

## CoStar Group (CSGP) – EQ Review

**We initiate earnings quality coverage of CSGP with a 4- rating (Acceptable).**

CoStar is a data and software company supporting several facets of commercial real estate. It routinely beats forecasts for adjusted EPS. However, adjusted EPS and adjusted EBITDA add back a number of routine costs at CoStar such as stock compensation and acquisition costs. On the surface, we think both figures are inflated – Adjusted EPS is \$10.18 on a trailing 4-quarters vs. reported EPS of \$8.49 (a 20% increase) and Adjusted EBITDA of \$503 million is 13% higher than reported EBITDA of \$445 million.

Half the assets at the end of September 30, 2019 were intangible and that should have increased with the recent closing of STR. Adjusting for the cash less \$450 million paid for STR since quarter-end, we arrive at a share price for CoStar of about \$620. On the inflated adjusted figures, it is trading for 61x EPS and 45x EBITDA. On top of that, organic growth has not been that high. CoStar reports dollar growth from net new subscribers and up-sales less cancels as between 4%-5% revenue growth. Without acquisitions, total revenue growth is often below 10% and until 2018 there has been minimal margin expansion. We point to the valuation only because if the stock price declines at some point, that can cause an impairment of intangible assets which, as noted, are more than half of total assets.

Our largest concern for earnings quality is recurring large acquisitions where the company typically does not expense over 70% of the cost and adds back anything it does amortize or incurs for integration. Management is incentivized to make acquisitions as it is paid on hitting revenue, EBITDA and income figures. By buying the growth and not expensing it rather than building and expensing cash costs as incurred – they are hitting targets. **It is tough to time acquisition-related problems and it is obvious CSGP is growing that way, which is why we are given it a 4 rating to start. Other issues for earnings quality are less material but are having some impacts on EPS. Plus, we believe 4Q18 set up 4Q19 results**

next month for a very tough comp and we have concerns if recent pricing power will hold – thus we are giving the company a minus rating for potential deterioration.

- **CoStar makes several acquisitions and they are expensive.** Deals routinely come in at over 20x EBITDA. Almost all deals are being paid for in cash and the total outlay for acquisitions of \$2.4 billion since 2012 exceeds the \$1.6 billion in cash from operations over that time. CoStar is funding the shortfall by issuing shares. Share count is up 20% since 2014.
- **Organic growth is closer to 10% from the reported 25% in many periods.** We adjusted for acquisitions and used some pro forma figures from the company to see several data points pointing to much slower growth. Also, net-gains on new contracts and upselling less cancellations is growing about 4%-5%.
- **Acquisition accounting is inflating income and EBITDA about 30% in our view.** Much of the acquired companies' costs are going to goodwill and not being amortized, yet the organic grown business has high daily wage cost that is expensed as incurred. The acquired intangibles are expensed over 2-3x the life of CSGP's other assets. Just adjusting figures to include a 3-year expensing of acquired assets would cut 30% off EPS and EBITDA.
- **It is difficult to point to timing on when the market may care about growth through acquisition at any company – and we do not have a catalyst.** However, we think it is important for investors to realize the size of the issue and how much air could be let out of the balloon if an impairment does occur or the market demands more organic growth.
- **Management has an incentive to do more acquisitions.** Their compensation is tied to metrics that are inflated when costs are not amortized or expensed as incurred. They also have long-term revenue targets they may not reach without deals. They are not penalized for issuing stock either as targets are not tied to EPS. The company has said it continues to see its growth path bolstered with more acquisitions.
- **CoStar beats forecasts often – but has a few areas that may be helping in the accounting.** ASC 606 added 19-cents to 2018 results. The company lengthened its depreciation life for computers and software in 2018 and we believe that may have added 13-cents. Bad debt reserves have dropped from 15% to 5% in recent years – every 100bp is about 2-cents.

