Big Grower Benchmarking

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Disclaimer

- I am not an accountant; I am an economist.
- Though certifiable, I am not certified (CPA).
- Anything I say today does not supersede advice from your CPA or tax advisor.
The Great Recession brought:

- Hypercompetition
- Structural changes in the industry
- Mixed levels of profitability

You must keep score...

- Major score keeping areas include:
  - **Financial benchmarks** – e.g. return on assets, sales volume, and gross profit.
  - **Operational benchmarks** – e.g. labor utilization rates, quality and safety measures.
Companies who benchmark achieve 69% faster growth and 45% greater productivity than those who don’t.

PWC Trendsetter Barometer Survey

What are the red flag warning signs signaling those in trouble?

The next few slides contain averages from respondents at the 2009 OFA Shortcourse, Far West Show, and the Michigan Greenhouse Growers Conference.
Are you having difficulty meeting your bills in a timely manner?

1. Yes
2. No

Are you experiencing a shrinking market for your product?

1. Yes
2. No
Are you frequently losing customers?

1. Yes  
2. No

Is there an increase in customer complaints?

1. Yes  
2. No
Do you find that inventory levels are climbing faster than sales?

1. Yes
2. No

Is your company highly leveraged and thinly capitalized?

1. Yes
2. No
Are you experiencing sales growth but no growth in net income?

1. Yes
2. No

Are you committing to expenditures before cash is in hand?

1. Yes
2. No
One of the most powerful tools of financial analysis is the:

**Strategic Profit Model**

\[
\text{Profit margin} \times \frac{\text{Net profit}}{\text{Net sales}} \times \frac{\text{Asset turnover}}{\text{Net sales}} = \frac{\text{ROI (ROA)}}{\text{Total assets}} \times \frac{\text{Leverage factor}}{\text{Net Worth}} = \frac{\text{ROE}}{\text{Net worth}}
\]

---

**Income & Investment Stream of the SPM**

\[
\text{ROE} \times \frac{\text{Return on Assets}}{\text{Profit Margin}} \times \frac{\text{Asset Turnover}}{\text{Total Assets}} \div \frac{\text{Financial Leverage}}{\text{Net Worth}} = \text{Investment stream}
\]

\[
\text{Income stream}
\]
## Analyzing Profitability

**Flowchart for Assessing and Improving Greenhouse Profitability**

- **If both asset turnover and operating profit are at acceptable levels, then increase size.**
- **Look for ways to increase the revenues generated from existing assets. Re-evaluate:**
  - Through
  - Cross/Product Mix
  - Marketing Program
  - Yields
  - Resource Use
- **Look for non-performing/underperforming assets to cut. Re-evaluate:**
  - Leasing versus Owning Assets
  - Custom Work versus Owning
  - Underutilized Machinery
  - Sharing Assets (Partnering)

## Space Utilization

### Monthly Summary

<table>
<thead>
<tr>
<th>Month</th>
<th>Avg Area Used (sq ft)</th>
<th>Avg Area Unused (sq ft)</th>
<th>Avg Area Available (sq ft)</th>
<th>SFW Used</th>
<th>SFW Unused</th>
<th>SFW Available</th>
<th>% Used</th>
<th>Overhead Cost</th>
<th>Overhead Cost/SFW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>346139</td>
<td>669541</td>
<td>1021680</td>
<td>1730696</td>
<td>3322074</td>
<td>5053400</td>
<td>34%</td>
<td>$1,655,283</td>
<td>$0.93</td>
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<tr>
<td>Feb</td>
<td>500789</td>
<td>513231</td>
<td>1014020</td>
<td>2003157</td>
<td>2052623</td>
<td>4056080</td>
<td>49%</td>
<td>$1,037,771</td>
<td>$0.52</td>
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<tr>
<td>Mar</td>
<td>596285</td>
<td>467665</td>
<td>1023020</td>
<td>2225020</td>
<td>1867060</td>
<td>4092080</td>
<td>54%</td>
<td>$1,641,592</td>
<td>$0.74</td>
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<td>Apr</td>
<td>598482</td>
<td>453978</td>
<td>1019020</td>
<td>2243676</td>
<td>1839813</td>
<td>4077280</td>
<td>55%</td>
<td>$1,572,944</td>
<td>$0.61</td>
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<td>May</td>
<td>473002</td>
<td>658638</td>
<td>1131640</td>
<td>2385020</td>
<td>3293191</td>
<td>5658200</td>
<td>42%</td>
<td>$1,690,765</td>
<td>$0.70</td>
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<td>Jun</td>
<td>346074</td>
<td>954046</td>
<td>1300120</td>
<td>1384296</td>
<td>3615182</td>
<td>5203480</td>
<td>27%</td>
<td>$235,286</td>
<td>$0.17</td>
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<td>Jul</td>
<td>186129</td>
<td>1133961</td>
<td>1300120</td>
<td>83044</td>
<td>5668565</td>
<td>6508800</td>
<td>13%</td>
<td>$395,225</td>
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<td>Aug</td>
<td>195770</td>
<td>1121543</td>
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<td>666308</td>
<td>4486172</td>
<td>5152480</td>
<td>13%</td>
<td>$254,491</td>
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<td>Sep</td>
<td>295432</td>
<td>1082688</td>
<td>1288120</td>
<td>821730</td>
<td>4330750</td>
<td>5152480</td>
<td>16%</td>
<td>$182,038</td>
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<td>Oct</td>
<td>269147</td>
<td>604963</td>
<td>1119640</td>
<td>1445736</td>
<td>4152454</td>
<td>5568800</td>
<td>26%</td>
<td>$260,054</td>
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<td>Nov</td>
<td>280689</td>
<td>746631</td>
<td>1007320</td>
<td>1042757</td>
<td>2868523</td>
<td>4026280</td>
<td>26%</td>
<td>$394,341</td>
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<td>Dec</td>
<td>196948</td>
<td>810372</td>
<td>1007320</td>
<td>787794</td>
<td>3241456</td>
<td>4026280</td>
<td>20%</td>
<td>$433,531</td>
<td>$0.55</td>
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</table>

