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*Dutch risk adjustment system*

# CPB Netherlands Bureau for Economic Policy Analysis

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## **Erfahrungen mit dem niederländischen RSA**

Rudy Douven

Berlin, Zeno,  
29 June  
2007

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## **Experiences with the Dutch Risk Adjustment System**

Rudy Douven

Berlin, Zeno,  
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- Independent policy analyses relevant for economic policy
  
- Customers:
  - ▶ Government, ministries
  - ▶ Parliament, political parties
  - ▶ Trade unions, employers' associations
  - ▶ Public debate (media, "the taxpayer")

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# Cartoon in newspaper



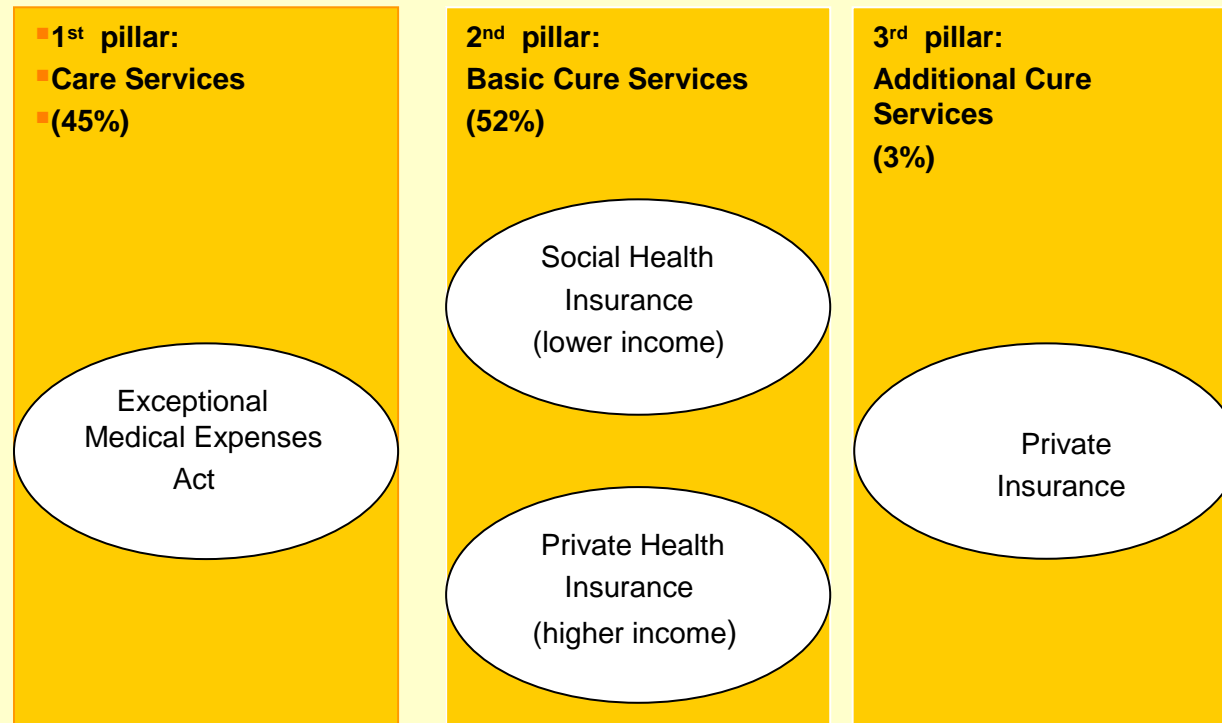
# Content

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- Dutch health care reform in 2006
- Dutch risk adjustment system
- Can we learn from the Netherlands?

