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Informal sector in general equilibrium: welfare effects of trade policy reforms

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Abstract

The paper demonstrates the welfare effects of trade policy reforms in a general equilibrium framework, in the presence of an informal sector in the economy. The methodology we developed in the paper allows us to use a full-employment model with wage differential. Tariff cuts in this model have ambiguous effects because of the preexisting wage differential and due to the cross-effects in the three-good structure, which is used in some recent works in trade theory. Complementarity in production may lead to negative welfare effects despite improvements in terms of trade.

JEL classification: F11; F13

Keywords: Informal sector; Trade reform; General equilibrium; Welfare; Complementarity

1. Introduction

Theoretical and empirical policy research in international economics addresses crucial questions about structural adjustments, both in the real and in the financial sectors of the developing economies. Among these, the theoretical papers in trade deal with the use of trade policies, tariffs or tariff equivalents to improve national welfare, appropriately defined. Here

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we address, how the consideration of informal sector, an area scarcely dealt with in a pure general equilibrium framework, works with more generalized applications of some of the basic theories related to trade policy.

A survey of the literature reveals that, so far, considerations of the urban informal sector have been embedded in the rural–urban migration models of the traditional Harris–Todaro (henceforth, H–T) type. Gupta (1993), for example, considers a three-sector static model of a small open economy, with wage and employment determined endogenously in the informal sector. The hypothesis that rural migrants expect to get a job in the urban formal sector with some probability 'λ', holds in these models, although, some of the subsidy policies in this structure run counter to those generated by the original model. The problem with these models is that, informal sector offers a wage that has to be lower than the rural wage, because the weighted average of formal and informal wages equals the rural wage. We argue that the poor laborers, moving freely between rural and urban centers, cannot afford to remain unemployed while expecting higher earnings only in the future. They form instead what is known as the urban informal sector, where they earn less than the urban formal wage rate. However, with free mobility of labor between the urban informal and the rural sectors, there is high probability that informal wage is closely related to the rural wage. Accordingly, in our model, we consider them equal. We capture these characteristics in a full-employment general equilibrium model. Subsequently, we wish to check the welfare implications of the trade policy reforms. With this view, we define a welfare parameter and see how it changes when trade policy reforms are introduced at various levels of the economy.

In the existing literature, welfare implications of the trade reforms, with the informal sector as an important part of the economy, have not come up for much discussions so far. Leaving out the informal sector fails to capture the actual impact of such policy reforms, because, on an average, about 70% of the labor force in the LDCs belong to the informal sectors. Data from Southeast Asian, East European, African, and Latin American countries show varying rates of urban informal sector employment with a range going up from 15% to 20% in Turkey and Slovakia to 80% in Zambia, or even more, to about 83% in Myanmar. Moreover, considering the state of agricultural and rural activities in these countries, it is quite apparent that the total share of the informal sector in the economy as a whole would be very high (International Labour Organisation (ILO), 1999). This is also corroborated by some of the other studies, like that by Turnham (1993), which provide evidence that in low-income countries like Nigeria, Bangladesh, Ivory Coast, India, and elsewhere, the share of the urban informal sector is at least as high as 51%. Alternatively, seen from the point of view of the 'minimum wage' earners, only 11% of Tunisia's labor force is subject to minimum wage; in Mexico and Morocco, a substantive number earns less than the minimum wage; in Taiwan, minimum wage is less than half of the average wage and so on (Agenor, 1996).

Once again, the importance of the present theoretical construct is that, in the earlier literature, the informal sector, urban or rural, has not been modeled in a quasi full-employment general equilibrium framework such as this.[1] Stark (1982), for example, has also noted

[1] See Agenor and Montiel (1996).