



Concept Symposium 2016

Governing the Front-End of Major Projects

Dutch politicians' use of cost-benefit analysis



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28 Dutch politicians and 10 top-level civil servants were interviewed about the way Dutch politicians use cost-benefit analysis (CBA). Various types of use were identified. Politicians use CBA: (1) When forming their opinion about the desirability of transport projects; (2) As political ammunition (opportunistic use); (3) To make themselves and their decisions look more rational (symbolic use). None of the politicians stated that they solely base their judgment on CBAs. Politicians mention seven barriers that hamper the use of CBA when forming their opinion: (1) The process of forming an opinion is trivial; (2) Politicians prefer to form their opinion based on conversations rather than on reading reports; (3) Politicians don't trust CBA's impartiality; (4) Politicians disagree with normative choices made in CBA. An example of such a normative choice is that CBA attaches an equally large weight to everybody's utility changes. (5) Politicians think that CBA's explanatory power is limited; (6) Politicians receive CBAs too late; (7) When there is plenty of money, politicians care less about a project's social profitability. Members of Parliament identified barriers 3 and 6 as the most important barriers. They regard publishing CBAs one or two months before a debate as the most auspicious solution for rectifying these barriers. An interesting observation is that no barriers for the opportunistic and symbolic use of CBA by politicians were identified. Hence, it can be concluded that it is highly likely that when politicians receive CBAs for transport projects, they will use the CBA in an opportunistic and symbolic way, but politicians will not necessarily use CBA when forming their opinion.

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Dutch politicians' use of CBA in selecting infrastructure projects

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Introduction

- **Economist & Philosopher TU Delft:**

- 2009 – 2014 Dissertation (Delft University of Technology)
 - Improvement of the use of Cost-Benefit Analysis in Practice;
- Post-doc 2014-2017 CBA and ethics;
- **Study I will present:** How Dutch politicians use CBA (in transport domain).
 - 5 former ministers or undersecretaries;
 - 10 Members of Parliament;
 - 11 former Members of Parliament (2003-2012);
 - 10 top-level civil servants.
- Previous studies Nyborg (1998), Sager and Ravlum (2005)

Mouter, N. Dutch politicians' use of Cost-Benefit Analysis. Transportation, in press.

How do politicians use research?

Four types of use of research by politicians identified in the literature:

- 1. Instrumental:** direct and immediate implementation of recommendations;
 - *Always decide in line with the CBA.*
- 2. Conceptual:** use of study for general enlightenment. Change way of thinking;
 - *CBA can change way of thinking towards a project.*
- 3. Opportunistic:** use of study as political ammunition;
 - *If CBA supports view I use it, otherwise I don't (and criticize CBA).*
- 4. Symbolic:** use of study to make decision and politician look more rational.
 - *CBA is a 'rational ritual'. The decisions don't change;*
 - *The fact that studies were carried out enhances acceptability decisions.*

Do politicians use CBA predominantly in an instrumental, conceptual, opportunistic or symbolic way?

Planning process in NL

- **Initiative phase:** ministers (assisted by civil servants) discuss with politicians from (five) regions which challenges should be tackled;
 - Political 'start decision' when there is consensus on a challenge.
- **Exploration phase:** problems analyzed and solutions generated;
- **Appraisal phase:** three favorable solutions analyzed with CBA and EIA;
 - Minister – in consultation with regions – selects one solution;
 - Project is included in the National Budget for Transport Infrastructure (2028).
- **Members of Parliament:**
 - Can select a different solution than the minister or make a 'no go' decision;
 - Demand that the minister should reserve money for a project.

Results

How do politicians use CBA in forming their opinion?

- None of the politicians solely grounds their judgments on CBAs;
- Majority of politicians/civil servants interviewed cannot recall situations in which a CBA changed their viewpoint about a project's desirability;
- Politicians who assign (high) value to CBA predominantly use it in forming opinion about desirability of (alignment of) **specific** transport projects;
- Various politicians state that a **very negative CBA** can lead to a **gradual** change of their viewpoint.
 - Interviewed ministers, civil servants and Members of Parliament argued that very negative CBA **HSR Amsterdam – Groningen** (BCR 0.1) gradually changed viewpoints.
 - Before CBA arguing against this HSR was considered to be political suicide;
 - Several people in MP's networks advised MP's to rethink their position based on CBA;
 - Next, several political party's decided to reconsider their viewpoint;
 - Finally, HSR was abandoned. However, North Netherlands received 2.7 billion 'bail out'.

Other types of CBA use by politicians

- CBA strengthens position of advocates or antagonists in bargaining processes.
- MPs use CBA as **political ammunition** in political debates (opportunistic use)
 - Emphasize CBA when the study supports their opinion;
 - Criticize the impartiality, validity and quality of CBA when results are not in line with their view;
 - Also politicians who **do not use CBA to form their opinion** use CBA in an opportunistic way.
- Politicians also use CBA in bargaining/discussions 'behind the scenes'
 - Minister of Finance to kill projects of Minister of Transport;
 - Minister of Transport and MPs to convince each other;
 - MPs to convince other members of their Party.

Other types of CBA use by politicians

Politicians use CBA in a **symbolic way** (to make themselves and decisions look more rational):

- *"Dutch people love technocratic politicians. So if I use CBA in my argument I enhance my popularity."*
- Executives prefer that one set of arguments consistently backs up all choices.
 - Minimize number of times the executives needs to say: *"I just want the project"*
 - Currently CBA happens to be included in this set of arguments.

7 barriers for using CBA in **forming opinion**

1. The process of forming an opinion is trivial

- Politicians cannot read all reports
- For a politician it is irrational to read a report when viewpoint is clear.

2. Politicians prefer to form opinion based on conversations rather than on reading reports

- Some politicians are 'readers' others are 'listeners'.

