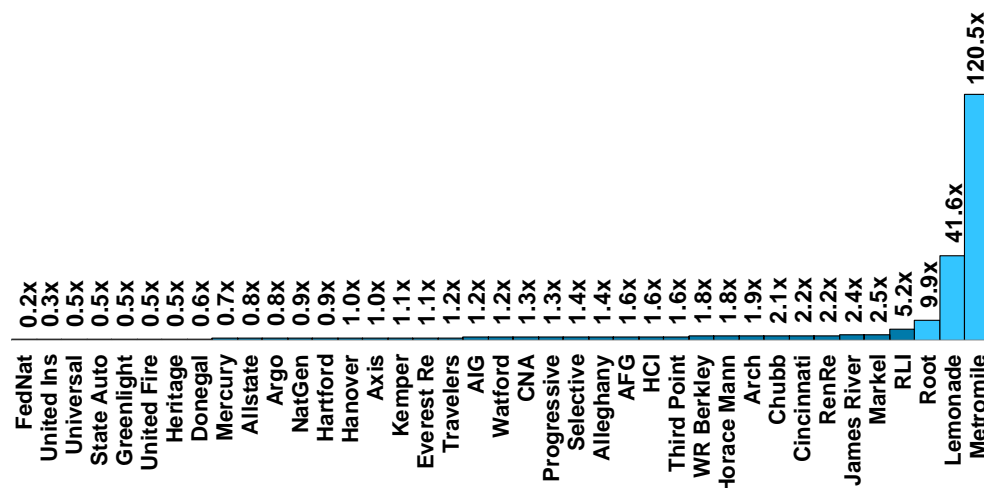


Metromile: Stop me if you've heard this one before (Part 1/2)

Following the IPOs of Lemonade and Root, this is the latest in a sequence of high profile "InsurTech" public listings to occur at valuations that leave little margin for error on future growth – especially for those that will need to raise money again.

Exhibit: P&C price-to-NEP multiples (using 9M:2020 annualized revenues)

Source: FactSet, Inside P&C



It is hard not to see this latest transaction as a direct consequence of Root's successful IPO valuation.

Speculative bubbles in public equity markets are to a certain type of company what the Statue of Liberty was to immigrants a century ago: bring us your poor, your weary, and your cash starved companies.

Indeed, the parallels to Root are uncanny. The two companies have a similar pitch to investors on an "antiquated" industry ripe for disruption through telematics.

Like Root, Metromile seems to be facing imminent financial distress without a fresh capital injection. Its pre-merger balance sheet has only \$21mn of cash, with debt of \$46mn and an annual cash burn of ~\$30mn.

Like Root, it has recently raised interim capital at extortionate rates that look more like ~2008 distressed debt than typical mezzanine financing (11-13% PIK debt with 8.5 million warrants at an exercise price equal to its last preferred equity raise in 2018).

Indeed, the company's recently filed S-4 strongly suggests it might have difficulty preparing its financial statements as a going concern but for its confidence in its ability to consummate a transaction. Per Coverager, [Metromile laid off 50 employees](#) in April (including the whole marketing department) and furloughed another 50.

Like Root, Metromile is making a pitch that it is well positioned to "disrupt" incumbents in spite of a significant fall-off in growth that predates the pandemic.

And like Root, Metromile is currently taking significant price increases that will likely be a headwind to growth in an increasingly price competitive market, in part due to similar issues around increasing product expense loads for true acquisition costs.

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Composite	YTD px chg.	P/B
Large comm.	(10.8)%	0.9x
Regional	(21.4)%	1.3x
Specialty	(8.9)%	1.5x
Personal	7.5%	1.8x
Bermuda	(18.1)%	1.1x
Florida	(40.7)%	0.8x
Brokers	5.9%	-
IPC Select	(8.4)%	1.2x
S&P 500 Fin.	(7.2)%	-
S&P 500	13.6%	-

1YR Price Performance

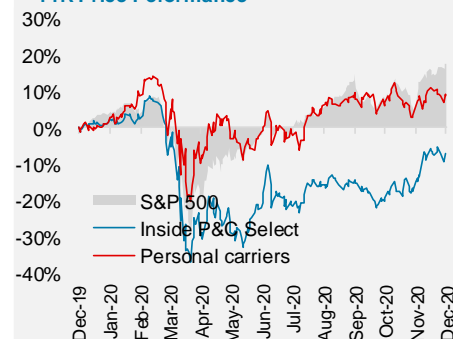
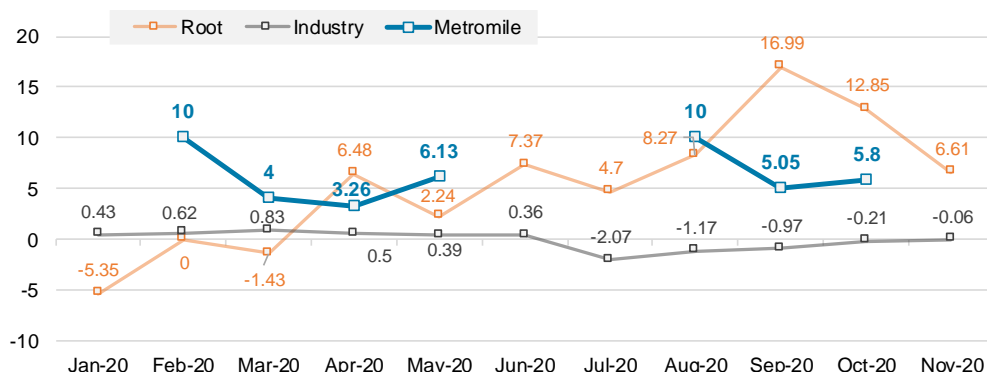


Exhibit: 2020 rate increases

Source: SNL, Inside P&C

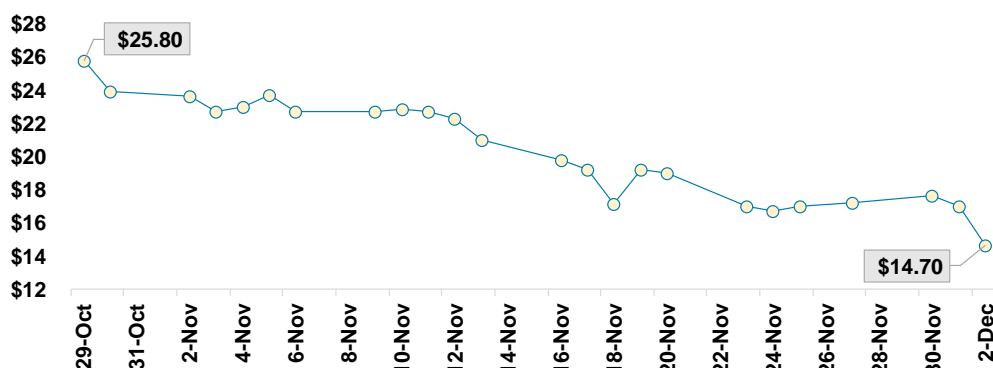


Indeed, there is something of an irony in the fact that on the one hand Metromile's rush to public markets via a SPAC is clearly motivated by the success of Root's high-multiple IPO.