- **Watch out for a tough comp for 4Q19 after issues from 4Q18.** CoStar cheered hitting an adjusted 44% EBITDA margin in 4Q18 but gave little guidance toward getting there. It picked up considerable margin gains by having personnel costs rise through the first three quarters of 2018 and then suddenly decline in 4Q18. In 2019, these margins are flat y/y. It also benefited from marketing costs growing in the first three quarters of 2018 and falling in 4Q18. All in all, we can see 600-800bp of margin gains that appeared in 4Q18 and do not seem to have held.
- **How sustainable are recent margin gains?** With all the acquisitions and promised synergies, CoStar should be seeing margin improvements plus gaining some operating leverage too. Very little happened until 2018. We accept margin gains in G&A leveraging, but also see about 200bp from marketing costs falling as a percentage of sales. For several years of results, CSGP has touted the need to keep customers by offering more content and features and never talked of taking pricing. In 2019, gross margin is up about 200bp and a key reason is pricing. Will that hold? Or will competitive pressures return it to historic levels?

## Acquisitions Are Expensive and Recur Frequently

CoStar does not make an acquisition every year, but normally does and many are sizeable. The total cost is often outweighing the cash flow model's ability to pay:

CSGP	<u>2019 ytd</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>
Cash Ops	\$350.0	\$335.4	\$234.7	\$200.6	\$131.2	\$143.9	\$108.3	\$86.1
Cap. Exp.	\$44.2	\$29.6	\$24.5	\$18.8	\$35.1	\$27.4	\$19.0	\$14.8
Acquisitions	<u>\$13.7</u>	<u>\$454.8</u>	<u>\$47.8</u>	<u>\$10.4</u>	<u>\$182.3</u>	<u>\$584.2</u>	<u>\$0.0</u>	<u>\$640.4</u>
Free Cash	\$292.1	-\$149.0	\$162.4	\$171.4	-\$86.2	-\$467.7	\$89.3	-\$569.1

•In 2019, the company spent \$450 million on another deal so free cash flow may come in negative.

•In 2018, \$36.4 million of acquisitions were paid for with stock, we added that to the \$454.8 million shown.

Just adding up these years, CoStar has had \$1.6 billion in cash from operations from 2012 through September 2019. Against that, acquisitions have totaled \$2.4 billion including STR completed in 4Q19. Total assets are only \$3.7 billion. It has paid the shortfall by borrowing money and then issuing more shares to retire the debt. In 2011, 2014, and 2017, the company raised \$1.6 billion in secondary offerings.

Also, not only were the dollars spent high, the multiples of sales and EBITDA were high also. Here is a list of the major deals, we are leaving out smaller deals like Cozy for \$65 million, Realla for \$15 million and Off-Campus for \$16 million where details are more sparse.

Acquisitions	Cost	Rev.	EBITDA	P/Rev	P/EBITDA	Goodwill %	Intang %
Loopnet 2012	\$884	\$85	\$28	10.4	31.6	71%	19%
Apartmts.com 2014	\$585	\$86	\$28	6.8	20.9	72%	26%
Apt. Finder 2015	\$173	\$79	\$23	2.2	7.5	62%	30%
For Rent 2018	\$376	\$100	\$15	3.8	25.1	71%	38%
STR 2019	\$450	\$64	\$16	7.0	28.1	n/a	n/a

CSGP consistently pays over 20x EBITDA for deals and is allocating over 90% to goodwill and intangible assets.

## Organic Growth Is Much Slower without these Acquisitions

The company touts its revenue growth figures with acquisitions helping drive growth:

Rev. Growth	2019 ytd	2018	2017	2016	2015	2014	2013	2012
Reported Rev.	\$1,025	\$1,192	\$965	\$838	\$712	\$576	\$441	\$350
Reported Growth	17.0%	23.5%	15.2%	17.7%	23.6%	30.6%	26.0%	39.0%
Proforma Growth	n/a	12.9%	n/a	n/a	n/a	13.6%	n/a	14.1%
Adjusted for Acq.	15.2%	n/a	n/a	8.7%	9.0%	13.2%	10.9%	15.1%
New Contract/Upsale Growth	4.9%	4.2%	4.5%	1.9%	4.1%	3.0%	n/a	n/a

- In some periods after a large acquisition, CSGP gives two years of pro forma revenues as if the large acquisition had been in place for 24 months. This pro forma table does not include impacts of smaller deals that may have happened, and we only found this table in 3 years.
- In nearly all periods, CSGP calls out acquisition growth in the MD&A section as key driver. They did not quantify the acquisition impact in dollars in 2018 or 2017. We subtracted the impact where provided and divided by prior year growth for the line Adjusted for Acq.

