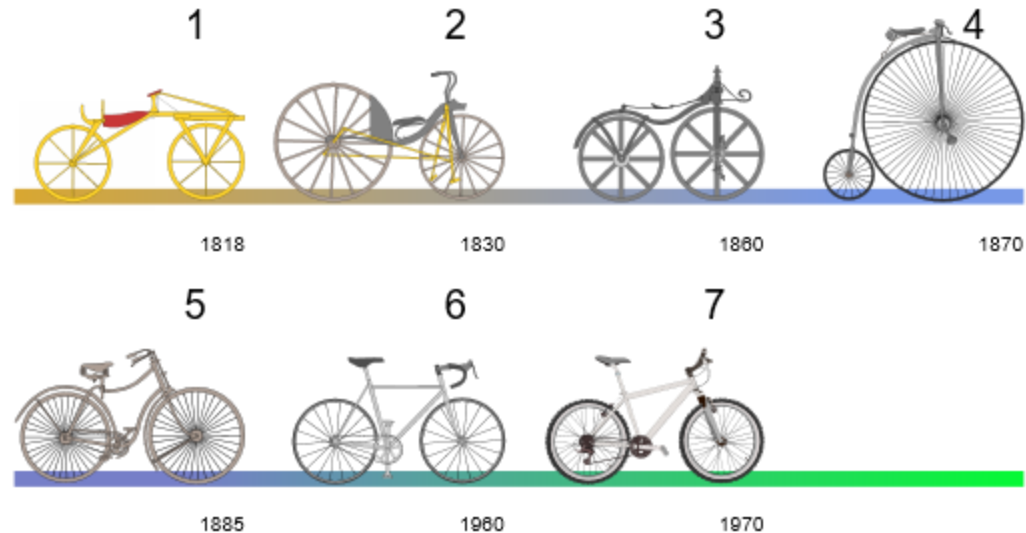
Day's Sales	Monday	Saturday	A Year Ago	Two Years Ago
16,410,030	9,212,890	2,687,660	3,482,770	1,676,570
	—Same Period—			
Year to Date	1928	1927	1926	1925
950,797,190	708,649,607	464,944,676	376,924,260	863,084,123

Recent trading volume
p. 31

https://upload.wikimedia.org/wikipedia/commons/f/f2/19291030_Crash_of_%2729_-_New_York_Times.jpg

Evolution and development of a project

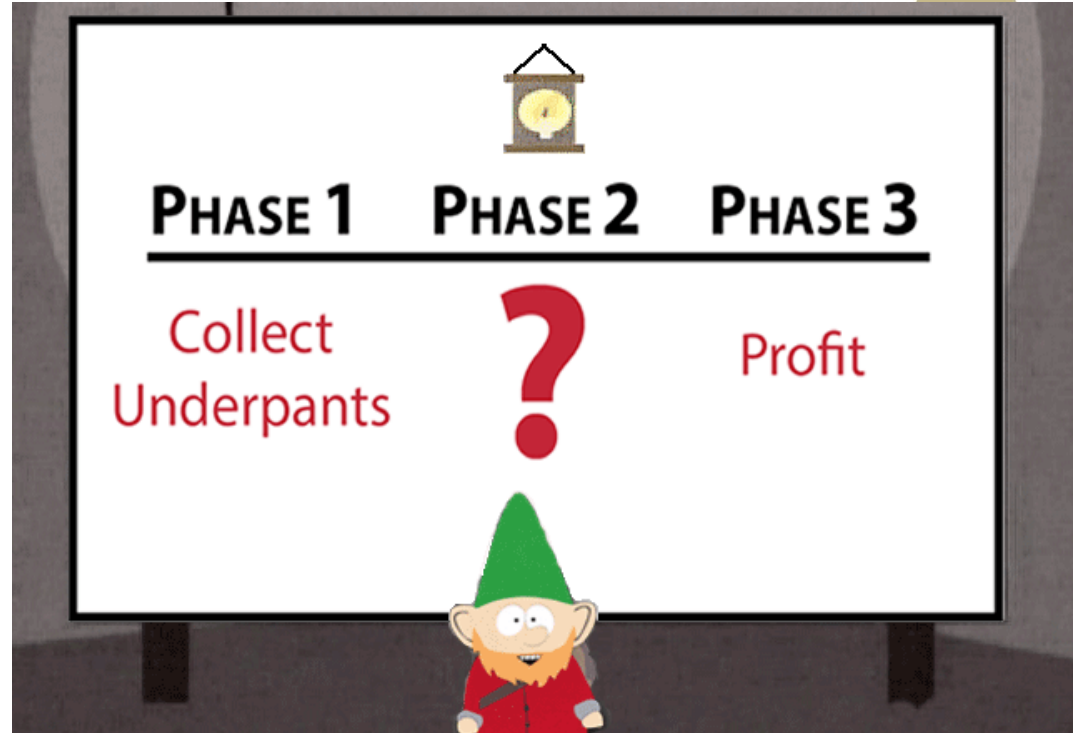
- How do we get from inception to delivery
- Proposal to project
- Natural selection & Survival of the (un)fittest?
- Incremental vs discontinuities



[AI2, CC BY 3.0](https://commons.wikimedia.org/wiki/File:Bicycle_evolution-numbers.svg), via Wikimedia Commons
https://commons.wikimedia.org/wiki/File:Bicycle_evolution-numbers.svg

The project front-end, appraisal and planning

- Continuity and causality missing
- Seeds of success and failure are sown in the front-end.
- ‘The underpants gnomes’ theory of front-end planning



Southpark meme (cca 1998)

Why do we need formal project models?

Operational success
Project management success
Internal efficiency

**New comparative study on project models
coming up later this year**

Target audience: policy makers

Includes Ireland as a country case study!

Societal
objective (-s)

Tactical and strategic success
Successful outcome/effects
External efficiency

Key learnings

- Imperative of project execution- more than one option
 - Do nothing or do minimum
- Break through the fog
 - Decisions are based on incomplete and uncertain information
 - Need to dispel the silo mindset
 - Explain/avoid opaque models
- Accountability
 - Both in a robust system and key individuals

Thank you



NTNU Concept Research Programme

Official account for the NTNU Concept Research Programme

Research Services · Trondheim · 349 followers · 2-10 employees

—

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<https://www.ntnu.edu/concept>

LinkedIn: **NTNU Concept
Research Programme**

Some references

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