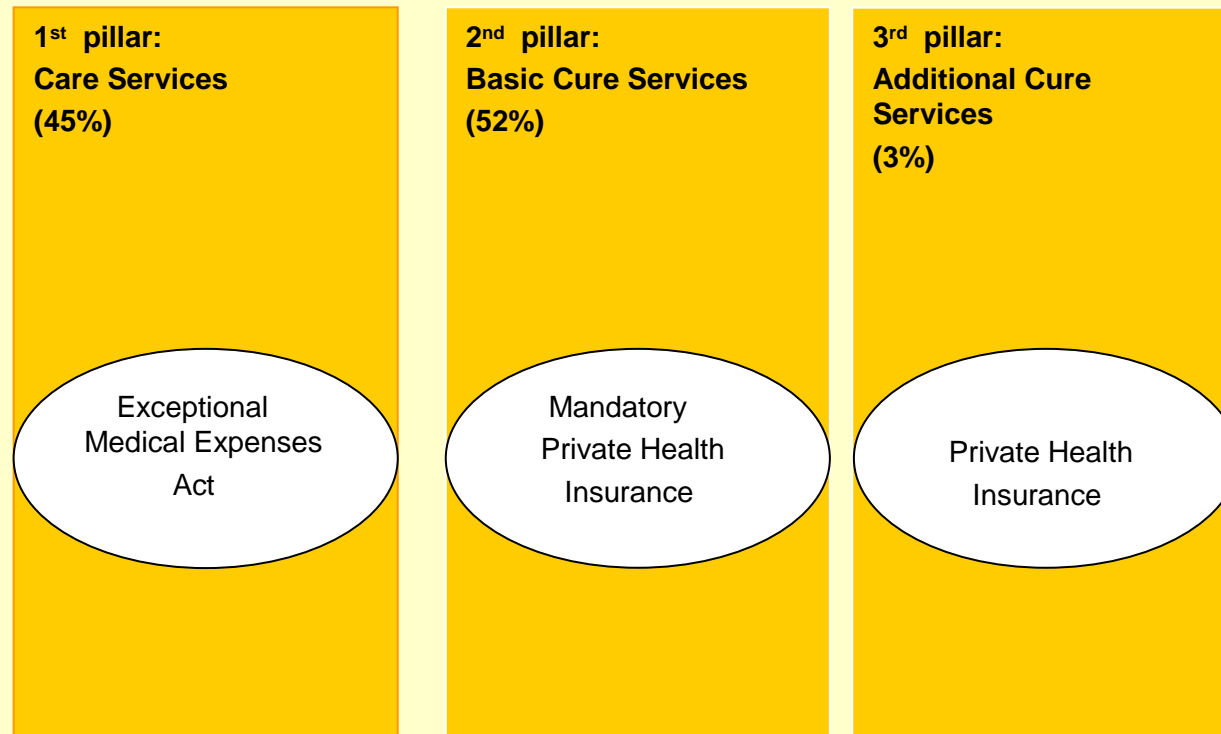
# Dutch Health Care Reform 2006

## Before 2006



# Dutch Health Care Reform 2006

**As of 2006**



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# Dutch Health Care Reforms 2006

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- Promoting competition.....
  - Health insurance market
  - Provider market
  - Establishment Dutch Competition Authority
  
- .....but maintaining solidarity
  - Standard benefit package
  - Open enrollment
  - Community rating per insurer

# Dutch Health Care Reforms 2006

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- Two types of solidarity (= cross subsidies)
  - Risk solidarity:  
Low risks pay money to high risks
  - Income solidarity:  
High incomes pay money to low incomes

