Industry: Enterprise Software

Date: 5/5/2022 (market data as of 5/4/2022)



David Winslow dwinslow22@gsb.columbia.edu Action: Long | Target: ~\$200 | Upside: ~150%

Recommendation:

Recommending a long on Avalara ("AVLR" or the "Company") with a price target of ~\$200, implying ~150% upside or a ~70% IRR, assuming a 2023 exit

Note: given the business model, it may be simpler to read the below "Important Context" and "Company Overview" prior to the "Key Investment Factors"

<u>3 Key Thesis Points</u>: (1) Strong economic moat with durable competitive advantages driven by its connectors, network effects, scale, customer captivity, and relationships, generating compelling economics for end customer and AVLR; (2) indirect tax automation industry is sizeable, underpenetrated, and distinctly segmented, providing AVLR with attractive growth opportunities in enterprise and international segments with favorable tailwinds; (3) favorable competitive landscape enables Avalara to dominate the mid-market segment, which will act a launchpad into enterprise and international adjacencies

<u>Variant View</u>: in the short run, the market is underappreciating (i) that during COVID there was a moratorium on audits and businesses delayed ERP transitions, and post-COVID there will be an increase in the volume of both of these "trigger events", encouraging adoption. Additionally, in the near-term (ii) the COVID-driven surge in e-commerce channel shift will amplify AVLR's value proposition. In the long run, the market is underappreciating AVLR's multi-year long-term growth runway, which AVLR will capitalize on given its moat and TAM. Furthermore, (iii) the market has irrationally sold off high-growth SaaS and provided an attractive entry point for high quality businesses such as AVLR

Important Context:

Prior to 2018, businesses only had to collect and remit sales tax for geographies in which their business had a physical location "nexus". This led to a complicated but manageable collection process. However, in June 2018, the US Supreme Court ruled (South Dakota v. Wayfair) that states may now require all businesses that sell into their state to collect and remit sales tax, even if the business does not have a physical presence in that respective state. This led to a megatrend of increased complexity for the following reasons:

- 1. The US has 13k+ tax jurisdictions that have varying tax codes, which are often irrational and dramatically different by jurisdiction, and jurisdictions can be the size of a small town (taxes can change as someone crosses the street)
- 2. Individual products are frequently taxed differently (thousands of categories) and counterintuitively (e.g., cowboy boots vs. hiking boots)
- 3. Taxes may differ by date (e.g., there could be specific time periods in which taxes are in place or a threshold of sales that must be reached for a tax to be turned taxes on)
- 4. Tax rules are constantly changing (AVLR makes 300k+ updates p.a.)
- 5. E-commerce / omnichannel growth is a multi-generation trend that far increases the volume of cross-border and cross jurisdictional transactions for businesses without physical presences
- 6. Taxes must be calculated and collected rapidly in real time to charge the customer the appropriate tax amount at payment

Since IPO, AVLR has become the market leader in the SMB space (~2x IPO revenue)

Company Overview:

AVLR is the leader in cloud-based tax compliance software, helping customers calculate, file, and remit sales and other transactional taxes, reporting into two segments:

1. Subscription (~92% of revenue / ~35% 2-year CAGR)

- Calculations ("AvaTax"): tax calculation software that connects directly into a customer's applications (e.g., accounting, ERP, e-commerce, marketplace, point of sale, billing, CRM, etc.). The software program then provides product codes (AVLR has 16mm) that are paired with each product sold. As products are sold, AvaTax will instantaneously calculate the relevant indirect tax (e.g., sales, consumer, excise, communications, cross-border, etc.)
- Returns: automatically tracks filing requirements and calendars for states and jurisdictions in which the customer operates and prepares, files, and remits taxes accordingly
- Registrations: automatically tracks customer's sales, shows in which states / jurisdictions the customer must register, and completes registrations

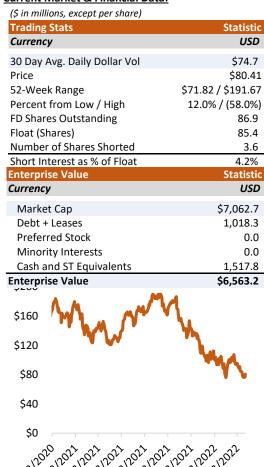
2. Professional Services (~8% of revenue / ~42% 2-year CAGR)

Tax compliance services that assist with the sale and implementation of AVLR solutions (e.g., nexus studies and analysis, voluntary compliance
initiatives, complex tax registrations, specialized tax research, etc.). Customers are invoiced on a fixed fee, milestone, or a time and materials basis

Framing the Opportunity:

- Sales taxes are increasingly becoming complex, enforced, and will need to be automated
- · Nearly every business of scale will adopt a unified and automated sales tax solution: it's matter of when, not if
- Avalara has de facto exclusivity on integrations enabling it to dominate the mid-market and launch penetration into enterprise and international segments

Current Market & Financial Data:



<u>Thesis 1 –</u> Strong economic moat with durable competitive advantages driven by its connectors, network effects, scale, customer captivity, and relationships, generating compelling economics for end customer and AVLR:

Connectors: for a customer to properly calculate taxes and comply with indirect tax laws, transaction information must be aggregated from multiple applications (primary research call with former AVLR executive indicated US SMBs typically have 2-6 connectors providing accounting, ERP, e-commerce, marketplace, POS, billing, CRM, etc. functions). For a software tax calculator (e.g., AVLR) to aggregate information across applications, a bridge or "connector" must be built between the tax calculator and applications. AVLR is differentiated by its 1,000+ pre-built connectors with 4,000+ versions (for reference, competitors have 50-150). This volume is advantageous given AVLR's connectors represent 75-90% of all notable applications in the ecosystem. A primary research call with an AVLR customer indicated that the volume of connectors helped decide the winner of its sales process given the customer operates in a niche industry (if AVLR is the only vendor to offer a connector to a customer's application, there is a higher likelihood AVLR will win the business).

