



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

The Economics of Duty and Excise Tax Drawbacks for Wine

Georgi Gabrielyan and Daniel Sumner

Selected Paper prepared for presentation at the International Agricultural Trade Research Consortium's (IATRC's) 2014 Annual Meeting: Food, Resources and Conflict, December 7-9, 2014, San Diego, CA.

Copyright 2014 by Georgi Gabrielyan and Daniel Sumner. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

UC

The Economics of Duty and Excise Tax Drawbacks for Wine

**International Agricultural Trade Research Consortium
December 09, 2014**

Georgi T. Gabrielyan and Daniel A. Sumner

**University of California Agricultural Issues Center and
Agricultural and Resource Economics, UC Davis**

AIC

Overview of the Presentation

- 1. Motivation**
- 2. Overview of U.S. Wine Production, Consumption and Trade**
- 3. U.S. Wine Import Duty and Excise Tax Policy, Implications**
- 4. Potential Data for Empirical Assessment**
- 5. Expected Implications of the Drawback Policy**
- 6. Implications of Drawback on Wine Producers and Grape Growers Depend on Patterns of Bulk Wine Imports/Exports**
- 7. Winners and Losers**
- 8. Next Step is Better Data and Analysis**
- 9. Summary**

Motivation

This research relates to observations about the following phenomena:

- **Changes in wine tax laws and regulation related to “drawbacks”**
 - U.S. began a program to refund import duties and excise taxes for table wine in 2003**
- **Changes in U.S. wine trade patterns over the last decade**
 - Imports and exports of bulk wine both grew rapidly after the implementation of the drawback**

U.S. Wine Production, Consumption and Trade

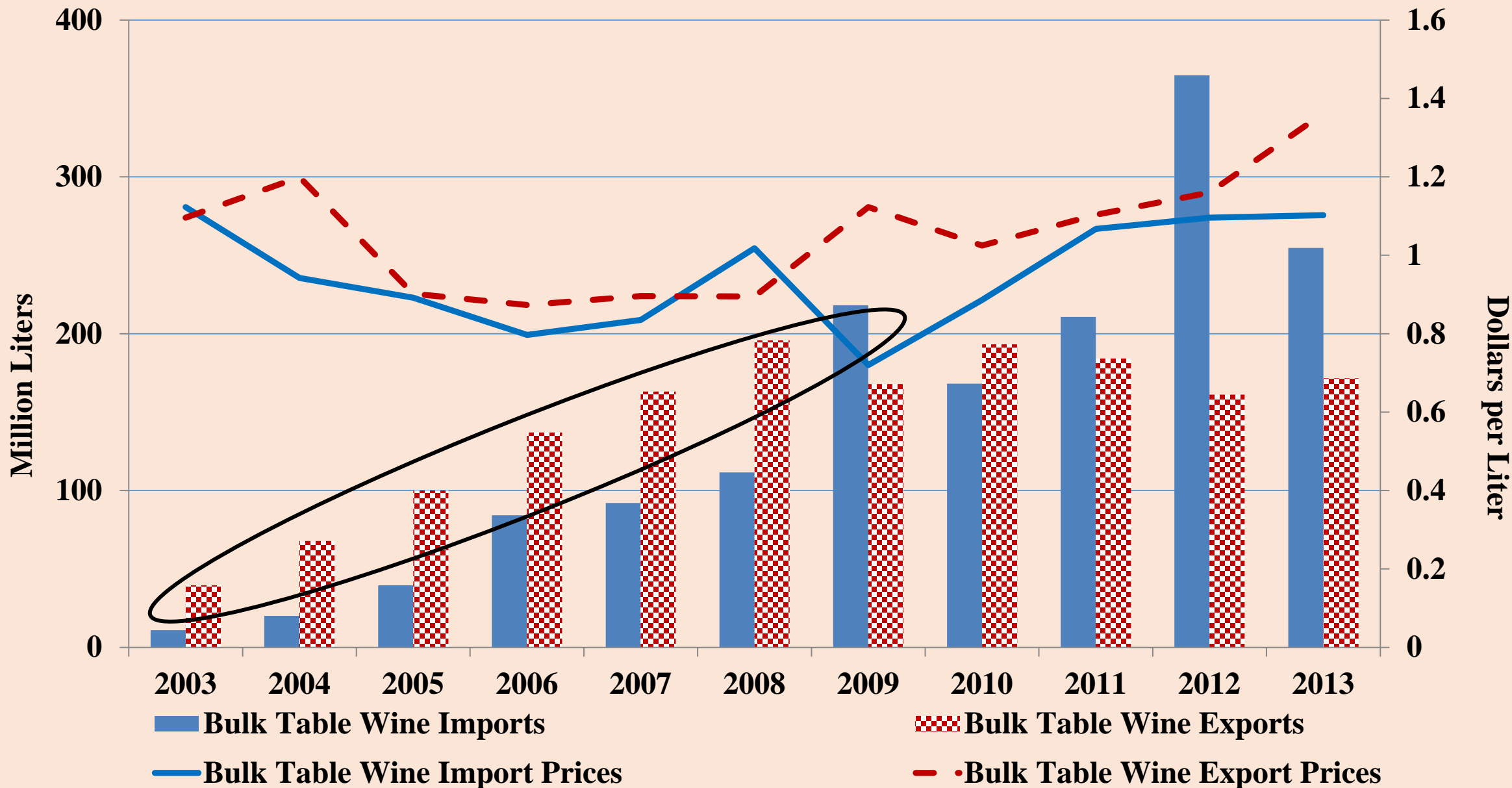
- **The United States is now the number one wine consuming country**
- **In 2013, United States imported almost 1/3 of consumption of table wine and about 30% of that was imported in bulk**
- **United States exported about 1/6th of table wine production, of which about half was in the bulk wine category**
- **In 2013, United States imported \$280 million dollars in bulk wine and exported \$233 million dollars in bulk wine**
- **Wine trade matters and government trade policies matter**