Enter overhead costs below:
Decrease age of receivables

Combined effects
(Price +5%; COGS -5%; G&A -3%; AR = 39 days)
Industry Comparisons

ROIC = \frac{\text{net income} - \text{dividends}}{\text{capital}}

ROIC > \text{Cost of capital} = \text{value created}

Nursery growers 4.7% / 26.5%

NY Greenhouse growers 7% / 40%

Design/Build Firms 14.2%

Maintenance Firms 16.3%

The bottom line...

<table>
<thead>
<tr>
<th>Primary Financial Objective</th>
<th>Return On Assets</th>
<th>Return On Net Worth</th>
<th>Effect On Company Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>4-9%</td>
<td>8-10%</td>
<td>Minimum long-term return necessary to assure survival.</td>
</tr>
<tr>
<td>Target</td>
<td>8-10%</td>
<td>15-20%</td>
<td>Satisfies owners minimum needs, but doesn’t provide for growth or offset inflation.</td>
</tr>
<tr>
<td>Top Performance</td>
<td>15-20%</td>
<td>30-40%</td>
<td>Would make the grower one of the top profit producers in the industry.</td>
</tr>
</tbody>
</table>
2010 Big Grower Survey Results

Primary Business Category

- Bedding plants
- Young plants
- Perennials
- Trees/shrubs

2010 Big Grower Survey Results

TOTAL COGS

<table>
<thead>
<tr>
<th>Year</th>
<th>COGS</th>
<th>T/H Costs</th>
<th>S/M Costs</th>
<th>G&amp;A</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>16</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

Average = 60.4% 10.4% 7.6% 9.7%

Median = 63.5% 10.4% 8.3% 9.1%
**2010 Big Grower Survey Results**

**Sales/FTE**
- Average = $137,260
- Median = $125,434

**Labor % of net revenue**
- Average = 23.9%
- Median = 27.0%

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**2010 Big Grower Survey Results**

**EBITDA**
- Average = 5.9%
- Median = 6.0%

**Sales Trend Since 2006**
- 20% Up
- 67% Flat
- 13% Down

**EBITDA Trend Since 2006**
- 53% Up
- 47% Down
### 2010 Big Grower Survey Results

**Debt $ / EBITDA $**

- **Average:** 6.36
- **Median:** 5.00

**Internal shrink**

- **Average:** 17.1%
- **Median:** 19.0%

**Retail shrink**

- **Average:** 5.0%
- **Median:** 5.0%
2010 Big Grower Survey Results

**Age of AR**

Average = 32.47
Median = 30.00

**2010 Big Grower Survey Results**

- Increased acreage?: 81%
- Plan to expand?: 53%
- Contract for you?: 81%
- Contract grower?: 25%
- Profit sharing?: 31%
- Incentive bonuses?: 81%
- 401K?: 88%
- 401K match?: 69%
- Health?: 94%
- Dental?: 69%
- Health savings?: 38%
- Life insurance?: 50%
- Drug test?: 63%
- Succession plan?: 19%
Other Grower Benchmarks

Please refer to your handout.

