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International spill-over effects of labour market rigidities

Morten Spange *

Bank of England, Threadneedlestreet, London EC2R 8AH, United Kingdom

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Abstract

This paper analyses the implications of real wage rigidities in a two-country stochastic general equilibrium model. It is shown how real wage rigidities in one country affect welfare in both countries. By assuming that the labour unions within each country decide whether wages are flexible or rigid, it is found that wages will be flexible in either none, one or both of the countries. Hence, even in a symmetric model flexible wages in one country and rigid wages in the other may be an equilibrium. Since there are international spill-over effects of the choice of wage setting regime, the utilitarian solution is also considered. Interestingly, this does not necessarily entail more real wage flexibility than in the Nash equilibrium.

JEL classification: E24; F41; F42

Keywords: Real wage rigidity; Risk; Welfare; Policy coordination; Open economy macroeconomics

1. Introduction

In Europe there has recently been a debate on the implications and in particular on the welfare costs associated with labour market rigidities. These rigidities can be divided into two main categories: the lack of labour mobility and the existence of real wage rigidities. Cultural and linguistic barriers may limit a significant rise in European labour market

* Tel.: +44 20 7601 4182; fax: +44 20 7601 5288.
E-mail address: morten.spange@bankofengland.co.uk

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mobility, and even between regions within the same country the mobility of labour is low, see e.g. Decressin and Fatás (1995). With a low degree of labour mobility, wage flexibility is particularly important in allowing the labour markets to adjust in response to macroeconomic fluctuations. However, it is widely believed that real wages in Europe are quite rigid, with the degree of real wage rigidity varying considerably across countries, see e.g. Berthold et al. (1999).

This paper analyses the implications of labour market rigidities within the framework of a two-country stochastic general equilibrium model.[1] The key contribution of the paper is to endogenize the choice of wage setting regime by allowing labour unions to decide whether real wages are to be flexible or rigid. If wages are flexible, the unions are able to set wages contingent on the state of the economy resulting from exogenous shocks. However, the possibility of doing so comes at the cost of having to verify the state of the economy, i.e. the level of productivity in both countries. This is assumed to require some effort, which is carried out by the workers.[2] We assume that the labour unions adopt the wage setting procedure that maximizes the expected utility of its members.

The way the productivity shocks affect the economy depends critically on whether wages are flexible or rigid. By specifying a fully micro-founded general equilibrium model we are able to analyse how labour market rigidities affect the domestic as well as the foreign economy. We also conduct a consistent welfare analysis allowing us to establish conditions under which the different labour market regimes will be chosen by the welfare maximizing unions. Thereby we distinguish ourselves from the bulk of the literature on wage rigidities and labour market reform, see e.g. Sibert and Sutherland (2000) and Calmfors (2001).

By analysing how labour market structures in one country affect trading partners, our paper is related to Davis (1998). He sets up a two-country model to analyse the interdependencies between a flex wage country and a country with a binding minimum wage. However, whereas Davis (1998) addresses the issue of structural unemployment, the present contribution considers fluctuations of employment to fundamental shocks to the economy.[3]

Turning to the results we find that real wage flexibility in the domestic country unambiguously leads to lower consumption variance in both countries compared with the case of rigid domestic wages. This is beneficial for the workers. However, the wage setting regime also affects expected consumption. We show that whether expected consumption will be highest under flexible or rigid wages depends on the parameters of the model. Abstracting from the cost of state verification, domestic workers prefer domestic wages to be flexible since the welfare gain from lower consumption variance dominates the possible loss from lower expected consumption. However, the potentially positive effect of domestic wage rigidity on the expected level of foreign consumption may welfare-domi-

[1] This is a framework that has been applied extensively for the study of stabilization policies, see e.g. Andersen and Spange (2006) for an analysis of fiscal policy and Obstfeld and Rogoff (2000, 2002) for an analysis of monetary policy.

[2] Note the similarity to the literature on menu cost, see e.g. Ball and Romer (1991), except that here the cost is related to the acquisition of information.

[3] Also see Benigno (2004) who analyses how optimal monetary policy within a monetary union is affected by asymmetries in the degree of price rigidity across member countries. Beetsma and Jensen (2005) extend the model of Benigno (2004) to analyse the implications for fiscal policy. Erlandsson (2002) analyses how monetary union affects the workers' incentive to adopt flexible nominal wages.