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Should tariff-rate quotas mimic quotas? Implications for trade liberalization under a supply management policy

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Abstract

This article compares price-equivalent import tariffs and quotas when domestic production is controlled by a marketing board with the power to restrict domestic supply through production quotas. Canada's dairy industry is supply-managed and protected by TRQs to achieve a domestic price target. TRQs are currently set to mimic the import quotas they replaced. However, they could be set to mimic tariffs instead. We provide welfare rankings between (domestic) price-equivalent quotas and tariffs under various assumptions regarding the powers of the marketing board to shed new light on liberalization in the Canadian dairy industry. When the marketing board is allowed to export, quotas can never be welfare-inferior to price-equivalent tariffs when transport costs between the two markets are insignificant. Import licensing methods have important implications for the ranking of the two trade instruments and the ranges of feasible domestic prices. If the marketing board controlled all import licenses and there was no rule preventing it from sleeping on part or all of its import licenses, the quota regime would support a small range of high feasible prices. In contrast, when the quota is a minimum access commitment, there are high prices under the tariff regime that are not feasible under the quota regime.

JEL classification: F13; Q17

Keywords: Non-equivalence; Tariffs; Quotas; Tariff-rate quotas; Supply management

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1. Introduction

Focusing on tariff reductions in the early days of the GATT was most useful as industrial tariffs averaged roughly 40%. Now these tariffs average about 4% (OECD, 2003). Similarly, many quantitative barriers to trade in industrial products were eliminated. The objective set out in the late 1940s to lower tariffs on industrial goods is nearly achieved. While the agri-food sector was not totally excluded from the rounds of multilateral trade negotiations that preceded the Uruguay Round, it is fair to say that not much was accomplished prior to 1994. One of the greatest achievements of the Uruguay Round (UR) was arguably the conversion of all non-tariff barriers (NTBs) in agriculture into bound tariffs using an average price gap method over the 1986–88 base period. Unfortunately, the reference period permitted extremely high bound tariffs to be proposed. These proposed tariffs threatened historic market access levels that prevailed under the previous NTBs and were deemed unacceptable by exporters. To protect market access and further encourage liberalization, WTO members agreed to introduce tariff-rate quotas (TRQs) in many agri-food sectors to guarantee access to all importing countries' markets.

UR TRQs are two-tier tariffs set such that a first (in-quota) tariff is applied to imports as long as aggregate imports do not exceed a certain quantity or quota, while a second (over-quota) tariff is applied when aggregate imports exceed the quota. For many sensitive sectors, the quota of the TRQ is set close to past import volumes; the in-quota tariff is set at a very low (close to zero) level, while the over-quota is set at a high (prohibitive) level. These TRQs mimic the import quotas they replaced. Because import licensing procedures used to administer TRQs were not disciplined in the UR, importing countries are able to rely on questionable import license allocation methods to protect sectors expected to be adversely affected by trade liberalization (Skully, 2000).

TRQs are typically used for agricultural products that have proved resilient to previous liberalization efforts. This is the case with Canada's supply-managed industries and particularly so for the dairy industry. Supply-managed products were excluded from the bilateral Canada-U.S. trade liberalization process initiated in 1989 and TRQs on these products (or products that make use of them) had over-quota tariff rates varying between 240 and 300%. Supply-management programs restrict domestic and import supplies through production quotas and TRQs to attain domestic price targets. Canada is not alone in using supply controls to support domestic prices. For example, similar policies are used in dairy production in the European Union and Japan. The United States had supply controls for tobacco until July of 2005. Supply-management programs in Canada have been an irritant for some of Canada's trading partners, notably the United States and New Zealand. The Doha Round has created much anxiety among Canadian dairy and poultry producers, because there is a great deal of uncertainty regarding the extent and the manner with which TRQs will be liberalized. The July 2004 framework in the Doha Round calls for liberalizing both tariffs and import limits although modalities are still being discussed.[1]

In this paper, we compare price-equivalent tariffs and quotas when domestic production is restricted by a marketing board that behaves like a monopolist as in Vercammen and Schmitz (1992), and Schmitz, Furtan, and Bayliss (2002).[2] Our analysis builds on the small-country models

[1] The July 2004 framework calls for a tiered formula to reduce tariffs "with flexibilities for sensitive products" (WTO, 2004). Some stakeholders in supply-managed sectors inferred from this that the principles of supply management are not threatened by the current trade negotiations. Because substantial improvement in market access must apply everywhere, including sensitive sectors, and because the number of sensitive products may fall short of what would be desired, supply-managed sectors will not be entirely shielded from trade liberalization.

[2] There is a voluminous literature that examines the non-equivalence between tariffs and quotas under various settings. For example, Rodriguez (1974) and Syropoulos (1994) make comparisons when countries are engaged in trade wars,