An Internet-Based System for Financial Benchmark Analysis of Wholesale Growers

- Database of records for wholesale nursery and greenhouse firms
- Query system for analysis reports by firm location (state, county), type, size, year, profitability
- Client accounts available for data entry and customized analysis (security encrypted)

Industry Segments:
- Container Woody Ornamentals
- Field Woody Ornamentals
- Flowering Plants
- Greenhouse Tropical Foliage
- Shadehouse Tropical Foliage
- Herbaceous Perennials
- Liners/plugs
Welcome to the Horticulture Business Analysis System website, developed by the University of Florida, with support from the Florida Nursery Growers and Landscape Association.

The system allows users to query a database of financial records for wholesale ornamental plant nurseries in the United States, to generate reports showing industry averages or benchmark values for selected nursery commodities or production systems.

Nursery industry professionals can use benchmark analysis as a guide for important decisions such as business expansions, financing, marketing strategies, operations planning, and product selection, and to see trends in performance.

Currently the system has data for greenhouse tropical foliage, shadehouse tropical foliage (South Florida), container-grown woody ornamentals, field-grown woody ornamentals, flowering plants, and cut foliage (tropicals). Within each commodity group, information is available for subgroups by firm size, profitability, location (state, county) and year. The system requires a minimum of five (5) valid records in the database to view averages for any selected combination of attributes in order to protect the confidentiality of individual records.

Other benchmarking resources

4-part webinar series on benchmarking
Benchmarking Your Way to Success!

<table>
<thead>
<tr>
<th>Operational metrics</th>
<th>Financial metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales per acre (yield)</td>
<td>Total annual greenhouse sales</td>
</tr>
<tr>
<td>Full-time worker equivalent (FTE)</td>
<td>Gross margin (profit - cost of goods sold)</td>
</tr>
<tr>
<td>Sales per acre (yield)</td>
<td>Net profit margin (profit / total sales)</td>
</tr>
<tr>
<td>Sales per acre (yield)</td>
<td>Total cost per acre</td>
</tr>
<tr>
<td>Sales per acre (yield)</td>
<td>Total cost per acre (WIP)</td>
</tr>
<tr>
<td>Sales per acre (yield)</td>
<td>Overhead expenses as % of sales</td>
</tr>
<tr>
<td>Sales per acre (yield)</td>
<td>Asset turnover (total revenue / average total assets)</td>
</tr>
<tr>
<td>Sales per acre (yield)</td>
<td>Financial leverage (total assets / total liabilities)</td>
</tr>
<tr>
<td>Sales per acre (yield)</td>
<td>Return on equity (net profit before tax / average total equity)</td>
</tr>
<tr>
<td>Sales per acre (yield)</td>
<td>Sales per FTE (full time equivalent)</td>
</tr>
<tr>
<td>Sales per acre (yield)</td>
<td>Average sales and profit per customer</td>
</tr>
</tbody>
</table>

Use benchmarking to determine if your company is financially healthy!
Operational Profitability

- Net Income per Square Foot per Week
  - Net Income / GH Sq. Ft. \times \text{Weeks in Operation}

This adjusts income / sq. ft. for different lengths of operations.

$0.04 - $0.08 per SFW greenhouse space / week
**Operations**

- **Labor As A Percent of Sales**
  - Total Labor Cost / Total Sales Revenue
    This is an indirect measure of labor efficiency and cost efficiency.
    \[
    \frac{159,890}{589,980} = 0.22 \text{ or } 22.0\%
    \]

- **Operating Expense (COGS) Ratio**
  - Total Variable Costs / Total Revenue
    The average % of sales price needed to cover direct costs of crop.
    \[
    \frac{440,768}{589,890} = 0.717 \text{ or } 71.7\%
    \]

**Production Efficiency Metrics**

- **Worker Equivalents.**
  Total # of labor hours / year divided by 2760 (55h per week)
  *This accounts for part-time labor and temporary workers.*
  \[
  (8 \text{ workers} \times 51\text{ wks} \times 40\text{ hr}) + (19 \text{ pt-workers} \times 36\text{ wks} \times 20\text{ hr}) = \]
  \[
  (16,320 \text{ hours} + 13,680 \text{ part hours}) = 30,000 \text{ hours}
  \]
  \[
  30,000 \text{ hours} / 2760 \text{ hours} = 10.8 \text{ worker equivalents!}
  \]

*New York Greenhouses averaged 8.9 FTE Worker Equivalents for the average 40,000 sq. ft greenhouse.*
Production Efficiency Metrics

• Net Income per Worker Equivalent
  ▪ Net Income / Number of Equivalent Workers
  This measures how well labor is used to generate net income.
  $8,199 per worker equivalent is average.