Yet on the other, the company is clearly cognizant of the cooling interest in Root's business model due to concerns about the firm's growth model that has led to a heavy and accidental non-standard auto mix – we think it is fair to say largely due to our report highlighting these issues immediately after the IPO ([Root: A Business in crisis and a tough road ahead](#)). Indeed, it is worth noting Root's stock is down 46% from its post-IPO highs.

Exhibit: Root share price since IPO

Source: FactSet



In order to draw contrast, Metromile has heavily played up a philosophy of more conservative growth, with a focus on unit economics. Indeed, beyond management assertion, there are some data points that support the assertion that Metromile has built a higher quality customer mix.

For example, though still fairly non-standard with an average estimated credit score of ~630-645 – likely somewhat below the larger national direct players – it is both somewhat higher than Root's at 619 and has 6.6% thin file or no score versus 16.6% for Root.

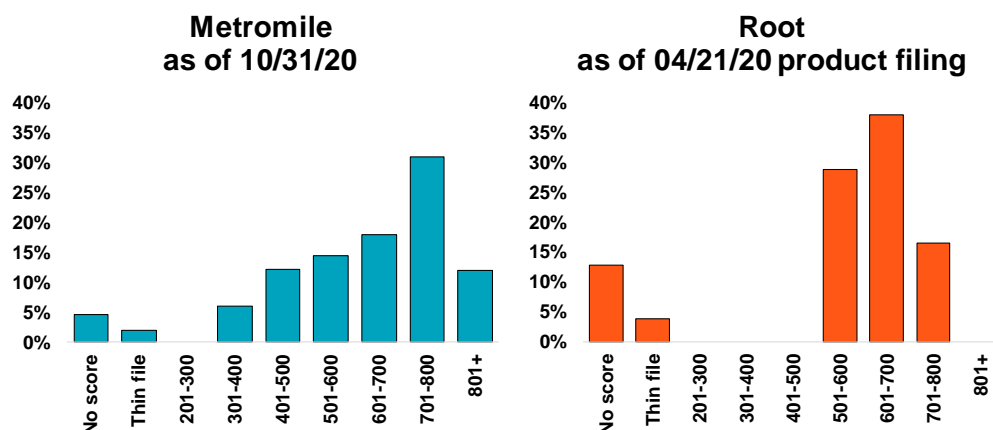
The company's one-year retention, while still somewhat low, is close to double Root's at ~63% (or ~70%, depending which filing you trust). It also disclosed an average policy life expectancy of around ~3.5 years, close to 3x what we estimate Root's at. And

Metromile also disclosed average customer acquisition costs of around \$238-\$289 versus \$332 at Root (though we should point out, we believe both numbers are drastically understated).

Exhibit: Customer credit score

Source: Company reports, Inside P&C

Note: may be using different credit scoring model (CW for Root, no disclosure for Metromile)



The company also took the somewhat unusual step of outlining a full four years of financial guidance across multiple line items. To say management is bullish is an understatement. The company's investor presentation forecasts 10x revenues over the next four years, while simultaneously improving loss ratios by ~16pts.

Exhibit: Company income statement projections and calculated ratios

Source: Company reports, Inside P&C

Metromile (\$M)	2018	2019	2020E	2021E	2022E	2023E	2024E
Income statement projections							
Ending policies	81,504	88,099	91,944	128,864	235,839	446,820	696,277
	45%	8%	4%	40%	83%	89%	56%
Ending Bal - annualized premium	97	106	111	176	328	686	1,099
	54%	9%	5%	59%	86%	109%	60%
Direct earned premium (MIC only)	82.1	102.2	101.5	140.6	253.2	523.6	901.8
DEP per PIF	\$ 1,190	\$ 1,203	\$ 1,207	\$ 1,366	\$ 1,391	\$ 1,535	\$ 1,578
	6%	1%	0%	13%	2%	10%	3%
Other income	0.2	1.0	1.0	1.5	4.2	11.4	29.3
Insurance revenue	82.3	103.2	102.5	142.1	257.4	535.0	931.1
Direct losses	67.7	74.7	64.3	95.5	168.3	337.3	564.3
Direct LAE	12.0	12.8	13.3	16.5	24.7	40.2	61.2
Servicing	11.2	14.2	13.6	13.9	20.0	34.0	50.5
Contribution profit	(8.6)	1.5	11.3	16.2	44.4	123.5	255.1
Revenue from enterprise segment	-	0.8	5.6	12.4	21.7	33.7	48.3
EBS specific costs, software development, G&A	32.7	45.1	41.8	49.3	63.1	70.2	78.5
Operating profit before CAC	(41.2)	(42.8)	(24.8)	(20.7)	3.1	87.1	225.0
Total CAC	24.6	27.9	13.7	20.0	46.7	94.9	128.0
Operating profit after CAC	(65.8)	(70.6)	(38.5)	(40.8)	(43.6)	(7.8)	97.0
Direct loss ratio	82%	73%	63%	68%	66%	64%	63%
Direct LAE ratio	15%	13%	13%	12%	10%	8%	7%
Direct loss & LAE ratio	97%	86%	76%	80%	76%	72%	69%
Policy % growth	44.8%	8.1%	4.4%	40.2%	83.0%	89.5%	55.8%

However, similar to Root, the more we dig into the numbers, the more reasons we find to be skeptical of management's narrative of imminent disruption and optimistic financial forecasts. We outline our concerns below.