- The company provides a revenue figure for most years that is New Subscription contracts plus up-sales on existing contracts less write-downs and canceled revenues. This revenue figure is about \$50 million of late and we tracked that growth too as another indicator of organic growth.

We think all of this should be viewed within the big picture and not on any one year. What is clear to us, is CSGP is not really growing at 25%-30% per year. Simply adjusting for acquisitions shows growth is closer to 10%-15% and net-new contracts and upselling is growing about 4%.

This is important because the company laid out a target to reach \$2.85 billion in sales for three years combined and beat that figure with \$3.0 billion for 2016-18. There is no way that goal was reached without sizeable acquisitions, in our opinion.

## Acquisition Accounting Inflates Income and EBITDA

The basic business model for CoStar involves a high level of footwork. There is much more here than designing websites. The R&D people are designing new features and products for customers as well as updating those systems to work more efficiently and easily for customers. There are also workers who gather data related to available property for sale or lease, various prices, recent transactions, the amount of vacancy in an area, what may be coming available, as well as taking pictures of properties and surrounding areas to load into the data base. There is a sales staff looking for customers to use the data base and train them how to use it. They are also looking for people to advertise on the various websites to further monetize the assets as well as preparing CSGP's own advertising efforts.

The key point is building and maintaining the business is more expensive than many may think. The operating margin is about 20%-25% after paying all the employees to build and update the databases and sell them to new and existing customers as well as covering marketing, travel, and equipment. Plus, as we noted above, building internally happens more slowly than the growth rate being touted.

We have three primary concerns with CSGP's growth through acquisition:

- It would have been possible to build much of it internally, which would have meant full expensing – yet clearly the acquisitions consumed cash too but are not impacting earnings.
- Even the intangibles being amortized are being expensed over 9-13 years and then added back to adjusted results as though they didn't happen. Regular assets being depreciated at CSGP are being expensed faster, hurt earnings, and there is more capital spending.
- Even assuming these acquired business costs were largely expensed over 3-years instead of immediately – margins and earnings levels would be materially lower.

Under CSGP's Plant and Equipment Depreciation Schedule, here are the average lives:

<u>Depreciation Assumptions</u>	<u>Estimated Life</u>
Leasehold Improvements	Term or useful life
Furniture - Equipment	5-10 years
Vehicles	5-10 years
Computer Equip/Software	3-5 years

However, CoStar is capitalizing most of the acquisition costs into Goodwill and most of the rest into intangible assets that are being amortized over longer periods:

<u>Acquisitions</u>	<u>Cost</u>	<u>Goodwill</u>	<u>Trade Names</u>	<u>Est Life</u>	<u>Customers</u>	<u>Est Life</u>
Loopnet 2012	\$884	\$625	\$49	Indef.	\$72	10 yrs
Apartmts.com 2014	\$585	\$422	\$72	13 yrs	\$70	10 yrs
Apt. Finder 2015	\$173	\$108	\$24	10 yrs	\$22	10 yrs
For Rent 2018	\$376	\$267	\$63*	10 yrs	\$63*	10 yrs

In the case of Loopnet, CoStar is not amortizing the trade names at all. For Rent did not break down the amounts to each category – we assumed 90% of intangibles split between those two buckets and both had the same amortization life assumption according to CoStar. We believe a strong case could be made that the amortization lives are at least double what CoStar is expensing other capitalized assets. It is adding this figure back for both adjusted EBITDA and non-GAAP EPS.

