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## **Brexit and Potential UK Trade Agreement**

**Andrew Muhammad**

*Selected Paper prepared for presentation at the International Agricultural Trade Research Consortium's (IATRC's) 2019 Annual Meeting: Recent Advances in Applied General Equilibrium Modeling: Relevance and Application to Agricultural Trade Analysis, December 8-10, 2019, Washington, DC.*

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# Brexit and Potential UK Trade Agreement

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Dec. 10, 2019



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- 2 U.S., EU, and UK Agricultural Trade
- 3 Specific Examples: Meat, Wine, and Whiskey
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# Background: Brexit

A public vote (referendum) in June 2016: leave or remain in the EU. Leave won by 52 percent. Turnout was very high at 72 percent (30 million people voting).

Issues: i) Rights of EU citizens in the UK and British citizens in the EU; ii) How much the UK is to pay the EU; iii) Structure of UK-EU trade agreement. iv) Trade barriers and borders between Northern Ireland and the Republic of Ireland.

Hard Brexit deadline was set for March 2019. EU has agreed to extend the Brexit deadline until 31 January 2020.

## Background: Hard Brexit and Trade

The decision to leave the EU is likely to have wide ranging impacts on the relationship between the UK and other EU member states.

Economic effects will mainly arise out of changes in free trade between the UK and EU, changes in investment patterns, barriers to labor movement, sector-specific legal and regulatory issues.

If the UK drops out with neither a trade deal nor a transition arrangement in place, then trade between the UK and EU would revert to World Trade Organisation (WTO) rules.

The Brexit Party was set up to campaign for a no-deal Brexit ahead of the 2019 European elections, in which it won 29 seats - more than any other UK party (December 7, 2019).

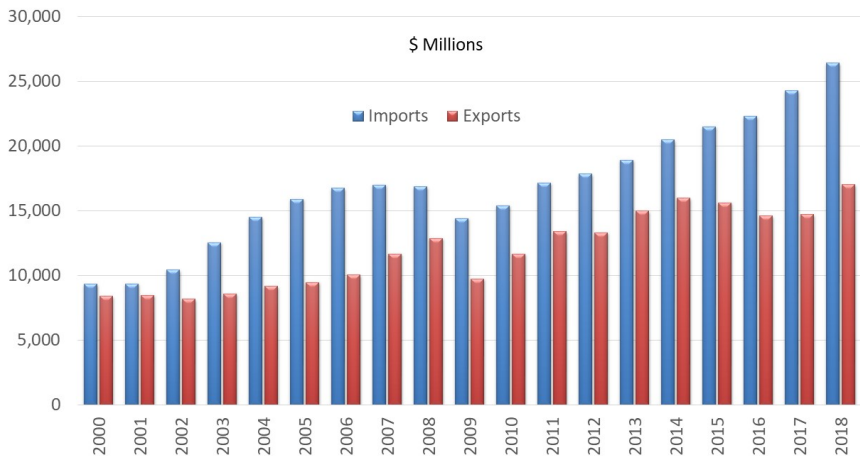
## U.S., EU, and UK Agricultural Trade

Current state of U.S. exports to the UK. What are the EU (and UK) trade policies?

## Potential for U.S. Agricultural Exports

General discussion and sector-specific examples.

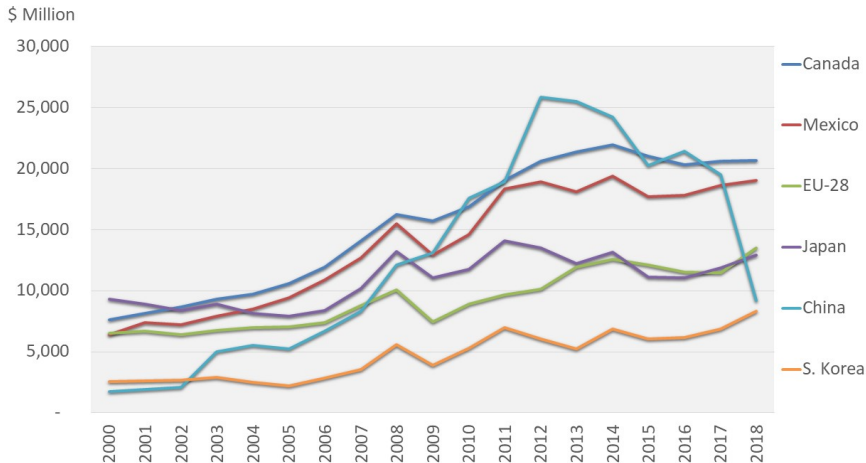
# U.S. Agricultural (+ related) Trade with the EU: 2000-18