Wine Substitution Drawback Regulations

- **Applies to table wine only: Still wine of 14% alcohol content or less**
- **Imports must be matched by “commercially interchangeable” exports within three years**
 - **Interchangeability: wine of the same color having a price difference not to exceed 50 percent between the imported wine and the exported wine**
 - **Exports to NAFTA countries cannot be used to qualify for drawback**
- **Allows refund of 99% of import duty and excise taxes.**
- **This is a drawback under “substitution” provisions of the “unused merchandise” drawback rules that have basis in legislation and regulation**

NOT a Manufacturing Drawback

Traded Bulk Table Wine Quantity and Prices



The U.S. Table Wine Import Duties and Excise Taxes

Import Duty and tax rates	Bottled Wine				Bulk Wine			
	General (MFN) Imports		Australia, Chile		General (MFN) Imports		Australia, Chile	
	2003	2014	2003	2014	2003	2014	2003	2014
	Cents per liter							
Import Duty Rate	6.3	6.3	6.3	6.3	14	14	14	1.4
Excise Tax	28.27	28.27	28.27	28.27	28.27	28.27	28.27	28.27
Total	34.57	34.57	34.57	34.57	42.27	42.27	42.27	29.67
Share of Average Import Unit Value	7%	6%	7%	6%	38%	38%	38%	27%

The drawback applies to excise tax so domestically produced wine always pays tax in domestic market but imports might not