(1) WE SIMPLY DO NOT BELIEVE THE COMPANY HAS COMPELLING COMPETITIVE ADVANTAGES OR A SUSTAINABLE MOAT.

Simply put, we believe the industry has come a long way since Metromile was formed in 2011, and telematics has gone from a fringe technology to table stakes.

Exhibit: Industry Telematics overview

Source: Company reports, websites, UBS, Inside P&C

Carrier:	Program:	App option:	Discount:	Days:	Headline measurements:			
					Time of Day:	Acceleration:	Braking:	Distraction:
State Farm	Drive Safe & Save	✓ + Beacon			✓	✓	✓	✓
Geico	DriveEasy	✓	≤ 25%		✓	✓	✓	✓
Progressive	Snapshot	✓	≤ 30%	75+	✓	✓	✓	✓
Allstate	Drivewise	✓	10% ≤ x ≤ 30%	60+	✓	unclear	✓	unclear
USAA	SafePilot	✓	5% ≤ x ≤ 20%		✓	✓	✓	✓
Liberty	RightTrack	✓	≤ 30%	90+	✓	✓	✓	likely w/ app
Farmers	Signal	✓	5% ≤ x ≤ 15%	10+ trips	✓	✓	✓	✓
Nationwide	SmartRide	✓	10% ≤ x ≤ 40%	85+	✓	✓	✓	✓
AmFam	KnowYourDrive	✓			✓	✓	✓	✓
Travelers	IntelliDrive	✓		90+	✓	✓	✓	✓
Root	Root test	✓		14+	✓	✓	✓	✓
Metromile		IN DEV.		Forever	✓	✓	✓	✓

Note: most programs collect additional data including weather, distance, road type, cornering, etc.

Pay per mile may not be a common product offering, but it is worth noting that this is essentially what all telematics programs are. For example, Root's management said on its Q3 conference call they believe they can predict miles driven on telematics customers with a ~95% accuracy. The only difference is how much this is used as a "selling" tool to customers, and how much visibility and engagement they have on this fact. Metromile may play up its uniqueness to investors, but product filings tell a different story.

Metromile

"As the Department may be aware, the usage-based auto insurance industry is growing and is highly competitive with participants such as Nationwide, Root, Progressive, Allstate, State Farm, and others, offering products that are highly competitive with the pay per mile model and the UBI Model."

9.30.2019 Metromile product filing in Oregon, introducing UBI factors for (a) time of driving, and (b) time spent driving.

It is also hard to overstate the advantages these incumbents have on one key aspect of the telematics value chain: data collection due to scale.

To put this in context, consider just the following example. From inception to date, we estimate Metromile has had around 155k total PIF (inclusive of lost customers estimated using retention metrics). We estimate this translates to around ~300k of total car years of data collection.

By contrast, we estimate that Progressive is adding around the same amount of total telematics customers every four to five weeks (based on an estimated ~35% opt-in for Snapshot in Direct and 10% in Agency, and some approximations on retention). Though the company only collects data for a shorter period (~3 months), it is still likely collecting Metromile's inception-to-date data assets every ~4 months. Other large incumbents do continuous monitoring.

This is not something the alleged disruptors like to point out when they talk about their competitive advantages in big data and the virtuous cycle of their "data flywheels".

Exhibit: Progressive PIF/Snapshot estimates

Source: company reports, Inside P&C

PIF in (k)	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20
Direct PIF	8,095.1	8,126.3	8,269.2	8,434.4	8,507.6	8,634.4	8,714.3	8,774.3	8,840.1
Retained		7,852.2	7,882.5	8,021.1	8,181.4	8,252.4	8,375.4	8,452.9	8,511.1
New customers		274.1	386.7	413.3	326.2	382.0	338.9	321.4	329.0
Snapshot (35%)		96	135	145	114	134	119	113	115
Agency PIF	7,148.1	7,164.6	7,237.1	7,336.7	7,362.5	7,435.4	7,487.0	7,527.1	7,583.4
Retained		6,933.7	6,949.7	7,020.0	7,116.6	7,141.6	7,212.3	7,262.4	7,301.3
New customers		230.9	287.4	316.7	245.9	293.8	274.7	264.7	282.1
Snapshot (10%)		23.1	28.7	31.7	24.6	29.4	27.5	26.5	28.2
Total Snapshot		119.0	164.1	176.3	138.8	163.1	146.1	139.0	143.4

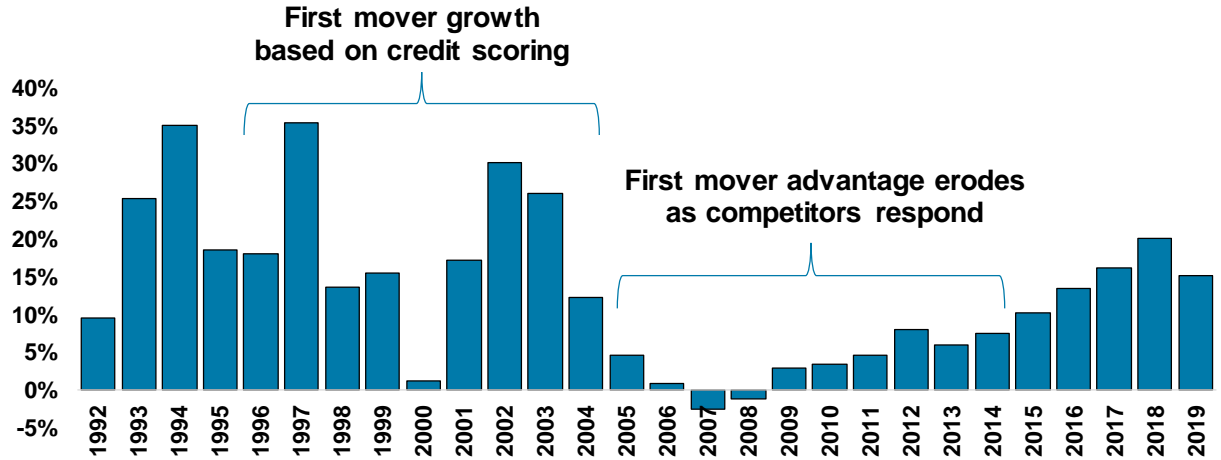
Even beyond the direct field of telematics, the industry has simply gotten better at measuring and estimating exposure, and there are both other non-telematics ways to monitor mileage, and ways to use predictive modeling gained from telematics data to apply it to other segments of your book that are less comfortable with the data privacy issues.

