

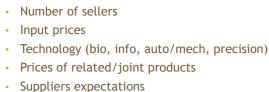


Dr. Charlie Hall Professor & Ellison Chair charliehall@tamu.edu

Green Industry Outlook

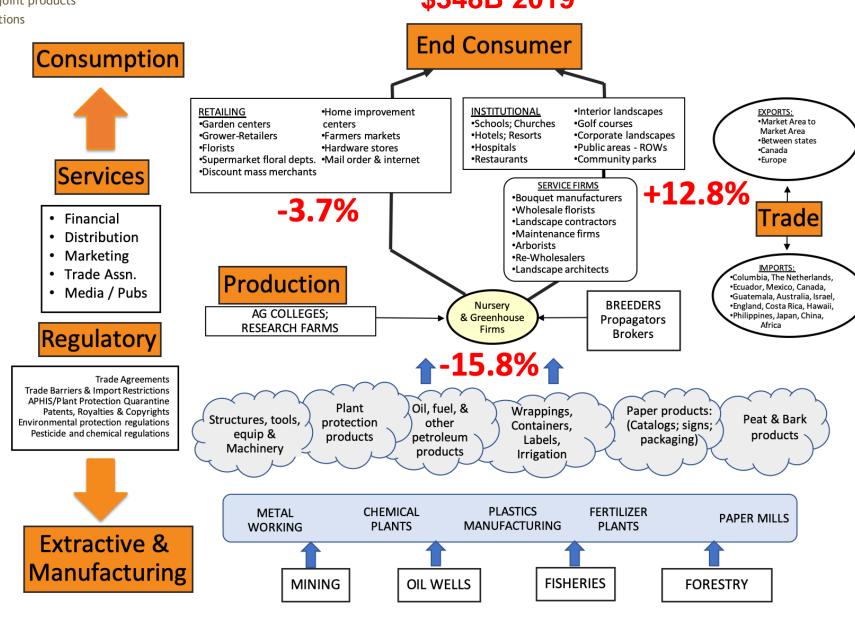
It is easy to lie with statistics. It is hard to tell the truth without them.

Andrejs Dunkels, mathematician, teacher, writer



Green industry supply chain \$348B 2019

- Size of market (population)
- Propensity to spend (income effects)
- Tastes and preferences
- Prices of related goods/services
- Consumer expectations
- Taxes or subsidies



Structural aspects

Mature stage
Consolidation
Shakeout
Hypercompetitive
Innovative

Issues

Consumers
Margins
Labor
Housing
Distribution
Economy

Your MarketMetrics, Grower Edition

Explore: Meet the Expert / What You Get / Pricing / Data & Metrics

https://yourmarketmetrics.com/



We've heard it for years: "the nursery & greenhouse industry needs better benchmarking data."

Your MarketMetrics will allow you to easily "see" how your company is doing compared to your peers, identify critical industry trends, and allow you to make meaningful business decisions to drive better profitability and financial stability.

Your MarketMetrics is online, private, visual, filterable ... and best of all, ACTIONABLE.

The project represents more than 50 nursery and greenhouse growers from across the US, representing more than \$1.3 B in aggregated annual production and data for more than 20 key business metrics going back to 2015. We onboard subscribers only twice annually, to enable them to get personalized service as they learn the reporting system.

Want a sample of the kind of info you'll get? Click HERE to download a complimentary "Index of Prices Paid By Growers" report to demonstrate the type of insights this program can generate to help you move your own productivity forward.

Current subscriptions are open from March 5 - May 30: join us today!