Potential Aggregate Data for Empirical Assessment

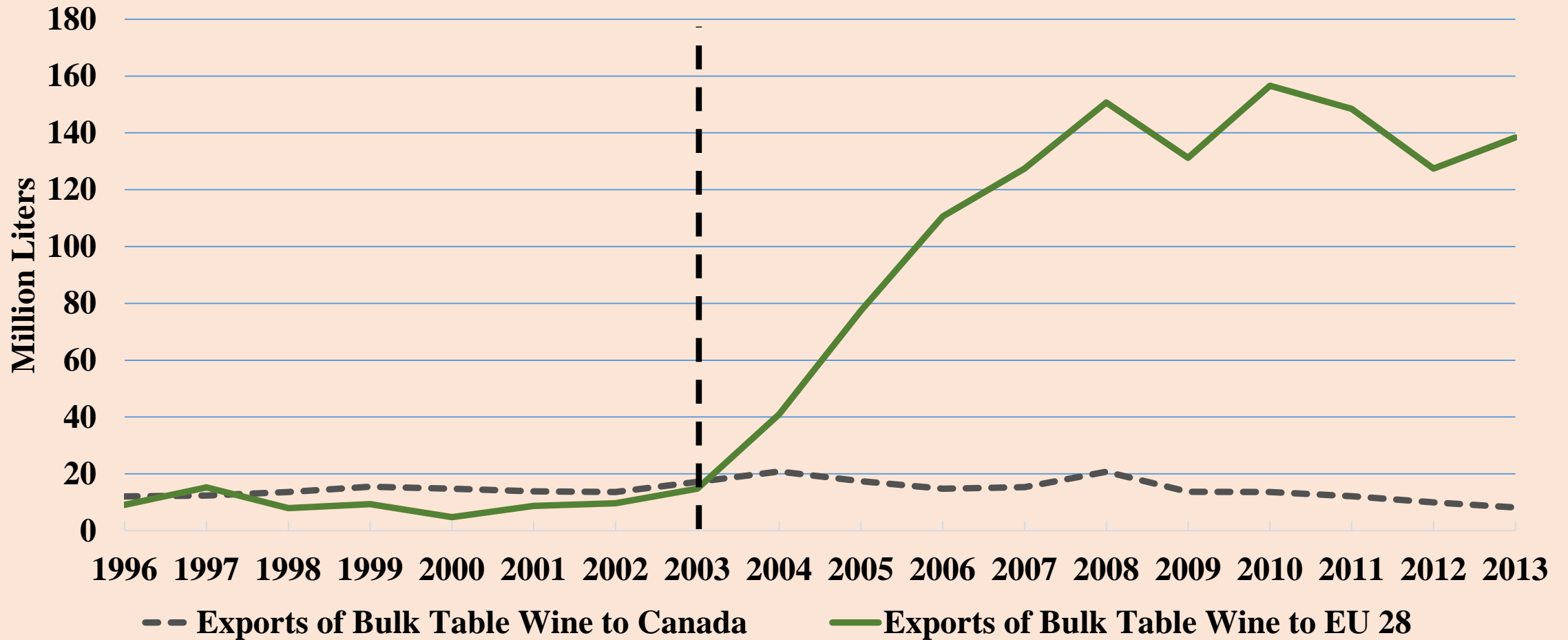
➤ Imports :

Differentiated by color, sparkling or still, alcohol content, organic or not, by unit price and package size. Values and quantities of wine imports by two ports (San Francisco and all others), for 180 months, a total of 18 HTSUS codes for wine imports, seven import source countries including the rest of the world a total of 45,360 observations

➤ Exports:

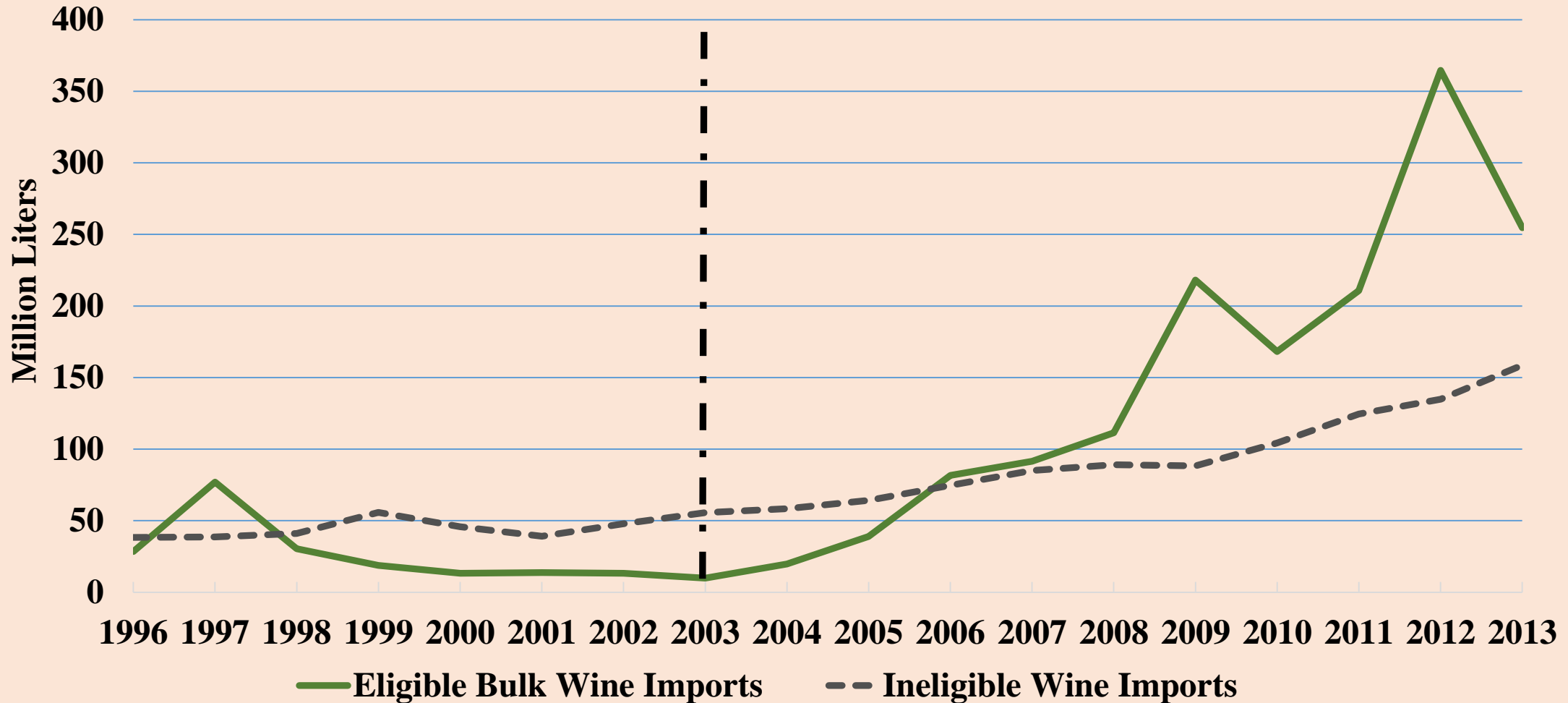
Differentiated by sparkling or not, alcohol content and package size. On the export side we compiled data for two ports, for 180 months, five HTSUS codes and five export destination codes. A total of 9,000 observations