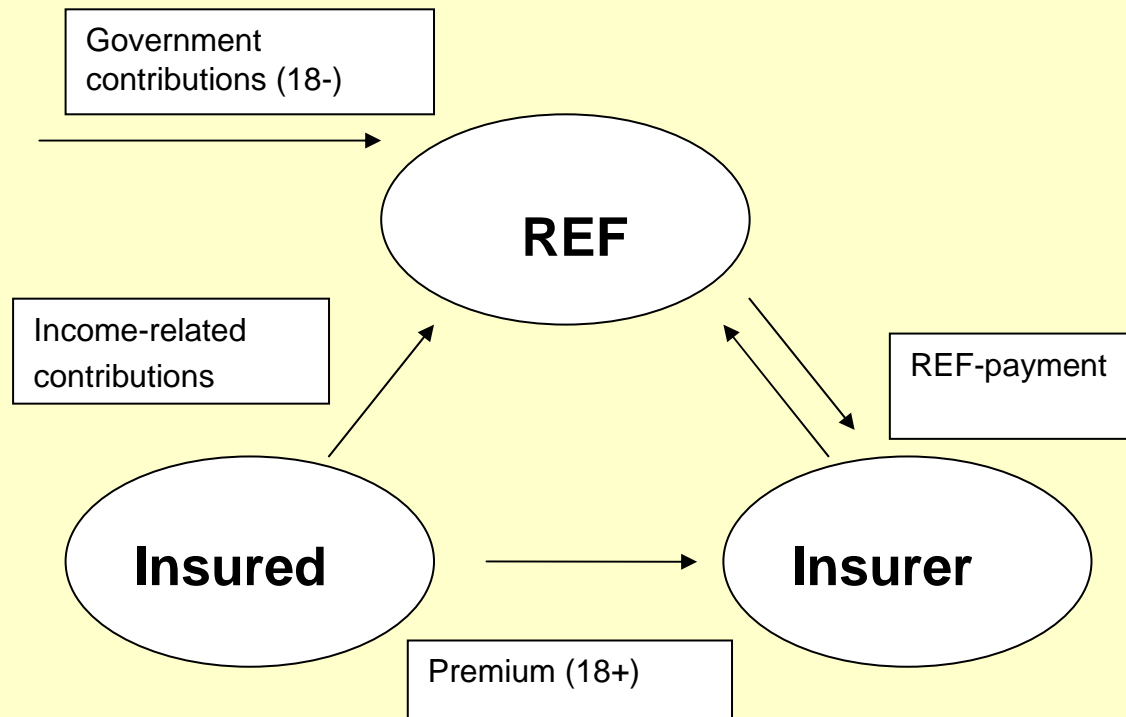
# Dutch Health Care Reforms 2006

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- How do we organize solidarity?
  - Income related payment schemes
  - Ex-ante risk adjusted premium payments
  - Ex-post payments schemes

# Dutch Health Care Reforms 2006

- Payment system and Risk Equalization Fund (REF)



# Dutch Health Care Reforms 2006

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- Large increase in out-of-pocket premiums for people in the lower income brackets

- 1988: € 0
- 1998: € 100
- 2000: € 200
- 2005: € 400                      Social health insurance
- 2006: € 1050                      New health care system

In 2006 the government compensated 1/3 of the total population by monthly premium subsidies

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# Dutch Risk Adjustment System

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- Ex-ante Risk Adjustment
- Ex-post Risk Adjustment
- Impact on health insurers profits

# Dutch Risk Adjustment System

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- Ex-ante Risk Adjustment
  - Government determines total health care payments...
  - and divides payments over health insurers...  
...on the basis of predictable cost differences...  
...by using risk adjustment

# Dutch Risk Adjustment System

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- Ex-ante Risk Adjustment system
  - Risk Adjusters (as of 2006)
    - age, sex (19+2 categ.)
    - kind of income (5 categ.)
    - urbanization (10 categ.)
    - Pharmaceutical cost groups (PCG, 17 categ.)
    - Diagnostic cost groups (DCG, 13 categ.)
    - adjustment for mandatory deductible
    - income (as of 2008, 10 categ.)

# Ex-ante Risk Adjustment System

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Example (2005):

Male, 33 years, employed, PCG0, DCG0, region 9

male, 30-34:	€ 762,91
kind income:	€ - 36,06
PCG0:	€ - 225,35 (PCG12, +€3660)
DCG0:	€ - 117,44
region 9:	€ - 29,37
no claim	€ 73,49
<b>Total:</b>	<b>€ 428,18</b>

# Ex-ante Risk Adjustment System

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- Criteria for **Pharmaceutical Cost Groups**
  - chronic diseases (at least 1 year health problems)
  - drug prescription in previous year at least 181 days
  - high future predictable costs
  - substantial group of patients (more than 1000)
  - clear consensus concerning drug's use

12% of total population falls in **PCG-group** (2006)