Your Industry Expert, Dr. Charlie Hall

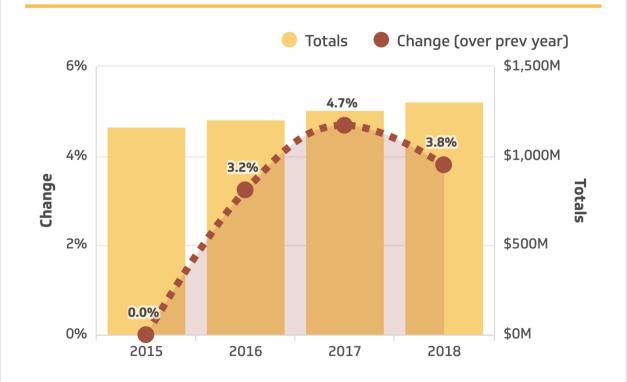
The Grower community within Your MarketMetrics is led by Dr. Charlie Hall, who grew up on a nursery in Western North Carolina. An economist by training, he is currently a Professor in the Department of Horticultural Sciences at Texas A&M University and holder of the Ellison Chair in International Floriculture. He is the lead faculty member of the Executive Academy for Growth & Leadership (EAGL), an exclusive certification program for industry-leading growers, and serves as the Chief Economist for AmericanHort. He is proud to shepherd and steward this critical industry data comparison initiative.



Aggregate Gross Sales

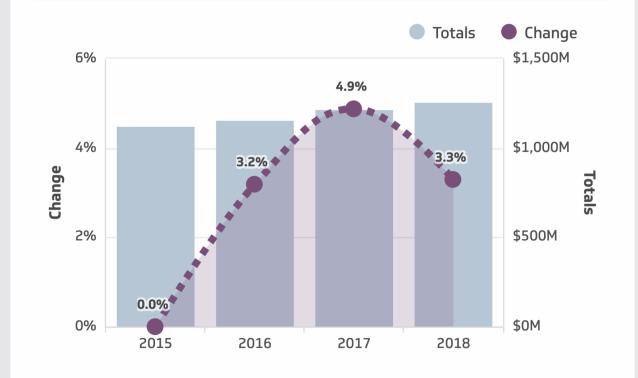
Dotted line = year over year change

Showing 50 firms with Firm Type equal to 'any' and Sales Volume equal to 'any'



Aggregate Net Sales

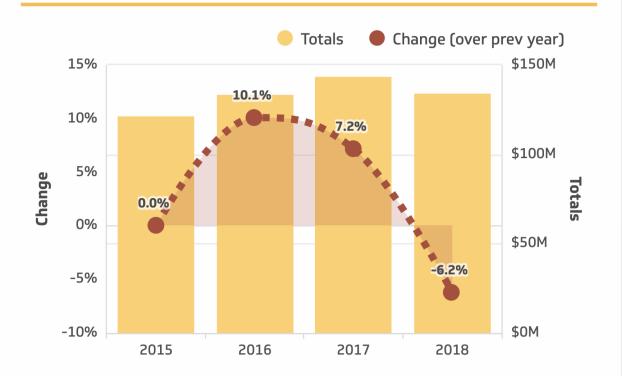
Dotted line = year over year change



Aggregate EBITDA Dollars

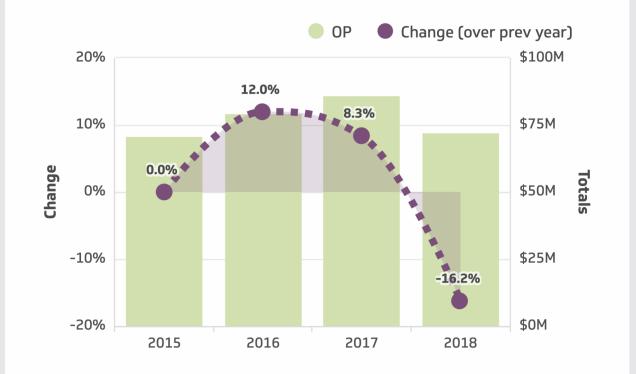
Dotted line = year over year change

Showing 50 firms with Firm Type equal to 'any' and Sales Volume equal to 'any'