Neutrality: additionally, businesses often have relationships with multiple applications provided by competing companies (e.g., Oracle NetSuite and SAP) that the tax calculator must connect into. However, given these applications compete directly with one another, they cannot build connectors directly into to their competitors' applications. This effectively prevents large players from competing directly with AVLR (AVLR is "Switzerland"). A primary research call with a Senior Director at one of the world's largest ERPs said "I do not see how we can make a business case to build internally...There is a big push at [our company] to prioritize the road map and this is not on it"

Network effect: AVLR's volume of connectors provides a network effect that might be overlooked by the street. The connectors attract customers, new customers in turn attract attention of application developers who build new connectors into AVLR, further attracting new customers

Scale: a new entrant would need to make meaningful fixed cost investments to replicate the following:

<u>Connectors:</u> management estimates it would take a single engineer 3-9 months of labor to construct a connector, so to replicate AVLR's 1,000+ connectors, it would require a large team considerable time (single engineer 500 years of labor). A call with a former executive of Vertex, AVLR's largest enterprise competitor, stated: "it would take Vertex a lot of time and effort to replicate AVLR's integrators... This is an area where [Vertex] could spend 100% of their time and never get caught up"

<u>Content:</u> "content" is the information required to operate in the industry, consisting of the (i) tax codes for 13k+ US and international jurisdictions (aggregated manually via pdf files, local city / town websites, word docs, etc.) and (ii) tax information for all products sold in each of those jurisdictions (AVLR has amassed 16mm codes and manages a database of 2.5bn products). Additionally, content is frequently changing (AVLR makes 300k updates p.a.), requiring a team of professionals to maintain content quality

<u>Technology:</u> AVLR is simple, it's easy to purchase, integrate, price, operate and understand. The Company's (i) native cloud technology and design make AVLR easy to access and operate, (ii) technological accuracy allows calculations to be made at the "rooftop-level" (taxes can differ on one side of the street vs. the other), and (iii) automations allow for a less challenging setup process (automatic product code pairing). This technology would be expensive to replicate

<u>Relationships:</u> AVLR is partnered with 3.5k companies with 35k salespeople incented to sell AVLR product (ERP providers receive 6-8% revenue share p.a. for first 3 years; referral partners (e.g., software resellers) receive a commission that is a percent of first year sales)

Strong Value Proposition:

Avalara offers a compelling value proposition / high ROI to its customer base. Primary research customer calls with customers and tax professionals indicate customers can earn 5-15x their investment by using AVLR, per the below:

			AvaTax	ROI Analysis
	Sav	ings Scenari	•	
	Breakeven	Low	High	Conservatism
Value of Time Saved	~26 minutes			 Analysis does not contemplate:
Hours Saved per Week	0.4	2.0	4.0	 Reputational risk for management of failed audit
Weeks in Year	50.0	50.0	50.0	Cost of (i) fines, (ii) third-party consultants, (iii) external
Hours Saved per Year	19.9	100.0	200.0	filing services, (iv) translation services, etc.
Hourly Market Rate for Accountant	\$150	\$150	\$250	Time spent (i) preparing for audit, (ii) cleansing data, (iii)
Value of Time Saved	\$2,990	\$15,000	\$50,000	error and invoice checking, etc.
Cost of Audit				3,
Hours to Make Transactional Tax Compliant	50	50	100	 Supported by:
Hourly Cost of CP A Firm	\$150	\$150	\$250	 Survey indicating avg. cost of managing sales and use
Total Cost of CPA Firm	\$7,500	\$7,500	\$25,000	tax is \$63-67k for SMBs
Liklihood of Non-Compliance	85.0%	85.0%	95.0%	 Separate customers stated (i) their "investment has
Compliance-Weighted Cost of CPA Firm	\$6,375	\$6,375	\$23,750	been recovered in the first few months based on time
IRS Fine from Failed Audit	Too Idio	syncratic to P	roject	alone" and (ii) they, "save 2-5 hours per week"
Total Cost of Audit	\$6,375	\$6,375	\$23,750	
Likelihood of Audit	4.0%	4.0%	4.0%	Assumptions
2021 Increase in Small Business Audits	50.0%	50.0%	50.0%	Assamptions
2021 Likelihood of Audit	6.0%	6.0%	6.0%	Customers – save 2-5 hours per week (researching
Compliance- and Risk-Weighted Cost of Audit	\$383	\$383	\$1,425	requirements; registering; calculating rates; studying rules;
Value of Time Saved + Cost of Audit	\$3,372	\$15,383	\$51,425	preparing, filing, and remitting; and managing certificates)
Cost of AVLR Product				2 Tax-focused CPA firms – "hourly fee of \$100-150 for
Activation Fee	\$905	\$905	\$905	unlicensed and \$250-300+ for credentialed"
Service Fee	2,252	2,252	2,252	
Platform Charge	215	215	215	Tax-focused CPA firms – " over 50 hours required"
Total Initiation Year Fees	\$3,372	\$3,372	\$3,372	(i) Ex-AVLR executive and (ii) sr. sales-tax executive –
Total Annual Savings	\$0	\$12,011	\$48,053	" almost impossible to be compliant"
MOIC	1.0x	4.6x	15.3x	
Service Fee	\$2,252	\$2,252	\$2,252	5 Stephens equity research
Platform Charge	215	215	215	6 IRS statement / Bloomberg
Non-Initiation Year Fees	\$2,467	\$2,467	\$2,467	Customer calls (assuming up to 2,500 transactions)
Total Annual Savings	\$905	\$12,916	\$48,958	Gustomer cans (assuming up to 2,500 transactions)
MOIC	1.4x	6.2x	20.8x	

Customers have also spoken very highly of the product on 15+ calls. A call with the CEO and founder of a mid-market Avalara customer stated: "Avalara saved us a ton of time in terms of properly filing and ensuring we were compliant. The investment was recovered in the first months based on time alone...The license fee is very small for the value you get". The CFO of another customer stated: "AvaTax is sticky. Once you use it, you never go back"

Strong Unit Economics:

At face value, AVLR's 2020 LTV / CAC is ~5x, which is roughly in-line with SaaS peers (Morgan Stanley's SaaS median is 5.0x). However, AVLR has a very strong NRR (116%) that dramatically increases the metric after being included in the formula. Including NRR, LTV / CAC rises to ~25x. It is reasonable to consider NRR in the calculation given AVLR is able to consistently upsell / cross-sell customers and therefore the scaled up economic customer value should be contemplated. The true LTV / CAC is likely somewhere between the 5x and 25x values (NRR will fall over time), so I approximate by averaging the figures (~15x). This figure then steps down to LDD (~11x) in out years (2040) as CAC increases, per the below:

AVLR's LTV / CAC														
(\$ in thousands, unless otherwise stated)														
	2018	2019	2020	2021	2022	2023	2024	2025	2026	2036	2037	2038	2039	2040
Subscription Rev (\$mm)	\$254	\$355	\$466	\$637	\$831	\$1,030	\$1,260	\$1,519	\$1,816	\$6,864	\$7,485	\$8,092	\$8,673	\$9,215
Customers - EoP	9,150	12,150	14,890	18,050	21,390	24,940	28,680	32,540	36,692	85,992	90,343	94,280	97,730	100,622
Subscription Rev / Customer	\$28	\$29	\$31	\$35	\$39	\$41	\$44	\$47	\$49	\$80	\$83	\$86	\$89	\$92
Gross Margin (Non-GAAP)	73.2%	71.9%	73.6%	73.7%	74.3%	74.7%	75.2%	75.6%	75.9%	78.8%	79.1%	79.4%	79.7%	80.0%
GP / Customer	\$20	\$21	\$23	\$26	\$29	\$31	\$33	\$35	\$38	\$63	\$66	\$68	\$71	\$73
Gross Churn ¹	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
Discount Rate	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%	8.2%
LTV	\$213	\$221	\$242	\$273	\$303	\$324	\$347	\$371	\$394	\$660	\$688	\$715	\$742	\$769
LTV (Incl. NRR Compounding)	\$1,073	\$1,110	\$1,216	\$1,567	\$1,738	\$1,857	\$1,989	\$2,127	\$2,264	\$3,791	\$3,949	\$4,106	\$4,261	\$4,413
Prior Year S&M Spend (\$mm; Non-GAAP)	\$128	\$161	\$158	\$188	\$264	\$362	\$424	\$488	\$571	\$1,250	\$1,338	\$1,436	\$1,544	\$1,666
New Core Customers	1,960	3,366	3,226	3,756	4,062	4,406	4,738	5,007	5,453	7,935	7,790	7,552	7,221	6,801
CAC	\$65	\$48	\$49	\$50	\$65	\$82	\$90	\$97	\$105	\$158	\$172	\$190	\$214	\$245
Months to recover CAC	39	27	25	23	27	32	33	33	33	30	31	33	36	40
LTV / CAC														
AVLR	3.3x	4.6x	4.9x	5.5x	4.7x	3.9x	3.9x	3.8x	3.8x	4.2x	4.0x	3.8x	3.5x	3.1x
NRR ²³	115.0%	115.0%	115.0%	116.0%	116.0%	116.0%	116.0%	116.0%	116.0%	116.0%	116.0%	116.0%	116.0%	116.0%
LTV / CAC Including NRR Compounding														
AVLR	16.4x	23.2x	24.9x	31.4x	26.7x	22.6x	22.2x	21.8x	21.6x	24.1x	23.0x	21.6x	19.9x	18.0x
LTV / CAC Average w/ and w/o NRR Compounding														
AVLR	9.8x	13.9x	14.9x	18.4x	15.7x	13.3x	13.0x	12.8x	12.7x	14.1x	13.5x	12.7x	11.7x	10.6x

Former AVLR Director of National Sales stated: "Internal records showed we lost typically about 4% annually of the customer base.."

Thesis 2 – the indirect tax automation industry is sizeable, underpenetrated, and distinctly segmented, providing AVLR with attractive growth opportunities in enterprise and international segments with favorable tailwinds

AVLR has a sizeable "goldilocks" TAM (large enough to provide growth runway for years, but not so large to attract the focus of behemoths). This market is also segmented into emerging small (<20 employees), small (20-99), mid-market (100-499), and enterprise (500+) each with players that focus on their respective segments.

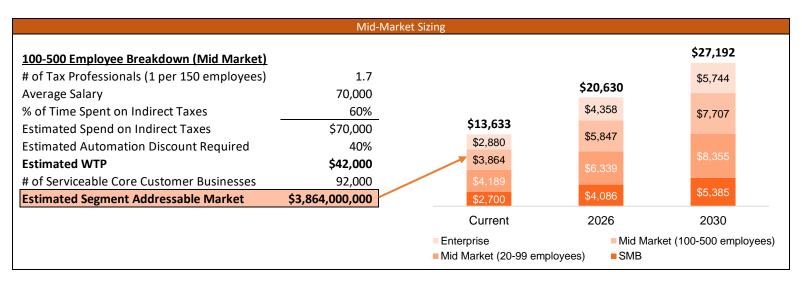
Domestic market: there are a broad range of sizing methods that traditionally sized the market at \$8bn, but have since been revised to value the market at ~\$15bn (management now sizes the market at ~\$60bn)

AVLR's SMB ("small" + "mid-market") sweet spot has grown from ~\$4bn to ~\$11bn. Management estimates a blue-sky case will yield a ~\$60bn TAM (calculated by applying the "above 90th percentile" ASP figures to customer volume). This case assumes AVLR can drive cross / upsell, price increases, and usage volume increase to drive ASP growth over time.

My own TAM calculation based on time savings roughly corroborates the domestic TAM range of \$13bn+ (see below for an example of the sizing of the midmarket segment and appendix for more TAM detail)

² Restated NRR not provided prior to 2020. Assume 2019 is in line with 2020; likely conservative given 2020 depressed by COVID and surrounding dates exceed 115% (1Q2020 was 117% and 3Q2021 is 116%)

³ Assuming 2021 figure is 116%, in line with 3Q2021



International: international TAM estimates have a broader range (~\$7bn to ~\$120bn+). The key point is the international market is much simpler than the US, but still provides a massive, attractive opportunity to AVLR

- Legacy sell side sized the market at ~\$7bn, but have since revised their forecasts closer to ~\$25bn
- Management believes the market is "likely many multiples of domestic", which would imply ~\$120bn+
- One of Avalara's competitors (Vertex) sizes it at ~\$15bn

Industry tailwinds: there are strong tailwinds given increased enforcement, complexity, efficiency, and rising volume of trigger events that create opportunities for adoption

