Economics of Draught Line Cleaning
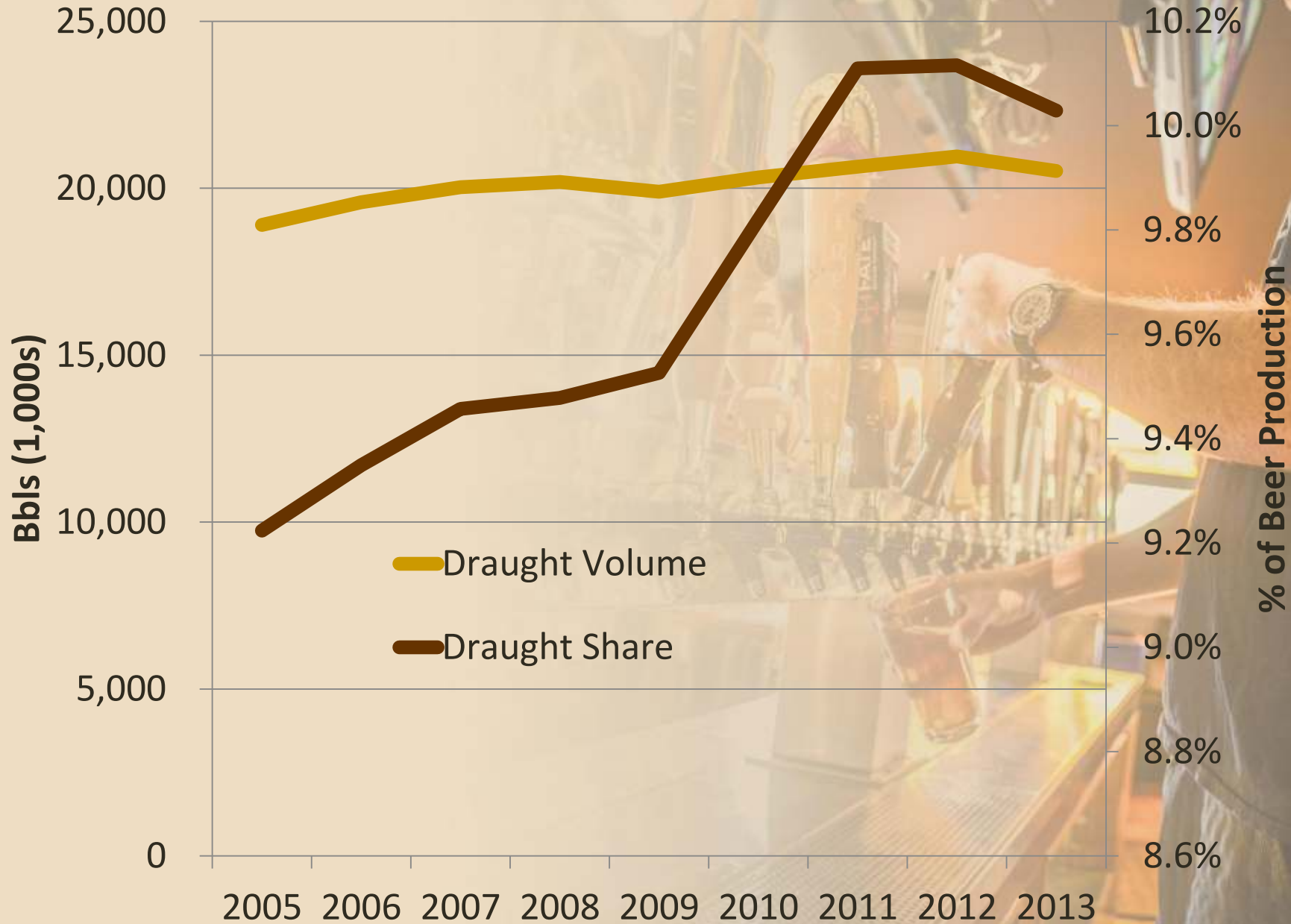
Bart Watson
Chief Economist
Brewers Association
bart@brewersassociation.org
@BrewersStats

Agenda

- **Market Update**
- **Background**
- **Study**
- **What this means**

Overall Beer Draught Trends

Bbls (1,000s)

25,000

20,000

15,000

10,000

5,000

0

10.2%

10.0%

9.8%

9.6%

9.4%

9.2%

9.0%

8.8%

8.6%

% of Beer Production

━━ Draught Volume

━━ Draught Share

2005 2006 2007 2008 2009 2010 2011 2012 2013

U.S. Beer Industry by Package Type – YTD June 2014 (volume in millions of case equivalents)