# Ex-ante Risk Adjustment System

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- Criteria for **Diagnostic Cost Groups**
  - diagnosis of hospital admissions in previous year
  - length of stay 3 days or more
  - substantial group of patients (more than 1000)
  - DCG must be easily identifiable
  - only variable hospital costs are reimbursed

2.3% of total population falls in **DCG-group**

# Ex-ante Risk Adjustment System

## ■ Predictive accuracy

Ex-ante risk adjusted capitation payments to health insurers  
(>100 000 enrolees, year 2004, 2005 prices)

Risk adjusters	Maximum capitation payment	Minimum capitation payment	Difference
No risk adjusters	1804€	1804€	0€
Age, gender, urbanization, income, PCGs, DCGs	2051€	1602€	449€
Risk adjusters	Maximum Profits	Maximum Losses	Difference
No risk adjusters	345€	-300€	645€
Age, gender, urbanization, income, PCGs, DCGs	144€	-100€	244€

# Ex-post Risk adjustment system

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- Existing cost differences between insurers  
Luck, efficiency or imperfect risk adjustment?
- Health insurers should not be held responsible for costs they cannot control
- Therefore we have **ex-post payment** schemes
  - High cost equalization
  - Ex-post compensation

Germany: “**only**” High cost equalization scheme  
(60%, costs > 25000€)

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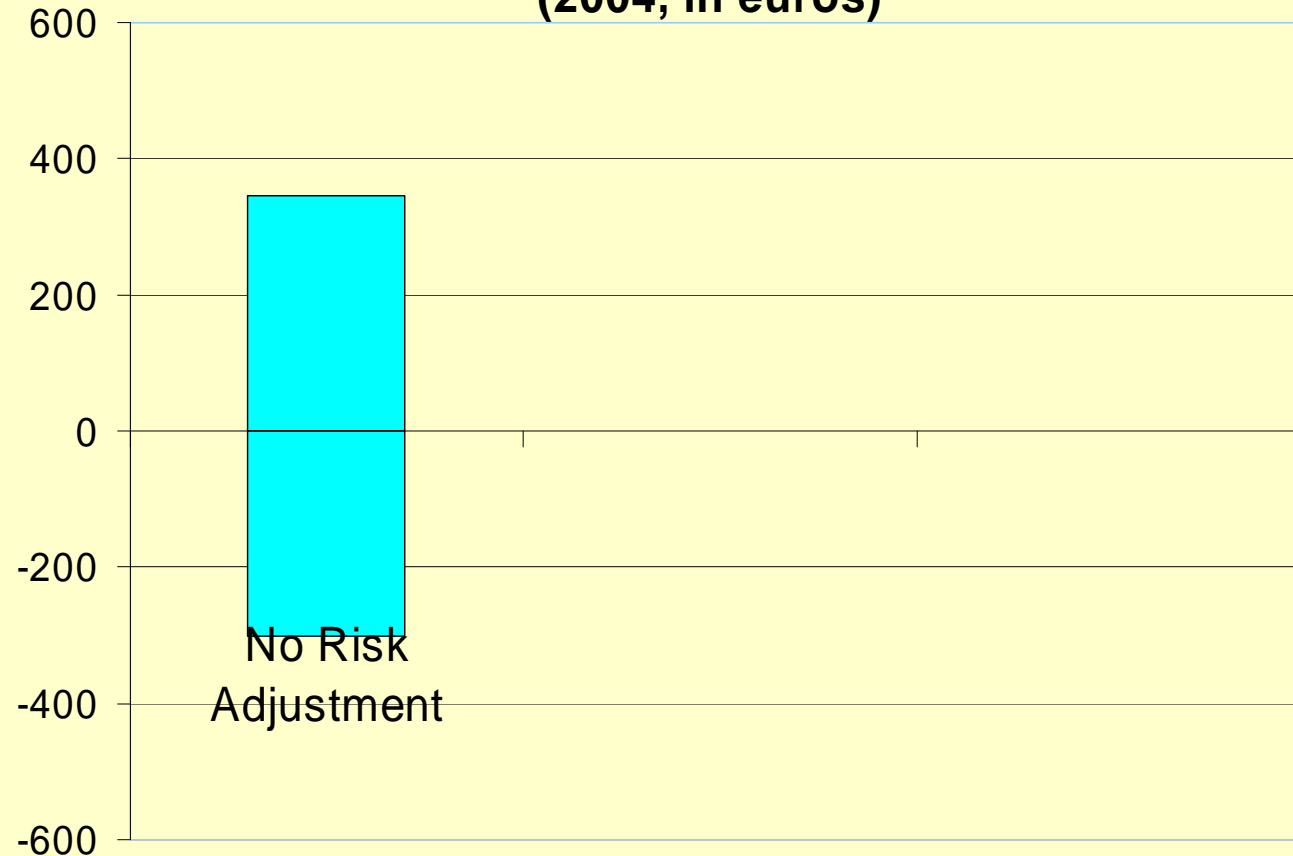
# How does risk adjustment work?

