CONJOINT RESEARCH FOR CONSUMER PERCEPTION OF WINE CLOSURE OPTIONS AND THEIR IMPACT ON PURCHASE INTEREST IN THE UNITED STATES AND AUSTRALIA

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Introduction

Trichloroanisole (TCA), the compound responsible for musty, moldy, and wet cardboard type aromas and flavors, is not a desirable characteristic in wine.

In wine, TCA can come from a variety of sources, including natural cork, the winery facility, and its equipment. Chlorine and other substances used in the winery contribute to the presence of TCA. Hence, natural cork is but one of the potential contaminants. However, most of the blame for TCA in wine has come from contaminated or “tainted” corks.
Suppliers sell 15 billion corks per year and have implemented more scientific and stringent screening methods. In the 80’s and 90’s cork suppliers had a 10 to 15% failure rate and they now have about a 1% failure rate, however wine producers have a zero tolerance. (S. Pitcher, Tackling TCA Contamination in the Cellar, 2004).

“Every tainted bottle is a financial loss. Our reputation is at stake. The consumer (wine writer/reviewer) doesn’t blame the cork, they blame us.” Tim Mondavi; from The New Look of Wine – Uncorked Innovation, Marsano 2004.
Background

To address the issues of TCA from natural cork, wineries are exploring alternative types of closures including synthetic or plastic corks, composite corks, and a variety of screw cap options, including hybrid closures that seal like a screw cap but pop like a cork.
Why Screw caps?

Relative to cork closures, screw caps are:

- Inexpensive
- Easy to Open
- Easy to Reseal
- Prevent “cork taint” effect
- Bottles can be stored upright

So . . . what do consumers think?
Research Objectives

How aware is the consumer of cork taint?

How important is the natural cork closure to their wine purchase?

Given the alternatives of a synthetic/plastic cork or a screw cap, which alternate closure would consumers be willing to purchase?

- For which varietal?
- At what price?

A conjoint exploration of three wine closures (natural cork, plastic cork, and screw cap) was explored in the USA and Australia by country/region of origin, varietal, and price, to determine which of these is most important to consumer’s purchase decision.
Two questionnaires were given to approximately 700 consumers

- Males (35%) and Females (65%)
- Head of household, primary shoppers, ages 25-65
- Red and white wine purchasers/drinkers

USA - 300 consumers
- Boston, Chicago, San Francisco

Australia - 400 consumers
- Adelaide, Melbourne, Perth, Sydney
Mini A&U Survey

First, consumers were given a mini Attitude & Usage questionnaire to understand their current wine consumption behaviors.

Questions asked included:

- Number of years drinking wine
- Typical price for a bottle of wine
- Wine varietals they consume
- Purchase interest by closure type
- Appropriateness ratings by closure type
United States vs. Australia

Attitude & Usage Questionnaire
Most consumers in both countries (>75%) were experienced wine drinkers, i.e., have been drinking wine for over 10 years.
How Much Do You Frequently Spend per Bottle?

Most consumers frequently spend between $9-$15 for a bottle of wine. Consumers in Australia typically spent a bit more on their wines (data not adjusted for exchange rates).
What types of White Wines are they drinking weekly?

- **Chardonnay**: 46% USA, 43% Australia
- **Sauv/Fume Blanc**: 35% USA, 18% Australia
- **White Zin (USA)**: 30% USA
- **Riesling**: 14% USA, 26% Australia
- **Semillon (AUS)**: 22% Australia
- **Other White**: 18% USA, 20% Australia

Tragon Corporation & AWRI 2005
Purchase Interest – Closure

White Wine – Top 2 Box Purchase Interest

% of Consumers

- Natural Cork
  - USA: 90%
  - AUS: 87%

- Screw Cap
  - USA: 14%
  - AUS: 82%

- Synthetic Cork
  - USA: 25%
  - AUS: 50%

Tragon Corporation & AWRI 2005
Appropriateness of Closures by Usage Situation - USA

- Natural - USA
- Synthetic - USA
- Screw Cap - USA

% of Consumers (Appropriate) vs. Usage Situation:
- At Home
- Dinner w/Family
- Everyday Wine
- Special Occasion
- Gift Giving
- Dinner Party
Appropriateness of Closures by Usage Situation - Australia

- Natural - AUS
- Synthetic - AUS
- Screw Cap - AUS

% of Consumers (Appropriate)

- At Home
- Dinner w/Family
- Everyday Wine
- Special Occasion
- Gift Giving
- Dinner Party
Appropriateness of Closures by Usage Situation

% of Consumers (Appropriate)

At Home  Dinner w/Family  Everyday Wine  Special Occasion  Gift Giving  Dinner Party

Natural - USA

Natural - AUS
Appropriateness of Closures by Usage Situation

- **At Home Dinner**
- **Dinner w/Family**
- **Everyday Wine**
- **Special Occasion**
- **Gift Giving**
- **Dinner Party**

% of Consumers (Appropriate)

