

Goosehead Insurance Inc.

Questioning franchisee quality and cash flow generation over the long term

Reiterate Rating: UNDERPERFORM | PO: 41.00 USD | Price: 69.63 USD

Improvements in new franchise quality difficult to discern

We have received feedback from investors and others arguing that our analysis has particularly ignored the productivity improvement of (significantly fewer) new franchises founded in 2023. We would argue it is too early to be confident about the quality of truly new franchisees, which take time to ramp, but the franchise conversions from corporate agents do improve the Franchise segment's productivity, albeit at the expense of the Corporate segment. Further, we believe that the appearance of improved productivity overall is merely the reduction in the number of non-productive franchises, not improving productivity among productive franchises — a circumstance that reduces the denominator as opposed to improving the numerator.

Productivity among productive franchises has declined

Both gross new policies bound per seasoned franchise and average number of producers per seasoned franchise have materially declined YoY in recent quarters, the former likely to show itself again notably with 4Q23 results. Perhaps this should be expected, given the current slump in US home sales. One can make a reasonable argument that Goosehead's model is contending with unprecedented macro headwinds that could wane in the future. Further, non-producing/back-office employee count appears to grow at a faster pace than the growth rate of producers.

Free cash flow generation remains tepid

While management points to a 28% adjusted EBITDA margin for 9M23, up materially from 16% in 9M22, the adjustment largely relates to recurring non-cash compensation expense, which increases \$42mn in EBITDA for the trailing 12 months ended 3Q23 to an adjusted \$68mn. Operating cash flow excluding capex, non-cash comp and deferred tax payments was just \$8mn on a revenue base of \$256mn over those past 12 months. Excluding the benefit of ignoring non-cash comp, free cash flow margin has been, at best, stagnant, but has more likely declined.

Margins/growth rates way short of long-term guidance

Management argues for a 30% premium CAGR through at least 2027, but already seems poised to be below that in 4Q23 despite the tailwind of nearly unprecedentedly high double-digit price increases in US personal lines insurance. Management also directs investors to EBITDA margins at scale in excess of 40% compared with 16.7% and 16.3% for 9M23 and T12M ended 3Q23. With significant potential downside to our price objective, we believe our Underperform rating on Goosehead shares accurately reflects the risk/return profile.

Estimates (Dec) (US\$)	2021A	2022A	2023E	2024E	2025E
EPS	0.48	0.55	1.34	1.65	2.25
GAAP EPS	0.27	0.03	0.65	0.90	1.44
EPS Change (YoY)	-29.4%	14.6%	143.6%	23.1%	36.4%
Consensus EPS (Bloomberg)			1.33	1.73	2.38
DPS	1.63	0	0	0	1.30
Valuation (Dec)					
P/E	145.1x	126.6x	52.0x	42.2x	30.9x
GAAP P/E	257.9x	2,321.0x	107.1x	77.4x	48.4x
Dividend Yield	2.3%	0%	0%	0%	1.9%

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Refer to important disclosures on page 26 to 28. Analyst Certification on page 24. Price Objective Basis/Risk on page 24.

Timestamp: 08 January 2024 05:00AM EST

08 January 2024

Equity

Joshua Shanker Research Analyst BofAS +1 347 821 9017 joshua.shanker@bofa.com

Grace Carter, CFA Research Analyst BofAS +1 646 416 2114 grace.carter@bofa.com

Joseph Tumillo, CFA Research Analyst BofAS joseph.tumillo@bofa.com

Cyril Onyango Research Analyst BofAS cyril.onyango@bofa.com

Stock Data

Price 69.63 USD Price Objective 41.00 USD 18-May-2023 Date Established Investment Opinion C - 3 - 852-Week Range 31.49 USD - 79.80 USD Mrkt Val (mn) / Shares Out 2613 LISD / 37.5 Free Float 23 4% Average Daily Value (mn) 14.57 USD BofA Ticker / Exchange GSHD / NAS GSHD US / GSHD.OQ Bloomberg / Reuters ROE (2023E) 0% Net Dbt to Eaty (Dec-2022A) NA ESGMeter™ Medium

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to "BofA ESGMeter Methodology".