Divergence of U.S. Bulk Table Wine Exports by Eligible and Non-eligible Destination



We can see the break in the export patterns just by looking at it

Divergence of U.S. Drawback Eligible Bulk Table Wine Imports and Ineligible Wine Imports



The difference between eligible bulk wine and ineligible wine imports changed after 2003. The $F(1,428) = 20.03$

Import Supply Function

- *Import Supply Quantity = $f(P_{US}, P_{origin}, Costs_{Transp}, Costs_{other}, \text{Importer's Anticipated Drawback Benefit})$*
- *Importer's Anticipated Drawback Benefit = $\$r * \text{Drawback per unit}$*
- *r is the importer's share – a function of current accumulated imports that have not been claimed for drawbacks, and expected export quantity of eligible wine within next 3 years. $r \in [0, 1]$*

Accumulation of Potential Excess Bulk Table Wine Imports Potentially Eligible for Drawback

Basis for the Calculations

- **Accumulated Eligible Imports = those imports that could qualify for future drawback, still within 36 months and not yet offset by exports in subsequent periods**
- **Drawbacks started at January 2003. Thus the first exports that are available are those from January 2003 and the first imports are the ones from January 2000**
- **No negative net carryover of imports. The minimum accumulated imports are zero**
- **If accumulated imports are zero it takes 36 months to have imports that no longer qualify for drawback**
- **Assume earlier imports are claimed first and all eligible imports are offset by subsequent exports**

Formulas for Calculating the Accumulation of Potential Excess Bulk Table Wine Imports Eligible for Drawback

$$ACC_0 = \sum_{Jan\ 2000}^{Dec2002} IMP - EX_0 \quad t \in [-36,140]$$

Jan 2003 is month 0 and there are 140 subsequent months through Sep 2014

If $ACC_{t-1} \leq 0$ then $ACC_{t-1} = 0$ and $[IMP_{t-37} - EX_{t-1}] = 0$

for $t = t - 1, \dots t + 35$.

$$ACC_t = 0 + IMP_{t-1} - EX_t$$

Otherwise if $ACC_{t-1} > 0$;

