Unemployment Dynamics in a Short-Run Two Sector Model of a Tourism Exporting Small Open Economy

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Abstract

The aim of this paper is to investigate the effects of an increase in inbound tourism demand on unemployment in a small open economy, comprising an industrial sector and a tourism sector. The demand of foreign tourists may either rise exogenously (e. g. due to an increase in foreigners' income) or because of advertizing efforts of the domestic country, which – of course – have to be financed.

We develop a short-run two sector model, where labor is the only input in production of the industrial good and of tourism services. Both the industrial good and tourism services are domestically consumed and can be exported. Whereas the industrial good can be sold/bought on the world market at the exogenously given world market price, the economy's tourism services are differentiated from other countries' tourism services, resulting in a foreigners' demand schedule for domestic tourism services which depends negatively on the relative price of tourism services in terms of the industrial good.

Labor markets of the two sectors are separated and are characterized by search of the Pissarides type. Unemployment results from time consuming and costly matching of vacancies with searching agents. Agents have to decide how much they want to search for a job at each labor market, and firms in each sector determine how many job openings they want to post.

Due to the high order of the resulting dynamic system, our analysis resorts to numerical simulations, based on a plausible calibration. We find that the resulting unemployment dynamics depend crucially on the cause of the increase in foreigners' demand for tourism services.

If demand increases exogenously, on impact the industrial sector's unemployment rate drops whereas the unemployment rate in the tourism sector increases (as search in this sector becomes more effective). Both unemployment rates adjust monotonically towards lower levels. The economy's overall unemployment rate falls on impact and adjusts non-monotonically towards a lower steady-state level. Employment and production in the industrial sector fall over time, but increase in the tourism sector.

If, however, the increase in foreigners' tourism demand is induced by higher marketing expenditures which have to be financed from the domestic economy, the unemployment rates in both sectors increase on impact and fall from thereon. The steady-state unemployment rate in the industrial sector is slightly higher, whereas in the tourism sector it is slightly lower, and the economy's overall unemployment rate becomes also marginally lower. Employment and production in both sectors rise to generate sufficient income to finance the increase in advertizing expenditures.

Sensitivity analysis reveals that the degree of access to the international financial market, proxied by the economy’s risk premium, has negligible effects on unemployment dynamics.