1. Step change in tax enforcement to drive adoption:

- <u>Government budget shortfalls</u>: given COVID stimulus and tax revenue declines, governments have experienced budget shortfalls that require increased tax collection and enforcement (US state revenue shortfalls are estimated to be \$400bn through 2022)
- Increase in audits: audits are expected to increase and drive adoption (a failed audit is a powerful, common trigger event)

2. Increased complexity stemming from growth in e-commerce, digitalization, and the gig economy:

- E-commerce growth: South Dakota v. Wayfair dramatically complicated the e-commerce process, and so COVID driven-e-commerce growth will exacerbate the need for tax compliance software (2020 and 2019 US online spending were up 44% and 15%+ YoY, respectively, per Digital Commerce 360; online retail represented \$1 in \$5 spent in 2020, up ~40% from \$1 in \$7 in 2019, per Mastercard Economics Institute). During a call with the CEO of a sales tax advisory firm he revealed that, "after the Wayfair decision changing to economic standard, we're doing a lot more ecommerce and SMB business...The bulk of customers are going to AVLR".
- Omnichannel growth: COVID encouraged SMBs (historically AVLR's focal market segment) to endorse omnichannel strategies
- Cross-border marketplace growth, digital economy growth, and gig economy growth

3. Increasing complexity of tax legislation and use of e-invoicing

- <u>Increasingly complex domestic tax codes:</u> domestic tax codes have become increasingly complex and meager simplification attempts by both Democrats and Republicans have proven ineffective. There is no single governing body overseeing state and local tax law, making it extremely difficult to simplify or create a common method of taxation (there is no single governing authority for local taxes)
- Governments embracing tax solutions: governments have taken to technological innovations to simply processes (e.g., e-invoicing), likely (i) providing opportunities for software tax compliance providers and (ii) illuminating non-compliant potential customers

4. Continued trigger events, including ERP transitions and cloud adoption

• ERP transitions, transitions to the cloud, and real-time calculations require automaton (indirect taxes require real-time calculations that are best computed via an automated cloud offering)

5. Trend toward automation

 Automation of back-office functions has been fruitful by (i) improving efficiency and (ii) allowing officers to allocate more time toward strategic decision making vs. making manual calculations (e.g., ADP automating payroll)

Thesis 3 – Favorable competitive landscape enables Avalara to dominate the mid-market segment, which will act a launchpad into enterprise and international adjacencies

Competitive landscape: the competitive landscape is fragmented and continuously evolving

- ~70% of the market consists of (i) homegrown, internally managed spreadsheets; (ii) 3rd party accounting firms; and (iii) tax calculation apps that are sold within larger ERP platforms. These providers can be segmented into (i) <u>manual</u>: DIY approaches that rely on static tax tables, spreadsheet software, and manual filing and remittance and (ii) <u>services</u>: specialized consulting firms that offer transaction tax compliance services
- ~30% of the market is software solutions that are automating the industry and have carved out distinct segments of the market. AVLR dominates the mid-market and has been making in-roads into enterprise (500+ employees) and small (<20 employees) segments. Enterprise competitors have indicated they do not intend to enter the market or have tried and failed. A former executive for Vertex, the largest enterprise player, said on a primary research call "Vertex several years ago tried to move [down market] and created Vertex SMB division. This did not go as successfully as planned. [Vertex] no longer supports this. [Going back down market] is not something that is widely discussed or that I would foresee in the future"</p>

Below is an overview of the major competitors of scale, key characteristics that differentiate AVLR, and primary research that supports the competitive differentiation (see appendix for additional information)

		Avalara's Competiti	ve Landscape		
•	Emerging Small	Mid Market		Enterprise	
	®TaxJar° <	Avalara	₩ VERTEX	(One Source)	sovos
Segment Focus	SMB	Mid market	Enterprise	Enterprise	Enterprise
Pricing Strategy	# of Transactions	# of Transactions	% of Revenue	% of Revenue	% of Revenue
of Integrations / Connectors	~25	<u>1,000+</u>	~100	~25	~70
2020 Revenue / YoY Growth%	<\$50 / -	\$501 / 31%	\$375 / 15%	~\$200 - \$300 / 8%	~\$215 / <10%
Total Customers	15,000 (mainly online merchants)	30,000+	5,000+	-	5,000+
Employees	178	3,351	1,000	-	~1,100
Strengths & Weaknesses	 ✓ Focus is on tax returns ✓ Cheapest option X No sales force X Amazon / Ebay concentration X Cannot compute complex rules X Not scalable 	✓ Full automation ✓ Nearly all integrations ✓ Dominates e-commerce ✓ Liability of miscalculation ✓ Highly scalable ✓ Proven solution for noncompliant clients ✓ Massive content library Small direct sales force (preTTR acquisition) Limited Customizations	Legacy provider Large sales force Customizations Market leader in retail X Limited integrations X Not fully automated X Requires manual updates due to customized solutions	✓ Legacy provider ✓ Large sales force ✓ Customizations ✓ Strong Internationally ✓ Strong O&G X Limited integrations X Not fully automated X Requires manual updates due to customized solutions	✓ Market leader in the EU ✓ Foouses on VAT and e- invoicing X Distant 3 rd player in US market X Limited integrations
online without spe missing some the specific tax rules. that TaxJar cannot I	g after standard widgets coial tax rules. They're ings where there are There are some states handle" (CEO, sales tax ory firm).	When AVLR emerged, "it was the first time Vertex was really scared". "Avalara has stronger technology [than Vertex]. They are more current". "Avalara is the only Company that Vertex looks at as competitor" (former Executive, Vertex).	It would take a lot of time and effort to [replicate AVLR's integrators] This is an area where [Vertex] could spend 100% of their time and never get caught up" (former Executive, Vertex).	"TR needs to do some big changes. They do not do any marketing" (Former Senior Sales Executive, Avalara).	"Sovos treated customers poorly double or tripling pricing and giving month to switch. Sovos blew this" (Former Senior Sales Executive, Avalara).