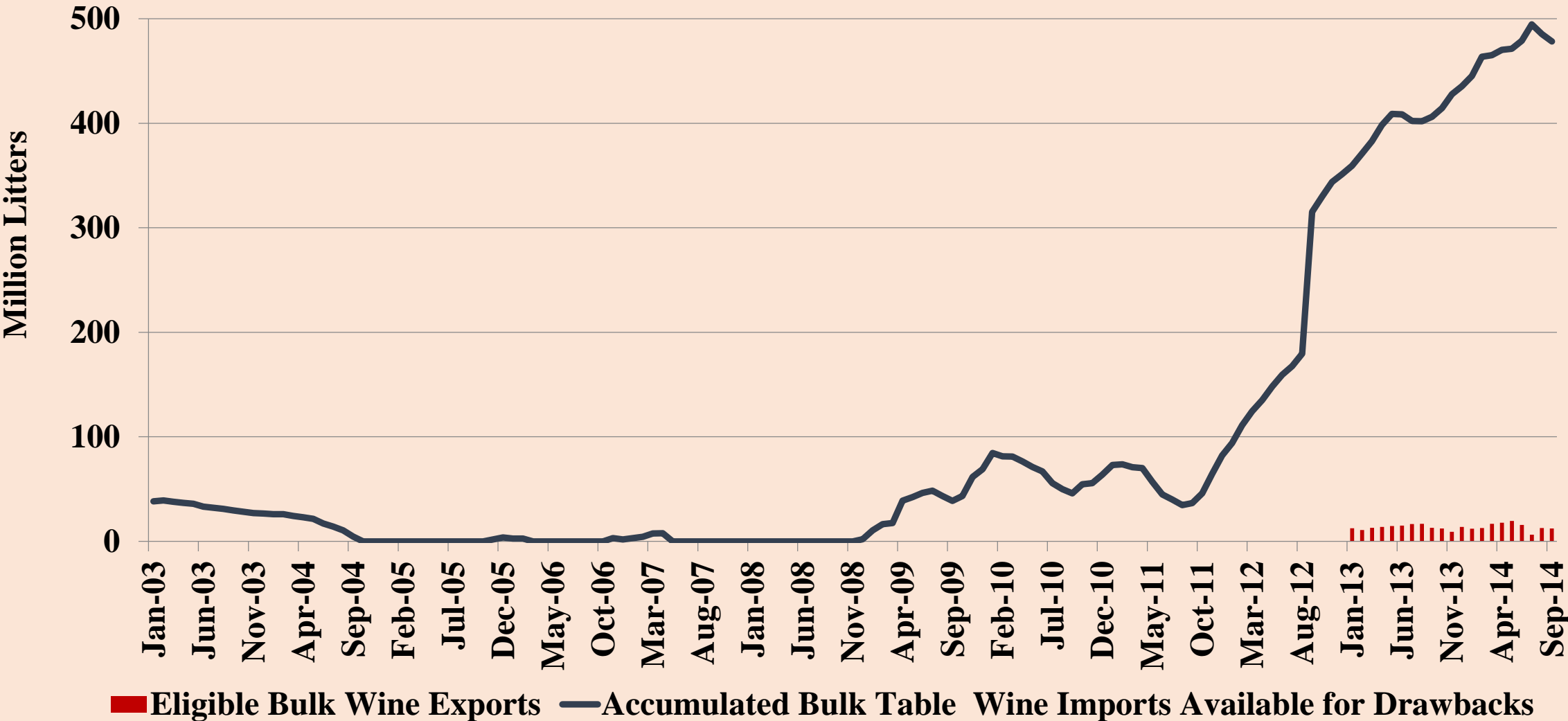
$$ACC_t = ACC_{t-1} + IMP_{t-1} - EX_t$$

