Discussion of
"Optimal Trade Policy with Trade Imbalances," by Mostafa Beshkar and Ali Shourideh

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Abstract

This note discusses the article "Optimal Trade Policy with Trade Imbalances" by Mostafa Beshkar and Ali Shourideh.

1 Overview

A prominent view of trade agreements is that they are mechanisms to enforce cooperation among countries. To better design trade agreements, it is then critical to understand the government's incentives to deviate from cooperative behavior. Most of the trade literature focuses on the government's incentives to manipulate the terms of trade to exploit the monopoly power that is not internalized by competitive producers.[1] Beshkar and Shourideh (BS henceforth) contribute to this literature by studying a *dynamic* Ricardian economy while most of the previous works focused on static models.

In a dynamic economy, there are incentives to manipulate the intertemporal prices and this can be achieved by using *capital controls*. Costinot et al. (2014) also study the optimal pattern of capital controls for intertemporal price manipulation but they do so in isolation from other trade taxes (assumed to be zero). BS's contribution is to study the joint determination of unilaterally optimal trade taxes and capital controls. They show that when preferences have constant elasticity of substitution across goods, the optimal intertemporal distortions induced by time-varying trade taxes (or by capital controls) are functions of

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[1] Another branch of the literature assumes governments are politically motivated and manipulate terms of trade to redistribute toward preferred interest groups. See Grossman (2016) and Bagwell and Staiger (2016) for excellent surveys.

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the growth rate of the relative productivity of a country. The optimal tax-induced distortions reduce trade balances in periods of relatively high productivity growth and reduce them in periods of low relative productivity growth, similarly to the finding in Costinot et al. (2014).

BS make a second contribution by providing a back of the envelope calculation for the welfare gains of deviating from free trade to the unilaterally optimal trade and capital control taxes for the US. Interestingly, they find that the gains for using only capital controls are negligible. This suggests that leaving capital controls out of trade agreements may be innocuous because countries – at least the US – do not have large incentives to deviate from the cooperative behavior.

The rest of my comment is organized as follows. In Section 2, I describe the paper in more detail and make some suggestion about potential extensions. In Section 3, I discuss what we learn from the paper about the importance of including capital controls in trade agreement and I sketch an interesting avenue for future research about the the optimal design of trade agreement with multiple instruments.

2   Contribution of the paper

BS study the optimal trade policy in a dynamic Ricardian economy with two countries – Home and Foreign – where inelastically supplied labor is the only factor of production. The Home country's government has three instruments at its disposal: import and export taxes – potentially different across different goods – and capital controls i.e. taxes on accumulation of foreign assets. BS characterize the optimal trade taxes for the Home country assuming that the Foreign country imposes no trade taxes and no capital controls.

BS use the primal approach typical in public finance to study the optimal policy problem. Instead of solving directly for the path for taxes, they characterize the set of allocations that can be implemented given the available policy instruments and then choose the allocation to maximize the utility of the stand-in household in the Home country subject to the constraint that the allocations are implementable.[2] Taxes can then be calculated to support the optimal allocation.[3]

BS show that in a given period the optimal import tariffs are uniform across products. The optimal export taxes are also uniform across products if the intratemporal preferences have constant elasticity of substitution. The novelty comes from the *intertemporal distortion*, the wedge in the marginal rate of substitution over time between the Home

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[2]The problem assumes commitment and abstracts from manipulation of the value of initial wealth.

[3]At a conceptual level, the dynamic problem is equivalent to a static one in which goods in different periods are different commodities that are produced with a specialized type of labor – labor in a given period – that cannot be used for other goods.

and Foreign consumers. Absent capital controls, the optimal path of intertemporal distortions can be achieved by fluctuating values for the taxes on trade. Vice versa, if taxes on trade are constant over time, capital controls can implement the desired intertemporal distortions.

