Endogenous Labour Market Imperfections, FDI and External Terms-of-Trade Shocks in a Developing Economy

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ABSTRACT: This paper shows that developing countries possess an inherent shock-absorbing mechanism that stems from their peculiar institutional characteristics and can lessen the gravity of detrimental welfare consequence of exogenous terms-of-trade disturbances in terms of a two-sector, full-employment general equilibrium model with endogenous labour market distortion. The supply of foreign capital in the economy is a positive function of the return to capital and a decreasing function of the degree of prevailing restrictions in the economy in the process of free inflow of foreign capital. The analysis leads to a couple of important policies that should be adhered to preserve this in-built system. Finally, it offers three important statistically testable hypotheses, empirical validation of which might have an important bearing on formulation of developmental policies in these countries.

Keywords: Terms-of-trade shocks; Endogenous labour market imperfection; Supply function of FDI; Shock-absorbing mechanism; Social welfare; Developing countries; General equilibrium.

JEL Classification: D59, D60, F21, F61, J42, J52.

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1. Introduction and motivation

That developing countries are much more vulnerable to external terms-of-trade (TOT) (the price of its exports relative to the price of its imports) shocks relative to countries in the northern part of the world has been pointed out by several empirical studies. Such fluctuations are undesirable because they contribute to significantly increased volatility in the growth of output and hence social welfare. Studies e.g. Baxter and Kouparitsas (2006), Broda (2004), Mendoza (1995) and Kose (2002) have found that TOT fluctuations are twice as large in developing countries as in developed nations. Baxter and Kouparitsas (2006) have attributed this pattern to the heavy reliance of developing countries on commodity exports, whose prices are more volatile vis-à-vis those of manufactured goods. They also assert that sharp swings in the TOT affect many of the southern economies because they generally have a high degree of openness to foreign trade. According to Broda (2004) developing countries are also very exposed to terms-of-trade fluctuations because they have little influence over their export prices. World markets dictate the price of the goods which the developing economies export. On the contrary, developed countries and oil exporters can exert a substantial control on export prices. So, TOT changes in developing countries are largely determined by forces outside the control of these nations which led Mendoza (1995) and Kose (2002) to conclude that TOT movements can account for most of the output volatility in these countries.

Switching from fixed to flexible exchange rate regime and export diversification policies have often been advocated to minimize the negative effects resulting from international TOT disturbances.[1] However, possibly nowhere it has been pointed out that these economies have an inbuilt shock-absorbing mechanism that arises due to their peculiar institutional characteristics and hence the necessity for designing development policies to

[1] See for example, Hoffmann (2007), Tornell and Velasco (2000), Broda (2004), Broda and Tille (2003), Mendoza (1995) and Kose (2002) and Haddad et al. (2011).

keep this mechanism unaffected has never been emphasized. In this theoretical note without undermining the efficacy of other suggested measures, we have demonstrated by using the simplest and possibly the most widely used Heckscher-Ohlin-Samuelson (HOS) trade model for a small open economy with endogenous labour market distortion how the existence of labour market imperfection can lessen the gravity of the detrimental TOT shocks on welfare of these economies.[2] Furthermore, we have shown that policies aimed at deregulating the labour market hurt the effectiveness of their inherent shock-absorbing capacity. Hence, the developing countries instead of going for labour market reform should resort to liberalized trade and investment policies for shielding themselves at least to a certain extent from detrimental consequence of exogenous volatile price movements at the international market.

Finally, the present analysis suggests a few important statistically testable hypotheses. For example, with the help of cross-country data it can easily be examined whether TOT movements in either direction have caused smaller fluctuations in per capita GDP in the economies with larger wage dispersion relative to the countries with lower intersectoral wage differentials. Quite encouragingly, this hypothesis has been found to be valid in the empirical analysis of Chaudhuri and Biswas (2014) which is based on a panel dataset of 13 small developing countries for the period 2000-2012. Two other empirically verifiable hypotheses that the present theoretical analysis offers are as follows. First, fluctuations in per capita GDP in a small country arising out of TOT changes is positively correlated with the degree of restrictions to free FDI flow prevailing in the economy. Finally, economies with higher degree of protectionism are more prone to international price movements vis-à-vis other set of countries. Empirical validation of results is always gratifying for a theoretical analysis.

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[2] It should be clearly mentioned at this point that this is a trade model for a small open economy and, therefore, should not be related to the dynamic open economy literature consisting of works like Mendoza (1995). Besides, in this model, TOT movements lead to an investment/capital response through changes in interest rate sensitive FDI.

2. The Model

4. Concluding remarks and policy recommendations

Several recent empirical studies have found that developing countries are more prone to external terms-of-trade shocks compared to developed nations. Policies like switching from fixed to flexible exchange rate regime and diversification of the export basket have been advocated in general to minimize the negative effects resulting from such international disturbances. However, possibly no attempt has been made to identify the inherent shock-absorbing mechanism in the developing countries which arises out of their typical institutional characteristics. Consequently, the importance of designing appropriate developmental policies for preserving this beneficial conduit has not so far been explored. In this theoretical exercise, we have demonstrated how the existence of labour market imperfection can lessen the gravity of detrimental TOT shocks on social welfare of these economies. We have also shown that policies aimed at deregulating the labour market hurt the efficacy of the internal shock-absorbing capacity while trade reforms e.g. lowering the tariff rate produce the opposite effects. We have also argued that countries having less restrictive FDI policies are less vulnerable to external TOT disturbances compared to the other group of countries. The policy prescriptions that readily follow from our analysis are as follows: (i) these countries should think twice before going for reformatory policies in the labour market; (ii) they should vigorously implement trade reforms and lower their tariff rates on importables; and, (iii) these should remove/lower the existing impediments that restrict free FDI flows in their economies.

Our analysis presents a few important empirically testable hypotheses. First, by using cross-country data one can examine whether countries with relatively greater trade unionism that is reflected in higher intersectoral wage differential have experienced smaller fluctuations in per capita GDP owing to TOT changes compared to the other set of countries with smaller wage dispersion and lower trade union activities. Second, fluctuations in per capita GDP in a small country resulting from TOT changes vary

positively with the degree of impediments to free flow of FDI. Finally, small countries with higher degree of protectionism have been more affected owing to TOT shocks relative to the other group of countries. If some of these hypotheses are found to be statistically significant the purpose of the present analysis will be successful.[3]

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[3] In this connection it may be mentioned that the empirical analysis of Chaudhuri and Biswas (2014), based on a panel dataset of 13 small developing countries, has found that the countries having higher intersectoral wage differentials have indeed been less affected due to volatility in TOT movements relative to the countries with lower wage dispersion during the period 2000-2012.

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