

**Promotion, retention and hours supplied
by doctors in NHS Scotland**

Kostas Mavromaras and Anthony Scott

University of Aberdeen

The aim of this paper is to investigate labour demand and supply factors influencing promotions and retention of medical staff in the Scottish NHS. The paper tries to address the question of what determines the incidence and speed of promotion and retention (distinguishing between doctors who move between Scottish health boards and doctors who leave NHS Scotland altogether), the degree to which these may be associated with change of employer/hospital and how these may be associated with hours supplied by medical staff. Gender and regional differences are examined. The paper uses a unique panel data set which contains individual level information on all NHS hospital doctors in Scotland from 1990 to 2000. It describes the mobility of doctors in terms of changing grade, post, and hospital. As the data contain measures of labour supplied or effort (in whole time equivalents, WTE), the possibility that this may be associated with mobility is examined.

The data for each individual is augmented with several characteristics of their current employer/hospital (staff skill mix and related indicators), in order to control for work place conditions, as well as the characteristics of the local area in which the hospital is situated (social deprivation index, need for health services and related indicators), in order to control for regional aspects of the demand for health provision (and the derived demand for doctors) and the socio-economic structure of the local population.

Different promotion points are considered in the examination of career progression and a competing risks framework is utilised for estimation. The panel nature of the promotion process is examined.

Preliminary results indicate that, on balance, the use of panel estimation does not prove useful in this context. Pooled estimates perform as well. The way promotions happen from lower to middle grade does not seem to be influenced systematically by very much. Effort measured in WTE influences promotion from middle to high grades with a time lag. Experience matters, but only for middle to high grades promotions.