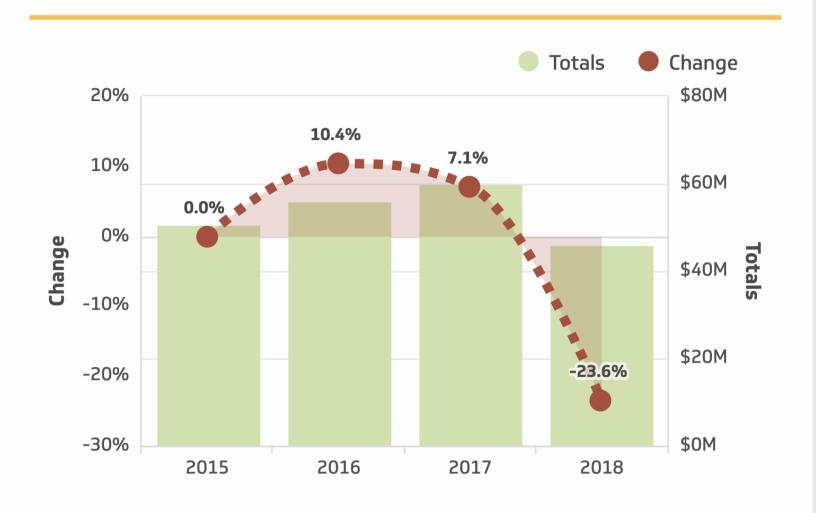
Aggregate Operating Profit Dollars

Dotted line = year over year change



Aggregate Net Profit Dollars

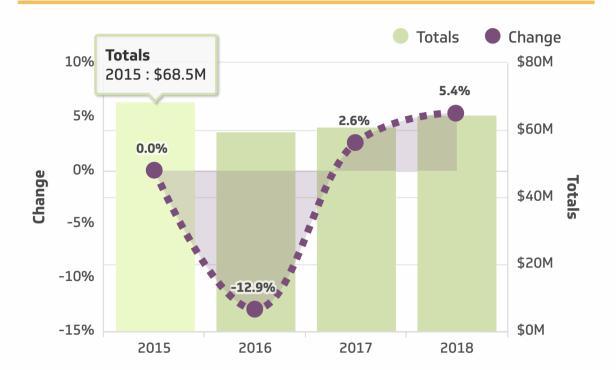
Dotted line = year over year change



Aggregate Shrink Dollars

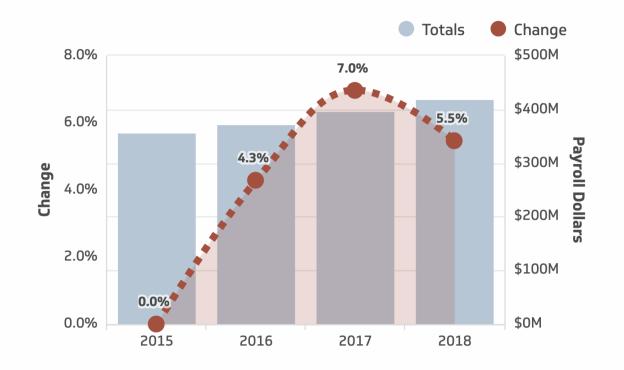
Dotted line = year over year change

Showing 50 firms with Firm Type equal to 'any' and Sales Volume equal to 'any'



Aggregate Payroll Dollars

(Aggregate Payroll including burden / Aggregate Net Sales)





2019 Index of prices paid by growers = 129.6



+2.49% YOY

Index of Prices Paid by Growers in the Green Industry, 2007-2019 (2007=100).

