

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

Ian Sheldon (Ohio State University)

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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?**