$$\text{if } [IMP_{t-37} - EX_{t-1}] \leq 0$$

Otherwise

$$ACC_t = ACC_{t-1} + IMP_{t-1} - EX_t - [IMP_{t-37} - EX_{t-1}]$$

Accumulation of Potential Excess Bulk Table Wine Imports Eligible for Drawback

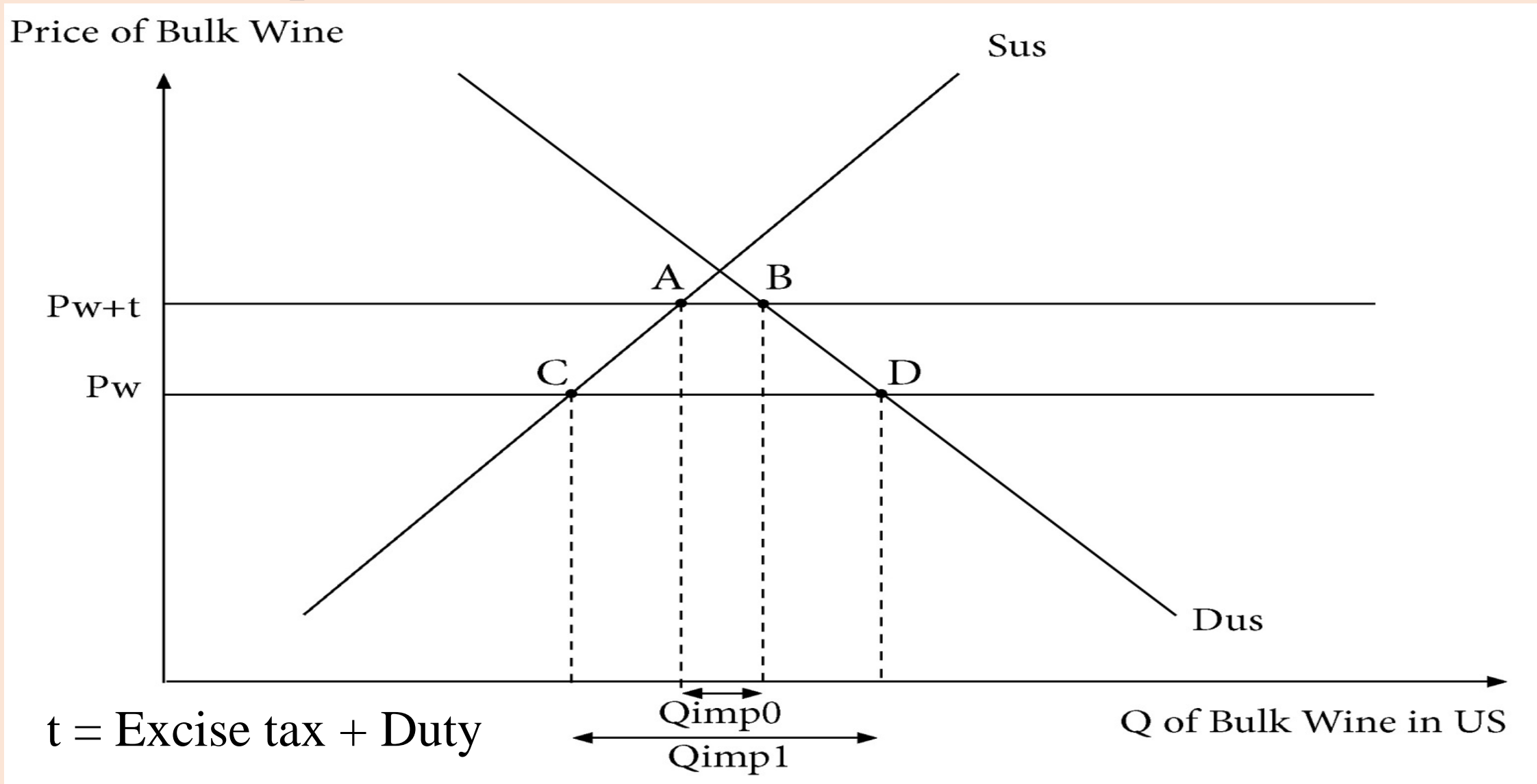


Effects of Drawbacks When Exports Exceeded Imports (2003-2008)

Simplest welfare consequences

- Import receive drawback and need not pay much to get matching exports
- Additional imports will drive prices down from $P_w + t$ to almost P_w
- At lower price of P_w , quantity demanded in the U.S. bulk wine market rises; the quantity supplied of U.S.-produced bulk wine sold in the U.S. falls
- Imports increase from Q_0 to Q_1
- U.S. growers and U.S. bulk wine producers lose

Effects of Drawbacks on Domestic Bulk Wine Market When Exports Exceeded Imports



Economics of Drawbacks When Imports Exceeded Exports (2010-2014)