- Synthetic - USA
- Synthetic - AUS

Tragon Corporation & AWRI 2005
Appropriateness of Closures by Usage Situation

- **Screw Cap - USA**

- **Screw Cap - AUS**

<table>
<thead>
<tr>
<th>Usage Situation</th>
<th>% of Consumers (Appropriate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Home</td>
<td>80%</td>
</tr>
<tr>
<td>Dinner w/Family</td>
<td>70%</td>
</tr>
<tr>
<td>Everyday Wine</td>
<td>50%</td>
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<tr>
<td>Special Occasion</td>
<td>30%</td>
</tr>
<tr>
<td>Gift Giving</td>
<td>20%</td>
</tr>
<tr>
<td>Dinner Party</td>
<td>60%</td>
</tr>
</tbody>
</table>
United States vs. Australia

Conjoint Questionnaire
## Conjoint Variables

<table>
<thead>
<tr>
<th>Price Range</th>
<th>Region of Origin</th>
<th>Varietal</th>
<th>Wine Closure</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3.00 - $6.99</td>
<td>California</td>
<td>Pinot Grigio</td>
<td>Screw Top</td>
</tr>
<tr>
<td>$7.00 - $9.99</td>
<td>Australia/New Zealand</td>
<td>Chardonnay</td>
<td>Natural Cork</td>
</tr>
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<td>$10.00 - $14.99</td>
<td>Chile</td>
<td>Sauvignon Blanc</td>
<td>Synthetic Cork</td>
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<td>$15.00 - $19.99</td>
<td>Italy</td>
<td>Riesling</td>
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</tr>
<tr>
<td>$20.00 or over</td>
<td>France</td>
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<td>White Table Wine</td>
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</tbody>
</table>

### USA

<table>
<thead>
<tr>
<th>Price Range</th>
<th>Region of Origin</th>
<th>Varietal</th>
<th>Wine Closure</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5.00 - $9.99</td>
<td>South Australian</td>
<td>Semillon</td>
<td>Screw Cap</td>
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<tr>
<td>$10.00 - $12.99</td>
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<td>Chardonnay</td>
<td>Natural Cork</td>
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<tr>
<td>$13.00 - $17.99</td>
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<td>Sauvignon Blanc</td>
<td>Synthetic Cork</td>
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<tr>
<td>$18.00 - $24.99</td>
<td>Western Australian</td>
<td>Riesling</td>
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<tr>
<td>$25.00 or over</td>
<td>New Zealand</td>
<td>White Table Wine</td>
<td></td>
</tr>
</tbody>
</table>
Next, consumers were given a series of choice based questions and were asked to select the combination they were most interested in purchasing.

Please imagine you are in a local grocery store and you are able to select from various WHITE WINES. These WHITE Wines are described for you in terms of BRAND, REGION, VARIETY and PRICE. For each question, please select the ONE product you would be most likely to purchase.

<table>
<thead>
<tr>
<th>Question 1</th>
<th>Choose One</th>
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<tbody>
<tr>
<td>Chilean Sauvignon Blanc, for $15.00 - $19.99 that uses a <strong>Natural Cork</strong>.</td>
<td>California Chardonnay, for $20-25 or over that uses a <strong>Screw Top</strong>.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Question 2</th>
<th>Choose One</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia/New Zealand Sauvignon Blanc, for $10.00 - $14.99 that uses a <strong>Screw Top</strong>.</td>
<td>California Pinot Grigio, for $3.00 - $6.99 that uses a <strong>Synthetic Cork</strong>.</td>
</tr>
</tbody>
</table>
In the USA, wine closure followed by price was most important, whereas in Australia, price was most important. In both countries, varietal and region were much less important.

<table>
<thead>
<tr>
<th>USA</th>
<th>Australia</th>
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<tbody>
<tr>
<td>• Closure</td>
<td>• Price</td>
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<td>• Price</td>
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<td>• Region</td>
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<tr>
<td>• Region</td>
<td>Varietal</td>
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</tbody>
</table>
Detailed Findings
United States

Conjoint Questionnaire
Cork type (closure), followed by price was most important for all but the <$8 group, for whom price was most important.

<table>
<thead>
<tr>
<th></th>
<th>Total Population (n=291)</th>
<th>&lt;10 Years (n=73)</th>
<th>10-20 Years (n=71)</th>
<th>&gt;20 Years (n=147)</th>
<th>&lt;$8 (n=83)</th>
<th>$9-15 (n=142)</th>
<th>&gt;$15 (n=81)</th>
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<tbody>
<tr>
<td>Cork Type</td>
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</tbody>
</table>
**Importance**

Consumers Who Spend < $8.00 Per Bottle - USA

- **Price**
  - $7.00 - $9.99
  - $3.00 - $6.99
  - $10.00 - $14.99
  - $20-25 or Over

- **Region**
  - California
  - Australia/New Zealand
  - Italian
  - French
  - Chilean

- **Cork Type**
  - Natural Cork
  - Plastic Cork
  - Screw Top

- **Varietal**
  - Chardonnay
  - Pinot Grigio
  - Sauvignon Blanc
  - White Table Wine
  - Riesling
Importance
Consumers Who Spend > $15.00 Per Bottle - USA

