<u>Religion and the marginal utility of unemployment</u> <u>benefits.</u>

Why is the replacement rate (*b*) lower in more religious societies?

Governments act to maximise welfare:

uU(Unemployment) + (1-u)U(Employment) - C(b).

where C(b) is the cost of unemployment benefits. We have: U(Employment) = U(w) U(Unemployment) = U(b -  $\psi$ ) where  $\psi$  is the psychological cost of unemployment.

We suggest that  $d\psi/dR < 0$ , where R is religiosity. The government's problem is then to choose the replacement rate, *b*, to maximise:

$$u U(b - \psi) + (1 - u)U(w) - C(b)$$
(1)

This gives a First-Order Condition of

 $uU'(b - \psi) = C'(b) \tag{2}$ 

Totally differentiate (2) to obtain:

 $uU''db - uU''\psi'dR = C''db$ Rearranging:  $db/dR = (uU''\psi')/(uU''-C'')$ 

The denominator is negative by concavity. As for the numerator: U'' < 0 as utility functions are concave, and we hypothesise that religion plays a buffering role, so that  $\psi'$ . Hence:

db/dR < 0. Optimal unemployment benefits are lower in more religious countries.