Package	2014 Volume CE's	Volume Change	Growth	Share
Bottle	508.7	-8.3	-1.6%	35.4%
Can	790.7	22.8	3.1%	55.0%
Draft	**139.2**	**-6.5**	**-4.5%**	**9.7%**
Total	1,438.5	8.0	0.6%	100%

Craft Package Mix by Type (2011), %

Package	Draught	Bottle	Can
All	37.4	60.5	2.1
Production	36.0	61.8	2.2
Brewpub	85.9	12.8	1.3
Other (Contract)	51.0	48.9	0.0

Source: Brewers Association (Brewery Operations and Benchmarking Survey, 2012); numbers may not add due to rounding

Measuring Craft Growth

~540,000 bbls = ~All Brewpub + Micro Growth

16.6% Growth

7.8% Growth

Legend:
- Missing Bbls
- Exports
- Off-Premise Volume
- On-Premise Volume

Y-axis: 0 — 18,000,000

X-axis: 2012, 2013
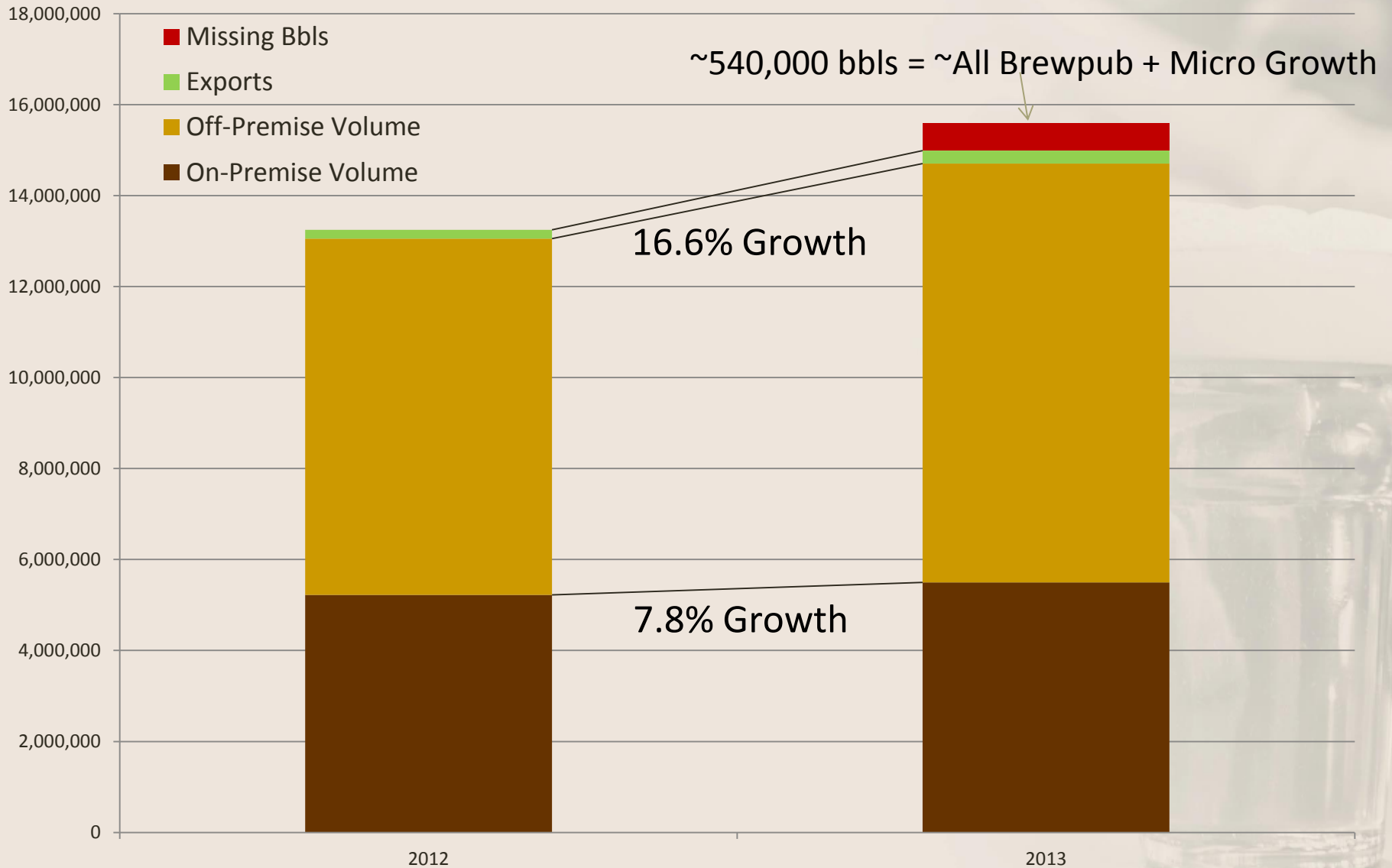
BREWER'S ASSOCIATION DRAUGHT QUALITY MANUAL RETAIL VERSION