On top of this, we see the company as behind competitors on its tech curve, having made a one way bet on data collection via dongles as the industry standard has pivoted to mobile apps and OEMs. Though the company is now pivoting to these channels and expresses this omnichannel strategy as a strength, we believe potential investors should see this as a high-risk strategic pivot where the company has no track record of competitive advantages. This is vice masquerading as virtue.

Indeed, our view of telematics is that over time, the informational edge will erode, similar to the impact that innovation with credit scores drove rapid growth for early adopters but was quickly competed away as the data became commoditized and credit factors became table stakes for product filings. With this as a historical analog, it is worth noting that Metromile appears to have squandered whatever first mover advantage it may have had as an early innovator when it was founded in 2011, having grown DPW to just \$100mn in that period.

Exhibit: Progressive NWP growth since 1991

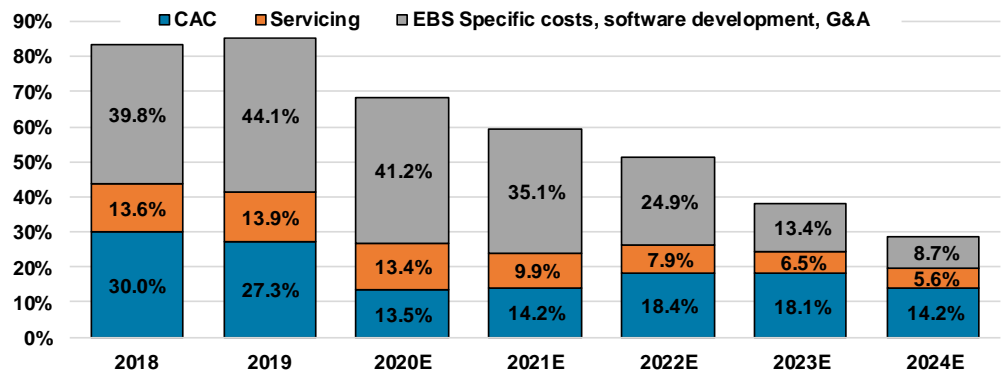
Source: SNL, Inside P&C



Metromile now finds itself pivoting its business model to play catch up, with a non-CAC expense ratio of ~60% almost 10 years into its existence. Whatever the debate around the “conservatism” on its unit economics, there can be no debate around the lack of conservatism on a high fixed expense base that by management’s own accounts requires \$1bn in premium volume to hit break even, having taken close to a decade to hit \$100mn.

Exhibit: Expense breakdown (% DEP)

Source: Company reports, Inside P&C



(2) METROMILE’S CAC METRICS LOOK UNDERSTATED, MAKING ITS GROWTH FORECAST SEEM UNREALISTIC

We do not think Metromile’s self-disclosed metrics on customer acquisition should be taken at face value. As such we do not believe its growth forecasts on its proposed S&M budget is credible.

For all Metromile’s talk of a conservative growth model with a focus on unit economics, we see enough evidence to conclude that the company’s weak track record on growth is as much a function of a broken growth model as it is conservatism on unit economics.

Simply put, the company seems to have taken a Field of Dreams approach to customer acquisition, assuming that “if they build it, customers will come”. Indeed, it derisively describes competitors as “at best, marketing companies” – as if this wasn’t a core competency of a direct to consumer (DTC) business. When growth has not happened, the solution appears to have been to repeatedly blame marketing and clear house, instead of re-thinking its growth model.

Metromile’s growth has stalled. Its average PIF growth over the past two years has been 6%, below the level of many mature peers. Premium growth peaked in Q3:19 or earlier in six of its eight states and has subsequently gone into reverse, something we see as symptomatic of initial underpricing followed by price increases that harm retention and slow customer acquisition.

It is hard to see this as “conservatism” instead of symptomatic of a broken growth model.

The company seems to think it can re-ignite growth following an injection of fresh capital – which should be a warning sign on its own that the DTC and marketing part of the business is more important than the product/pay-per-mile “revolution”.

Nevertheless, as we demonstrate in Part Two of this series, we do not think the company’s disclosed CAC of \$238 is a credible number. We estimate – with a high degree of confidence – the company’s true fully loaded CAC is closer to \$500 (or higher). As such, we think its aggressive growth forecasts on its modest marketing budget – just \$20mn in 2021 – are not credible. Our back of the envelope bull case for growth – outlined in detail in part two tomorrow – has the company hitting around ~460k policies by 2024 instead of its estimated ~700k, putting annualized premium closer to \$722mn than the company’s \$1.1bn.

It should be noted this simulated bull case would be an absolutely fantastic performance, and put the company on track to look something like Esurance as a reasonable comp. But putting an Esurance-like take-out multiple of ~1.25x on ~\$722mn of premium in 2024 would give a valuation of ~\$900mn four years from now. Even if we called it 1.5x this would get us to ~\$1.1bn.

Discounting these back to the present day at a cost of capital appropriate for a late stage and unprofitable venture (~15%) implies a valuation today of ~\$515 to \$630mn – or around 40% the level implied in the current SPAC valuation.

Exhibit: Implied market value based on 2024E DEP of \$722M

Source: Inside P&C

		Implied market value						Implied (downside) / upside on \$1.5B valuation					
		Discount rate						Discount rate					
		5%	8%	11%	14%	17%	20%	5%	8%	11%	14%	17%	20%
Exit multiple	1.0 x	594	531	476	427	385	348	-60.4%	-64.6%	-68.3%	-71.5%	-74.3%	-76.8%
	1.5 x	891	796	713	641	578	522	-40.6%	-46.9%	-52.4%	-57.3%	-61.5%	-65.2%
	2.0 x	1,188	1,061	951	855	771	696	-20.8%	-29.2%	-36.6%	-43.0%	-48.6%	-53.6%
	2.5 x	1,485	1,327	1,189	1,069	963	870	-1.0%	-11.6%	-20.7%	-28.8%	-35.8%	-42.0%
	3.0 x	1,782	1,592	1,427	1,282	1,156	1,045	18.8%	6.1%	-4.9%	-14.5%	-22.9%	-30.4%