2

iQprofile[™] Goosehead Insurance Inc.

ncome Statement Data (Dec)					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Total Earned Premiums	133	188	238	270	289
Net Investment Income	NA	NA	NA	NA	NA
Total Revenue	151	209	268	303	350
Total Cost of Benefits and Claims	NA	NA	NA	NA	NA
S,G & A (Including Commissions)	(135)	(186)	(216)	(238)	(255)
Total Operating Expenses	(145)	(204)	(236)	(258)	(279)
Pre-Tax Operating Earnings	6	5	31	45	71
Income Tax Expense	2	(2)	(5)	(9)	(13)
Operating Earnings After Tax	10	12	33	47	72
Net Income (Reported)	5	1	16	25	46
Diluted Shares	20	22	25	28	32
Operating Earnings Per Share	0.48	0.55	1.34	1.65	2.25
Net Income (Reported) Per Share	0.27	0.03	0.65	0.90	1.44
Balance Sheet Data (Dec)					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025
Fixed Income Securities	NA	NA	NA	NA	N/
Total Cash and Investments	29	29	52	112	196
Total Assets	268	321	358	421	509
Reserves	NA	NA	NA	NA	N/
LT Debt	118	87	70	70	120
Total Liabilities	337	355	338	339	390
Total Equity	(69)	(34)	20	82	119
Total Equity (Ex FAS 115)	(69)	(34)	20	82	119
Book Value per Share (Ex FAS 115)	NA	NA	NA	NA	NA
Ratios (Dec)	20214	20224	20225	20245	20251
(US\$ Millions) Expense Ratio	2021A 101.0%	2022A 98.9%	2023E 90.9%	2024E 88.4%	2025 l 88.3%
Loss Ratio	0%	96.9%	90.9%	00.4%	06.3%
Combined Ratio	101.0%	98.9%	90.9%	88.4%	88.3%
Avg Assets / Avg Eq (Ex FAS 115) Ratio	NM	98.9% NM	90.9% NM	7.6x	4.6
Growth Rates (YoY) (Dec)					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025
Total Earned Premium	40.3%	41.1%	26.3%	13.4%	7.1%
Net Investment Income	40.5% NM	41.170 NM	20.5% NM	13.4% NM	7.170 NN
Total Revenue	29.3%	38.4%	27.8%	13.1%	15.7%
Operating Earnings per Share	-29.4%	14.6%	143.6%	23.1%	36.4%
Asset	-29.4% 44.1%	20.0%	11.4%	17.7%	20.7%
Reported Book Value per Share	0.8%	0.8%	0.8%	0.8%	0.8%
Performance Metrics (Dec)					
	20222	2055	2000-	205	•
(US\$ Millions)	2021A	2022A	2023E	2024E	2025
•	NIA.	NA	NA	NA	N/
Operating ROE	NA				
Operating ROE Operating ROE (Ex FAS 115)	NA	NA	NA	NA	
Operating ROE Operating ROE (Ex FAS 115) Operating Return on Average Assets	NA 4.3%	NA 4.1%	9.7%	12.0%	15.6%
Operating ROE Operating ROE (Ex FAS 115) Operating Return on Average Assets Operating Margin	NA 4.3% 6.5%	NA 4.1% 5.7%	9.7% 12.3%	12.0% 15.4%	15.6% 20.7%
Operating ROE Operating ROE (Ex FAS 115) Operating Return on Average Assets Operating Margin Long Term Debt to Cap Ratio (Ex FAS 115)	NA 4.3% 6.5% 240.7%	NA 4.1% 5.7% 163.3%	9.7% 12.3% 77.5%	12.0% 15.4% 45.9%	15.6% 20.7% 50.3%
Operating ROE Operating ROE (Ex FAS 115) Operating Return on Average Assets Operating Margin	NA 4.3% 6.5%	NA 4.1% 5.7%	9.7% 12.3%	12.0% 15.4%	NA 15.6% 20.7% 50.3% 64.1%

Company Sector

Insurance - Non-Life

Company Description

Goosehead is attempting to build a large-scale personal lines insurance brokerage company using a unique sales and service model. The company operates through its own agents as well as franchise agents. Goosehead leads with homeowners business, which is typically stickier than auto insurance. Customer retention is high in this space and Goosehead keeps a larger percentage of renewal business.

Investment Rationale

Goosehead is a rapidly growing business, and we believe it is well-positioned for continued growth moving forward due to a strong pipeline of potential franchises and its unique business model of separating sales from client services. We estimate 15-20% revenue CAGR over 2025E-27E. That said, we believe that the current share price already reflects the strong growth outlook At a 11% discount rate on future cash flows, we believe the stock is more than fully valued, risking downside.

