

## **A COOL Repeal: Potential Outcomes of U.S. Mandatory Country of Origin Labeling Requirements on Dairy and Beef Sectors**

US Congress repealed the Mandatory Country of Origin Labeling (COOL) requirement for certain agricultural commodities on December 18, 2015 after continued controversy within the US agricultural industry and seven years of consultations in the World Trade Organization (WTO) Dispute Settlement (DS) process. The COOL repeal followed the WTO final ruling authorizing retaliatory import tariffs totaling \$1 billion on US-sourced imports into Canada and Mexico beginning on December 21, 2015. While the dispute was based on the trade-distorting effects of COOL on Canada and Mexico's beef and pork exports to the US, both trade partners announced intentions to retaliate with tariffs on imports of a suite of US-sourced agricultural commodities, including dairy and beef products. This provides an interesting research opportunity to evaluate the potential outcomes of the COOL repeal on directly and indirectly affected industries. Specifically we will investigate two scenarios; first, the potential economic effects of continued COOL, assuming Canada and Mexico are permitted to retaliate against agricultural imports from the US, and second, the potential outcomes of removing mandatory COOL in agricultural sectors.

The majority of US imports are required to label the country of origin at the final retail level, according to 1930s US tariff law. However, there are certain goods, including many agricultural commodities that were exempted from mandatory COOL until the 2008 US Farm Bill. Passage of the 2008 Farm Bill implemented mandatory COOL, effective March, 2009, for different agricultural products including meat, fish and shellfish, many perishables and peanuts (Greene 2015). COOL legislation was introduced in the US as a potential method to increase consumer demand for domestic meat products. Many small operations were early adopters of COOL with the hopes of receiving first-mover advantages within a newly created niche market providing consumers with additional, potentially valuable information. However, implementation costs were high with marginal reported benefits for small scale producers.

Early in the COOL discussion, Canada and Mexico challenged US COOL in the WTO, claiming that the legislation is trade-distorting and violates US commitments in the WTO. The DS panel found that COOL reduces the value and quantity of live cattle and hog imports from Canada and Mexico, thereby treating domestically produced cattle and hogs more favorably than imported animals, and initially determined that COOL did not meet the objective of giving consumers full information on meat products' country of origin. The initial DS panel finding in 2011 was followed by a series of DS appeals and US amendments to the original COOL legislation, until the DS final ruling concluded that while COOL meets its objective to provide full information to consumers, the policy is trade-distorting and violates WTO obligations. Accordingly, the DS body authorized retaliation by Canada and Mexico against the US and levels for retaliatory tariffs (\$1 billion in total) were determined in December, 2015. While the effects of COOL on beef and pork exports were the basis for the WTO dispute, both countries identified additional agricultural and non-agricultural sectors to target with retaliatory tariffs, most notably dairy.

The potential negative effects of COOL on beef and pork exports have been extensively documented in the literature. For example Pouliot and Sumner (2014) find that COOL has a negative impact on fed cattle imports from Canada, although in relative terms of US cattle. Similarly, De Vila Estenssoro and Anderson (2015) estimate that COOL implementation resulted in a wider spread of calf prices between the US and Mexico. COOL-related analyses have considered other industries as well: Johncheck, Wilde and Caswell (2010) found that the implementation of

COOL may potentially reduce the value of Mexican tomato exports to the US by 14% to 32%, and may result in modest US consumer welfare increases compared to the increased (decreased) surplus of domestic (Mexican) tomato producers.

Several analyses highlight how the distributional effects of COOL may be unclear, depending upon consumer preferences for the additional information provided by the regulation. Awada and Yiannaka's (2012) theoretical model finds that consumer welfare increases (decreases) for those consumers with strong (weak) preferences for COOL when moving from a scenario where no regulation is in place to one where COOL is mandatory. Taylor and Tonsor (2013) showed that post-2009 (the year when COOL became mandatory), demand for beef remained unchanged, showing that surplus decreased due to the fact that the costs of COOL implementation were transferred to consumers. Similarly, consumer preferences for COOL in selected beef products has been found to be less marked than USDA food safety inspection labels in choice experiments for US consumers (Loureiro and Umberger 2007).

Thus, in light of the approved DS retaliation for Canada and Mexico, and COOL's unclear effect on both producers, and (particularly) consumers, the repeal of COOL may have avoided large welfare losses by producers without reducing consumer welfare. In order to evaluate what outcomes could have resulted from the imposition of such DS retaliation measures, our analysis assesses the spillovers of COOL across agricultural sectors by accounting for the potential retaliatory import tariffs approved for use by Mexico and Canada had COOL not been repealed, as well as the potential outcomes of removing mandatory COOL in agricultural sectors.

Other existing analyses have assessed the effects of COOL on related agricultural industries, including Brester, Marsh and Atwood (2004) and Lusk and Anderson (2004), who adopted equilibrium displacement models that include beef, pork and chicken sectors. This research augments the existing literature by investigating each scenario in a computable general equilibrium modeling framework that accounts for the retaliatory tariffs by Canada and Mexico if COOL was to remain in place in the first scenario, as well as the removal of the trade-distorting effects of COOL as a nontariff barrier under the second scenario where COOL is repealed.

We employ a modified Global Trade Analysis Project (GTAP) model (Keeney and Hertel 2005) and database from Burfisher et al. (2014). The GTAP-AGR model includes imperfect factor mobility between agricultural and nonagricultural sectors, a nested Constant Elasticity of Substitution (CES) production function for tradable commodities, and a Constant Difference of Elasticities (CDE) specification for household demand (Keeney and Hertel 2005). The model also includes detailed supply and demand elasticities specific to agricultural production and consumption as well as the Armington import demand specification to allow for product differentiation by region (Hertel et al. 2007). The database employed updates the GTAP v8 from a base year of 2007 to 2014 given macroeconomic projections for growth and productivity, changes in the supply of labor, capital and population as well as tariff reductions given preferential trade agreements since 2007. The database includes 25 agricultural and 4 non-agricultural sectors that includes 5 disaggregated dairy sectors and disaggregates beef, pork and poultry sectors (Burfisher et al. 2014). This economy-wide framework allows for the assessment of the potential direct and indirect effects of retaliatory import tariffs that may have been levied if COOL had not been repealed, as well as the potential economic outcomes of the COOL repeal on agricultural sectors including changes in production, consumption, trade and consumer and producer welfare.

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