3. Politicians don't trust the impartiality of the CBA

- Some politicians believe in manipulation, others in 'implicit influencing' and some barely distrust CBA.

4. Politicians disagree with normative choices made in CBA

- Example of such a normative choice is that CBA attaches an equally large weight to everybody's utility changes.

7 barriers for using CBA in **forming opinion**

5. **Politicians worry about explanatory power of CBA**

- Human behavior unpredictable;
- Examples of prosperous projects despite skepticism beforehand.



6. **Politicians receive CBA too late;**

- Sometimes MPs receive CBA few days before debate;
- Not possible to ask confidant to verify the CBA;
- MPs cannot decide themselves on changing viewpoint.

7. **When there is plenty of money politicians care less about the social profitability of a project.**

- When there is enough money there is room to play with the money.

Observations

- No barriers for **opportunistic and symbolic use** of CBA by politicians;
- Politicians will not necessarily use CBA in forming their opinion.
- Early publication CBA (institutional design) key solution enhance use CBA MPs
- **Early before a debate** (but is difficult to implement):
 - If Cabinet did not decide yet, **no publication**;
 - Minister incentive to publish negative CBA right before the debate;
 - CBA is end-of-pipe analysis.
- If CBA is publicized and send to Parliament **early in the planning process** probability is higher that CBA will influence their viewpoint.
 - From the beginning onwards Dutch MPs receive information from lobbyists;
 - Based on this information they make promises;
 - MPs receive information from Government (CBA) at final stage;
 - We actually expect that MPs can adapt their opinion based on this CBA.
- MPs portrayed as irrational. Do we give them a good chance to make rational decisions?



Questions and Discussion

Second part

Interesting result: critique politicians on normative choices CBA

- CBA attaches an equally large weight to everybody's utility changes.

Group of politicians makes the following observation:

- Transport projects in the urbanized Randstad perform better in CBAs than projects in the rural areas, since more people benefit from transport projects in the Randstad.
- CO₂ repositories and other hazardous facilities in the rural areas perform better in CBAs than hazardous projects in the Randstad, because they can do harm to more people in the urbanized Randstad.

Next, these politicians convey the proportionality argument

- *"tax payers do not only live in the Randstad, but also in the rural areas. Hence, people in the rural areas should also receive some beneficial projects in return for their taxes"*

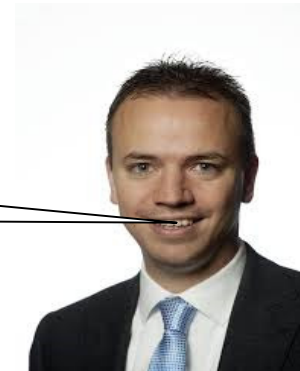
Should we weigh utility effects for every person equally?

- Σ (individual WTP x marginal utility money x weight in the SFW) = welfare effect
- **MUM**: how much utility does the individual gain from an extra euro?
- **Weight in SWF**: the weight of the individual in the social welfare function?



The impacts on Dutch citizens should be weighted equally.

More weight to effects for Frisians



More emphasis on utility changes of people who have a hard time.

- Politicians criticize “each individuals’ welfare is to count for one and not more than one”
- **Research question:** but do Dutch citizens have a preference for spatial equity?

Do Dutch citizens have a preference for spatial equity?

- Government has decided to start a new transport investment program which consists out of a large package of road and rail projects.
- Investment programs only differ in travel time savings accruing to Region A (Randstad, 8.5 mln people) and Region B (rural area, 8.5 mln people).
- We ask you which Variant you would recommend to the Government

	Variant 1	Variant 2	Variant 3
Travel time savings average inhabitant Region A	12 minutes per day	1 minute per day	6 minutes per day
Travel time savings average inhabitant Region B	1 minute per day	11 minutes per day	3 minutes per day

- 50 respondents variant 1 (29%). Most attractive according to CBA.
- 38 respondents variant 2 (22%).
- 86 respondents variant 3 (49%). Negative utility from inequality

Do Dutch citizens have a preference for spatial equity?

- Government has decided to start a new transport investment program which consists out of a large package of safety projects.
- Investment programs only differ in reduced traffic deaths to Region A (Randstad, 8.5 mln people) and Region B (rural area, 8.5 mln people).
- We ask you which Variant you would recommend to the Government

	Variant 1	Variant 2	Variant 3
Reduction number of traffic deaths Region A	Reduction of 30 deaths per year	Reduction of 26 deaths per year	Reduction of 15 deaths per year
Reduction number of traffic deaths Region B	Reduction of 6 deaths per year	Reduction of 13 deaths per year	Reduction of 15 deaths per year

- 8 respondents variant 1 (5%).
- 117 respondents variant 2 (71%). Most attractive according to CBA.
- 40 respondents variant 3 (24%). Negative utility from inequality

Latent Class analysis

Travel time

Attributes	Class1	Class2	Class3
AGGR			
	0,4220		0,2456
SV			
	0,1024	0,6017	-0,1639
DIFM			
	-0,9868	-0,3037	

Class 1: 54%
Class 2: 33%
Class 3: 13%

Safety

Attributes	Class1	Class2	Class3
AGGR			
	0,4321	1,5069	
SV			
	0,1271	0,0278	0,0404
DIFM			
	-0,4849		0,0286

Class 1: 44%
Class 2: 37%
Class 3: 19%

Conclusions

- Substantial part of Dutch citizens have a clear preference for a balanced distribution of transport benefits across regions;
- Particularly when the transport benefits involve travel time savings, but also in case of traffic safety improvements.
- This observation questions the merits of conventional CBA methodology, which postulates a utilitarian social welfare function, and as such is insensitive to the (spatial) distribution of welfare in society.
- Question: what are the implications of these empirical results?