If the cost of acquisitions was being expensed over even 3-years rather than immediately, there would still be a sizeable hit to EBITDA and margins. Here we amortized the growth in goodwill over the next three years, starting with the year after the acquisition:

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>
Goodwill Bal.	\$1,612	\$1,284	\$1,254	\$1,253	\$1,139	\$719	\$718	\$92
Growth in GW	\$328	\$29		\$115	\$420		\$626	
2011 Amortiz.					\$31	\$31	\$31	
2012 Amortiz.				\$209	\$209	\$209		
2014 Amortiz.		\$140	\$140	\$140				
2015 Amortiz.	\$38	\$38	\$38					
2017 Amort.	<u>\$10</u>							
Pro forma Amort. Of GW	\$48	\$178	\$178	\$349	\$240	\$240	\$31	

We are going to treat this as a cash expense and not add it back for EBITDA as we already showed that the company spent \$2.4 billion on acquisitions against \$1.6 billion in operating cash flow above. If this was the case, CoStar would have seen negative or very modest EBITDA for the years 2012-17.

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>
EBITDA	\$351	\$238	\$215	\$90	\$151	\$94	\$60
Amtz. of Intangibles *	\$52	\$37	\$46	\$59	\$55	\$28	\$23
3-Year Amort GW.	<u>\$48</u>	<u>\$178</u>	<u>\$178</u>	<u>\$349</u>	<u>\$240</u>	<u>\$240</u>	<u>\$31</u>
BTN EBITDA	\$251	\$23	-\$9	-\$318	-\$144	-\$174	\$6
EBITDA Margin	29.5%	24.6%	25.7%	12.6%	26.3%	21.3%	17.1%
BTN Margin	21.1%	2.3%	-1.2%	-44.7%	-24.8%	-39.2%	1.7%

• *This still uses the amortization of other intangibles at the reported 10-13 year rate*

The table does not have the 2018 goodwill being amortized at all yet – which includes For Rent and a collection of smaller deals. Nor does it have the 2019 goodwill for STR yet. So, the modest improvement of expensing on 2018 would likely be short-lived. The company also states that it will continue this growth through acquisition approach – from the 10-K:

*“Our future capital requirements will depend on many factors, including, among others, our operating results, expansion and integration efforts, and our level of acquisition activity or other strategic transactions. **To date, we have grown in part by acquiring other companies, and we expect to continue to make acquisitions.** Any future acquisitions may vary in size and could be material to our current operations.*

*We may use cash, stock, debt or other means of funding to make any future acquisitions.”*

To us there are there is a potential problem here. The company’s growth model has demonstrated that has been cash flow negative taking all cash payments into account. That may become more difficult to maintain going forward. However, its stock valuation should be heavily influenced by the reported growth rate for revenues and earnings. Without acquisitions, the growth rate may be less than half the reported figures. If they don’t do more deals, the stock could fall based on lower growth and that may trigger impairments for all these intangibles.

We cannot time this risk and it may never materialize. However, we would point out that with the stock trading for over 60x adjusted EPS and 45x adjusted EBITDA, investors should be aware of how much inflation is actually in these figures due to management assumptions regarding buying assets vs. developing them:

	<u>3Q19</u>	<u>2Q19</u>	<u>1Q19</u>	<u>4Q18</u>	<u>Total</u>
2018 Goodwill	\$27.3	\$27.3	\$27.3		\$81.9
2017 Goodwill	\$2.4	\$2.4	\$2.4	\$2.4	\$9.6
2015 Goodwill				\$9.6	\$9.6
Intangible Amtz.	<u>\$12.5</u>	<u>\$12.2</u>	<u>\$13.2</u>	<u>\$13.3</u>	<u>\$51.2</u>
Acq. Expensing	\$42.2	\$41.9	\$42.9	\$25.3	\$152.3
Net of 25% tax	\$31.7	\$31.4	\$32.2	\$19.0	\$114.2
CSGP Non-GAAP Inc.	\$95.7	\$81.5	\$92.4	\$102.3	\$371.9
BTN Non-GAAP Inc.	\$64.1	\$50.1	\$60.2	\$83.3	\$257.7
CSGP Non-GAAP EPS	\$2.61	\$2.23	\$2.53	\$2.81	<b>\$10.18</b>
BTN Non-GAAP EPS	\$1.74	\$1.37	\$1.64	\$2.28	<b>\$7.03</b>

