

Outline:

A Political Economy Theory of Subsidy Agreements

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The role and design of subsidy agreements within the WTO has recently been criticized in important academic contributions (Bagwell and Staiger, 2006, Sykes, 2003). In Doha, WTO ministers agreed that "In the light of experience and of the increasing application of these instruments by Members, we agree to negotiations aimed at clarifying and improving disciplines of subsidy agreements" (paragraph 28). Similarly, the EU is undergoing a process of reform of its rules governing state aid policies.

What is the role of subsidy agreements? And why do governments value such agreements? We provide a political economy model that addresses these two questions. We show that when governments bind their tariffs in a trade treaty, the role of a subsidy agreement is to provide governments with a commitment device towards domestic lobbies. Governments value such agreements when political pressures from special interests support a use of subsidies that distorts the long-run efficient allocation of resources and lowers social and government welfare.

An important argument that circulates among practitioners is that governments use subsidies to undo the effects of trade liberalization. Import-competing producers lobby for protection as tariffs increase the domestic price of imported goods and boost their profits. This way, tariffs redistribute income from domestic consumers to domestic producers. As it is well known, a trade agreement that eliminates trade tariffs increases aggregate welfare, but hurts producers in the import-competing sectors. In presence of an agreement that binds tariffs, domestic special interest groups have an incentive to lobby for other policies that will benefit them. Domestic subsidies (e.g. direct government transfers, production or R&D subsidies) are obvious candidates of such alternative policy measures (others would be sector-specific regulations, antidumping, etc.). While the effect of a subsidy on trade depends on its specific form, generally subsidies displace foreign production to the advantage of domestic producers, thus undoing the effects of trade liberalization. This is why multilateral (WTO) and regional (EU) economic integration processes contemplate disciplines on the use of subsidies that limit the spectrum of government's choice in this area. This is the role of subsidy agreements we formalize in this paper.

Notwithstanding this role, it is however unclear why a government may want to sign a subsidy agreement in presence of political pressures from domestic producers. In particular, consider a variation of the standard Grossman and Helpman (1994) framework, where firms pay political contributions to the policy maker to obtain subsidies (rather than tariff protection). In this framework, it could well be that government welfare (which includes lobbying contributions) is as high if the government does not sign a subsidy agreement, even if social welfare is lower. However, if politically motivated subsidies create distortions in the way producers allocate resources between different activities (production and innovation), this has long-run negative effects on social and government welfare. For this reason, a government may value a subsidy agreement which allows it to commit its policy vis à vis domestic special interests. In short, there exists a political-economy rationale for subsidy agreements which is similar to the one of trade agreements in presence of political pressures (Maggi and Rodriguez-Clare, 1998 and 2007).

The economic model we employ assumes an oligopolistic goods market where firms engage in the production of differentiated final goods and in-house R&D (innovation). Industrial R&D generates knowledge that reduces firm-specific costs and has positive spillover effects on other firms' R&D activity, thus increasing aggregate welfare. The political model assumes that firms' owners are organized to lobby the government for favourable policies and that firms (rather than sectors) exert political pressures. Lobbying requires a firm to devote resources in the form of political contributions to obtaining government subsidies that are financed through lump-sum taxation.

We (initially) consider the trade regime as exogenous and assume that countries can be part of a zero-tariff trade agreement or produce and consume in autarky. A trade agreement, by making the economic market more competitive, increases firms' incentives to innovate in order to lower costs and capture a greater share of the market. On the other hand, the removal of trade barriers lowers profits of domestic producers. In the absence of a subsidy agreement, this has the effect of inducing domestic firms to lobby harder for subsidies from the government. In turn, higher subsidies boost profits and reduce a firm's need to compete in the economic market and reduce the incentive to innovate. The overall effect of economic integration on innovation and welfare is ambiguous in the absence of a subsidy agreement. We then show that this ambiguity disappears when governments commit both their trade and subsidy policy. Moreover, we find conditions under which government welfare (social welfare plus contributions) is higher when the policy maker commits its subsidy policy. Finally, we extend this framework to consider different types of government subsidies (e.g. production, R&D) and the endogenous decision of trade and subsidy policy.