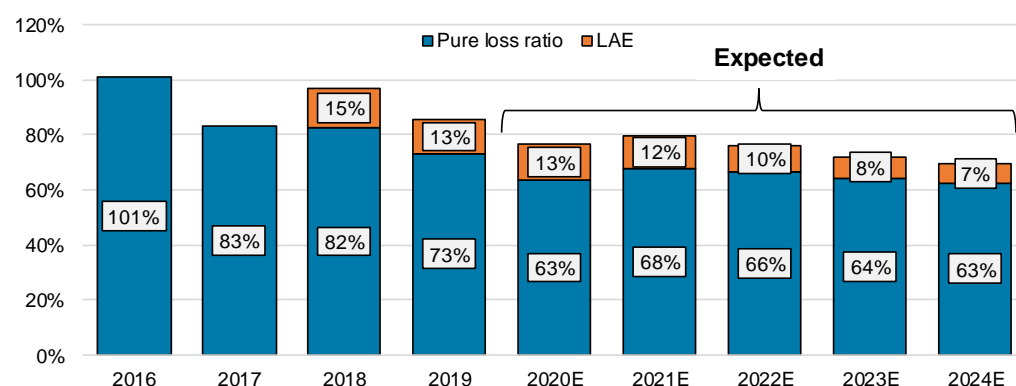
(3) WE STRUGGLE TO SEE HOW THE COMPANY CAN ACHIEVE ITS LOSS RATIO IMPROVEMENT GOALS AT THE SAME TIME AS 10X-ING ITS REVENUE.

Looking at Metromile's numbers, we think a reasonable baseline loss ratio assumption is ~83-86%, roughly in line with its 2019 loss ratio of 86% and 7-10pts higher than its 2020E number. We think ~10pts is a reasonable adjustment for the impact of Covid seen at competitors.

If we take ~85% to be something like a normalized baseline, we can see the company is forecasting out around 16pts of loss ratio improvement over four years. This is a steep hill to climb for a company with large growth ambitions.

Exhibit: Metromile direct loss ratio breakdown

Source: Company reports, Inside P&C

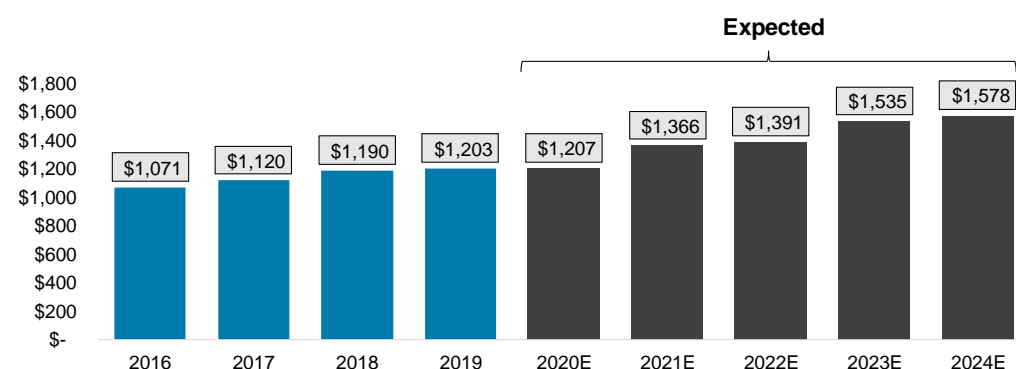


However, an interesting component is that around ~6pts of this is driven by assumed improvements in LAE, and the other ~10pts by the pure loss ratio. Another way of saying this is that the company is forecasting an 8% improvement in its loss ratio but a ~50% improvement in its LAE efficiency.

The pure loss ratio improvement is at least somewhat reasonable given the implied 7% annual average rate increases embedded in the company's premium forecasts. And we'd assume the company is giving itself some credit from underwriting improvements as its model improves and its data assets accumulate.

Exhibit: Implied premium per policy (using actual results and Metromile estimates)

Source: Company reports, Inside P&C

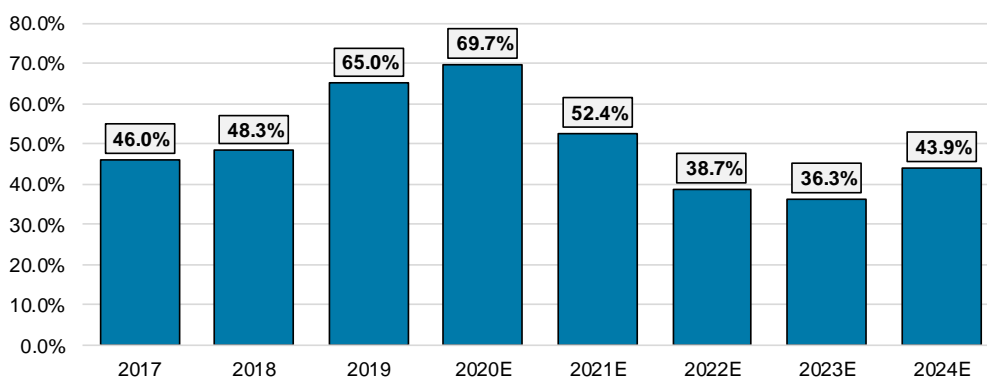


However, even accounting for that, we'd be skeptical of this given the level of growth the company is targeting.

For example, in 2020, we estimate based on disclosed retention statistics that around ~70% of Metromile's book is renewal business. Based on the company's growth forecasts, we expect this to drop to ~35% by 2023 – potentially further if its rapid growth and pivot to an app-based model changes its one-year retention.

Exhibit: Retained PIF to total book (assumes 63% first year retention, 78% following)

Source: Company reports, Inside P&C



A typical industry average delta between new and renewal business is around 7-10pts on the loss ratio. This would imply around ~3-4pts of additional loss ratio drag on Metromile's all-in loss ratio due to the new business penalty by 2023.

However, we note that Metromile's deck shows only a ~4pt gap between its new and renewal loss ratio. We're skeptical of this given the company's decision to use its distorted Q2:20 loss ratio. But even if we grant them this, it's still a ~1-2pt new business penalty drag. As such, we should see that the ~16pts of forecast improvement from baseline is really closer to 17-20pts of forecast improvement.

If this seems like a heavy lift given its plans to 10x revenue, its LAE forecasts look even more ambitious.