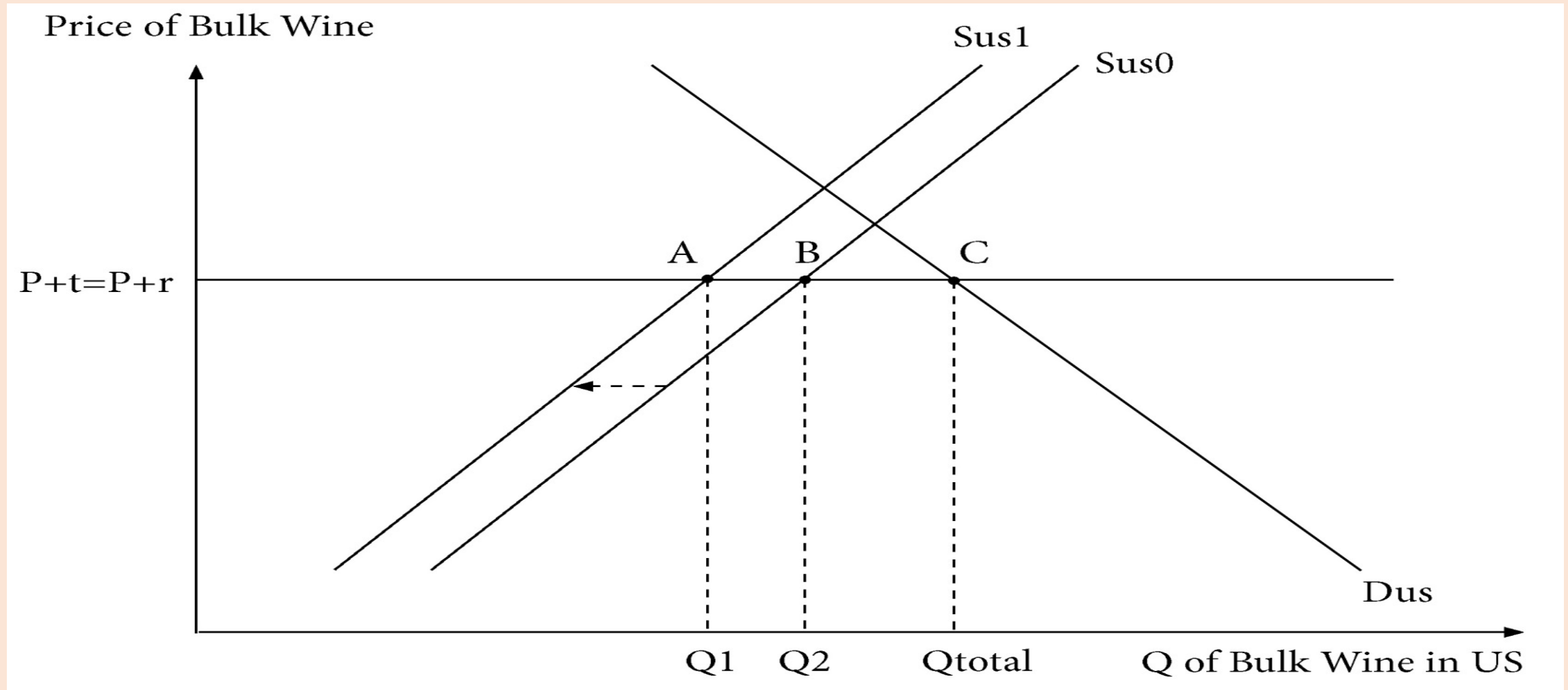
Domestic Market

Importers must compete for exports and transfer drawback to exports as an incentive

- **Some of U.S. produced wine gets shifted from the U.S. market and more U.S. production is exported. The supply curve of domestically produced wine shifts to the left**
- **Quantity demanded does not change because drawback goes to exports. Import share of domestic market rises**

This is not the whole story, we must consider the U.S. exports of bulk wine to understand implications

Effects of Drawbacks on Domestic Bulk Wine Market When Imports Exceeded Exports



t = Tax eligible for drawbacks r = Refund of drawback to exporters

Economics of Drawbacks When Imports Exceed Exports (Export Market for U.S. Wine)