BA BREWERS ASSOCIATION

CASE STUDY I: TOTAL PROFIT IN A 1/2 BARREL OF BEER RETAILED AT $4.00/ GLASS.

Cost of 1/2 bbl of beer = $100.00

Refundable Deposit = $50.00

Number of 16 oz. glass Servings with 3/4" of foam and 15 oz. of beer = 132

Retail Price = $4.00

Total Gross profit = $528.00 minus keg cost = $428.00 net profit.

Return on each $1.00 invested = $4.28

CASE STUDY II: YEARLY PROFIT FROM DRAUGHT BEER AT A RETAIL ACCOUNT WITH 10 DRAUGHT BEER LINES.

Here is what a case study looks like when you dig a little deeper into the draft beer numbers.

Number of Draught Lines = 10

Number of 1/2 barrels sold each week = 10

Gross Profit, minus beer cost in this 10 draft line system at 10 kegs per week = $4,280.00

52 weeks per year x $4,280.00 = $222,560.00 total profits from draught beer.

CASE STUDY III: COST TO MAINTAIN A 10 FAUCET DRAUGHT SYSTEM.

10 Draught Lines x $10.00 per draught line cleaning and maintenance investment = $100.00

Servings Per week from example above = 1,320 x 2 weeks = 2,640 servings in 14 days

Let's take the $100.00 investment in cleaning and maintenance and divide by the 2,640 servings. You will see each serving of draught beer will require $0.04 to protect the flavor and integrity of the beer on draught.

CASE STUDY IV:
How much beer is in each line of this 10 line system.*

3/8" Vinyl or "jumper line" = ¾ oz. per foot. 6' of line contains 4.5 ounces of beer

Assume 50 foot run from cooler to taps

5/16" barrier tubing = ½ oz. per foot. 50' of line contains 25 ounces of beer

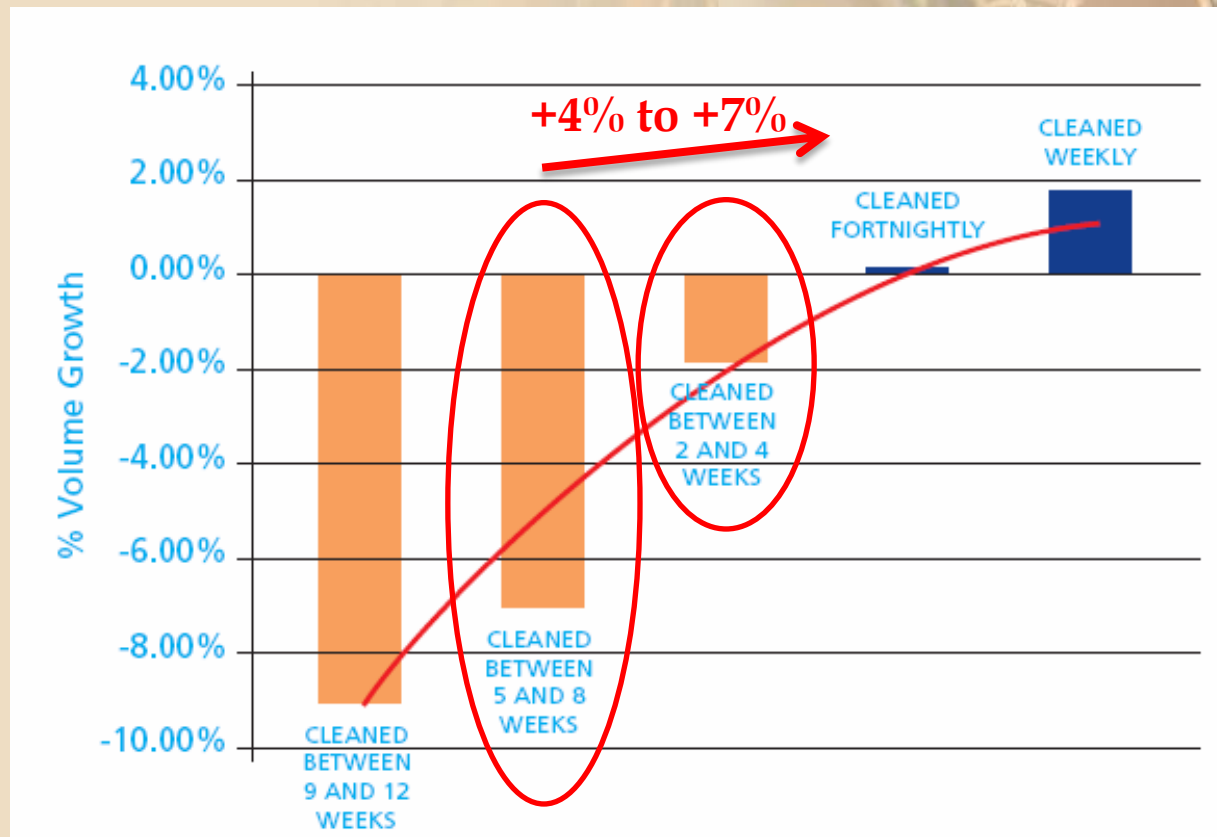¼" stainless = 1/6 oz. per foot. 3' contains 0.5 ounces of beer

