Tyler Technologies, Inc. (TYL)
Municipalities Starting to Feel the COVID Crisis

While we continue to view Tyler as one of the best positioned vertical software companies longer term - and ultimately a beneficiary of changes stemming from COVID-19 - we are more cautious near term given the emerging severe pressures on local/municipal budgets. While large cities can avail themselves of CARES Act funding, this is not available to small/medium entities, which are the majority of TYL customers. Investors appear to be looking through the near term given current valuation (all-time high), which we think represents some risk even with TYL’s withdrawn 2020 guide.

- Beginning to see the impact of COVID-19 related shutdown ripple through local/municipal governments budget planning processes. This will likely weigh on new project spending well into 2021 and potentially even 2022 as local governments project meaningfully lower revenues from sales/property taxes and fees.
- According to a recent survey from CTIA’s Public Technology Group, 51% of city and county CIOs expect budget cuts this year. While this reflects the important role IT currently plays, respondents note that they wouldn’t see the full impact for at least a year as budgets set now roll through into 2021.
- According to multiple media sources, 1 million local government employees were laid off in April.
- CARES Act funds allocated for local/municipal are earmarked for the largest cities, which are not the primary customer for TYL. San Diego, for example, which received $248M in aid, is one of only six municipalities in California to get such assistance.
- Some local entities are already calling for cuts to public safety budgets - recent examples are Palo Alto, CA, Riverside, CA, and New Haven, CT. This could weigh on New World’s business, which tends to be more large deal/perpetual license.
- We learned one of TYL’s main private competitors serving smaller localities is doing layoffs to brace for the current environment. While we are believers in TYL’s view that the current crisis can allow it to create further distance vs. the competition (as it did in the great recession), near/medium-term pain could be more acute.
- The bi-partisan Smart Act legislation would provide $500B in emergency funding to local governments and would clearly be a positive for the sector, but it remains too early to tell if that will pass. Republicans to-date have opposed more spending packages. As written, the bill would allocate funding proportionate to COVID-19 infection rates and budgets.
- Valuation. Currently trading at 67x NTM P/E and compares to one-year average 48x and five-year average 44x. We believe this valuation represents optimism around longer-term prospects and local governments ultimately accelerating moves to digital processes once budgets come back.
- Moving to subscription. In addition to acknowledging that TYL is a best-in-class vertical software company that will benefit longer term from COVID, we also believe the business model shifting to subscription could mitigate the risk relative to 2008/09 period.

Tyler Technologies is a leading vertical software provider of end-to-end solutions for local governments and public sector clients.

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Please refer to Appendix - Important Disclosures and Analyst Certification
Investment Thesis

- **Our price target is $320.** We derive this price target by applying a 59x multiple to our 2020E EPS estimate (also implies 54x 2021E). Our 59x forward P/FCF multiple compares to the five-year average NTM P/E that TYL has seen over the past half-decade (five-year average = 43x, range of 33x-59x, +1/-1 std dev 48x/38x). We believe this multiple is warranted due to: 1) TYL is the largest player in a fragmented market (selling software to state and local governments); 2) opportunity to replace antiquated systems; 3) consistent top-line and earnings grower over the past decade; and 4) strong management team.

- **Large market, modest penetration, significant opportunity ahead.** TYL has a long runway of growth in an end market with antiquated technology and a need to move to digital.

- **Very strong competitive positioning.** TYL has a singular focus on public sector (primarily local government) with scale both geographically (national presence) and in its product suite (end-to-end offering). These serve as high barriers to entry versus competitors who primarily compete only geographically region or with a point solution.

- **Powerful business model.** Tyler’s financial profile includes double-digit revenue growth, ~20% EPS growth, >20% cash flow growth, and ~150bps of average annual EBIT margin expansion.

- **Ability to expand TAM.** Vertical software companies are uniquely positioned to understand the problems their customers face because they understand their businesses very well. TYL has proven its ability to acquire smaller competitors/point solutions and expand TAM effectively.

- **Sticky software that rarely gets replaced.** TYL has retention rates of 98%+, which is best-in-class in the software sector. Over time, this highly recurring and highly profitable business model will help expand margins and drive future growth.

- **Strong management team.** Management team has years of experience at TYL (CEO and CFO each joined in 1998, and 1997, respectively) and understands how to run a company for the long term.

Risks & Caveats

- **Sales cycles tend to be long.** In many cases Tyler is replacing a home-grown or unsupported system, and the average local government agency may take 9+ months to decide whether to “kick the can down the road” or replace its old system with a more modern one.

- **Potential budgetary constraints from macroeconomic weakness.** TYL is tied to the local government market, which is heavily funded by tax receipts. Any macroeconomic weakness could create budgetary constraints which could stall new business (i.e., 2008 housing crisis)

- **Valuation.** TYL has always commanded a premium valuation given its predictable business model and sticky nature of state and local government software contracts.

- **Acquisition strategy.** Acquisitions are clearly a positive for TYL and a bullish part of the thesis, but these acquisitions also represent a risk. Integration is needed to make these products work more cohesively as a suite, and any inability to execute on integration can cause a slip up. One possible example is the New World acquisition, which meaningfully expanded TYL’s TAM into an adjacent area, but also presented some challenges in integration and forecasting.

- **Cloud/subscription.** The majority of TYL’s business is still on-premise. Hosted offerings are not true multi-tenant SaaS as seen with other software vendors. While we don’t believe the move to cloud computing puts Tyler’s customer base at risk (i.e., cloud won’t create new competitors), we do believe this creates business model risk as the company is forced to shift its pricing models and perhaps step up R&D investment dollars to maintain a level of innovation.
- **Reputation risk.** If any system were to experience a major failure, hack, or high-profile error it could create an opening for competitors if customers were ever to lose confidence in TYL as the market leading vendor.

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**Company Description**

Tyler Technologies is a leading vertical software provider of end-to-end solutions for local governments and public sector clients. Tyler operates through two segments, Enterprise Software, and Appraisal and Tax. The company’s financial management solutions include modular fund accounting systems for government agencies and not-for-profit entities; and utility billing systems for the billing and collection of metered and non-metered services. It also offers products to automate various city functions, such as municipal courts, parking tickets, equipment and project costing, animal and business licenses, permits and inspections, code enforcement, citizen complaint tracking, ambulance billing, fleet maintenance, and cemetery records management; and student information and transportation solutions for K-12 schools. Tyler was founded in 1966 and is headquartered in Plano, TX with over 5,400 total employees.
Appendix - Important Disclosures and Analyst Certification

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Rating and Price Target History for: Tyler Technologies, Inc. (TYL) as of 05-20-2020

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1 Robert W. Baird & Co. Incorporated makes a market in the securities of TYL.

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