

No paper  
available

Theme: Modelling  
Session: ThC1 - Modelling: wider issues

Title: **Growth Accounting in a Fishery**

Author(s): Rognvaldur Hannesson

Abstract: Since 1950, the real value of fish catches in Norway has about doubled, while the number of fishermen has declined by about 85 percent. This has made it possible to maintain fishermen's incomes roughly on par with other occupational groups in Norway. It is investigated to what extent this increase in labor productivity is due to accumulation of capital, increasingly abundant fish stocks, or technological progress. Since the capital stock in recent years is not much greater in real terms than in the early 1960s, it is tempting to ascribe most of the increase in labor productivity to technical progress. This, however, would leave out the role of fish stocks; if stocks have increased over this period, this would explain some of what otherwise appears as a technical progress. Using data on labor, capital, fish catches, and fish stock abundance 1961-2004 the development of total factor productivity is examined. Using a chain index approach, it is found that technical progress is likely to have been at least 2-3 percent per year, and possibly as high as 4-5 percent, depending on the importance assigned to fish abundance.