

**The Actuarial Profession**  
making financial sense of the future

**Pensions, benefits and social security colloquium 2011**  
Jan Hagberg



## Pouring pension savings into a financial black hole

25-27 September 2011

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### **Pouring Pension Savings into the International Financial Black Hole**

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*Jan Hagberg*, PhD Royal Institute of Technology Stockholm, 1972

Former Chief Actuary, 1989 – 2006

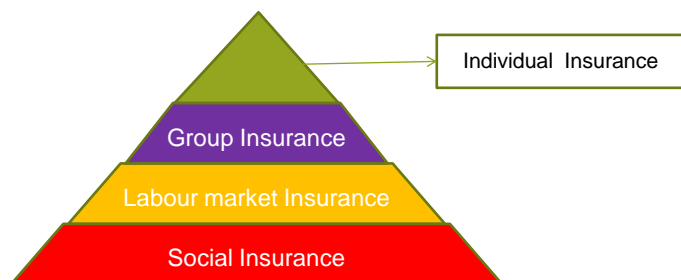
before that Senior Statistician, Statistics Sweden,  
President Swedish Society of Actuaries 2002 – 2004  
Vice chairman IAA Social Security Committee 2007, 2008

## Main equation of National Accounts

$$\text{GDP} = \text{consumption} + \text{real investments} + (\text{export} - \text{import})$$

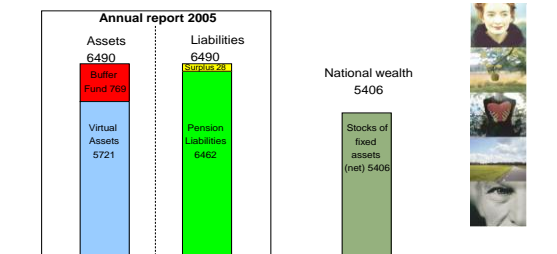
(production approach = expenditure approach = income approach)

## National Security Pyramid, Sweden



Remark: No group insurance for pensions

**PAYG system vs. National Wealth**  
SEK billions



## "Liabilities" and National Wealth

GDP 2010	3 301
National wealth, according to the national accounts (2005)	5 406
Level 1	
Public pension system NDC	
Pension liability (end of 2010)	7 367
Level 2 and 3	
Insurance industry, including non-life insurance	
Assets (i.e. incl consolidation), where	2 975
Life Insurance and Private accounts	2 434

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## Public pension system, summary

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### Old system

- Folkpension  
(Basic pension)
- ATP  
(Public supplemental  
pension)

### New system

- Guarantee pension  
(paid by state budget)
- Income pension
- Private accounts  
(PPM-funds)

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## Objectives of the (old) ATP system

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### Income security

Defined Benefit System

with a

Buffer Fund

Invested (mainly) in Bonds (National Infrastructure)

## Stated objectives of the new pension system

**Financial stability**

**Insurance-like\***

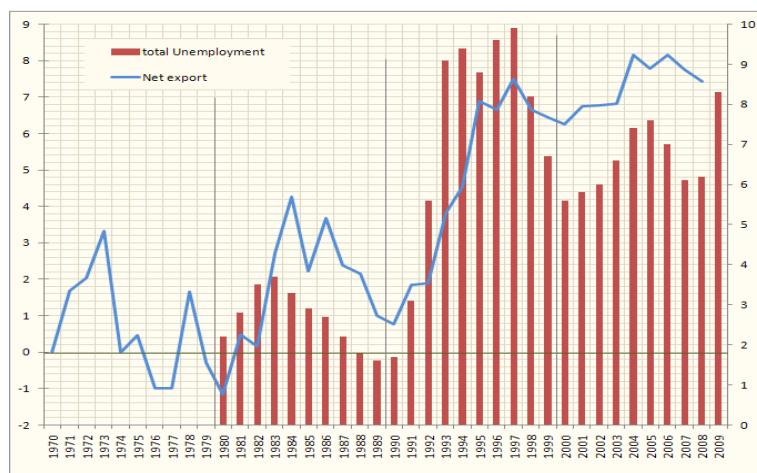
**Flexibility**

**Freedom of choice**

**Ownership**

\*As defined by economists, not by actuaries, the most important consideration being the lifetime earnings principle.

## Unemployment and Balance of Payment Sweden 1970 - 2009



Source

<http://www.tradingeconomics.com/sweden/unemployment-rate>

## Balance of payments Sweden 1950 -- 2000

