“Brexit: Will it be a game of ‘chlorinated chicken’?”

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Motivation

- Considerable public concern expressed about UK food safety standards post-Brexit – most notably with respect to imports of chlorine-washed chicken

- Concern has intensified with discussion of UK-US free trade agreement (FTA) and statements by UK government officials such as Liam Fox,

  “...Liam Fox mocks concerns over chlorine-washed chicken and insists it is just a ‘detail’ of trade deal with US...” (The Telegraph, July 24, 2017)

- Debate recently intensified with comments by Woody Johnson, US ambassador to UK,

  “...Inflammatory and misleading terms like ‘chlorinated chicken’ ... are deployed to cast American farming in the worst possible light...”(The Telegraph, March 2, 2019)
“Toxic trade deals....”
Chicken production: EU vs. US standards

- EU standards based on link between animal welfare (flock density) and food safety (lower risk of disease and contamination)

- EU processors only allowed to decontaminate poultry carcasses with cold air and water, US processors use chlorine solutions to kill bacteria

- Long-running dispute between EU and US over use of pathogen reduction treatments (PRTs) in poultry processing – banned by EU in 1997

- US filed case at WTO in 2009 when EU did not allow import of PRT-treated poultry
Processed chicken becomes a credence good?

- WTO case never moved forward, but US clear it seeks removal of UK non-tariff barriers to agricultural trade in any future FTA (USTR, February, 2019)

- Market could go from one where consumers know with certainty that chicken is not “chlorinated” to one where chicken is a credence good

- UK consumers have signaled opposition to US imports, and firms state they will maintain reputation for “high-quality” (The Grocer, December 3, 2018)

- Adapt Baron (2011) to case where firms may supply “high-quality” good (non-chlorinated chicken) in presence of activist
Structure of model

- Low and high-quality chicken sold to continuum of consumers, uniformly distributed in terms of willingness to pay for credence good
- Firms can form “club” to set and certify standard for high-quality good, club members incurring convex fixed costs and higher marginal costs
- Activist applies social pressure to firms concerning poultry processing methods
- Given standard, firms producing high-quality compete in Nash-Cournot game, low-quality being supplied competitively via imports
Implications

- Higher willingness to pay for non-chlorinated chicken means greater incentive for club to set high standard
- Role of activist critical, especially if club chooses standard below current mandatory EU standard
- Assuming chlorinated chicken is safe, potential for increase in welfare
- UK’s future trading arrangement will affect tradeoff between size of market and level of competition in setting of standard by club, i.e., soft vs. hard Brexit
- What will happen if UK is able to set minimum standards, and what is role of UK retailers?