OPINION PIECE

On the implications of digital technologies for the multilateral trading system

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There is little formal research into the implications of digital technologies for the multilateral trading system and the role of the WTO. However, the literature on the economics of trade agreements offers a possible approach to thinking about these issues. On the basis that trade agreements address the international externalities associated with unilateral trade policy decisions (see Bagwell and Staiger, 2016; Grossman, 2016), two questions might be asked: (1) How might digital technologies interact with the traditional international policy externalities addressed by the WTO; and/or (2) might they create new forms of international externalities that the WTO could address?

Consider the first question. In the literature on the economics of trade agreements, shifting a portion of the costs of unilateral trade policy interventions onto trading partners gives rise to a "terms-of-trade" externality. The market access issues that dominate WTO discussions can be reinterpreted within this literature as terms-of-trade-manipulation/ international-cost-shifting issues (Bagwell and Staiger, 2002). The question can then be rephrased as whether digital technologies might alter the trade rules that are necessary to deal effectively with terms-of-trade manipulation.

There are many channels through which digital technologies could have such an effect (see, for example, the discussion in Gao, 2018). A basic issue in this context is how to classify digital trade for the purpose of applying existing WTO rules. For example, is a blueprint for use in a 3D printer, when delivered

from abroad, a traded good or a traded service? If the latter, should the transaction be considered as services trade under GATS Mode 1 or Mode 2?

Answering these questions is important, in part because of the different nature of the WTO approaches to liberalization in the GATT and in the GATS. While the GATT's approach may be termed "shallow integration", based on "tariffication" of protective measures and the subsequent focus of liberalization efforts on tariffs, the GATS's approach can be characterized as "deep integration", since it focuses on a variety of sector-specific behindthe-border regulatory measures. Will digital technologies, and the associated blurring of the goods/services distinction, make the distinction between GATT and GATS increasingly untenable? If so, the rising importance of digital technologies may necessitate a restructuring and unification of these agreements within the WTO.

Staiger and Sykes (2016) offer an interpretation of the distinct design features of the GATT and the GATS from the perspective of the terms-of-trade theory of trade agreements. They suggest that a redesign of the GATS in line with the shallow integration design of the GATT might be possible and could be warranted. Greater harmonization of the WTO approach to rules for trade in goods and in services could be even more beneficial in the light of the blurring of the distinction between trade in goods and trade in services.

Turning to the second question above, it is indeed possible that digital technologies will create new forms of international externalities that can be

addressed by the multilateral trading system. An example is the privacy issue associated with cross-border data flows. Just as firms' intellectual property rights (IPRs) can have trade effects, protection of consumers' data can also have trade impacts. Like IPR protection, cross-border privacy issues are not market access issues, i.e. the international externality associated with cross-border privacy issues does not take the form of a terms-of-trade externality. Accordingly, one would expect to look outside of the GATT and the GATS for solutions to the privacy issues raised by digital technologies.

The WTO TRIPS Agreement (i.e. the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights) seems a natural forum for addressing the privacy issues raised by digital technologies. Since much digital trade takes the form of licensing arrangements over intellectual property, issues of IPR protection are central to digital technologies. Moreover, the privacy issues raised by digital technologies can be viewed as cross-border private property rights issues over one's own digital data. Viewed in this way, the international externality associated with these issues has a broadly similar structure to the non-market-access externality that the TRIPS Agreement is designed to address. (Rather than an agreement over reciprocal market access rights, TRIPS is an agreement on minimum standards for the protection and enforcement of IPRs, which are explicitly recognized in the TRIPS preamble as "private rights" - see Petersmann, 1996). This suggests that the broad design of TRIPS might also provide a platform for addressing the cross-border privacy issues raised by digital technologies.