Total beer per draught line = 30 ounces

10 draught lines = 300 ounces

$100.00 keg cost divided by 1984 ounces = $0.05 per ounce beer cost.

ounces of beer cost = $15.00 cost of beer in the entire draught system.

Economics of Draught Quality

Prove this study right…

… how much money is at stake?

Repeating with
U.S. Data

A Natural Experiment

- In September of 2012, a U.S. wholesaler purchased a local draught line-cleaning business. Can compare:

  – Accounts using the line-cleaning service, versus

  – Those that do not

Strong Opportunity
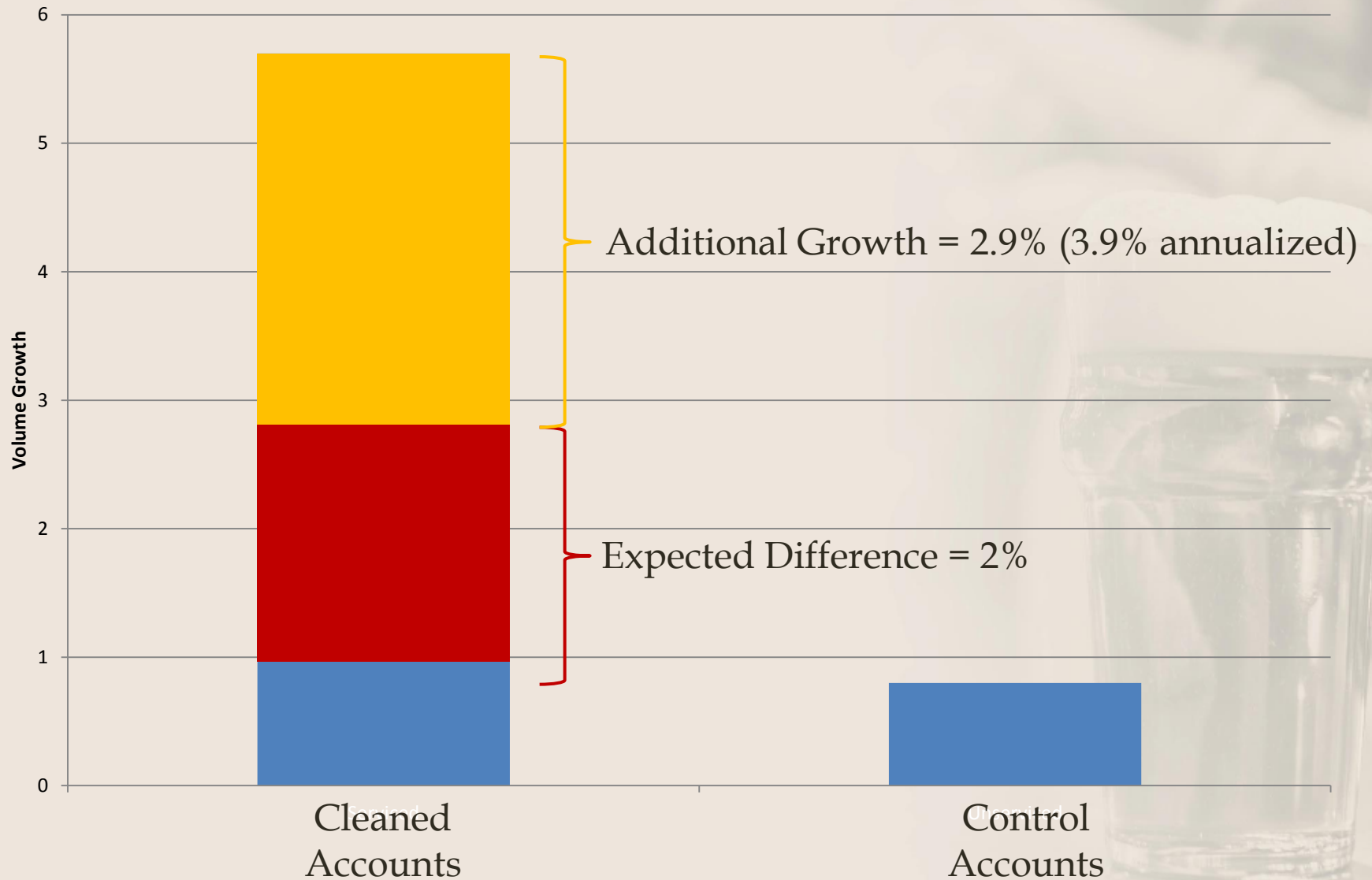
- Both accounts are relatively large
  - Line-cleaning accounts > 40,000 barrels annually
  - Other accounts >120,000 barrels annually
  - No other known differences
    - Same area, beers, etc.
    - **So only difference is 2-wk cleaning**

