

**Discussion of “Are Trade Liberalizations a Source of Global Imbalances?”
by Jiandong Ju and Shang-Jin Wei, 21st Annual East Asian Seminar on Economics: A
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This paper addresses a very important question, with key policy implications. There are large, persistent global imbalances in the world. Will increased trade openness exacerbate or remedy these imbalances? I’m going to discuss the paper in two parts: first thinking about the theoretical contribution of the paper, and second focusing on the underlying real world questions, highlighting some important gaps between this model and reality and therefore the ability of the model to serve as a basis for policy.

Are trade liberalisations a source of global imbalances within a Heckscher-Ohlin model with capital flows and a variety of rigidities?

Figure 1 provides a simple diagrammatic explanation of the key mechanism of the model. The model is based on Heckscher-Ohlin, but with capital flows and a variety of rigidities added in.

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For labour-intensive, developing economy:

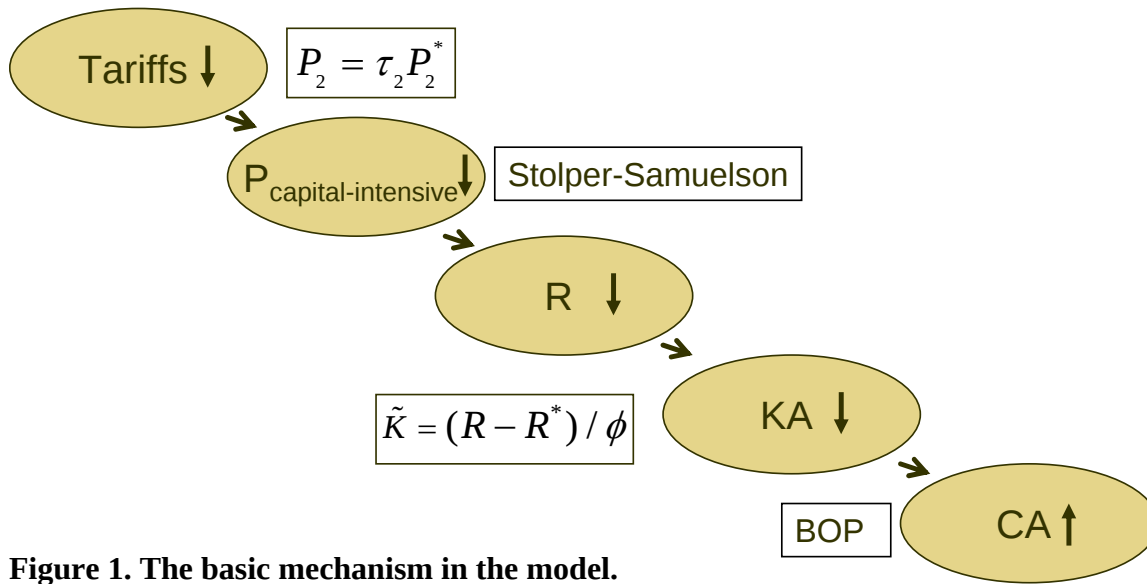


Figure 1. The basic mechanism in the model.

Consider the case of a labour-intensive, developing economy. An increase in trade openness in this model would be represented by a reduction in tariffs on capital-intensive good. Given the assumption that the law of one price holds ($P_2 = \tau_2 P_2^*$) and the developing economy is a price taker, it follows that the price of the capital intensive good will decline. In Heckscher-Ohlin models, Stolper-Samuelson holds, so the return on capital falls. The model assumes that capital flows are a linear function of the return on capital ($\tilde{K} = (R - R^*) / \phi$), so capital flows out of the developing economy to the rest of the world. Finally, balance of payments therefore implies a current account surplus. Based on this mechanism, the authors find that trade liberalisation and capital flows are generally substitutes, implying that increased trade liberalisation will generally worsen global imbalances.

I have a number of questions regarding the model. First, where does the capital flow equation ($\tilde{K} = (R - R^*) / \phi$) come from? Is it purely an assumption, or does it have some concrete underpinnings in the model? Second, doesn't the capital flow assumption, combined with the

balance of payments, virtually guarantee that increased trade openness will lead to worsening global imbalances? At the very least, it guarantees that any policy that reduces the return on capital in the developing economy will lead to worsening imbalances. Third, is the model closed? For example, where does the tariff revenue (that will be reduced by an increase in trade openness) go?

After developing and discussing the basic model, the authors go on to add a number of institutional details to try to address the interaction between financial institutions and global imbalances. In particular, agents choose between being entrepreneurs or investors; entrepreneurs invest their own capital and also raise additional capital; entrepreneurs choose between a good investment (with a high probability of success, but no private benefit) and a bad investment (with a low probability of success, but offering some private benefit); property taxes, a risk of expropriation and costly financial intermediation are also introduced. The authors find that these additional details do not generally change the conclusions obtained from the more basic versions of the model.

I question whether Heckscher-Ohlin is the right starting point for this analysis. This is a highly simplified framework, with a poor track record in explaining reality (see later comments), and it's not clear whether this is the best place to start. A discussion of the model choice would be helpful in the paper.

