

Currency devaluation with dual labor market : Which perspectives for the Euro zone ?

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In this paper, we assume a world of two countries in a fixed exchange rate system. The main difference between the two countries lies on the features of their labor markets. In the home country, we assume the existence of a dual labor market, with formal and informal sectors. In the foreign country, the labor market is homogeneous and characterized by a nominal wage rigidity.

In the home country, we introduce a segmented labor market with two sectors. Each sector contributes to the production of the single domestic good. In the primary sector, called formal sector (sector 1), only skilled workers can be employed. Wage in this first sector takes into account workers effort and corresponds to efficiency wage above concurrential wage. In the secondary sector, called informal sector, both skilled and unskilled workers can work. Wage in this second segment is concurrential. As a consequence, no unemployment can emerge in the home country since skilled workers who do not find a job in the formal sector can always be hired in the informal one. In the secondary or informal sector (sector 2), we assume a perfect observation of the effort by employer. For simplicity's sake, we admit that the desutility of informal worker effort is supposed to be zero. The informal wage is fully flexible and determined by market forces.

In the foreign economy, we assume a one sector labor market, with homogeneous workers, and a legal minimum nominal wage above the equilibrium wage. In other words, the labor market is characterized by unemployment.

This world economy is characterized by five markets : two goods markets, two national labor markets and the money market. After analyzing the equilibrium, we shed light on the effects of an exchange rate policy.

At the equilibrium, the situation of employment is not satisfying. Indeed, in the home country, since jobs are rationed in the formal sector because of

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the presence of an efficiency wage, some workers have to accept informal jobs. In the foreign country, as the labor market is characterized by a minimum legal wage, unemployment emerges.

In this case, it can be interesting to analyze the effects of an exchange rate policy. More precisely, the questions are : can a devaluation of the domestic currency improve the allocation of workers by increasing formal jobs ? And what are consequences in the foreign country ? To answer these questions, we examine the effects of an increase in the exchange rate on macroeconomic outcomes.

Our article shows that a devaluation implies an increase in price of the domestic good and a decrease in price of the foreign good. We also demonstrate that the overall effect of a devaluation on the relative price is negative.

In the home country, a devaluation leads to a decrease in the relative price inducing a lower real wage of informal jobs. Due to efficiency considerations, real wage and effort of formal workers are lower. Finally, the new dual labor market equilibrium is characterized by a reallocation of workers from formal to informal sector. This overall decrease in wages and effort, combined to a smaller formal sector yields to a lower level of domestic production.

So, the devaluation is clearly counterproductive for the domestic economy since it damages the labor market and production. Furthermore, it is straightforward to demonstrate that this deterioration is higher, the smaller the domestic economy is.

In the foreign economy, the devaluation of the domestic currency tends to increase the price of the foreign good. Thus, the real wage becomes higher and unemployment increases. As a consequence, the level of production decreases. So, as in the domestic country, a policy devaluation is not efficient to reduce unemployment.