- Impact ex-post payments on insurers' financial risk

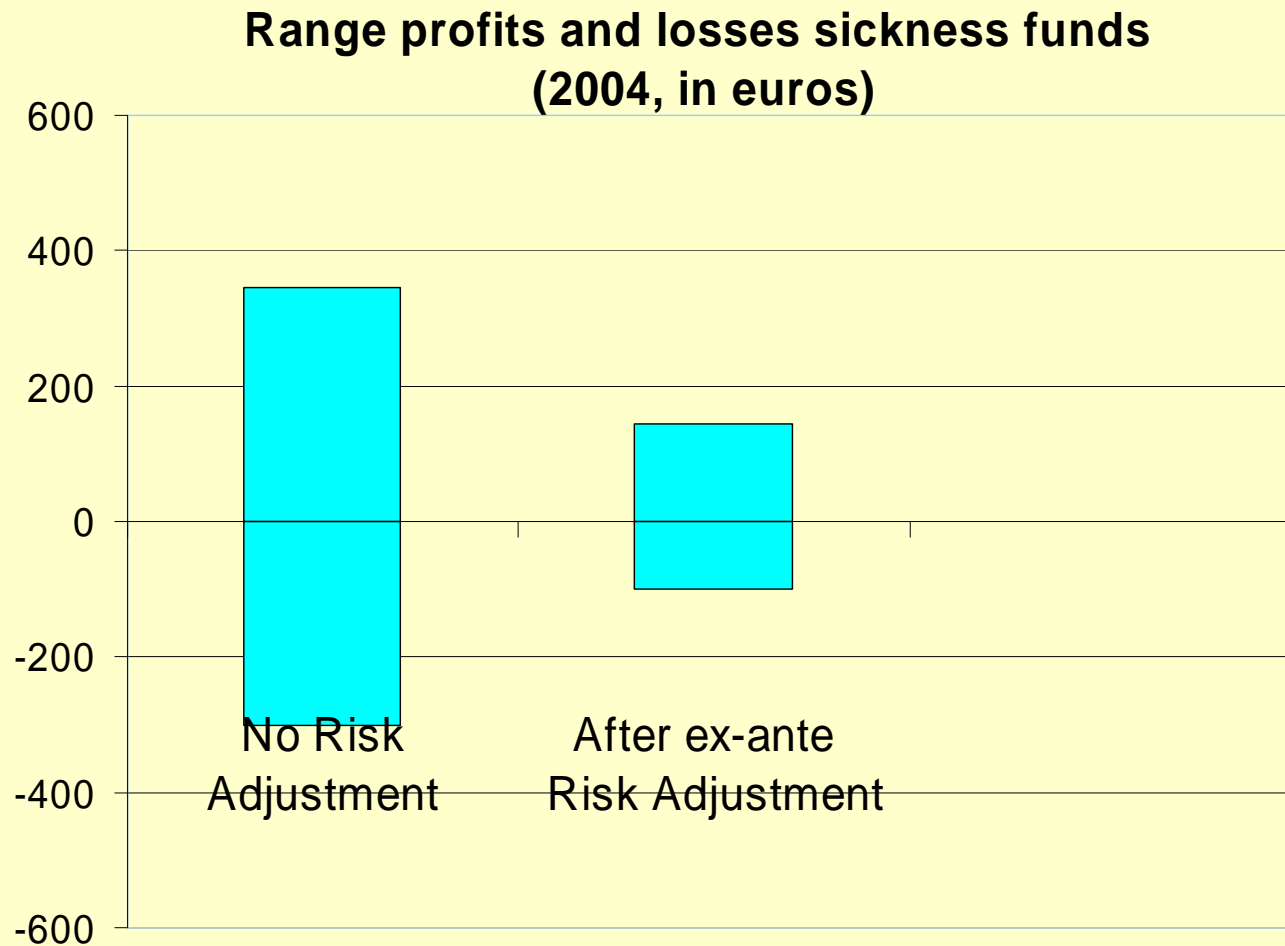


# Risk adjustment and health