Stock Data

Average Daily Volume 206,700

Quarterly Earnings Estimates

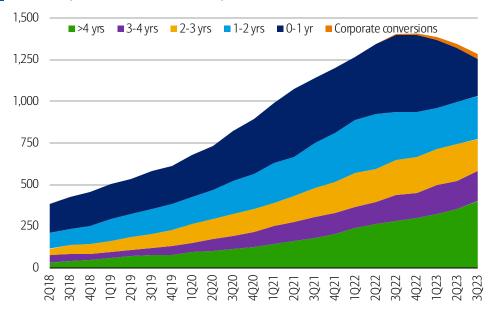
	2022	2023
Q1	0.04A	0.17A
Q2	0.16A	0.41A
Q3	0.24A	0.46A
04	0.11A	0.39E

How Goosehead grows (or does not grow) franchise count

Following 3Q23 earnings results at Goosehead, we published a lengthy note (on November 14, 2023) titled "New franchise formation grinds to stand-still: younger franchises fail at high rate." We won't repeat all the details provided in this note, but we believe it worthwhile to revisit some of the major themes. It is no secret that the company's franchise appointment strategy has shifted to decline. The number of active franchises peaked in 4Q22 with 1,413 actively operated franchises on December 31, 2022, which has since declined to 1,285 as of September 30, 2023. We would expect this number has further declined, the confirmation of which should appear when the company reports year-end 2023 results, and we would expect this decline to continue, albeit at a slower pace, for a number of quarters into the future. The slowing is not due to an arresting of the broader adverse trend, but rather the significant decline in franchisee onboardings, which declined from a peak of 144 in 3Q22 to a mere 30 in 3Q23 (with the number likely even fewer in 4Q23).

Exhibit 1: Franchise agency count by years of "seasoning"

Goosehead's agency franchise count has begun to decline due to a combination of a high failure rate among franchises formed in the COVID19 and post-COVID19 periods and more recently a decline in new formations. For the most part, franchises formed before the pandemic seem to have a healthier success rate.



Goosehead has ceased to provide investors with data about franchise count subdivided by years of seasoning beginning with 1Q23 results, and so we have reasonably estimated that 1-2yrs, 2-3yrs, 3-4yrs and >4yrs cohorts during the 1Q23-3Q23 periods.

Source: Company filings and BofA Global Research

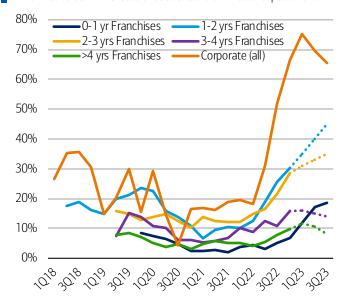
BofA GLOBAL RESEARCH

While the company ceased to provide investors with a breakdown of franchise agent seasoning by vintage in 2023, these numbers don't seem terribly difficult to extrapolate (requiring some modest estimation) from past trend and other data provided by the company. Franchises with 1-2 years and 2-3 years of seasoning are failing at a high rate; franchises with less than one year experience are failing far more quickly than in the past (with precise numbers provided by the company); and corporate agents (which fall into a different bucket) are failing at 60-80%, and, while we don't have the exact data, we presume north of 80% of new corporate agents don't make it past a single year of employment at Goosehead. These turnover rates appear, to us, as problematic. Management has described 15% franchise churn/closure as "healthy for a high-performing sales organization." 15% appears intuitively high to us as a rule of thumb, but the company's churn/closure rate is well over 15% regardless.



Exhibit 2: Closure/failure rates of Goosehead producers by cohort

As of the most current quarterly financials, 18% of franchises formed over the past year have failed. 40-50% of the franchises with one year of experience have failed. 30-40% of franchises with two years of experience have closed. We expect the ultimate failure rate of 2021 and 2022 vintage franchises to be far in excess of Goosehead's or investor expectations.



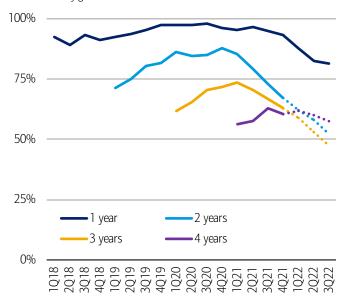
Goosehead has ceased to provide investors with data about franchise count subdivided by years of seasoning beginning with 1Q23 results, and so we have reasonably estimated that 1-2yrs, 2-3yrs, 3-4yrs and >4yrs cohorts during the 1Q23-3Q23 periods. We have dotted the line where we have estimated.