• Sales per Square Foot
  ▪ Total Sales / Sq. Ft. Production Space
  This establishes how well use is used to generate sales
  $14.00 is the average for NY Greenhouses

Production Efficiency Metrics

• Square Feet per Worker Equivalent
  ▪ Sq. Ft Production / Number of Equivalent Workers
  This is an indirect measure of worker efficiency / responsibility.
  8,502 sq. ft per FTE worker

• Greenhouse Area per Operator
  ▪ Total Sq. Ft. Space / Production Managers
  An indirect measure of how efficiently the greenhouse is managed
  1.2 FTE-Managers per 40,000 sq. ft operation
Sales and Marketing Metrics

Salesperson Performance

- Mike
- Roger
- Pam

Generated Sales $1,000

Year
Tracking Temporary Effects

- Southern Living Promotion
- Two Cool, Sunny Weekends
- Three rainy Weekends
- Rainy Weekends
- Drought / Watering Bans

Customer Metrics

- Units rejected by customer / week
- Customer complaints / week
- Follow-up customer contacts made
- Consecutive years as customer
- Percent of total sales per customer
Sales Metrics

• Percent New Customers
  Total new customers / Total customers that year
  This is a direct measure of customer base growth
  \( \frac{21}{74} = 28\% \) New Customers

• Percent Customers Dropped / Lost
  Total New Customers / Total Dropped Customers
  This is a direct measure of customer turnover.
  \( \frac{17}{74} = 22\% \) Customer Base Loss

Net Increase In Customer Base: 6%!

Sales Team Metrics

• New Contacts / Week
  ▪ Total number of new contacts / Number of weeks of sales event. … or number of sales weeks / year.
  This is a direct measure of sales team efficiency.

• Customer Value Ratio
  ▪ Number of Orders / Dollar Value of Orders
  This is an indirect assessment of overall customer value. You can also apply this metric on a per customer basis to evaluate customer base.
Marketing Metrics

• Market Impact (Sales per dollar spent)
  ▪ Total Sales / Market Program Costs
  Sum of advertising, sales expenses, etc. divided into total sales generated for that particular program. Track every event!

  Remember, a marketing program can be divided by market segment, product line, etc. You can track by segment to measure effectiveness that might not show up in overall market assessments!

Marketing Metrics

• Program contact efficiency
  ▪ Total program costs / # customers contacted

• Program customer yield
  ▪ Program costs per buying customer

• Program product yield
  ▪ Program costs / individual product line units sold
Marketing Metrics

- Sales per Worker Equivalent
  - Sq. Ft. Production Space / Number of Equivalent Workers
  This establishes how well use is used to generate sales
  $101,981.00 wholesale gross income / FTE

- Hired Labor Cost as Percent of Sales
  - Cost Of Labor / Total Sales Income
  This establishes how well use Labor is used to generate sales
  24.1% is average for NY Greenhouses.

Do You Track Shipping Costs, Routing & Driver Efficiency?

1. No, Don’t Have Time
2. Fuel Costs Only
3. Routes & Time
4. Driver Efficiency
5. Yes - All Three

Answer Number
Are My Shipping Costs In Line With Other Businesses?

The national average for shipping costs is 1.5% of Total Sales. In the greenhouse industry, we average between 2.0 and 2.5%.

What’s Included In Transportation Costs?

- Maintenance & Repairs
- Freight Bills
- Rental Fees
- Gas / Oil
- Driver Wages
- Insurance
- Licenses, Fees
- Tolls, Tickets
- Taxes
Transportation and Shipping Costs are Rising Rapidly

Total shipping costs have increased 87% in the last 5 Years, and predictions are that costs will increase another 30% in two years.

• Transportation Expense
  • Cost of Shipping and Transportation / Total Sales Income
    This establishes how well use transportation and shipping technology is used to generate sales
    2.0 % is average for NY Greenhouses.

Shipping Metrics

• Gallons fuel used / week / driver
• Miles off route distance / week / driver
• Percent on-time delivery / driver
• Percent follow up orders / driver
Shipping Metrics

- Route Efficiency
  - Dollars spent per mile
  - Dollars spent per unit load value
  - Load value per mile driven
  - Load value per hour driven
  - Number of client visits per day
  - Dollars spent per number clients on route.