insurers' profits and losses

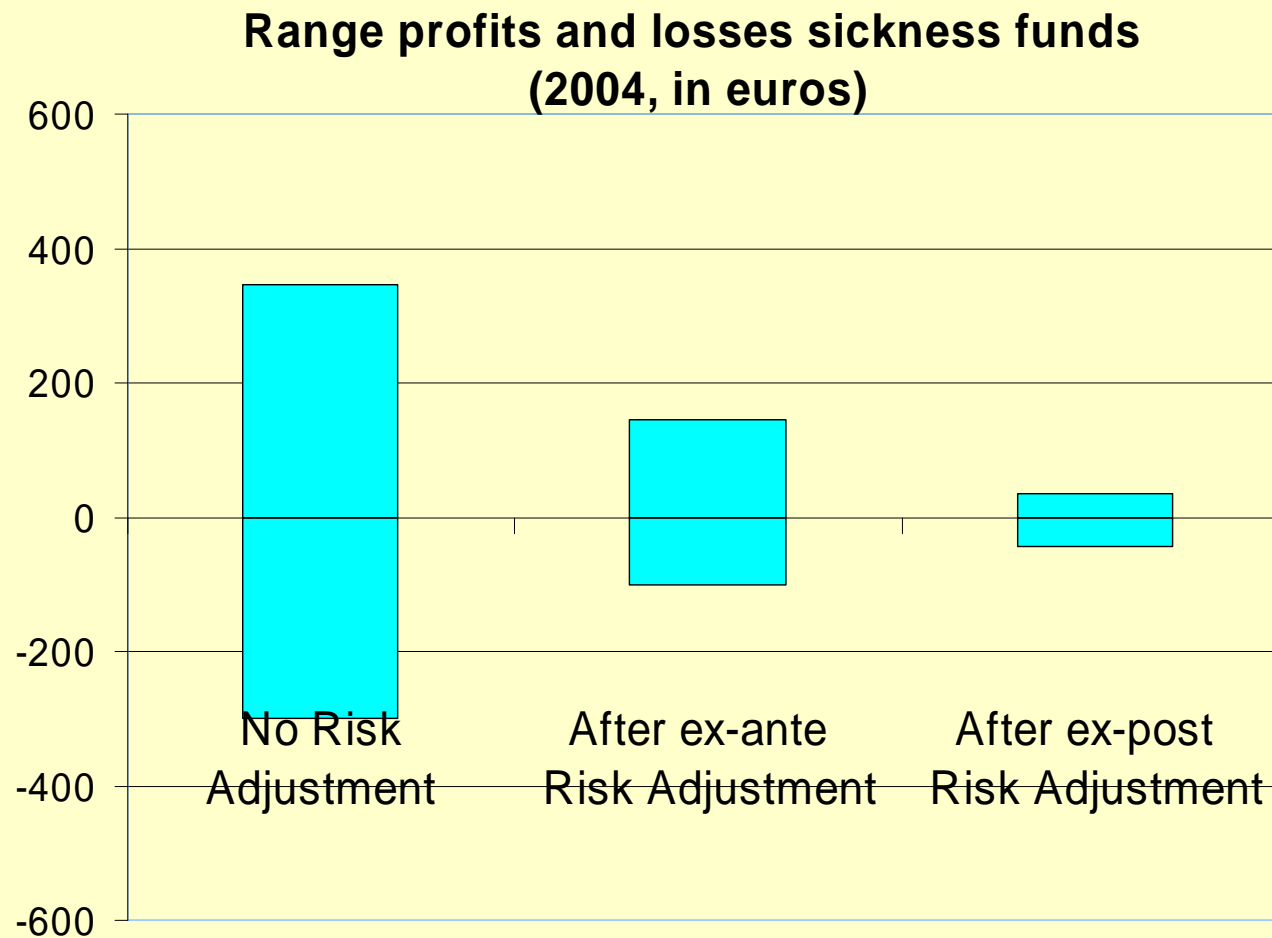
Range profits and losses sickness funds  
(2004, in euros)