COST CATEGORY	WEIGHT	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Containers	7.09%	100	109.8	98.0	107.9	117.2	119.9	124.1	129.3	116.7	111.2	117.0	122.7	117.8
Media (peat-based)	3.94%	100	103.2	90.8	96.9	95.3	95.5	99.1	97.6	110.9	124.9	117.2	120.8	115.3
Propagation stock	23.62%	100	102.8	106.7	108.4	111.9	114.2	115.9	117.8	117.9	119.5	122.0	125.0	128.1
Plant protection products	1.57%	100	107.3	114.9	111.5	112.1	118.2	121.6	122.8	119.4	120.7	113.0	114.2	112.7
Fertilizers	1.57%	100	181.7	127.7	117.1	152.4	154.6	147.4	144.1	132.9	109.5	106.2	104.0	101.7
Labor (wages)	34.65%	100	103.7	108.1	110.5	111.7	113.2	118.0	121.3	123.4	128.3	131.4	133.3	141.6
Fuel/Energy	3.94%	100	130.2	86.6	107.4	137.2	136.2	135.0	134.3	87.1	76.3	91.1	98.8	94.7
Maintenance	3.15%	100	102.9	104.9	106.9	111.2	114.5	115.5	117.6	117.7	117.9	120.8	126.1	127.6
Freight and trucking	17.32%	100	101.4	97.1	98.2	103.2	105.8	107.7	114.0	118.3	116.7	119.5	129.6	130.5
POP, tags, labels, etc.	3.15%	100	109.8	98.0	107.9	117.2	119.9	124.1	129.3	116.7	111.2	117.0	122.7	117.8
Weighted index (2007=100)		100	106.0	103.6	107.0	111.8	113.8	116.7	119.9	118.5	119.5	122.5	126.8	129.6
YOY increase/decrease			6.00%	-2.25%	3.22%	4.55%	1.80%	2.55%	2.69%	-1.13%	0.85%	2.46%	3.53%	2.49%



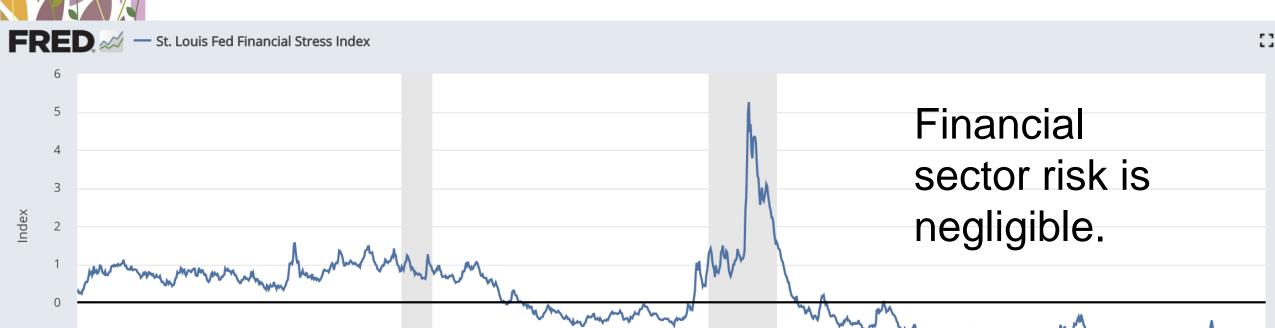
128 MONTHS



When will the next recession start?