Control Period (Before): Growth in Volume Sales Q1 - Q3, 2011 to 2012

Difference = 2%

Volume Growth

8

7

6

5

4

3

2

1

0

Serviced

Unserviced
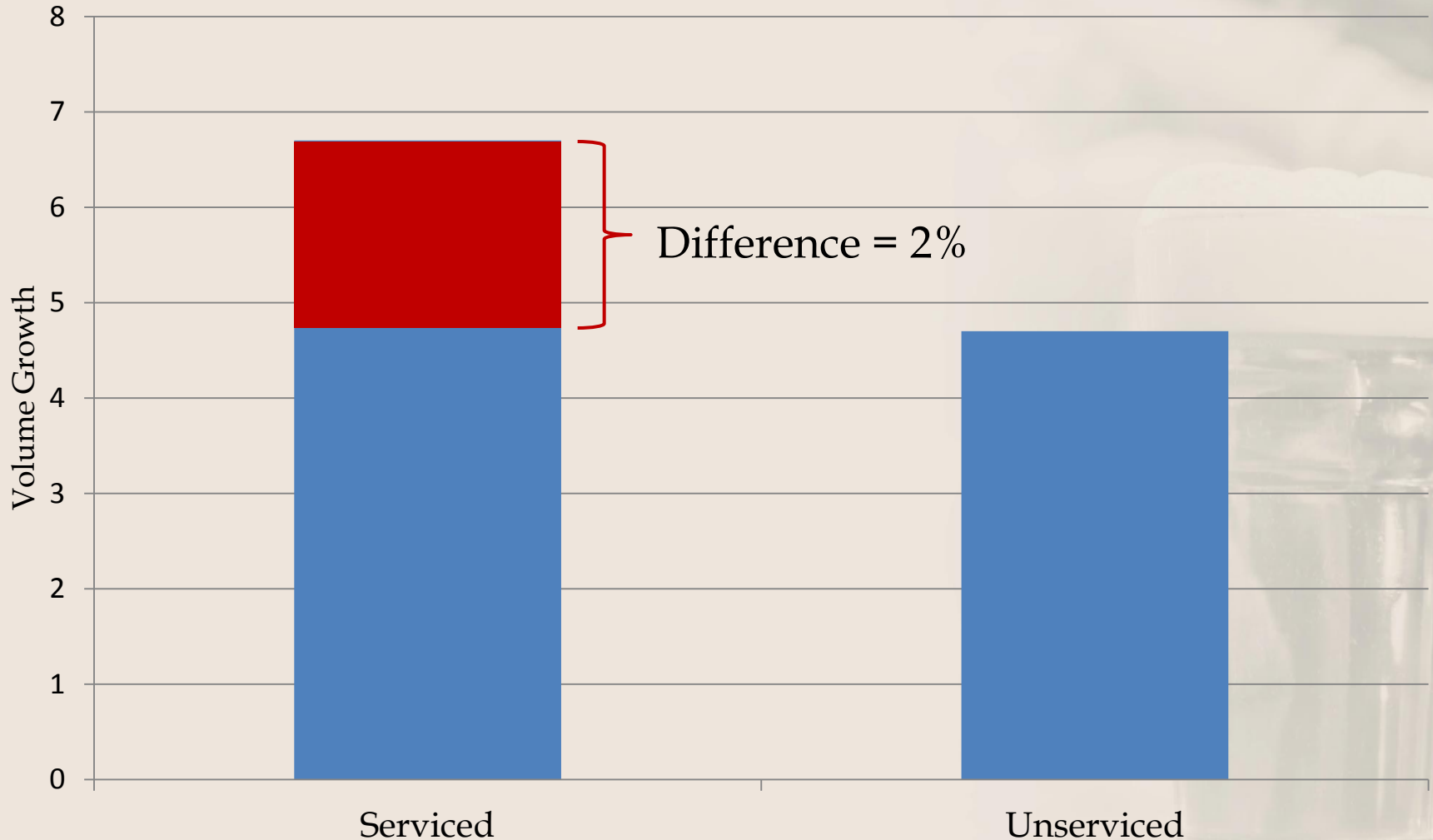
Test Period: Growth in Volume Sales Q4 2012 - Q2 2013 Versus Previous Year