# Risk adjustment and health insurers' profits and losses



# Risk adjustment and health insurers' profits and losses



# Can we learn from the Netherlands?

(1)

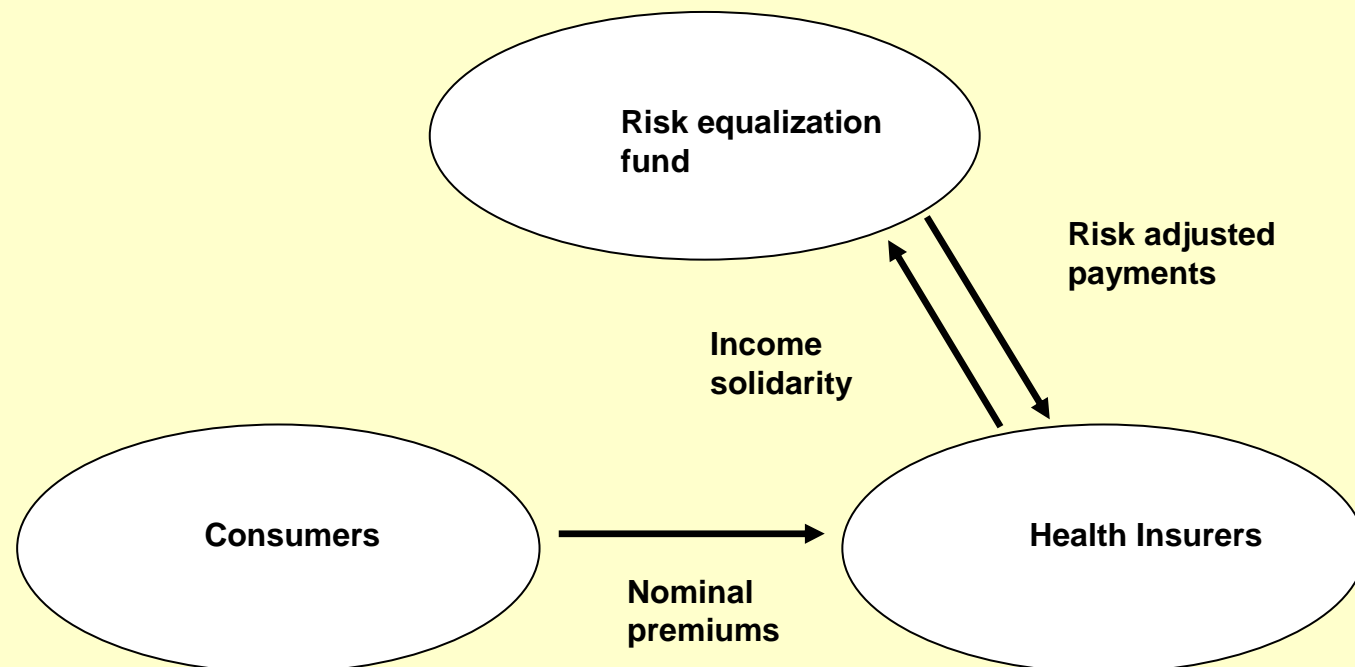
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- Netherlands:  
Health care reform 2006:  
One private insurance system for **total population**
- Germany:  
A small **private** insurance system next to  
a large **social** health insurance system

# Can we learn from the Netherlands?

(2)