AVLR conducted a survey that indicated 77% of lost sales processes resulted in the customer remaining with the status quo because the timing was not right, indicating inertia is the leading competitor (3% of processes were lost to competitors)

Expansion into enterprise segment: enterprise segment represents a \$2-3bn TAM that is currently largely unaddressed by AVLR

- <u>Invested in the following to position itself to penetrate the enterprise segment:</u> (i) enterprise-specific product suite, (ii) direct salesforce, (iii) higher-touch support, (iv) rule flexibility, (v) enterprise connectors, and (vi) relationships with enterprise partners (e.g., enterprise ERPs)
- <u>Building relationships with ancillary offerings</u>: AVLR has endorsed a "surround and displace" strategy in which it is focused on providing products to enterprise customers focused on indirect tax or adjacent categories. AVLR's goal is to develop relationships with financial suite decision makers and outflank legacy enterprise players. Offerings AVLR can provide to enterprise players include returns, document management, vertical-specific solutions, e-invoicing, cross-border duties and tax, content subscriptions, POS offerings, and more. As an example, AVLR has also developed beachheads with enterprise customers through its acquisitions of Transaction Tax Resources ("TTR") (\$300mm+) and Business Licenses ("BL) (~\$100mm), allowing AVLR to service 50% of the Fortune 2000 and giving AVLR credibility in the enterprise space
- <u>Lower priced offering:</u> primary research indicates AVLR is considered cheaper than the enterprise segment's dominant player (Vertex) and is positioned to compete favorably on pricing given AVLR's stronger gross margins (mid 70%s with expectation of reaching 80-82% vs. Vertex's 56%)
- <u>SaaS precedent of mid-market disrupting enterprise</u>: there is a precedent in the software industry of mid-market players moving up-market and disrupting enterprise (e.g., Salesforce and ServiceNow), a ascension / growth curve that AVLR may be able to replicate
- AVLR has shown 2x Vertex's growth (~35% vs. ~11% 4Q2018-3Q2021 CAGR), the most formidable enterprise player. Primary research has confirmed AVLR has an edge over Vertex: "when AVLR emerged, it was the first time Vertex was really scared" (former Executive, Vertex). "Avalara has stronger technology [than Vertex]. They are more current" (former Executive, Vertex) (see appendix for more detail)
- Scraping LinkedIn indicates AVLR has added ~23 new enterprise sales and technological personnel since 2019

Expansion into international segment: ~\$7bn to ~\$120bn+ TAM, currently largely unaddressed by AVLR. The below are reasons AVLR may be able to make inroads in the international segment:

- There is no clear single entrenched international market leader of scale
- AVLR has executed a successful organic and inorganic growth playbook (20+ acquisitions since 2007), allowing it to add product and geographic functionality, and may be able to replicate this internationally
- There is a myriad of areas of increasing complexity that will present opportunities for software tax compliance platforms to resolve challenges including the following: (i) countries such as Brazil, the United Arab Emirates, and Saudi Arabia have implemented VAT in recent years, leading to meaningful changes and uncertainty for businesses; (ii) new / updated e-invoicing mandates aiming to highlight non-compliance are being explored (Italy, France, India, Chile, Brazil, Poland, Greece, Turkey, and Denmark); (iii) EU is shifting the burden of VAT reporting to marketplaces; (iv) additional VAT and tariff rules to be implemented following Brexit; (v) China launched the "Golden Tax System", a national computerized taxation network designed to reduce tax evasion (businesses operating in China are required to use the government's tax software to generate VAT invoices, make VAT calculations, and execute statutory tax reporting

- AVLR has launched new international products including (i) additional capabilities in cross-border trade restrictions and management (2021); (ii) EU insurance premium tax, (iii) EU VAT; (iv) Brazilian tax, and (v) cross-border transactions (tariffs/ duties)
- AVLR has demonstrated international growth in recent years (2,000+ direct customers in the EMEA region, representing growth of 50%+ YoY (ex. thousands of EMEA customers monetized through a large marketplace partner and ex. small contributions from India and Brazil))
- AVLR currently supports transaction tax compliance in some capacity in Canada, Europe, South America, and Asia, but not at meaningful scale
- *\$700mm+ net cash on BS positions company to continue to acquire and invest heavily

<u>Variant View</u>: in the short run, the market is underappreciating (i) that during COVID there was a moratorium on audits, businesses delayed ERP transitions, and post-COVID there will be an increase in the volume of both of these "trigger events", encouraging adoption. Additionally, in the near-term (ii) the COVID-driven surge in e-commerce channel shift will amplify AVLR's value proposition. In the long run, the market is underappreciating AVLR's multi-year long-term growth runway, which AVLR will capitalize on given its moat and TAM. Furthermore, (iii) the market has irrationally sold off high-growth SaaS and provided an attractive entry point for high quality businesses such as AVLR

I believe the market is missing the forthcoming step function change in trigger events (events that prompt a customer to transition to a new software provider) in the way of volume of future audits, ERP system transitions, and surge in e-commerce.

- Audits will likely increase given local governments were not heavily enforcing tax policies during peak COVID. As a benchmark, the IRS announced it will increase small business audits by 50% starting in 2021. Primary research indicates being found non-compliant via audit is one of the leading drivers for users to transition to AVLR: Audit volume is a powerful driver given the complexity of the tax system. Primary research indicates audit failures are very common. "The general rule is SMBs are non-compliant. It is almost impossible to be compliant" (Former Executive, Avalara).
- Conversations indicate that during COVID, companies were hesitant to conduct ERP implementations (another powerful trigger event) and there is
 therefore potentially pent-up demand from that sourcing channel as well.
- Growth in e-commerce as a result of COVID will also drive non-compliance. Online retail represented \$1 in \$5 spent in 2020, up ~40% from \$1 in \$7 in 2019. I believe the street is not fully accounting for the (i) continued acceleration of E-commerce growth and (ii) increasing complexity of cross-border transactions that require an automated sales tax solutions

Ultimately over the long term, I believe Avalara can outgrow the street in the near term and sustain 20-30% growth for years longer than street valuations imply. This is supported by the fundamental view that (i) sales taxes are becoming more complex and the market is massive; (ii) nearly every business of scale will adopt a unified and automated sales tax solution: matter of when, not if and (iii) Avalara has de facto exclusivity on integrations enabling it to dominate the mid-market and maintain its pricing power over time (see financials section for how these beliefs inform my modeling)