	<u>3Q19</u>	<u>2Q19</u>	<u>1Q19</u>	<u>4Q18</u>	<u>Total</u>
CSGP Adj. EBITDA	\$129.2	\$110.0	\$125.5	\$139.0	<b>\$503.7</b>
Acq. Expensing	<u>\$42.2</u>	<u>\$41.9</u>	<u>\$42.9</u>	<u>\$25.3</u>	<u>\$152.3</u>
BTN Adj. EBITDA	\$87.0	\$68.1	\$82.6	\$113.7	<b>\$351.4</b>

In both cases, the policy for not accounting for the cost of acquisitions is generating 30% of EPS and EBITDA. The P/E may really be closer to 90x. It may take another event to draw attention to this area as there are not goodwill cops, but we think there is the potential for this to become an accelerator on bad news. Don’t forget, they also add back stock compensation to EPS too which for the trailing 12 months is another \$1.05 of non-GAAP



EPS. It would push our figure down to essentially \$6 per share with 40% inflation due to adjustment assumptions.

## Management Has Incentives to Make More Acquisitions

Looking at the proxy – company officers have variable compensation for 80%-90% of their pay tied to hitting performance targets. The primary targets are net income and EBITDA (both adjusted for litigation charges but not stock compensation). Net income has no expensing of goodwill, and only the amortization of other intangible assets vs. immediate expensing of other operating costs to grow the business. The more acquisitions with high levels of goodwill – the more income rises.

EBITDA adds back even the amortization of the other intangibles and does not include the costs in the investing section of cash flow. EBITDA growth via acquisition has essentially no cost under the formula. The compensation tests are not tied to EPS or other per-share ratios either. **Even though the share count has risen by 20% since 2014, that doesn't impact the target metrics of Net Income and EBITDA. Why pay with debt? Interest expense would hurt Net Income – issuing shares has no cost on the metrics.**

**A long term incentive metric is a three-year cumulative revenue target. This is important to consider too as it pertains to acquisitions.** The Net Income and EBITDA targets can be reset more frequently and would be after an acquisition. The three year cumulative revenue target would be set before many deals are even announced. **We think it gives management an incentive to be looking for more targets to buy. In 2018, the three-year target was \$2.85 billion, and the company hit \$3.0 billion. Could they have reached that target without buying For Rent in 2018 plus five other smaller companies in 2017 and 2018 (Realla, Cozy, Landwatch, Koa Lei, and Screening Process)?**

## Accounting Issues Influencing Margins and EPS

In 2018, the company adopted ASC 606 which had the effect of capitalizing some sales commissions and deferring some revenue. The bulk of the company's contracts are one-year or less. Thus, we view this as basically a one-time event and the level of deferred commissions has really not changed much. However, in 2018 this had the effect of boosting

sales by \$4 million and lowering selling expenses by \$5 million. The net impact for 2018 was a boost of \$0.19 in EPS and 50bp in margins.

**There is concern on depreciation as the level has stalled even though the company is growing** with acquisitions. This could be a sign that the company is using older equipment and may see a spike in catch-up spending on PP&E. Net PP&E has declined for several years too:

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Depreciation	\$26	\$26	\$24	\$24	\$15
Net PP&E	\$83	\$85	\$88	\$88	\$74
Deprc % sales	2.2%	2.7%	2.9%	2.8%	2.6%

We understand that office furniture may not need to be replaced after it is fully depreciated. But this is still a company dealing with a fair amount of technology that has more than doubled sales since 2014. Yet its net PP&E figure is declining and is not much higher than 2014. **They are also benefiting on EPS from the flat depreciation. Every 0.5% of sales is 13-cents in annual EPS (at a 25% tax rate).** It is also worth noting that CSGP changed its depreciation policy in 2018 to depreciate computer hardware and software over 3-5 years from 2-5 years in the prior periods. That coincided with a 0.5% of sales drop in depreciation.

**We see little concern over receivable DSOs.** They are at a small figure and have been holding in a tight range of 22-26 days. Having a quarter end on the weekend or an acquisition can skew that a couple days too – so we see no problems there.