The company is forecasting a decline in LAE as a % of earned premium from around 12-13% to just 6.8% in 2024. This is considerably below the amounts at any leading industry competitor (see table below)

Exhibit: Direct LAE ratio (statutory)

Source: SNL, Inside P&C

Firm:	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Progressive	10.7%	10.2%	10.2%	10.2%	10.0%	10.3%	10.5%	10.9%	9.9%	9.7%
Mercury	14.9%	12.5%	13.3%	13.1%	12.7%	12.2%	11.4%	12.6%	12.8%	12.9%
Allstate	11.6%	12.8%	12.6%	11.9%	10.6%	10.4%	11.2%	11.3%	10.9%	10.8%
Kemper	11.2%	12.3%	12.0%	11.8%	11.9%	11.3%	12.1%	11.8%	11.1%	10.9%
Horace Mann	10.1%	9.9%	9.9%	8.9%	9.0%	9.3%	9.7%	10.0%	9.7%	9.3%
State Farm	12.5%	12.5%	14.4%	14.3%	15.2%	15.1%	14.1%	12.1%	10.9%	10.8%
Geico	12.4%	12.8%	11.8%	12.2%	11.5%	11.7%	11.6%	11.1%	10.3%	10.7%
USAA	9.8%	9.6%	8.9%	8.3%	7.8%	7.7%	8.7%	9.3%	9.5%	9.8%
Liberty	12.8%	13.9%	13.8%	12.8%	12.5%	11.4%	12.1%	12.0%	11.2%	11.6%
Farmers	11.2%	12.0%	12.0%	10.0%	9.7%	9.9%	10.3%	10.5%	10.2%	10.0%
Nationwide	10.2%	11.4%	11.0%	10.1%	9.8%	9.3%	9.3%	10.4%	10.7%	10.3%
AmFam	10.2%	11.4%	9.7%	9.7%	9.2%	9.7%	10.6%	11.8%	11.5%	11.1%
Industry	11.8%	11.8%	11.7%	11.3%	11.1%	11.2%	11.1%	11.3%	10.7%	10.6%
Metromile							62.3%	15.9%	13.4%	12.4%
Lemonade							188.0%	24.9%	15.3%	13.2%
Root							7.7%	10.4%	17.0%	12.1%

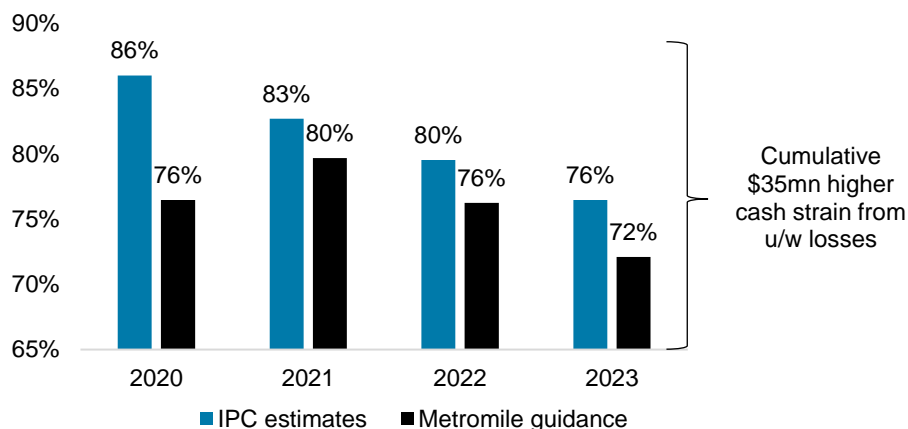
We are skeptical the company can drive such a dramatic improvement while also building out its claims infrastructure across dozens of states ahead of earned premium, and achieve a level of LAE spend around half of what fully scaled and best in class peers like Geico and Progressive achieve.

We'd note, for what it's worth, that Metromile's current pricing plans target peer levels of LAE – and classify the expense as 100% variable – which speaks against an easy ability to scale with operating leverage on a fixed expense base.

We'd expect something like 10pts of loss ratio improvement as more reasonable given the level of implied price increases and new business penalty of growth. Achieving this while 10xing revenue and expanding into new states would be a heroic achievement and put the company plausibly within touching distance of sustainable loss ratios in the low 70s. However, we note this slower – though still aggressive – path would add an extra ~\$35mn of cash strain on the company's budget, and all-else equal increase the chance of further capital raises.

Exhibit: Estimated "realistic" loss ratio path versus company guidance

Source: SNL, Inside P&C



(4) ESURANCE: THE SHADOW THAT SHOULD BE OVERHANGING START-UP DTCs

Finally, we note the strange parallel universe that can see the most successful DTC start-up of modern times axed due to a perceived lack of scale versus the direct duopoly – in the same year the market falls in love with start-ups with a fraction of the track record.

It has been a strange year for auto insurance, even putting aside the once in a hundred-year decline in frequency.

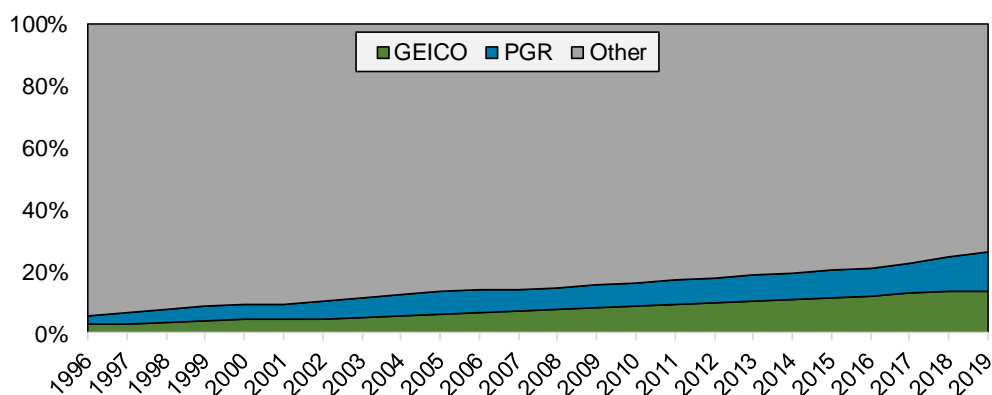
The year began with the surprise news that Allstate was killing its expensively acquired Esurance brand. The company bought Esurance for \$1bn in 2011 (~1.2x 2011 NWP) and has spent ~\$1.5bn investing in brand-specific advertising since.