Source: Company filings and BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 3: Likelihood of still operating a franchise by start date

For entrepreneurs who started a franchise 3 years ago (3Q20), there is less than a 50% chance that franchise is still operating. For those who started two years ago (3Q21) there is a hair more than a 50% chance. By 3Q24, when those franchise will turn 3 years old, the trend suggests failure rate will be considerably greater than 50%.



Goosehead has ceased to provide investors with data about franchise count subdivided by years of seasoning beginning with 1Q23 results, and so we have reasonably estimated that 1-2yrs, 2-3yrs, 3-4yrs and >4yrs cohorts during the 1Q23-3Q23 periods. We have dotted the line where we have estimated.

Source: Company filings and BofA Global Research

BofA GLOBAL RESEARCH

In speaking with investors and others, some have made the argument that our past research might be "backward-looking" and failing to acknowledge the much-improved quality of the average franchise recruit in 2023. Beginning with 4Q21, management began to comment on issues such as a) the low productivity of new franchise recruits and b) the poor conversion of franchise recruits opening their franchises. Management has cited – over several quarters – steps being taken to improve recruitment. Management described the quality of the 4Q21 cohort of franchise recruits as follows on that quarter's conference call in 1Q22: "As far as the quality of our agents that has not changed at all." This is the description of the 2Q22 recruits: "The quality of our signed pipeline also improved." And 3Q22: "The quality of our signed pipeline continues to improve." Investors have been told that the recruits of 2022 were better in quality than those of prior years, both on earnings conference calls, in SEC financials and in meetings/calls with management.

Management says the 2023 vintage of franchises is notably better than in prior years. This was the same way management described the 2022 vintage, which has turned out to be quite poor in terms of longevity, productivity and success. That said, given the rapid decline in onboardings, a higher average rate of success might be expected.

With management now acknowledging that the 2022 recruits were of less than desired quality, it might be prudent to wait for the data before being confident that 2023 class of franchises is of a notably better quality. We very much believe it to be possible that the 2023 vintage recruits are better than the 2022 recruits. However, as yet, we see



little statistical evidence to support this. Currently, it is just an assertion as it was in 2022 – an assertion which turned out not to be accurate. One certain truth: the 2023 cohort of franchisees is almost certain to be better than the 2022 vintage due to the 30+ high performing Corporate agents who have been converted into a franchise in 2023. However, we also argue this may ultimately be merely optical. By removing the best performers from the Corporate agency network and moving them to franchises, it reduces the quality of production at Corporate to improve the quality of production within the franchises. The decline in Corporate productivity is clear in the numbers provided.

Additionally, the expectation of improvement doesn't necessarily solve for what appears to be an issue of geography at the company. The failure of franchises seems to be a particularly notable problem outside of Texas. Within Texas, the results seem much better than outside it. Part of the improvement in productivity may be an increase in the proportion of franchise appointments within Texas where the Goosehead model seems to work best. There is nothing wrong with Texas-centric growth, but it does question the applicability of the business model to states outside of Texas and the long-term viability of growth as Texas gets saturated. If this model worked well nationwide, one might expect the proportion of Texas-based franchises would be declining. Instead, it is increasing. We would also note that non-Texas closure rate was high pre-pandemic, enjoyed a lull during the pandemic period when Goosehead was slow to close franchises, and is, once again, high today. It is not clear that the model is replicable outside of Texas, which has been a great beneficiary of intra-US migration of the past few years (and longer).

Exhibit 4: Overall franchise closure rates: Texas vs ex-Texas

Ex-Texas franchise closure rates of 30% are well-above a "healthy" 15%. Closure rates as described in this chart probably modestly underestimate actual closure rates. If one were to be able to estimate these numbers among franchises that were not spawned by former corporate agents, we would expect that this number would lead to higher closure rates among those formerly unaffiliated with Goosehead who bought into an agency.