Additional Growth = 2.9% (3.9% annualized)

Expected Difference = 2%

Cleaned Accounts

Control Accounts

+3.9% Annualized Growth

At 132 servings in a keg
= 5 additional pints per keg per year

Across the Cleaned Accounts **that's:**

- **450,000+ new pints/year**

Control Accounts, it represents almost:

- **1.3 million pints a year in foregone growth**

- Almost 5,000 barrels in lost growth across accounts that are > 125,000 barrels

18

Doing the Math...

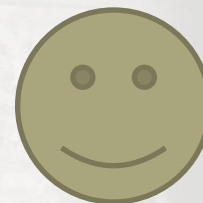- More frequent cleaning = 5 new pints/keg

New Profits/Keg   >   Costs of Cleaning

Does Entail New Costs

- Net Cost of lost beer = $217.69
  - This is less than 1% of total beer cost
- Net cost of labor = $800
  - May be cheaper with cleaning service; retailers often do not bear cost
- Net cost of cleaning materials = $371.65
  - May be cheaper in bulk
- **Total Net Cost = $1,389.34**

FAR Outweighed by New Profits

5 pints/keg x $3.41 profit/pint x 52 kegs/year/line =

$886.60 profit/year/line x 4 lines =

= **$3,546.40 in new profit**

Total Net Profit

- Under this scenario, moving from two-month to two-week cycle generates:

- **Total Net Profit =$2,157.06 ($539.26 a line)**

- Can re-work assumptions to increase costs

- *Even with the* **most extreme** *set of assumptions, retailers are projected to* **reap new profits** *from frequent line cleaning*

Economics of Draught Quality

Kegs have cost savings vs. bottles

Draught Quality $$$

Case of 24, 12 oz bottles = $26.40

Need 6.88 cases = ½ bbl @ $125.00

$181.63 cost of bottles vs. ½ bbl

$181.63 btls - $125.00 keg = $56.63 per keg

1 Line @ 1 Keg Week…

$56.63 x 52 weeks = **$2944.76 YR**

CRAFTBEER.COM

Poll Results

- "5 Cardinal Sins of Craft Beer Service"

- 23% of survey "say" Dirty Beer Lines

- Very close to "quality of service" and "diversity of beer menu" and MORE important than dirty glassware

4% Growth for the Industry

Total industry = ~200 million barrels

Draught = 10% or 20 million barrels

4% growth on 20 million barrels =

800,00 barrels, or almost 200 million pints

More beer than South Dakota drank in 2013

Craft would get roughly 25% of that

200,000 barrels or 50 million pints

Questions?

Bart Watson
bart@brewersassociation.org
@BrewersStats