<table>
<thead>
<tr>
<th>Price</th>
<th>Region</th>
<th>Cork Type</th>
<th>Varietal</th>
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</thead>
<tbody>
<tr>
<td>$7.00 - $9.99</td>
<td>Italian, French</td>
<td>Natural Cork</td>
<td>Riesling</td>
</tr>
<tr>
<td>$10.00 - $14.99</td>
<td>California</td>
<td>Natural Cork</td>
<td>Chardonnay</td>
</tr>
<tr>
<td>$15.00 - $19.99</td>
<td>California</td>
<td>Natural Cork</td>
<td>Pinot Grigio</td>
</tr>
<tr>
<td>$20-25 or Over</td>
<td>Australia/New Zealand, Chilean</td>
<td>Plastic Cork</td>
<td>Sauvignon Blanc, White Table Wine, Riesling</td>
</tr>
<tr>
<td>$3.00 - $6.99</td>
<td>Australia/New Zealand, Chilean</td>
<td>Screw Top</td>
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Increasing Importance
Detailed Findings
Australia

Conjoint Questionnaire
Price was most important overall, although region and varietal also were important.
Importance
Total Population - AUS

- $13.00 - $17.99
- $10.00 - $12.99
- $18.00 - 24.99
- $5.00 - $9.99
- $25-30 or Over

- Western Australian
- Natural Cork
- Sauvignon Blanc
- Chardonnay
- South Australian
- Screw Cap
- Victorian
- New Zealand
- New South Wales
- Semillon
- Riesling
- White Table Wine
- Synthetic Cork

Increasing Importance
### Importance of Consumers Drinking < 10 Years - AUS

<table>
<thead>
<tr>
<th>Region</th>
<th>Price Range</th>
<th>Wine Type</th>
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</thead>
<tbody>
<tr>
<td>New South Wales</td>
<td>$25-30 or Over</td>
<td>Riesling, Sauvignon Blanc</td>
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Increasing Importance
### Importance

**Consumers Drinking Longer Than 20 Years - AUS**

<table>
<thead>
<tr>
<th>Price Range</th>
<th>Wine Type</th>
<th>Region</th>
</tr>
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<tbody>
<tr>
<td>$25-30 or Over</td>
<td>Chardonnay</td>
<td>South Australian</td>
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<tr>
<td>$18.00 - $24.99</td>
<td>Natural Cork</td>
<td>Victorian</td>
</tr>
<tr>
<td>$13.00 - $17.99</td>
<td>Synthetic Cork</td>
<td>New Zealand</td>
</tr>
<tr>
<td>$5.00 - $9.99</td>
<td>Sauvignon Blanc</td>
<td>Western Australian</td>
</tr>
<tr>
<td>$13.00 - $17.99</td>
<td>Riesling</td>
<td>New South Wales</td>
</tr>
</tbody>
</table>

Increasing Importance
Importance
Consumers Who Spend < $8.00 Per Bottle - AUS

- $10.00 - $12.99
- $5.00 - $9.99
- $13.00 - $17.99
- $18.00 - 24.99
- $25-30 or Over

- Chardonnay
- Western Australian
- Natural Cork
- Screw Cap
- Synthetic Cork
- Riesling
- Sauvignon Blanc
- White Table Wine
- Semillon
- New Zealand
- South Australian
- New South Wales
- Victorian

Increasing Importance
Importance
Consumers Who Spend > $20.00 Per Bottle - AUS

- $18.00 - 24.99
- $13.00 - $17.99
- $25-30 or Over

- Screw Cap
- Sauvignon Blanc
- Chardonnay

- Western Australian
- New Zealand

- Victorian
- Natural Cork
- Riesling

- South Australian

- $10.00 - $12.99

- Semillon
- White Table Wine

- New South Wales

- Synthetic Cork

- $5.00 - $9.99

Increasing Importance
Key Findings & Recommendations
Key Findings

USA and Australian consumers are different. However, both rate natural cork as better for **special occasion**, **gift giving**, and **dinner party**.

**United States**

- More influenced by closure type; natural cork is preferred, followed by synthetic; screw cap is a negative factor, especially for $15+
- Only with USA consumers who frequently purchase wines for less than $8.00, price was more important than closure type.
- There was no group of consumers who preferred screw cap closed wines.
Key Findings

Australia

- Price is major determinant
- Natural cork had the most positive influence of the three closures, but only marginally more than screw cap, with synthetic cork being a substantial negative influence on choice.
- Those who spend $15+ on a bottle of wine, and also those who had been drinking wine for <10 years - where the screw cap was of equal or greater positive influence on purchase intent compared to the natural cork.
Key Findings

This study provides convincing evidence that consumers in Australia, with a longer history of screw cap use especially for premium white wines, are much less influenced by any possible negative connotations of screw caps.
Recommendations

Wineryes should consider having wines with both screw cap and natural cork to best satisfy consumers in these two major markets.

Most Australian companies exporting wine to the US would be aware of this difference in perceptions between the two populations, but the results of this study reinforce the need for careful risk assessment by wine companies considering exports to the US under alternative closures.