Source: USDA-FAS, GATS Database



# U.S. Agricultural Exports (Top 6): 2000-2018



Source: USDA-FAS, GATS Database

# U.S. Agricultural and Related Products Exports: 2017

| Consumer Oriented |                |                            | Intermediate         |                |                            |
|-------------------|----------------|----------------------------|----------------------|----------------|----------------------------|
| Rank              |                | \$ 64,508<br>(\$ millions) | Rank                 |                | \$ 25,620<br>(\$ millions) |
| 1                 | Canada         | 16,370                     | 1                    | Mexico         | 4,062                      |
| 2                 | Mexico         | 8,341                      | 2                    | Canada         | 3,394                      |
| 3                 | Japan          | 6,365                      | 3                    | China          | 2,266                      |
| 4                 | Hong Kong      | 4,027                      | 4                    | Japan          | 1,315                      |
| 5                 | S. Korea       | 3,826                      | 5                    | S. Korea       | 1,298                      |
| 10                | United Kingdom | 1,039                      | 11                   | United Kingdom | 555                        |
|                   |                |                            |                      |                |                            |
| Bulk              |                |                            | Agricultural Related |                |                            |
| Rank              |                | \$ 48,031                  | Rank                 |                | \$ 19,370                  |
| 1                 | China          | 14,784                     | 1                    | China          | 4,521                      |
| 2                 | Mexico         | 6,194                      | 2                    | Canada         | 4,114                      |
| 3                 | Japan          | 4,216                      | 3                    | Japan          | 1,665                      |
| 4                 | Indonesia      | 1,803                      | 4                    | United Kingdom | 1,014                      |
| 5                 | S. South       | 1,745                      | 5                    | Mexico         | 871                        |
| 38                | United Kingdom | 107                        |                      |                |                            |

Source: Foreign Agricultural Service, Global Agricultural Trade System

# U.S. Agricultural and Related Products Exports to the UK

|                                      | FY2018            | FY2019            | %Δ          |
|--------------------------------------|-------------------|-------------------|-------------|
|                                      | (\$ millions)     |                   |             |
| <b>Agricultural Related Products</b> | <b>\$ 1,081.1</b> | <b>\$ 1,171.0</b> | <b>8.0%</b> |
| <i>Forest Products</i>               | 793.1             | 935.8             | 18.0        |
| <i>Distilled Spirits</i>             | 215.9             | 125.3             | -42.0       |
| <b>Consumer Oriented Total</b>       | <b>1,044.6</b>    | <b>975.1</b>      | <b>-7.0</b> |
| Wine and Beer                        | 263.5             | 245.6             | -7.0        |
| Tree Nuts                            | 196.4             | 215.3             | 10.0        |
| Prepared Food                        | 164.8             | 155.3             | -6.0        |
| Fresh Vegetables                     | 88.4              | 78.9              | -11.0       |
| Pork and Products                    | 3.8               | 3.5               | -7.0        |
| Poultry Meat                         | 1.7               | 0.9               | -51.0       |
| Beef and Products                    | 2.8               | 0.6               | -77.0       |
| <b>Intermediate Total</b>            | <b>537.7</b>      | <b>597.8</b>      | <b>11.0</b> |
| Other Intermediate Products          | 275.5             | 288.6             | 5.0         |
| <b>Bulk Total</b>                    | <b>165.7</b>      | <b>195.0</b>      | <b>18.0</b> |
| Soybeans                             | 64.1              | 103.8             | 62.0        |
| Other Bulk Commodities               | 28.4              | 28.2              | -1.0        |
| Pulses                               | 24.2              | 22.5              | -7.0        |
| Wheat                                | 29.3              | 20.5              | -30.0       |

Source: Foreign Agricultural Service, Global Agricultural Trade System

## AGRICULTURE & FORESTRY EXPORTS

### #21 NATIONWIDE

Agricultural trade is a key ingredient to Tennessee's thriving economy. The Volunteer State exports over \$2 billion in agricultural products annually, ranking #21 in agriculture and forestry exports.



# Average EU Tariffs on Food and Agriculture



Source: Lawless and Morgenroth (2016) *The Product and Sector Level Impact of a Hard Brexit across the EU*



# Geographical Indication and IPR



Is bologna bologna if it is not from Bologna?

By Michael Standsert

Pass the Greek-like cheese product originating from Wisconsin yet made with cow's milk and not goat's milk that is like Feta but cannot be called Feta. If that sounds a bit odd, welcome to the world of geographical indicators and international property rights. While agreements on wine and spirits are being worked through between the US and EU, further down the food chain discussions have been choked.



## Parmigiano-Reggiano vs. Parmesan



# SPS rules, Regulations, and Standards



**100%**  
**NATURAL GRASS FED**  
**GOURMET BEEF.**  
We're shattering the myth  
about red meat.  
No hormones, no steroids,  
antibiotics or chemicals.