Yet ultimately, Allstate apparently decided Esurance did not have sufficient scale to compete with the direct duopoly of Progressive and Geico – and their >\$1.5bn annual marketing spend.

It is somewhat bizarre that the last successful DTC auto insurance company, with the benefit of a \$27bn balance sheet and subsidized marketing spend, was ultimately deemed strategically impaired relative to the scale required to successfully compete against the massive disruption caused by Progressive and Geico.

Exhibit: Major carrier PPA market share

Source: SNL, Inside P&C



Yet meanwhile in a parallel universe, tiny “InsurTechs” with limited track record on growth or profitability are attracting huge multiples based on the premise they are going to disrupt an antiquated industry with their direct to consumer models and ~\$20mn marketing spend.

Either the travails of Esurance should be both a bear signal on the scale required for a standalone brand, and a negative read for anyone simply betting on these newer start-ups to ultimately be acquired. Or else Allstate’s shareholders should be asking serious questions as to why the Esurance brand was axed instead of spun out of Allstate with an S-1 that mentioned “machine learning” as many times as possible.

In our view, this “Esurance shadow” should be hanging very heavily over the public market debuts of both Root and Metromile. These parallel universes cannot co-exist indefinitely.

APPENDIX: OTHER KEY ITEMS WORTH NOTING

Transaction/SPAC primer: The nuts and bolts

SPACs that have been the dominant theme in the booming US IPO market now manifest in P&C insurance industry with Metromile going public through the merger with the Cohen & Company-backed SPAC.

A SPAC, special purpose acquisition company or so-called blank-check company, is a shell entity that raises money in a public offering for the purpose of investing it in a target private company. Typically, there is no predetermined target when a SPAC raises money. Instead, the SPAC's board and sponsors use their expertise and network in the focus industry to look for investment opportunities. By merging with the SPAC, a target entity effectively raises money through consolidation with the SPAC's balance sheet and becomes a public company without the burden associated with IPOing.

Some of the most widely cited advantages of going public through a merger with a SPAC include higher speed, fixed price and less paperwork. Of course, it comes at a higher cost. The company going public through the SPAC merger, effectively pays deferred IPO fees associated with the SPAC's earlier IPO and merger fees, as well as the fees to the sponsors in the form of shares, or so-called promote shares.

Metromile is merging with INSU Acquisition Corp II, the SPAC sponsored by Insurance Acquisition Sponsor II and Dioptra Advisors II, both managed by Cohen & Company. The SPAC raised \$230mn from the public in September and announced the merger with Metromile last week. The SPAC is expected to raise an additional \$160mn in a PIPE transaction to finance the merger.

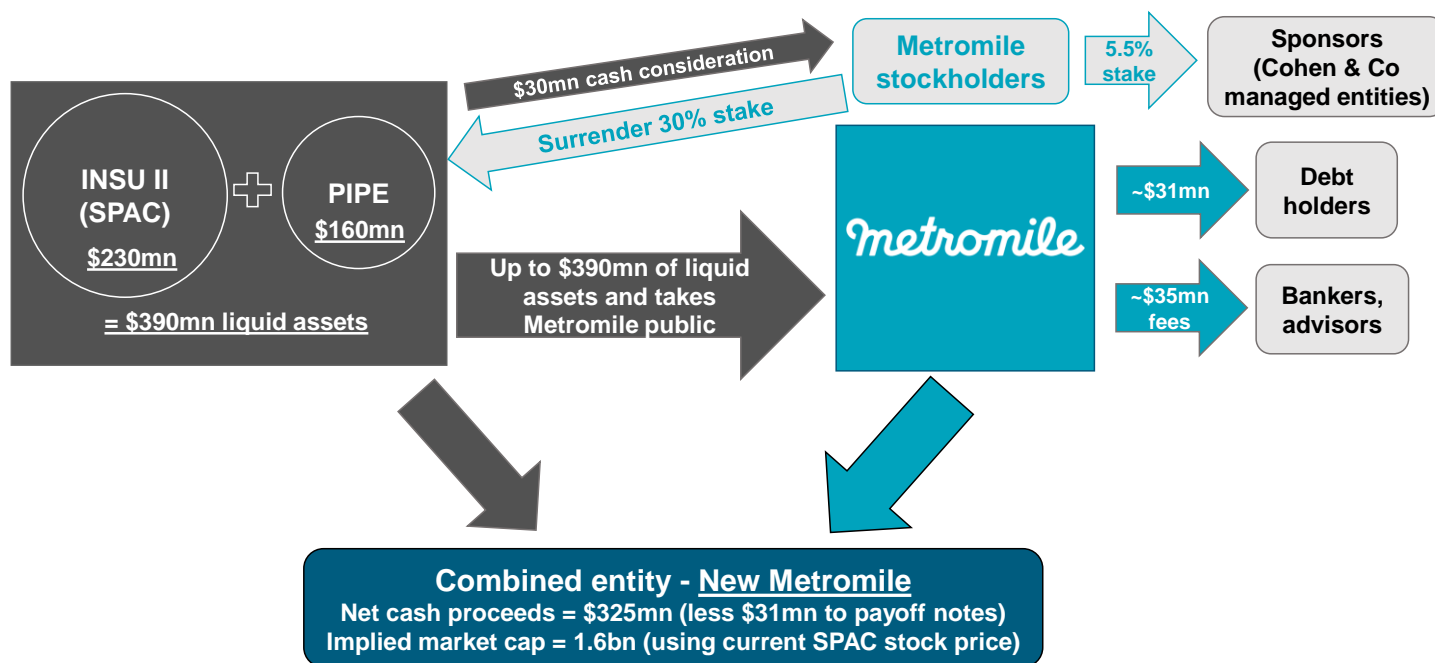
The SPAC and PIPE investors have agreed to acquire Metromile for \$30mn cash consideration and 84.2mn SPAC shares. Metromile will survive the merger, become public and consolidate the SPAC's \$390mn liquid assets. In exchange, Metromile investors surrender a 30% stake in the company to SPAC investors and 5.5% stake to sponsors in promote shares, including earnout promote shares (all numbers assume no redemption of shares by SPAC investors and exclude OTM money warrants, LTIP and \$10mn earnout shares to Metromile investors).

