

MATEMATISKA INSTITUTIONEN
STOCKHOLMS UNIVERSITET
Avd. Matematik

SJÄLVSTÄNDIGT ARBETE I MATEMATIK

Fredagen den 7 juni kl. 14.00–15.00 presenterar Jenny Kling sitt arbete “Räkna med en billigare död” (15 högskolepoäng, Grundnivå).

Handledare: Thomas Höglund

Plats: Sal 32, hus 5, Kräftriket

Sammanfattning:

This work examines the debt calculation of a government service pension benefits. The National Pensions Board (SPV) administers the benefit and has seen the need to revise the assumptions used in the debt calculation.

The benefit (called IAK) gives right to a lifetime pension (up to age 20 years for children) in case of death. Debt calculation of IAK contains assumptions about mortality, both for the insured and co-insured, assumptions that the insured is married, the age of the co-insured and the assumption of a dependent child. The first part of the work derives the current debt formula where all of these assumptions are described. In the second part, an examination of how the debt formula should be adjusted based on a stock that has had IAK-law. The survey portion is not included mortality assumptions but only assumptions about the probability of being married, age of co-insured and child allowance.

The result shows that the insured in the studied population are both married and have children at a much lower extent than is assumed in current debt formula. The effect of changing these assumptions has been demonstrated by restating a previous debt from 2012 and compares the results. Original debt was SEK 9.6 billion. The liability under the assumptions of this work, but otherwise the same assumptions as in the original debt was SEK 5.7 billion.

Alla intresserade är välkomna!