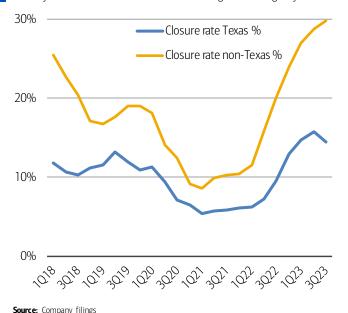
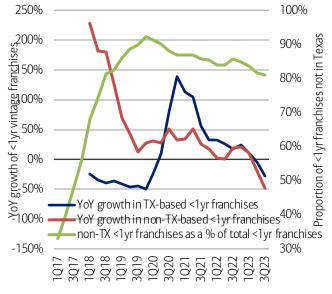


Exhibit 5: Trends of new franchise growth: Texas vs ex-Texas

In 4Q19—pre-pandemic—Goosehead had 233 first-year franchises and just 18 of them (7.7% in Texas). In 3Q23, Goosehead had 224 non-conversion first-year franchises, but 18.9% of new franchises were Texas-based. The company seems to have a model that works well for Texas—a state with significant 2020-2023 population gain and housing formation—but it doesn't seem as successful elsewhere.



Source: Company filings

BofA GLOBAL RESEARCH

The increasing – as opposed to decreasing – Texas concentration may be partly responsible for some trends that would support Goosehead management's argument that productivity is increasing within the agencies, as the company culls/prunes the underperformers. If Texas is a place where a) new housing formations are happening and b) the model has a track record of working there, it will show productivity increasing as a greater proportion of the franchises are Texas-based and a smaller proportion are



outside Texas. This, however, does not bode well for prospects for national business expansion.

That said, despite this arguable benefit, it is far from evident to us that productivity is even improving. Management is culling/pruning the non-performing franchises. A thought exercise: Imagine a business with two "producers." One producer forms 10 widgets per day. The other forms zero per day. Together they form 10. Management finally gets around to purging non-producing "producer" #2. By all appearances, productivity <a href="https://doi.org/10.2016/jas

Management has said of the franchises that have closed, "these non-performing franchises account for less than 1% of new business." By removing producers that essentially produce no production, the numbers look the same as they would as described in the "two-person widget factory" above. The productivity numbers appear to have improved, but only because the company has purged the non-producers as opposed to enhancing the production of the remaining producers. In fact, our calculations suggests that productivity per healthy producer is on the decline. We can measure this in a couple of ways.

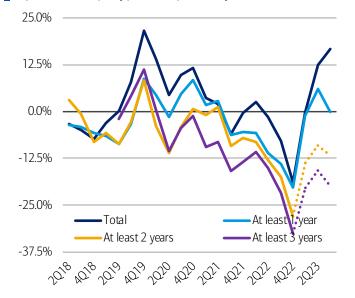
The assertions of increased productivity generally relate to a decrease in the number of producers, not an increase in the business generated per "seasoned" producer. Production per "seasoned" producer appears to be declining.

One way we suggest doing this is by diving deeper into the total gross number of new policies written by franchises (which takes a bit of calculation to estimate) and dividing it by the average number of franchises in a given quarter. We estimate that Goosehead's franchises wrote about 367k gross new policies in the trailing-12-months ended September 30, 2023, up from 326k in the prior year, an increase of 12%. Likewise, the number of franchises has declined by 4% over the same year (an average of 1,315 in 3Q23 vs, 1,374 in 3Q22). This suggests outstanding growth in productivity of 17% per franchise, which supports management's claims of improved productivity; however, if we assume management's context that the purged franchises are less than 1% of new business, we should probably exclude those purged and soon-to-be purged franchises from the calculation. We don't have the hard data to do this, but we can eliminate all first-year, non-conversion franchises from the count. Franchises with at least one year of experience averaged 1,048 over 3Q23, up from 938 in 3Q22 (+12%). This suggests that new policy count grew in-line with the growth in franchises with at least a year of experience. However, even a lot of these second-year franchises are underperforming and closing. Taken one step further, estimated franchises with at least two years of experience: 784 vs 619, up 26%, vs 12% growth in new policies. The pace of growth or franchises with experience is growing much more quickly than new policy growth, making unlikely that productivity per "healthy" agency is improving.



Exhibit 6: Year-over-year change in gross new policies written per franchise cohorts of differing levels of experience

While it is true that new policy production per agency is rising, this may merely be a function of eliminating non-producing agencies from the denominator. New policy production divided among franchises with years of experience shows policy production per "healthy" franchise on the decline.