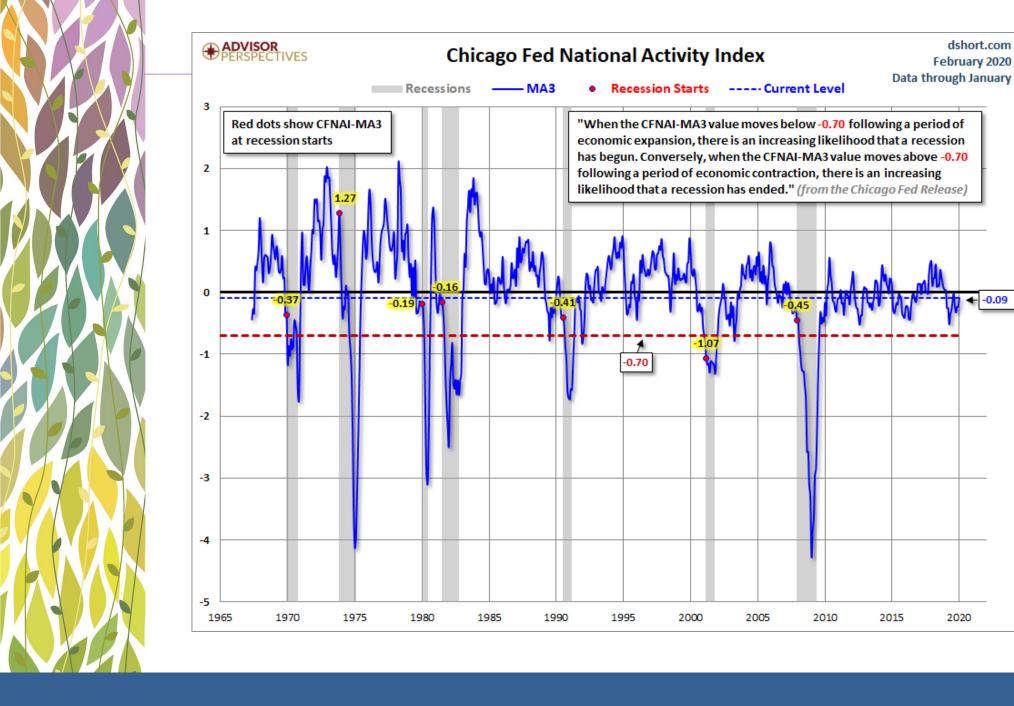
fred.stlouisfed.org

Shaded areas indicate U.S. recessions Source: Federal Reserve Bank of St. Louis



-1

-2



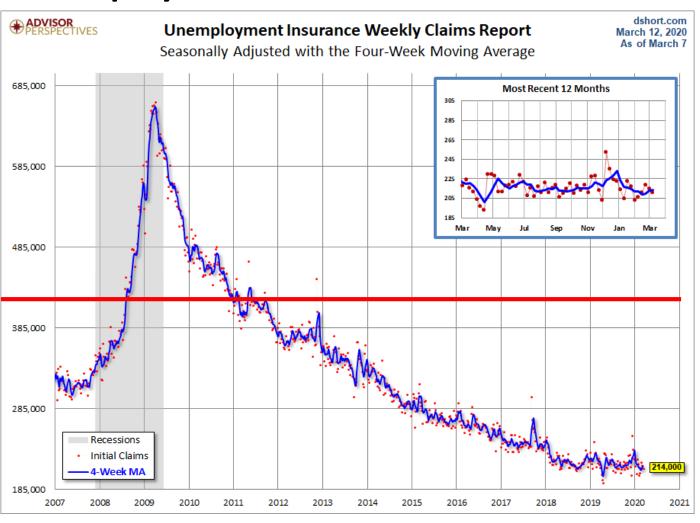
Growing slower than historic average.