**SAY NO TO**  
~~**RACTOPAMINE**~~



SUPERBUGS FROM FARM TO FORK



Animals receive  
unnecessary antibiotics



Bacteria become  
resistant to antibiotics



Bacteria travel on meat  
from farm to stores



Meat may cause  
hard-to-treat illness

**Will these apply after Brexit?**

# Specific Examples

## Potential Increase in Meat Exports.

Hard Brexit outcome. Brief discussion.

## Potential Increase in Wine Exports.

Recent decline in the UK market and Brexit and trade implications. Brief discussion.

## Return and Increase in Whiskey Exports.

Retaliatory tariffs are the issue; another major market impacted by the Trade War. Demand analysis.



While the UK is the third largest EU beef producer, the second largest poultry producer and the largest sheep meat producer, it is a net importer of meat from the EU (except sheep meat).

Fall in meat trade between the EU and UK in a Hard Brexit Scenario



Source: European Livestock and Meat Trades Union (UECBV) (2019) *CRISIS: The EU Meat Industry in a Hard Brexit Scenario*

# Willingness-to-Pay for Hormone-Free Beef: EU versus U.S.

| Country | WTP Estimate |
|---------|--------------|
| France  | \$ 9.94      |
| UK      | \$ 7.39      |
| US      | \$ 8.12      |

Table: Willingness-to-Pay for Hormone-Free Beef

Results from Lusk et al. (2003). Demand for beef from cattle administered growth hormones...*AJAE*

## UK was our second largest wine market.

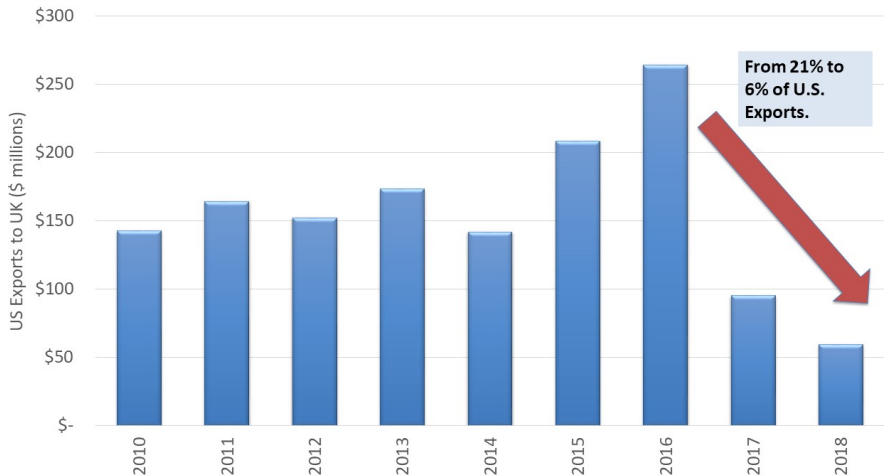
U.S. wine exports to the major markets, other than Canada, face tariffs that are double or triple the WTO simple average (7 percent).

EU import tariff per 750 ml bottle can range from \$0.11 to \$0.29. By comparison, the U.S. import tariff on a 750 ml bottle is \$0.05 for still wine.

The Wine Institute has argued that EU subsidies intended to encourage, support and finance European winemakers have resulted in an unreasonable competitive advantage in the global marketplace.

The UK is (was) a leading market for U.S. wines (\$150 to \$250 million, roughly 15 to 20 percent of total U.S. exports). (1) Ensuring that U.S. wine exports continue after Brexit; (2) Creating a U.S./UK wine trade relationship based on mutual recognition; (3) Potential for lower tariffs.

# U.S. Wine Exports to the UK: 2010-18



Source: Foreign Agricultural Service, Global Agricultural Trade System

# U.S. Whiskey Exports to the UK

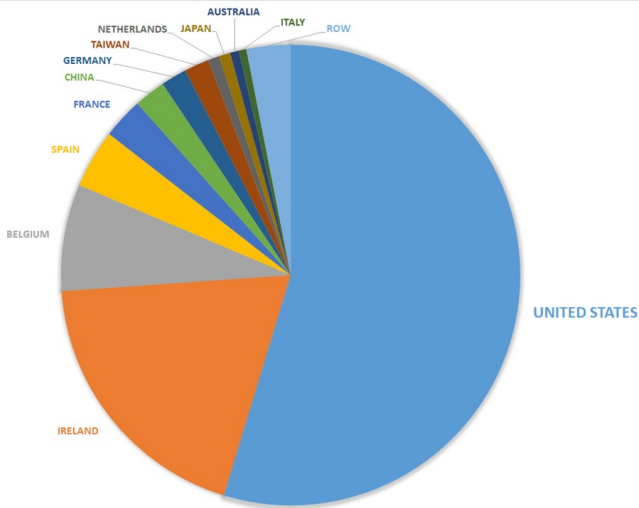
In response to the 232 tariffs the EU retaliated against U.S. whiskey with a 25 percent tariff. The tariff has had a significant impact on whiskey exports to the EU (UK in particular). More to come (more retaliation)?