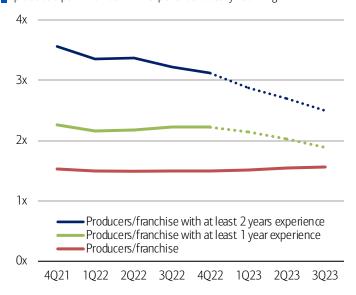


Source: Company filings and BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 7: Tracking producers per franchise

In 2022, Goosehead began to include franchise producers (principal + employees) as a KPI in its disclosures. We generally assume first-year franchisees with an employee are very rare, and even those with only one year of experience don't often have employees. However, the number of producers per franchises with experience is clearly declining.



Source: Company filings and BofA Global Research

BofA GLOBAL RESEARCH

A second measure that leads us to question the idea that productivity is improving is the ratio of producers within franchises to total franchises. In 2022, Goosehead began to provide franchises producers as a key performance indicator (KPI) and argued that the number of producers was more important that the number of franchises (just as the number of franchises began to decline). When Goosehead franchises are successful, they can hire employees to increase their productivity. These individuals are non-owner employees of the franchise, not employees of Goosehead, but Goosehead offers training for these new hires. There are a couple Goosehead franchises that have 10-20 employees, but of those that have employees, most employ just one. And we would assume that almost none of the culled/"less than 1% of volume franchises" had employees. Typically, a franchise would need at least two years of success under its belt before the hiring of an employee would make sense. And what we see is that the ratio of non-owner employees per seasoned Goosehead franchise is down dramatically. In the same way that Goosehead has purged most of its corporate agents and is culling significant numbers of its younger franchisees, the seasoned franchisees have stopped hiring new employees and the number of non-owner producers overall had begun to decline. Employees per franchise with at least two years' experience has fallen to 2.5x from 3.5x at YE2021 (though franchise producers are only down to 2,008 at September 30, 2023 from a peak of 2,102 a year earlier), and 3Q23 was the first quarter where allin non-owner franchise employees declined from the previous quarter (723 at September 30 vs 725 at June 30).

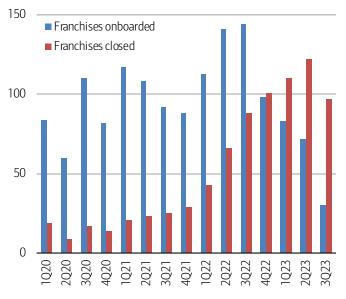
This overall decline in franchise productivity combined with high franchise closure rates is not lost upon prospective entrepreneurs looking for new business opportunities. Closing franchises are quickly outpacing new franchise formations, and prospective Goosehead franchisees are reneging on signed contracts more quickly than new contracts are being signed. Goosehead argues this is all an effort toward increasing selectivity and productivity. This may very well be true. Management now readily concedes that, in 2020-2021, signed contracts ultimately had a low probability of



opening a Goosehead franchises and is now in the process of reversing those contract signings in the accounting.

Exhibit 8: New Goosehead franchises onboarded vs franchises closed

A significant portion of the Goosehead franchises opened in 2020-2022 are now finding themselves shuttered. Whether the company is hesitant to appoint new franchises or whether entrepreneurs are seeing franchises failures and choosing not to open Goosehead businesses, new franchise formation has slowed dramatically.



Source: Company filings and BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 9: Contracts for new Goosehead franchises signed vs contracts revoked

The decline in franchise formation is unlikely to be temporary. 30 onboarding in 3Q23 compares with 144 in 3Q22, but 40-50 new contracts signed in 2Q23-3Q23 compares with 600-700 signed in 2Q22-3Q22. Even if more signees form franchises, there simply aren't many new signees.



Source: Company filings and BofA Global Research

BofA GLOBAL RESEARCH

In addition to arguing that current prospective franchisees are of a higher quality than past vintages, management suggests that the pipeline of prospective franchisees will have a higher propensity to actually open the franchise compared with the past when the company had collected signatures from prospects with limited follow-through. This might be true (for reasons described below), but it is probably early to simply assume a better onboarding rate in 2023 simply because 2021-2022 was so poor. Investors have seen this same line of argument before. 1Q22: "We've also shifted compensation for our recruiting team during the quarter towards successful launches of franchises to better align with this objective going forward." 2Q22: "We are once again seeing a shortening of time between contract signings and launches." 3Q22: "We're seeing faster launch rates." Yet, "launch rate" as defined (by us) as onboardings per prospective contract signed over the preceding 12 months has hit an all-time low in 3Q23, though it has ticked up on a 6-month basis (onboardings per prospective contract signed over the preceding 6 months, which is probably a better indicator of trend). We would expect that this is almost certain to materially rise. Goosehead appears to have signed just 20-30 new prospective contracts per quarter in 2Q23 and 3Q33 as compared with 200-400 per quarter in 4Q20-3Q22. The individual success rate should hopefully improve when recruitment falls by 90%. For the moment, the churn rate of prospective contracts nonetheless remains extremely high. (For those interested, we estimate these numbers using the New Deferrals and Write-offs numbers from the Significant Changes in Contract Liabilities waterfall in the quarterly SEC financials.)