The paper fully characterizes the optimal intertemporal distortion when intratemporal preferences are CES. In particular, they show that the dynamics of the intertemporal distortions is determined by the growth rate of the relative productivity between the Home and Foreign country: It is optimal to discourage (encourage) the accumulation of foreign debt when the Home country is expected to grow faster (slower) than the Foreign country. The logic for this result is similar to the one underlying the similar finding in Costinot et al. (2014): periods of (relative) fast growth are associated with larger future trade surpluses (or lower future trade deficits) thus the government has an incentive to discourage the accumulation of debt to increase future Home consumption to ameliorate the terms of trade in periods in which exports are large relative to imports.

Let me briefly suggest two potentially interesting extensions for the model in BS. First, the paper abstracts from capital accumulation and consumption smoothing is the only motive for trade imbalances. It would be interesting to see whether the results extend to an economy with capital accumulation. This is particularly interesting because introducing capital accumulation changes the equilibrium correlation between the relative productivity growth and the trade balance. Second, it would be interesting to consider different market structures. This paper considers a Ricardian model where there is perfect competition and absent taxes prices are equal to the marginal costs. The role of trade taxes is precisely to exploit the monopoly power not internalized by competitive producers. Another popular trade model is the Melitz (2003) model where firms operate under monopolistic competition. Here prices are higher than the marginal costs and, under certain conditions, in a static model a benevolent government can have no incentives to manipulate the terms of trade. Does the intertemporal dimension introduce novel motives for terms of trade manipulation?

Finally, BS provide a back of the envelope calculation for the importance of trade and capital control taxes for the US during its WTO membership. To this end, they show that the optimal policies can be express in terms of sufficient statics – like trade shares – that are easy to measure and without the need to estimate a process for the productivity in the Home country (the US) and the rest of the world. Applying these formulas for the US, they find that the unilateral gains from deviating to the optimal trade policy are sizable, 0.70% in consumption equivalent units. However, the gains for using only capital controls are negligible. This follows from the finding that the optimal trade taxes are roughly constant over time and the induced intertemporal distortions are small.

3 Should trade arrangements regulate capital controls?

What can we learn from the paper about the importance of including capital controls in trade agreement? Should capital controls be left out from trade agreements? The back of the envelope calculation suggests that the incentives to manipulate the intertemporal terms of trade are small, at least for the US. Thus, leaving flexibility to countries like the US to choose their capital controls will not result in large deviations from the cooperative behavior. On the surface, this finding seems to justify the practice of not regulating capital controls in international agreements because capital controls can be a useful instrument to correct pecuniary or aggregate demand externalities, e.g. Kehoe and Levine (1993), Lorenzoni (2008), Farhi and Werning (2016). However, the imposition of capital controls for these motives can also impose externalities on other countries. See for instance Acharya and Bengui (2018). More research is needed to understand the potential gains from international policy cooperation.

Even if the gains from a deviation are small, restricting capital controls results in higher welfare. Why should trade agreement leave capital controls out and not fully enforce the cooperative solution? One possibility is that not regulating capital controls introduces an element of flexibility that acts as a buffer against shocks that increase temptation to leave the trade agreement. Not regulating capital controls – instead of static trade taxes – seems a natural candidate to provide some flexibility because of their usefulness for macro-prudential policy. In fact, despite one can replicate capital controls with trade taxes in the stylized economy considered here, capital controls can be targeted to different types of assets and thus more effective for macro-prudential reasons.

It would be very interesting – and relevant for the optimal design of international agreement – to study whether the best way to provide flexibility in trade arrangement is to fully leave out capital controls. Consider an environment in which a (benevolent) government has time varying temptation to impose capital controls either to manipulate terms of trade – as in BS – or for macro-prudential motives. Further assume that these motives are private information to the government and that the government can always exit the trade agreement. Does optimal arrangement call for full flexibility on capital controls and no/limited flexibility on trade taxes or there is limited flexibility on all instruments?

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