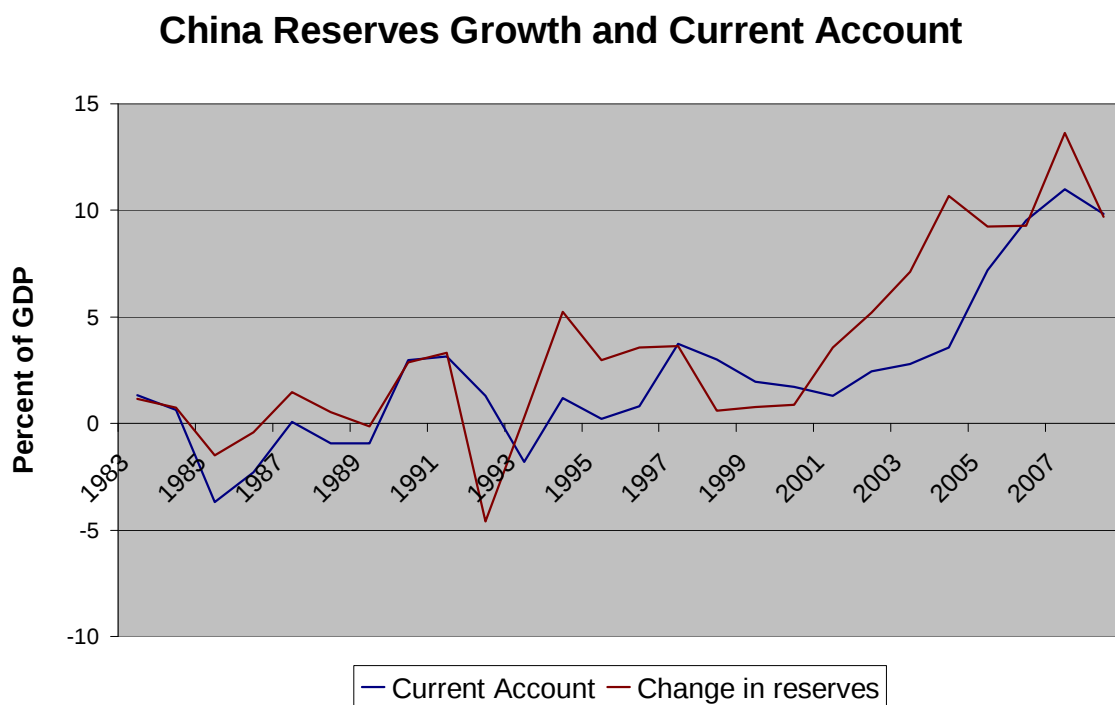
Are trade liberalisations a source of global imbalances in reality?

My next set of comments will focus on the motivation for, and policy implications of, the model. The paper is motivated in part by the growing global imbalances – in particular in China and the US. But I think there are some important departures of the model from reality that raise

doubts about the implications of the model. Returning to Figure 1, I will briefly mention a number of these in turn.

First, the model assumes that developing economies are price takers. This is increasingly an inaccurate assumption of developing economies in general, and China in particular.

Second, the practical relevance of Stolper-Samuelson is by no means non-controversial. Davis and Mishra (2006) point to the sensitivity of Stolper-Samuelson to the presence of non-traded goods, aggregation issues, trade in intermediate (rather than final) goods, and the degree of substitutability between domestic and imported goods, for example.



Third, for China in particular, large-scale foreign exchange intervention has driven a wedge between private capital flows and the current account. In fact, the above graph suggests

that the change in reserves in recent periods closely follows the current account, with the capital account playing little role. That is very different from the assumptions in the model.

Fourth, what about flexible exchange rates? I'd argue that all of the links in Figure 1 are influenced by exchange rate flexibility in most economies, as expectations of future exchange rate changes drive key variables such as capital flows and interest rates.

Fifth, the model is a static model. This is a potential problem on several fronts. It ignores growth, which is crucial to understanding the Chinese economy. There's no savings in the model (see equation 2). And capital is in fixed supply, so any increase in capital in one country requires a reduction in capital in the other country.

Finally, the model does not do a good job in capturing the nature of capital, confusing capital flows with the capital stock. In this model, the Chinese capital stock increases by China importing capital goods from the rest of the world. These appear as a capital flow into China and an increase in the Chinese capital stock, but a reduction in the rest of the world's capital stock. Reality is very different. Capital flows into China (in the form of money) are often used to buy capital goods from places like Japan, Korea and Germany. The movement of capital goods into China appears not in the capital account but in the current account instead. And the increase in the Chinese capital stock would likely result in an increase in the capital stock in the rest of the world, to enable the production of sufficient capital for China, rather than a reduction. It's not clear that a model that takes these flows seriously would have the same policy implications as the one offered here.

Overall I think this paper is on a very important issue, and makes an important start. But I think there's a need to close some of the gaps between the model and reality in order to take it seriously as a model of global imbalances.

Reference

Davis, Donald R. and Prachi Mishra (2006). "Stolper-Samuelson is dead: And other crimes of both theory and data." In: Harrison, Ann (ed.), *Globalization and Poverty*, University of Chicago Press for NBER, 87-107.