Exhibit 10: Onboardings as a % of preceding period signed contracts

The number of signed contracts that result in a franchise onboarded remain quite low, though it seems quite probable that this could meaningfully improve as new contract signings are plummeting.

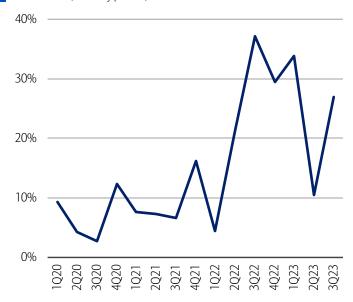


Source: Company filings and BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 11: Contracts revoked as a % of outstanding contracts

Contract cancellations of unopened franchises has been eliminating a backlog of individuals who signed commitments to open a franchise but never did so (nor likely plan to).



Source: Company filings and BofA Global Research

BofA GLOBAL RESEARCH

GAAP income at Goosehead was \$21 million for the trailing 12-months ended September 30, 2023. "Free cash flow" (cash flow from operations less capital expenditures) was \$36 million. However, "free cash flow" excluding the benefit of non-cash compensation and taxes deferred is just \$8 million. At market capitalization of \$2.6 billion, one needs to believe that there will be significant growth in these numbers over the next decade. Ultimately, we believe there is a long-term waterfall effect to this story, and we don't believe that Goosehead is meeting the needs of that waterfall: prospective franchisees sign contracts to form franchises \rightarrow the franchises open \rightarrow the franchises are successful \rightarrow the royalties at the franchises increase as 20% on new business becomes 50% on renewal. Recently, Goosehead has been enjoying that last stage from the COVID19-period housing boom, but now its future growth cycle is based in matriculating new franchises, which does not appear to be occurring.

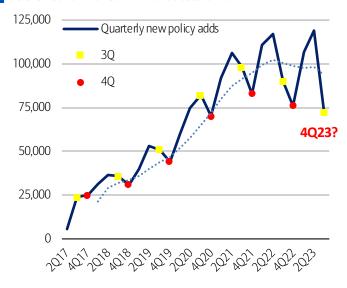
Concerns into 4Q23 results

When Goosehead management claims that it is culling underperforming franchises that produce less than 1% of new business for the firm, there is an implication that the closures are the result of poor performance. We generally have a difficult time reconciling the idea that an individual paid Goosehead \$25k or \$40k (the costs of starting a franchise outside or inside of Texas, respectively) plus perhaps another \$5k in office rentals and computer hardware only to call that money a sunk cost and hang up their gloves just 12-24 months later. We therefore believe the closures are more likely the result of: 1) the difficulty some franchisees are having making ends meet as Goosehead's royalty share kicks up from 20% to 50% on renewal commissions combined with 2) the increasing difficulty of sourcing new business as interest rates and housing sales have declined along with a slowdown of the peak pace of migration seen during the pandemic and immediate post-pandemic period. We believe a lot of startup Goosehead franchises are failing because it is hard work, and what little production there has been for the newcomers isn't being rewarded. As such, when Goosehead says that productivity per franchise is up, we believe this is more about denominator decline than numerator enhances because a) the data points in this direction and b) the macro headwinds of housing sales, interest rates and migration patterns suggest that new business should be slowing. Further, we believe these headwinds are going to particularly present themselves again in a notably difficult 4Q23.



Exhibit 12: Gross new policy additions trend at Goosehead

We believe there has been a material stepdown in production from 2Q23 to 3Q23. Arguably, the trailing-12-month number may understate the pace of decline, which might be better tracked by following each 3^{rd} quarter (yellow markers) or 4^{th} quarter (red markers), whose trend might be particularly germane in anticipation of 4Q23 results to be disclosed in a few weeks. We believe much of this headwind is macroeconomic.