Exports increase due to drawback incentives

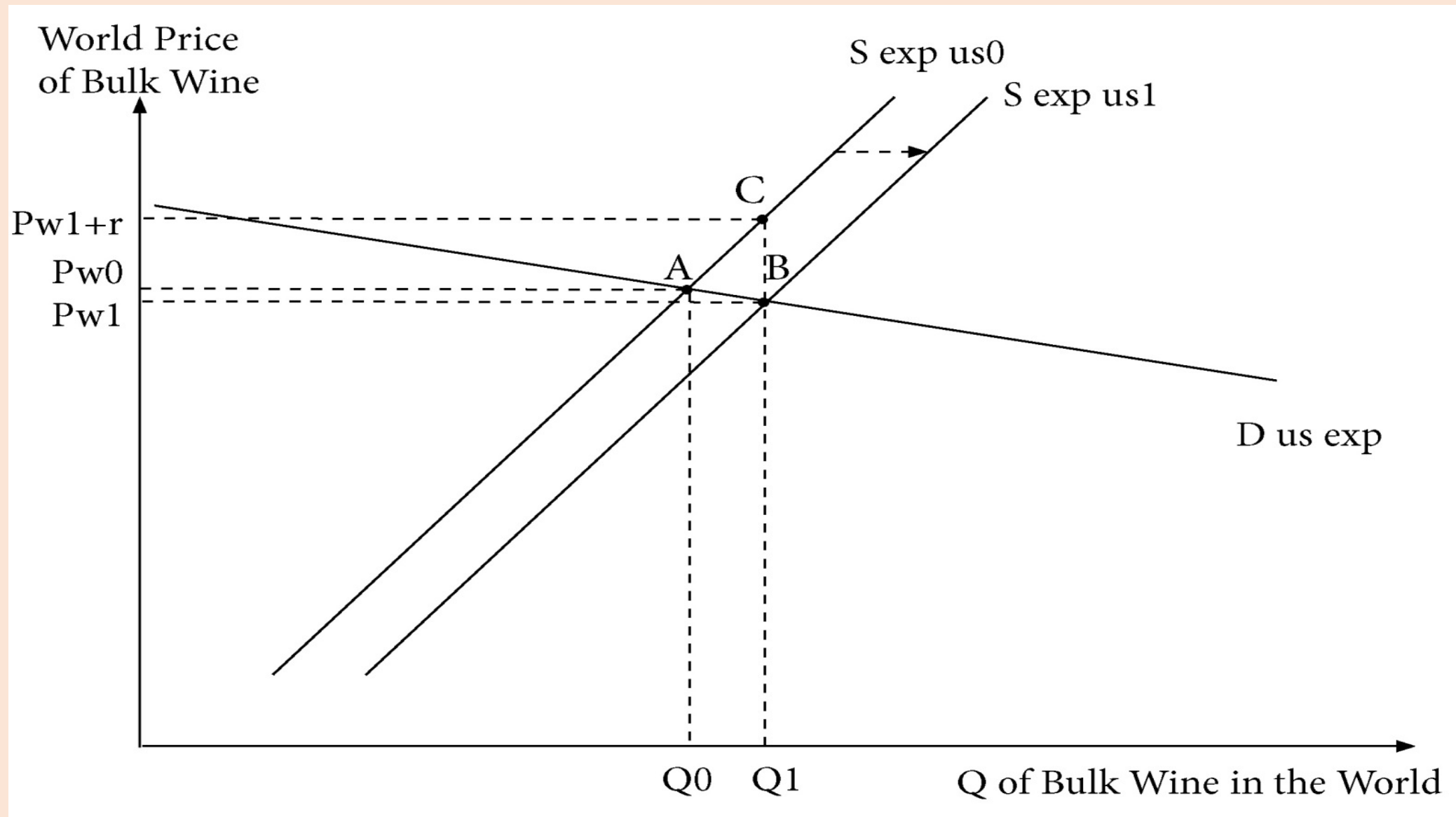
- **Supply of U.S. exports shifts out. Price falls slightly to P_{w1} . However, U.S. exports now fetch $P_{w1} + r$ since they obtain the drawback**

Increase in exports is attributed to two sources:

- 1. Some wine previously sold domestically is now exported**
- 2. More wine is produced as the drawback adds revenue to domestic wine production incentives**

➤ **Both U.S. growers and U.S. wine producers gain**

Export Market for U.S. Bulk Wine



Initial Economic Impacts of Wine Drawbacks

Winners:

- **Exporters, mainly when imports exceed exports**
- **Growers supplying exporters, mainly when imports exceed exports**
- **U.S. consumers always gain (sometimes just a little)**
- **Importers, mainly when exports exceed imports**

Losers:

- **U.S. winemakers who do not export**
- **Growers whose grapes are not used in exported wine**
- **Growers when exports exceed imports**
- **U.S. taxpayers**

Data on Actual Drawbacks

- **So far we have not discussed data on actual drawbacks**
- **Customs sent us transaction-level data on drawbacks in response to the Freedom of Information Act request**
- **We found 147,128 rows of data from Jan. 20th 2003 to Dec. 30th 2011, covering what seems to be 1,595 separate filings**
- **Data do not correspond to aggregate figures and annual totals exceed actual imports and exports – there seem to be duplicates**
- **No export information to match imports**
- **We think the data reflect the “requests” for import duty and excise tax drawbacks not the actual “approved” amounts**
- **We think the data set includes rejected merchandise and non-substitution unused merchandise drawbacks**

Overall these data are, so far, impossible to interpret as substitution drawback transactions

Thank you. www.aic.ucdavis.edu