dshort.com

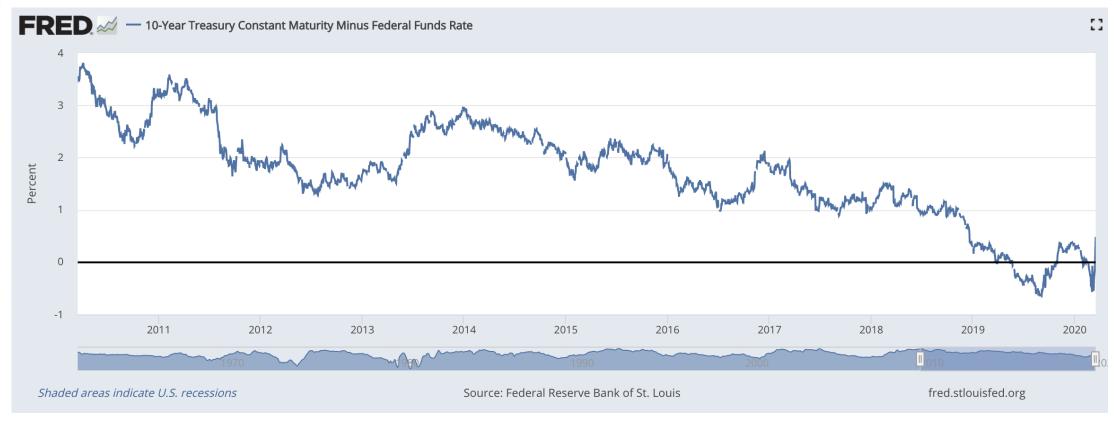
← -0.09

2020

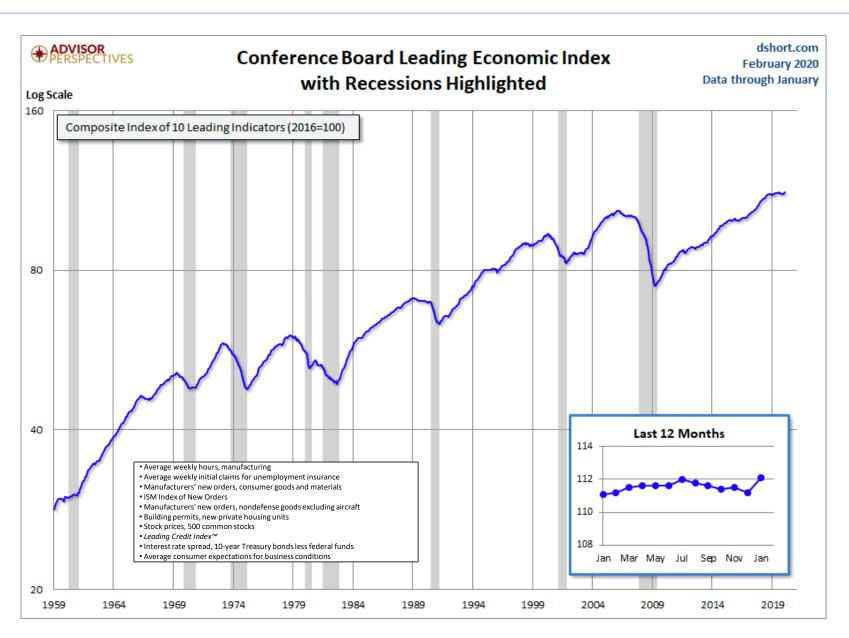
The unemployment rate is still in the safe zone.



The yield curve is now positive.







Leading economic index is flattening.



What could derail this outlook?

- Bubble bursting / Exogenous event(s).
- Monetary policy gone awry.
- Trade war effects.
- OPEC reneging on output deal.
- Recession in China/Europe.



When will the next recession start?



- 1. Though the data through February do not bear this out, we are likely already in recession.
- 2. It will likely be sharp, but short-lived with most impacts felt in Q2 and Q3 2020. Some estimate 18 months, however.



Do you have a contingency plan in place?

Now is the time to start implementing it!

- How prepared am I for the next downturn?
- What predetermined strategies should I have in place?
 - 1. Leveraged properly
 - 2. Working capital
 - 3. Lean / efficient
 - 4. Value proposition

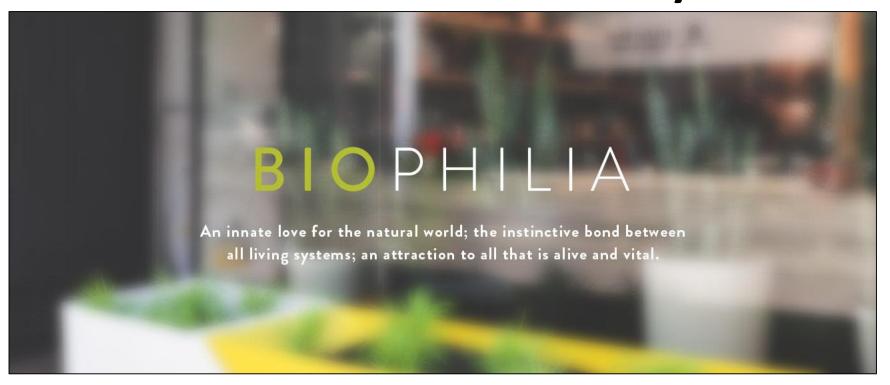
Your trade associations are also already at work on your behalf.







The Power of Plants in Every Life



ellisonchair.tamu.edu -- Benefits of Plants



Uncertainty