Examined UK whiskey import data (Eurostat): Jan, 2000 - Aug. 2019 differentiated by source: U.S., Ireland, Rest of EU, and Rest of World.

Estimated import demand using a dynamic import demand framework (Generalized Dynamic Rotterdam Model).

Derived short- and long-run price elasticities and do back-of-envelope policy analysis.

# UK Whiskey Imports: 2018 (\$203 million: 2018)



Source: FAS, GATS

# Own-Price Elasticities UK Demand for Imported Whiskey

| Country          | Estimate (SE)         | P-value       |
|------------------|-----------------------|---------------|
| <b>Short-run</b> |                       |               |
| <b>U.S.</b>      | <b>-0.137</b> (0.042) | <b>[.001]</b> |
| Ireland          | -0.521 (0.062)        | [.000]        |
| Rest of EU       | -0.539 (0.111)        | [.000]        |
| ROW              | -0.081 (0.161)        | [.611]        |
| <b>Long-run</b>  |                       |               |
| <b>U.S.</b>      | <b>-0.179</b> (0.055) | <b>[.001]</b> |
| Ireland          | -0.666 (0.081)        | [.000]        |
| Rest of EU       | -0.807 (0.194)        | [.000]        |
| ROW              | -0.110 (0.219)        | [.613]        |

Table: Own-price elasticities by source

Source: Author's estimates

# U.S. Whiskey Exports to the UK

The inelastic estimate (-0.18) suggests that UK importers are bearing the larger burden.

What do we see when we examine the data?



# U.S. Whiskey Exports to the UK: Pre- and Post-Trade War

| Indicator                        | FY2018    | FY2019    | % Change |
|----------------------------------|-----------|-----------|----------|
| <b>World</b>                     |           |           |          |
| Export value (\$ million)        | \$1,263.6 | \$1,007.8 | -19.5%   |
| Export quantity (million liters) | 158.7     | 168.5     | 6.2%     |
| Unit value (price per liter)     | \$7.97    | \$6.04    | -24.1%   |
| <b>United Kingdom</b>            |           |           |          |
| Export value (\$ million)        | \$175.5   | \$107.3   | -38.5%   |
| Export quantity (million liters) | 15.0      | 13.5      | -9.9%    |
| Unit value (price per liter)     | \$11.61   | \$7.92    | -31.8%   |

Table: U.S. Whiskey exports: FY2018 and FY2019

Source: FAS, GATS

# Cross-Price Elasticities

| Country          | Estimate (SE)  | P-value |
|------------------|----------------|---------|
| <b>Short-run</b> |                |         |
| Ireland          | 0.336 (0.066)  | [.000]  |
| Rest of EU       | 0.240 (0.121)  | [.047]  |
| ROW              | -0.154 (0.183) | [.401]  |
| <b>Long-run</b>  |                |         |
| Ireland          | 0.430 (0.084)  | [.000]  |
| Rest of EU       | 0.359 (0.182)  | [.049]  |
| ROW              | 0.208 (0.247)  | [.400]  |

Table: Cross-price elasticities w.r.t. U.S. whiskey prices

Source: Author's estimates

# First Stage Estimates: Dependent Variable = Divisia Index (Real Aggregate Expenditure on Imported Whiskey)

| Variable          | Estimate (SE)         | P-value        |
|-------------------|-----------------------|----------------|
| Constant          | 0.036 (0.031)         | [0.244]        |
| Price Domestic    | 0.501 (0.784)         | [0.522]        |
| <b>Price U.S.</b> | <b>-0.032 (0.075)</b> | <b>[0.668]</b> |
| Price Ireland     | -0.172 (0.048)        | [0.000]        |
| Price Rest of EU  | -0.124 (0.036)        | [0.001]        |
| Price ROW         | -0.101 (0.029)        | [0.000]        |
| Rho (AR1)         | 0.276 (0.067)         | [0.000]        |

Table: Unconditional demand estimation

Source: Author's estimates

The very idea of "Brexit" fits perfectly with the anti-globalist sentiments of the Administration.

Brexit in line with the Administration's preference for bilateral negotiations.

EU Trade War issues could be resolved.

EU agricultural and food policies (regulations and standards) make agricultural trade negotiations particularly contentious. The EU has actually argued for agriculture to be excluded. With Brexit, these policies could no longer apply.

Given a "No-Deal" Brexit, a trade agreement could make U.S. agricultural and food exports more competitive than imports from the EU.

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