

Mobile Capital, Rent Shifting, and Inefficiency Source of Policy Equilibrium

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Extended Abstract

“During his state visit to Britain, US President Donald Trump asserted that his imposition of tariffs has significantly boosted investment in the United States. He claimed that without these tariffs, the country would only be experiencing a fraction of its current investment levels.” (September 18, 2025, The Economic Times)

As President Trump said, tariffs are now seen as a policy tool for attracting capital, which is expected to lead to an increase in the number and size of firms, and therefore employment. The present study focuses the rent-shifting effect of trade taxes via attracting capital, and examines each country’s taxing behavior, the equilibrium, and its efficiency. Specifically, by using a two-country, two-factor, one-sector monopolistic-competition model, I examine characteristics and equilibrium of import, export, and capital taxes of two countries, and then clarify the inefficiency source of policy equilibrium. The results are summarized as follows. First, capital taxes have both aspects of import and export taxes in the present model, and, hence, three tax instruments are redundant and any two of them are sufficient for each government to maximize welfare. Second, the Nash equilibrium is inefficient, and larger countries tend to taxes to raise world prices of their products, while smaller countries tend to impose taxes to raise local relative prices of imported varieties. Third, although rent-shifting externalities appear in the model, a first-best resource allocation can be achieved only without terms-of-trade (TOT) manipulations, because, for exporting countries without TOT motives, setting taxes such that world prices of their products are equal to marginal costs is optimal.

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Until now, theoretical studies on delocation effects and profit-shifting effects of trade policies in monopolistically competitive markets almost rely on models with multiple sectors and only one immobile factor; namely, labor (e.g., Venables, 1987; Ossa, 2011, 2012, 2014; Campolmi et al., 2014, 2025; Bagwell and Staiger, 2015). In that case, both delocation and profit-shifting effects of trade taxes are simple variations of production-efficiency effects (Helpman and Krugman, 1987, Ch.7). In a monopolistically competitive market, markups lead to under-allocation of labor to the industry. Hence, an increase in demand for goods of the industry by using trade policies leads to shifting labor to the industry and making production more efficient. Delocation and profit-shifting effects are both means rather than fundamental motive for trade taxes (Campolmi et al., 2025). Under this framework, hence, if domestic policies like labor tax/subsidies are introduced, labor allocation can be endogenously efficient and delocation and profit-shifting effects disappear (Campolmi et al., 2025); otherwise, labor allocation remains inefficient, so that both effects also remain.

Meanwhile, Bagwell and Staiger (2015) show that, even if delocation effects remain due to absence of domestic policies, efficient trade taxes can be achieved if each country has a complete set of trade-tax instruments while does not manipulate its TOT, so that externalities via delocation effects are not necessarily addressed in trade agreements. More specifically, following Bagwell and Staiger (1999, 2002), they define *politically optimal* (PO) taxes as those taxes that would hypothetically be chosen by governments unilaterally if they did not value the pure international transfer associated with the TOT movements induced by their unilateral tax choices, and then show that PO taxes are efficient. However, their results are obtained under a quasi-linear preference without income effects and specific characteristics of PO taxes are not clarified.¹

In contrast, the present study employs a one-sector and two-factor (i.e., immobile labor and mobile capital) monopolistic-competition model with income effects, and features rent-shifting effects by fixing number of firms.² It is noteworthy that our rent-shifting effects are *not* production-efficiency effects since production has been already efficient due to the assumption of one sector. Rent-shifting effects are generated in our model, because mobile capital is attracted and firm scale is increased by means of tax policies at the expense of outflow of capital from

¹Although Bagwell and Staiger (2012) obtain similar results on profit-shifting effects, they do not rely on monopolistic-competition models but use a Cournot competition model à la Brander and Spencer (1985).

²Although there are multiple industries and only one factor, Ossa (2012, 2014) employ a similar model and derive similar effects by fixing number of firms, but he calls it profit-shifting effects, because positive pure (abnormal) profit is generated by their assumption of no fixed input. In contrast, pure (abnormal) profit is zero and operating profit is distributed to labor (fixed input) as wage. Therefore, we do not use the term of profit-shifting effects but use the term of rent-shifting effects.

passive countries.³ Different from one-factor cases, rent-shifting effects never disappear even with domestic policies, and, thus, trade taxes are always accompanied with externalities via rent shifting as well as TOT manipulations. In such a situation, is the policy (Nash) equilibrium efficient if a complete set of trade-tax instruments is available? If not, what is the source of inefficiency? How does the PO equilibrium without TOT manipulations allocate resources? They still remain open questions.

Furthermore, the present paper is also related to studies on capital tax competition, since capital taxes/subsidies are well-known policy tools for attracting capital, and have been studied in this field. Especially, Wilson (1991) discuss a fundamental difference between tax competition and tariff wars. Namely, large countries impose higher tariffs to improve their TOT more in tariff wars, while small countries impose lower capital taxes to attract capital more in tax competition (Bucovetsuky, 1991; Wilson, 1991). However, aforementioned comments of President Trump suggest that import tariffs play a role similar to that of capital taxes. Similarly, if capital taxes can affect the terms of trade, then the difference between the two may not be as clear-cut as Wilson (1991) stated.

Recently, Takatsuka and Zeng (2022) show that smaller countries impose higher tariffs and they can win tariff wars by using a model with mobile capital. However, they consider neither capital taxes nor export taxes, and the difference between capital taxes and trade taxes is not clarified. In addition, they focus on what occurs in Nash equilibrium of import tariffs, and discuss neither efficiency of the equilibrium nor the source of (possible) inefficiency.

The remainder of this paper is organized as follows: In Section 2, I describe the model and derive the welfare decomposition in a similar manner of Helpman and Krugman (1989, Ch.2) and Campolmi et al. (2012), where the rent-shifting effect can be expressed as well as usual TOT effect and consumption-wedge effect. In Section 3, I derive the conditions of efficient resource allocation and a first-best resource allocation which maximizes the simple sum of utilities across all individuals. I also compare the first-best allocation with the laissez-faire equilibrium. In Section 4, unilaterally optimal and Nash policies are derived, and show that the Nash policies are inefficient. Sections 5 show that a first-best resource allocation can be achieved by PO policies, and also discuss the principle of reciprocity applied in the General Agreement on Tariffs and Trade (GATT) and its successor the World Trade Organization (WTO). Finally, Section 6 is the conclusion.

³Thus, such effects are not observed in models with one sector and one factor (Gros, 1987; Campolmi et al., 2025).

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