**On bad debt reserves, CSGP has seen the level of reserves plummet in recent years.** In 2015, the reserve was 15.7%. It ranged between 11%-15% from 2012-2016 and didn't drop below 10% until 2018. The current rate is only 5.1%. We think the company has seen a history of customers either not paying or getting a discount on bill. **At the company's current size, 100bp of bad debt reserve is \$1 million. That is 2-cents in EPS per year.** Against the \$10.18 adjusted non-GAAP EPS figure, that doesn't sound very large, but it can help with beating or missing forecasts if the company picks up 4-6 cents in this area.

**Watch out for the tough comp of 4Q18.** That was the quarter when management touted hitting the goal of 40%+ on adjusted EBITDA margins. They actually hit 44% for the quarter which came out of nowhere. Management did not guide to level at all, its forecast of \$125-\$129 million in adjusted EBITDA would have come in just a hair under 40%. Here were the areas of improvement for margins:

	<u>4Q18</u>	<u>4Q17</u>	<u>2018</u>	<u>2017</u>
Gross Margin	78.4%	77.0%	77.4%	77.2%
Selling Exp	21.9%	30.5%	30.2%	33.0%
Software Dev.	8.1%	8.6%	8.5%	9.2%
G&A Exp.	<u>12.4%</u>	<u>16.4%</u>	<u>13.1%</u>	<u>15.1%</u>
Op. Margin	36.0%	21.5%	25.6%	19.9%

The biggest areas of change came in Selling & G&A expenses. Look at some of the changes in costs for the first three quarters of 2018 against the full year of 2018 to isolate 4Q18:

- Selling costs were up \$50mm through 3Q, yet only rose \$42mm for all of 2018
- Personnel cost rose \$22mm through 3Q, it rose \$14mm for all of 2018 = 4Q they fell \$8mm
- Marketing rose \$22mm through 3Q, it rose \$21mm for all of 2018 = 4Q the fell \$1mm
- G&A costs rose \$13mm through 3Q, and rose only \$11mm in 2018
- Personnel at G&A rose \$8mm through 3Q, rose only \$1mm in 4Q
- Professional fees at G&A fell \$2mm through 3Q, fell \$4mm more in 4Q
- Legal costs were not called out through 3Q, fell \$9mm in 4Q

Looking just at the personnel costs and marketing – that’s about \$19-\$26 million in short-term changes that added 600-800bp to margins in 4Q18. We say short-term because **CSGP** already has been investing more in those areas again with selling expenses as a percentage of sales largely flat in 2019. The company also made another acquisition in 4Q19 – the professional and legal costs could return and may be another 200-300bp of headwind.

## Shouldn't Margins Have Been Growing Before 2018?

When CoStar bought several of these companies, it laid out a plan to achieve \$20 million in synergies with each one within two years of closing. Some the forecast was to boost margins to 40% also. On top of that, these companies had some decent margin to being with at the time of the deal:

	<u>Sales</u>	<u>EBITDA</u>	<u>Margin</u>
For Rent	\$100	\$15	15%
Apt. Finder	\$79	\$23	29%
Apts.com	\$86	\$28	33%
Loopnet	\$21	\$7	33%

If these companies were growing at 10%-15% too – the acquired EBITDA of \$73 million should have grown at least 50% by now based on higher sales plus \$80 million on synergies – would be close to \$200 million in additional EBITDA now than when this started. Plus, of course, CSGP’s own organic growth. Also, with similar businesses allowing duplicate costs to be cut – costs should leverage here too on fast revenue growth. This hasn’t really been the case here until 2018:

	<u>9 mths 19</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
EBITDA	\$320	\$351	\$238	\$215	\$90	\$151
Adj. EBITDA	\$365	\$418	\$280	\$256	\$136	\$189
EBITDA margin	31.0%	29.5%	24.6%	25.7%	12.6%	26.3%
Adj margin	35.6%	35.1%	29.0%	30.5%	19.1%	32.7%

In 2015, the company spent heavily on marketing to drive traffic to websites. Selling expenses went to 42.5% of sales from 26% in 2014. That was a one-time event. Adjusting for that, margins were flat for years and results were driven by buying sales with acquisitions.