Base Case Financial Assumptions

Net core customer adds: assuming ~100k core customers at terminal year (2040)

ARPU: Aggregate ARPU steps down to GDP-type ~3.0% growth in 2040: 5-6% 2023-2031, 4-5% 2032-2036, <4% 2037-2040, justified given (i) pre-COVID 2019 ARPU growth was ~9% and 2021 growth to be 16.1%; (ii) expansion into enterprise segment (~20k customers) will serve as a tailwind (enterprise ARPU is \$71k or 63% higher than aggregate core customer ARPU of ~\$44k); (iii) AVLR operates a usage model in which ARPU increases as the customer scales, and AVLR operates in the higher-growth mid-market; (iv) given switching costs / stickiness of offering (~95% gross retention for naturally high-churn SMB business / 109-117% net revenue retention), AVLR likely has meaningful pricing power; and (iv) AVLR has ambitions to expand (organically and inorganically) into a global compliance platform, which will offer meaningful cross sale (inside and outside of tax). Customer calls indicate AVLR has historically implemented as high as 5% price improvements successfully. Customers stated they had no issue with the increase and the product was well worth it. Assumptions imply AVLR's share will increase from 1-4% today to ~10-25% in 2040 depending on the TAM sizing method

EBIT Margins

- 2021-2025
 - Subscription gross margins assuming modest improvement through 2025 from 76% to 78% (assuming <80% GM given recent incremental margins waver between the mid-70%s and low 80%s), and increasing to 80% to 2040. Management is targeting LT gross margins of 80-82% by increasing automation (only ~60% of tax content is automated today) and achieving additional leverage on labor costs (management is targeting keeping content headcount flat or reducing it). Keeping margins at 80% vs. 82% given recent incrementals (will be show-me story) and professional services segment (will become smaller portion of overall business)
 - Professional services gross margin assuming continued 53.2% gross margin, in line with 1Q-3Q2021 historicals
 - R&D assuming gradual stepdown in YoY growth as Company benefits from operating leverage (26.0% to 11.6% YoY growth from 2021 to 2025).
 Given operating leverage falls 400bps to 16% in 2040
 - S&M— assuming meaningful uptick in YoY growth from 19% in 2020 to 40.9% in 2021, given (i) mgmt's commentary that they will turn additional marketing back on following COVID, (ii) high 3Q2021 growth (48.1%), (iii) precedent of hosting high-cost events such as CRUSH, etc. Thereafter, followed by a stepdown in YoY growth to 17.7%. I arrive at the 17.7% figure by considering the S&M investment required to reach the Company's 2040 LT growth of 6.3% (conservative to assume 6.3% given I project growth beyond 2040 will be only 2.5%). The Company must spend 6.5% of revenue on S&M to reach the 6.3% growth figure. I then considered the margin profiles for similar relatively mature high growth SaaS players, such as Adobe (~40%) and assume a conservative 17.7% S&M figure to place AVLR's margin figure relatively in line with Adobe's. I believe this is considerably conservative, but (i) don't think management is going to settle for 6.5% growth and (ii) CAC will likely increase over time as low-hanging fruit is picked.
 - G&A assuming YoY gradual stepdown from 36.0% in 2021 to 10.0% in 2025 as meaningful operating leverage is achieved. Assuming falls ~500bps from 14.9% today to 10.0% in 2040
- 2025+
 - Assuming 2.1-2.7% step up in EBIT margins to exit at high 30%s (36.3%). Likely slightly lower margin than other mature software businesses given
 (i) management's long-term growth ambitions will likely lead to meaningful reinvestment, (ii) manual nature of tax will likely require more labor
 than other SaaS models, (iii) revenue share with partners as new customers are won (~8% share for 3 years)

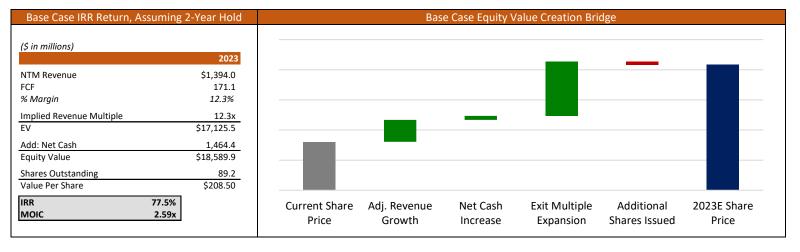
DCF Valuation

- Terminal Value
 - WACC analysis indicates appropriate discount rate is 7.9-8.2% (assuming 8.2%). The CFO has strong Wall Street background (former Software MD for GS) and executed intelligent cost of capital reductions, including issuing a 0.25% convertible notes with capped calls (to offset dilution)
 - Assuming US long-term growth rate of 2.5%: real GDP-like rate (potentially conservative given likely increasing international exposure that typically compounds in excess of 2.5% and 6% 2040 implied growth rate)
 - Implies a ~16x FCF multiple (17.5x including SBC and 14.2x excluding FCF). This is likely a fair multiple given (i) the valuation is roughly in line with the S&P 500, (ii) AVLR will be a market leader with a powerful moat (connectors, network effects, content, scale, technology, etc.), and (iii) the Company is of scale and still growing 6%+
- Returns ~150% upside (assuming SBC is fully contemplated in the valuation), per the below

Base Case DCF Returns (S	BC on)	Base Case WACC / LT Growth Impact on Implied FCF Multiple / Return													
(Values in millions, except per share) DCF Valuation				1.5%	Long-Term	Growth Rate 2.5%	3.0%	3.5%							
PV of Discounted Cash Flows Terminal Value DCF Value 2021 (Debt) / Cash Equity Value 2021 Shares Per Share Price Target Current Price Upside / (Downside)	\$7,085 10,263 17,348 701 18,049 87 \$208.50 80.41 159.3%	WACC	12.0% 11.0% 10.0% 9.0% 8.2% 8.0% 7.0%	9.5x / 17.5% 10.5x / 37.9% 11.8x / 64.3% 13.3x / 99.2% 14.9x / 136.1% 15.4x / 146.9% 18.2x / 214.6%	10.0x / 19.8% 11.1x / 41.2% 12.5x / 69.1% 14.3x / 106.6% 16.1x / 146.7% 16.7x / 158.7% 20.0x / 234.3%	10.5x / 22.3% 11.8x / 44.8% 13.3x / 74.6% 15.4x / 115.2% 17.5x / 159.3% 18.2x / 172.6% 22.2x / 258.4%	11.1x / 25.1% 12.5x / 49.0% 14.3x / 80.9% 16.7x / 125.1% 19.2x / 174.3% 20.0x / 189.2% 25.0x / 288.5%	11.8x / 28.2% 13.3x / 53.6% 15.4x / 88.2% 18.2x / 136.9% 21.3x / 192.4% 22.2x / 209.6% 28.6x / 327.3%							