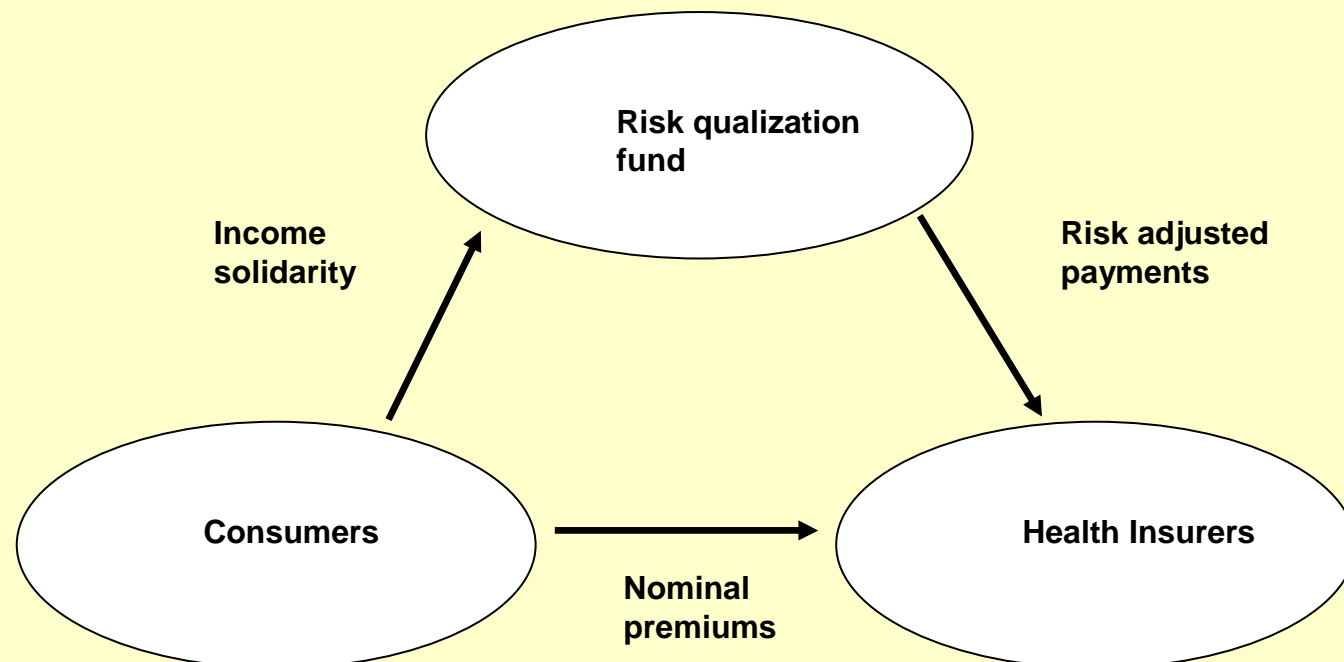
- **Germany:** payment flows
  - income dependent premiums paid to insurers



# Can we learn from the Netherlands?

(2)

- **Netherlands:** payment flows
  - flat rate premiums paid to health insurers
  - income dependent premiums paid directly to fund



# Can we learn from the Netherlands?

(3)

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- Dutch Risk adjustment system
  - Continuous updating necessary
    - In a competitive environment:  
More pressure on risk adjustment system
  - Morbidity based risk adjusters
    - Careful design of cost groups necessary
    - Not all persons who use pharmaceuticals or hospital diagnoses fall in a group

# Can we learn from the Netherlands?

(4)

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- Dutch Risk adjustment system
  - **Many** risk adjusters.....  
...and health insurers financial responsibility is **50%**
- German risk adjustment system
  - **Few** risk adjusters.....  
...but insurers financial responsibility is almost **100%**  
(only high cost equalization scheme)
- ▶ Introducing morbidity based risk adjusters may have a large impact on insurers' profits and losses

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# Conclusion

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Test for adequate risk adjustment:

If health insurers advertise with:

“Chronically ill people: Please choose us!  
Because we have the best health care  
arrangements contracted for you!”

then the risk adjustment system is O.K.