In 2018, several things helped results jump up and that continued in 2019. We mentioned the ASC 606 change in 2018 above helping out. We will also give the company credit for leveraging G&A costs and some other overhead. Costs there can move based on legal work, integration costs, and other items related to acquisitions and **CSGP** has picked up about 200-300bp of margin gains there:

	<u>9 mths 19</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Gross Margin	79%	77%	77%	79%	74%	73%
Selling Cost	30%	30%	33%	35%	43%	26%
Software	9%	8%	9%	9%	9%	10%
G&A Cost	12%	13%	15%	15%	16%	18%

In selling costs, this has seen some leverage too, but the bigger change has been lower marketing spending overall:

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Marketing \$	\$124	\$104	\$109	\$132	\$29
Marketing %	10%	11%	13%	19%	5%

This is another warning for 4Q's tough comp. It appears that even picking up 200bp of margin gains from lower advertising as a percentage of sales, it is still seeing wage growth match or exceed sales growth to offset the marketing leverage. Margins overall are flat this year in that area.

Gross margin is interesting because it has been about 77% of late except for 2016 and 2019. In 2016, the company highlighted that moved customers to some more profitable offerings. In 2019, the company said it raised prices to help sales growth and that normally helps margin too. That is the first time we saw the company talking about pricing at all. They have added about 200bp to margin there this year. Will that hold? Much of the discussion from CSGP is that it must continue to add more content and services to retain clients – taking pricing sounds tough. If it does not hold, margins could come under pressure because the rate of change to operating leverage in other areas appears to have slowed.

## Explanation of EQ Rating Scale

6- "Exceptionally Strong"	Indicates uncommonly conservative accounting policies to the point that revenue and earnings are essentially understated relative to the company's peers. Higher possibility of reporting positive earnings surprises
5- "Strong"	Indicates the company has no areas of concern with its reported results and we see very little risk of the company disappointing due to recent results being overstated from aggressive reporting in recent periods.
4- "Acceptable"	Indicates the company may have exhibited a minor "red flag", but the severity of the issue is not yet a concern. Minimal risk of an earnings disappointment resulting from previous earnings or cash flow overstatement
3- "Minor Concern"	Indicates the company has exhibited either a larger number of or more serious warning signs than companies receiving a 4. The likelihood of an immediate earnings or cash flow disappointment is not considered to be high, but the signs mentioned deserve a higher degree of attention in the future.
2- "Weak"	Indicates the company's recently reported results have benefitted materially from aggressive accounting. Follow up work should be performed to determine the nature and extent of the problem. There is a possibility that upcoming results could disappoint as the impact of unsustainable benefits disappears.
1- "Strong Concerns"	Indicates that the company's recent results are significantly overstated and that we view a disappointment in upcoming quarters is highly likely.

In addition to the numerical rating, the EQ Review Rating may also include either a minus or plus sign. A minus sign indicates that our analysis shows the overall earnings quality of the company has worsened since the last review and there is a possibility the numerical rating will fall should the problem continue into the next quarter. Likewise, a positive sign indicates that the overall earnings quality is improving, and the company may see an upgrade in its numerical rating should the trend continue.

### Key Points to Understand About the EQ Score

**The EQ Review Rating is much more than a blind, quantitative scoring method.** While we utilize proprietary adjustments, ratios, and methods developed over decades of earnings quality analysis, the foundation of all of our analysis is reading recent SEC filings, press releases, conference call transcripts and in some cases, conversations with managements.

**The EQ Review Rating is not comparable to a traditional buy/sell rating.** The Rating is intended to specifically convey the extent to which reported earnings may be over/understated. Fundamental factors such as forecasts for future growth, increasing competition, and valuation are not reflected in the rating. Therefore, a high score does not in itself indicate a company is a buy but rather indicates that recent results are a good indication of the underlying earnings and cash generation capacity of the company. A low score (1-2) will likely result in us performing a more thorough review of fundamental factors to determine if the company warrants a full-blown sell recommendation.

## Disclosure

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