IRR Return Methodology

Assuming it takes the market 2-years to realize the appropriate intrinsic value of the stock (reasonable given near-term performance catalysts / likely beats), the stock returns a 35%+ IRR (assuming market fully contemplates impact of SBC on FCF)



Risks & Mitigants:

Increased competition and price pressure from well-capitalized players such as Stripe (recently acquired TaxJar and launched Stripe Tax)

South Dakota v. Wayfair tailwind abatement – SD v Wayfair (June 2018; red bar below) led to a paradigm shift and increase in adoption (prior to the ruling avg. growth was 4.6%; post ruling, 6.1%). This ruling was ~3 years ago now, begging the question if businesses haven't converted to an automation after three years, why will they convert in years t+4 and beyond?

Cannibalization risk from the SST program – SST meaningfully simplifies the registration process (takes 10 minutes for all 24 SST states when it typically takes 30 minutes for an individual registration); SST is growing quickly (AVLR grew 2020 revenue 160%+ YoY and the SST program added users at a 55% CAGR since the SD v. Wayfair decision); and SST can cannibalize existing or potential customers (customers can transition from AVLR Direct to SST). AVLR signed new 3-year SST contract in 2020 with less favorable terms than its predecessor and AVLR direct (revision to reduce AVLR's SST revenue by ~\$12mm of 2021 revenue)

Volatility risk – potential volatility given (i) ~10x 2022 revenue multiple, and (ii) interest rate exposure (high cash generative business over decades makes sensitive to changes in discount rate)

Government disruption – potential for (i) simplified tax code; (ii) standardized content across jurisdictions (making it easier for new entrants to aggregate content); and (iii) "government direct" implementation in which governments make direct tax calculations for the business (e.g., ask businesses to send all invoices to the government, runs calculations, and bills the business)

Connector construction simplification – risk process of creating connectors becomes standardized, making AVLR's 1,000+ connectors easier to replicate Execution risk making and integrating acquisitions – AVLR has acquired aggressively and, as a result, there have been reports of glitches between the applications and inadequate customer service (third party review aggregations indicate there were a high volume of negative reviews posted years ago)