The carrier is expected to spend \$35mn to pay banker/advisor fees. Excluding the \$30mn of cash consideration for Metromile investors, this results in \$325mn proceeds to spend on Metromile corporate needs, of which \$31mn is expected to be used to pay off debt. Below is the brief illustration of the transaction mechanics.

The IPO is estimated to cost ~8.5% of the transaction value (including earnout promote shares to sponsors). This is compared to the 3.5-7% of underwriting fees (the single biggest direct IPO costs) new issuers typically pay in a regular public offering.

Exhibit: Illustration of Metromile SPAC transaction

Source: Company reports, Inside P&C



Note: All figures assume no redemption of shares by SPAC investors and exclude OTM money warrants, LTIP and \$10mn earnout shares to Metromile investors

Enterprise Business: Another source of likely over-optimistic growth and earnings

Metromile is forecasting that its enterprise business will scale from \$0.8mn in revenues in 2019 and \$5.6mn in 2020 to \$48.3mn in 2024 with operating profit of \$13.4mn. The company cites "46 opportunities...in the pipeline" and expectations of "22 deployments by 2022".

It is worth noting that per the S-4, substantially all the revenue to date comes from one client, Tokio Marine, which is also an investor in the company.

Indeed, we speculate whether the other two listed but anonymized companies include either AmTrust and/or National General (both part of the Karfunkel family of companies).

AmTrust was an early investor in Metromile and National General helped with its early rate filings, transferred some business from Integon insurance company, and initially acted as its general insurance agent.

We are somewhat skeptical of the company's suggestion that it will convert half of its pipeline as our view is that in-market competitors tend to be wary of handing over proprietary data to active competitors trying to take their market share.

Additionally, we note that converting these 22 customers would only add around \$1mn per deployment per the company's revenue forecasts, suggesting these conversations skew to companies smaller in size. We are inherently skeptical of an income statement

where ~40% of its profits in its first break-even year in 2024 are dependent on an enterprise business with limited to no track record, and additional “cross-selling” revenues that appear absent in income statements to date.

Ultimately, both Root and Metromile’s attempts to make their enterprise businesses an attractive “high growth” adjunct to their core businesses should be seen as a sign of weakness, not strength. Both have invested heavily in fixed cost infrastructure required for a full-scale telematics program – yet neither has been able to adequately scale with an attractive customer mix and enough earned premium to support the costs. Both are trying to lessen the expense burden and capital strain by licensing the IP to competitors, with limited success to date. Both are likely to struggle given the inherent conflicts of giving away your data to a competitor trying to “disrupt” your business.

Exhibit: Metromile Enterprise guidance

Source: Company reports

Enterprise (\$M)	2019A	2020E	2021E	2022E	2023E	2024E
Revenue	0.8	5.6	12.4	21.7	33.7	48.3
Operating profit	(2.8)	(0.9)	(1.2)	(1.9)	5.0	13.4

A note on reinsurance & its impact on accounting

Metromile’s financials are more complicated than most peers due to the impact of some atypical reinsurance features. Metromile currently cedes around 85% of its premium under various quota share programs. As part of this, it receives an upfront policy fee from its reinsurers to help offset the surplus strain of new business acquisition. We suspect this leads to complications on the backend around needing to underwrite on a cohort basis rather than an underwriting year of account.

Our read is that in the stat filings this goes to the stat insurance company, which acts as a pass through to Metromile’s agency, and in GAAP it is reported as revenue – NOT as a contra expense, which is typical of reinsurance commissions. The company’s S-4 also references more typical ceding commissions of ~10%, which do seem to be reported as a contra-expense under GAAP.

However, as an offset for all of this upfront commission payment, reinsurers only pick up a fixed rate of LAE expense, varying from 3% to 6% of ceded earned premium depending on the vintage of the Q/S contract, per S-4 disclosures.

This is substantially lower than the ~12-13% direct LAE Metromile is running at. As a consequence, Metromile’s net LAE ratio in 2019 was 37.4%, which is the primary driver of the fact the company’s net loss ratios look materially worse than the direct.

To make matters even more complicated, Metromile’s non-statutory agency contributes a write-in amount to offset the LAE and expense strain, which was \$17mn in 2019. This is excluded from the combined ratio/underwriting margin, but would have lowered it by 63pts. There is little disclosure on this, and it is unclear how much is funded by the reinsurance pass through and how much is simply a net capital contribution to the insurance sub by another name. For context, the GAAP financials reference \$27.1mn in “other income” in 2019 which we read to be primarily the reinsurance up front commission.

As an aside, we'd also note there are also around ~\$80mn of expenses totaled in the company's GAAP income statement, but only \$17mn in stat, leaving a gap of around \$62mn – we assume primarily driven by tech expenses, corporate overheads, and advertising (which is listed at \$0 in the stats).

To make a long story short, all of this means we think the company's financials are best analyzed by assessing the loss and LAE ratios on a direct basis, as the reinsurance decision is simply one form of financing available to the company.

However, the company's expenses are best analyzed on a GAAP basis, with an eye to understanding how changes in reinsurance would change contra-expenses and other income – and could in practice only be actioned if the company could self-fund the upfront surplus strain of upfront acquisition costs from underwriting profits.

Exhibit: Metromile various loss ratios

Source: SNL, company reports, Inside P&C

Loss ratio methodology		2018	2019
Direct loss ratio estimate using investor deck (page 39)			
(1)	Direct earned premium (MIC only)	82.1	102.2
(2)	Direct losses	67.7	74.7
(3)	Direct LAE	12.0	12.8
(2+3)/(1)	Direct Loss & LAE ratio	97.10%	85.60%
Net loss ratio estimate using investor deck (page 45)			
(1)	Net premiums earned	33.8	23.8
(2)	Losses and LAE	40.7	30.8
(2)/(1)	Net Loss & LAE ratio	120.4%	129.4%
Direct simple loss & LAE ratio using statutory data - state page (annual)			
Direct simple loss and LAE ratio		85.2%	76.3%
Net loss ratio using statutory data - loss & LAE by NEP			
(1)	Net premiums earned	35.0	26.6
(2)	Losses and LAE	39.5	30.6
(2)/(1)	Net loss and LAE ratio	113.0%	115.0%

This research report was written by Insider Publishing's Research team which includes Gavin Davis, Gianluca Casapietra, and Dan Lukpanov.

The content of this report includes opinions based on publicly disclosed financials and management commentary.

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