Partner concentration – the 2 largest partners contribute 11% and 10% of revenue

Base Case DCF

(\$ in millions, except per customer) FY End December	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	Terminal
																				rerminui
Core Customers - EoP	21,390 <i>18.5%</i>	24,940 <i>16.6%</i>	28,680 <i>15.0%</i>	32,540 <i>13.5%</i>	36,692 12.8%	41,116 <i>12.1%</i>	45,787	50,667	55,713 10.0%	60,871	66,081 8.6%	71,274 7.9%	76,377	81,310	85,992	90,343	94,280	97,730	100,622	
YoY Growth Net Core Customer Adds	3,340	3,550	3,740	3,860	4,152	4,425	11.4% 4,670	10.7% 4,880	5,046	9.3% 5,158	5,210	7.9% 5,193	7.2% 5,102	6.5% 4,933	5.8% 4,683	5.1% 4,350	4.4% 3,938	3.7% 3,450	3.0% 2,892	
Average Revenue / Customer (\$ in thousands)	\$43	\$46	\$49	\$52	\$55	\$58	\$61	\$64	\$68	5,138 \$71	\$75	\$78	\$81	\$85	\$88	\$92	\$95	\$98	\$101	
YoY Growth	343 10.1%	6.3%	6.3%	6.2%	6.0%	5.8%	5.6%	5.4%	5.2%	5.0%	4.8%	4.6%	4.4%	4.2%	4.0%	3.8%	3.6%	3.4%	3.2%	
Revenue	\$920	\$1,140	\$1,394	\$1,680	\$2,008	\$2,380	\$2,799	\$3,264	\$3,776	\$4,332	\$4,928	\$5,559	\$6,219	\$6,899	\$7,588	\$8,275	\$8,946	\$9,588	\$10,188	\$10,442
YoY Growth	30.4%	23.9%	22.3%	20.5%	19.5%	18.6%	17.6%	16.6%	15.7%	14.7%	13.8%	12.8%	11.9%	10.9%	10.0%	9.0%	8.1%	7.2%	6.3%	710, 442
Gross Margin	74.3%	74.7%	75.2%	75.6%	75.9%	76.2%	76.5%	76.8%	77.1%	77.4%	77.7%	78.0%	78.3%	78.5%	78.8%	79.1%	79.4%	79.7%	80.0%	
R&D as a Percent of Revenue	19.5%	19.5%	19.2%	18.1%	18.0%	17.8%	17.7%	17.6%	17.4%	17.3%	17.1%	17.0%	16.9%	16.7%	16.6%	16.4%	16.3%	16.1%	16.0%	
S&M as a Percent of Revenue	39.3%	37.2%	35.0%	34.0%	31.5%	29.2%	27.1%	25.2%	23.6%	22.1%	20.8%	19.7%	18.8%	18.1%	17.6%	17.4%	17.3%	17.4%	17.7%	
G&A as a Percent of Revenue	14.5%	13.8%	12.6%	11.2%	11.1%	11.0%	11.0%	10.9%	10.8%	10.7%	10.6%	10.6%	10.5%	10.4%	10.3%	10.2%	10.2%	10.1%	10.0%	
EBIT Margin	0.9%	4.1%	8.4%	12.3%	15.3%	18.1%	20.7%	23.1%	25.3%	27.3%	29.1%	30.7%	32.1%	33.3%	34.3%	35.1%	35.7%	36.1%	36.3%	
D&A as a Percent of Revenue	3.5%	3.5%	3.5%	3.5%	3.3%	3.0%	2.8%	2.5%	2.3%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Simplified EBITDA Margin	4.4%	7.6%	11.9%	15.9%	18.6%	21.2%	23.5%	25.7%	27.6%	29.4%	31.1%	32.7%	34.1%	35.3%	36.3%	37.1%	37.7%	38.1%	38.3%	
EBITDA (Non-GAAP)	\$42	\$89	\$168	\$269	\$370	\$500	\$654	\$833	\$1,038	\$1,267	\$1,528	\$1,813	\$2,115	\$2,429	\$2,748	\$3,063	\$3,365	\$3,645	\$3,893	
% Margin	4.5%	7.8%	12.1%	16.0%	18.4%	21.0%	23.4%	25.5%	27.5%	29.3%	31.0%	32.6%	34.0%	35.2%	36.2%	37.0%	37.6%	38.0%	38.2%	
D&A	\$34	\$42	\$52	\$63	\$63	\$69	\$74	\$79	\$83	\$84	\$94	\$106	\$118	\$131	\$144	\$157	\$170	\$182	\$194	
(Capex + Software Development) / D&A	1.0x	1.0x	1.0x	1.0x	1.0x	1.0x	1.0x	1.0x	1.0x	1.0x	1.0x	1.0x	1.0x	1.0x	1.0x	1.0x	1.0x	1.0x	1.0x	
EBIT (Non-GAAP)	8	47	117	207	307	431	580	754	956	1,183	1,434	1,707	1,997	2,298	2,603	2,905	3,195	3,462	3,699	
% Margin	0.9%	4.1%	8.4%	12.3%	15.3%	18.1%	20.7%	23.1%	25.3%	27.3%	29.1%	30.7%	32.1%	33.3%	34.3%	35.1%	35.7%	36.1%	36.3%	
Margin Growth	(0.2%)	3.2%	4.2%	4.0%	3.0%	2.8%	2.6%	2.4%	2.2%	2.0%	1.8%	1.6%	1.4%	1.2%	1.0%	0.8%	0.6%	0.4%	0.2%	
EBIT Growth	11.2%	480.6%	147.4%	77.5%	48.6%	40.2%	34.5%	30.1%	26.7%	23.8%	21.3%	19.0%	17.0%	15.1%	13.3%	11.6%	10.0%	8.4%	6.8%	
EBIT Incrementals	0.4%	17.7%	27.3%	31.6%	30.7%	33.2%	35.5%	37.5%	39.3%	40.9%	42.2%	43.2%	43.9%	44.3%	44.3%	44.0%	43.1%	41.7%	39.5%	
Tax Expense / (Benefit)	\$0	\$0	\$0	\$0 22.5%	\$69	\$97	\$130 22.5%	\$170 22.5%	\$215	\$266 22.5%	\$323	\$384	\$449	\$517	\$586	\$654	\$719	\$779	\$832 22.5%	
Normalized Tax Rate	22.5%	22.5%	22.5%		22.5%	22.5%			22.5% \$741		22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%	22.5%		
Net Income	\$18	\$57	\$126	\$216	\$238	\$334	\$449	\$585		\$917	\$1,112	\$1,323	\$1,548	\$1,781	\$2,018	\$2,252	\$2,476	\$2,683	\$2,867	
Add: D&A	34	42	52	63	63	69	74	79	83	84	94	106	118	131	144	157	170	182	194	
Less: Capex & Software Development	(32)	(40)	(49)	(60)	(66)	(73)	(78)	(83)	(87)	(89)	(99)	(111)	(124)	(138)	(152)	(165)	(179)	(192)	(204)	
Capex & Software Development / Revenue	3.5%	3.5%	3.5%	3.5%	3.3%	3.0%	2.8%	2.5%	2.3%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Less: Change in NWC	82	136	167	143	161	190	196	228	264	260	296	334	311	345	379	331	358	288	306	
uFCF Pre-SBC	\$102	\$194	\$296	\$363	\$396	\$521	\$641	\$809	\$1,001	\$1,172	\$1,403	\$1,651	\$1,853	\$2,119	\$2,390	\$2,574	\$2,825	\$2,962	\$3,162	\$3,242
Pre-Tax SBC	112	140	161	185	207	230	253	274	304	349	397	448	502	556	602	657	710	742	789	
Post-Tax SBC uFCF After SBC	87 15	108 86	125 171	143 219	161 235	179 342	196 445	212 597	236 765	271 902	308 1.095	347 1.304	389 1,464	431 1.688	467 1,923	509 2.066	550 2,275	575 2.386	611 2,551	\$2,615
% Margin	1.6%	7.5%	12.3%	13.1%	11.7%	342 14.4%	15.9%	18.3%	20.3%	20.8%	22.2%	23.5%	23.5%	24.5%	25.3%	25.0%	2 ,275 25.4%	2,386 24.9%	2,551 25.0%	\$2,615
FCF / PAT	578.3%	343.5%	234.7%	167.7%	166.1%	155.9%	142.8%	138.4%	135.1%	127.9%	126.2%	124.8%	119.7%	119.0%	118.4%	114.3%	114.1%	110.4%	110.3%	
WACC 8.2%																				
Terminal Growth 2.5%																				
(Values in millions, except per share) DCF Valuation																				
PV of Discounted Cash Flows \$7,085	\$14	\$73	\$135	\$160	\$158	\$213	\$257	\$318	\$376	\$410	\$460	\$506	\$525	\$560	\$590	\$585	\$596	\$578	\$571	45,877
Terminal Value 10,263	Ψ.	ψ.5	V 100	7100	V 130	Ų210	Ų23,	V 020	4576	Ų 120	φ.00	Ų300	ψ3 2 3	φοσσ	φυσο	ψυσυ	ψυσο	4370	Ų3/1	13,077
DCF Value 17,348																		Implied F	CF Multiple	
2021 (Debt) / Cash 701																		Exc	luding SBC	14.2x
Equity Value 18,049																		Inc	luding SBC	17.5x
2021 Shares 87																			Average	15.8x
Per Share Price Target \$208.50																				
Current Price 80.41																				
Upside / (Downside) 159.3%																				