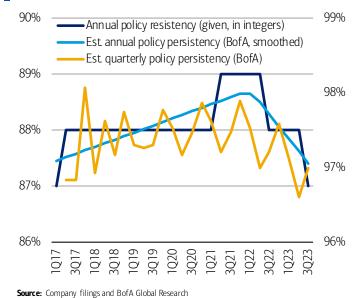


Source: Company filings and BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 13: Assumptions around policy persistency and new policies

Gross new policies is not a KPI that the company provides. We have backed into this number by converting/estimating the annually policy persistency KPI into a quarterly number as detailed below. Net policy growth plus policies non-retained leads to our calculation of the numbers to the left. The smooth progression we have assumed may not be correct, but the impact is minor even if were volatile.



BofA GLOBAL RESEARCH

As 4Q23 approaches, we expect a slump in new policy production, a combination of a weak macroeconomic background for sourcing new homeowners' insurance policies and a significantly lower platform of producers to generate new business. On a trailing-12-month basis, new policy production has not been terribly weak. We expect some lingering 2H22 home sales helped stimulate 1H23 new insurance policy sales for Goosehead, but 3Q23 sales were weak at approximately 72k gross new policies compared with 90k in 3Q22 (a decline of 20% despite an increasing number of experienced producers). We believe Exhibit 12 helps to show the trend investors should expect into 4Q23.

While the company only provides net policycount growth, it also provides policy retention data. With some modest assumptions (as detailed in Exhibit 13), we can estimate gross policycount growth my adding net policycount growth with policies non-renewed. Over the past year, policycount retention seems to have declined from its mid-2022 peak.

The slumping housing industry may explain some of the productivity decline, and bullish investors may be arguing to buy Goosehead, believing it can be purchased at the trough in the housing market.

Some may argue that 4Q23 might represent the bottom of the housing market slump. 10-year Treasury yields are down nearly 100bps from their October 17 peak (though 30-year Treasury yields, a major indicator of where fixed mortgage rates might go, is not as much changed). This could have a positive impact on a housing market where new sales are at decade lows. We don't disagree that housing sales can't improve from here. But there were also many circumstances over the 2020-2022 period that may not recur: 1) a massive sentiment change regarding the value of a home when people were sheltering-at-home during the pandemic, 2) a significant FOMO (fear of missing out) rally as



housing values spiked, 3) mortgage rates in the 3% range readily available, 4) a significant migration of residents across states, etc. Housing sales may improve form 2H23 levels, but we are skeptical that they would return to 2020-2022 levels, especially since the 2020-2022 migration did not have the headwind of people wedded to extremely low mortgage rates from a previous market rate bottom. Just as some might be willing to look past poor 4Q23 production at Goosehead as a function of an inhospitable housing market, we believe one should probably look at 2H20-1H22 as anomalistic in how robust housing sales were and unlikely to repeat even in a recovery. (We also have concerns regarding 4Q23 contingent commission generation per comments earlier in the quarter from mid-cap Florida-based broker BRP Group.)

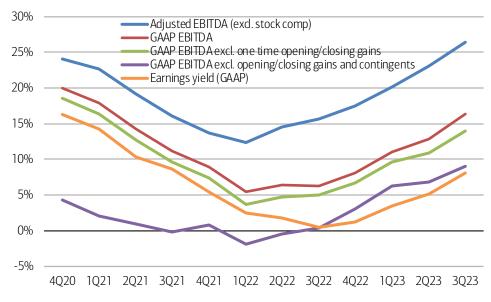
Earnings quality revisited

Earlier we noted that Goosehead has earned GAAP income of \$21 million in the trailing 12-months ended September 30, 2023. Likewise, "free cash flow" (cash flow from operations excluding capital expenditures, non-cash comp and deferred income taxes) was just \$8 million in the same period. (Stock comp will be recurring and represent compounding shareholder dilution in future periods, while deferred taxes will need to be ultimately paid.) This represents a high multiple on a very limited amount of cash earnings generation.

Bulls would challenge this assertion, noting a 32% **adjusted** EBITDA margin (\$22 million against \$71 million of revenues) in 3Q23 and 26% for the trailing 12 months ended September 30, 2023 (\$68 million against \$256 of revenues). We believe that these "adjustments" serve to overstate the earnings power at Goosehead. Of the \$22 million and \$68 million in 3Q23 and TTM3Q23 adjusted EBITDA, \$6 million and \$22 million, respectively, represent non-cash stock compensation, a recurring feature of the Goosehead company economics. Non-cash stock compensation for the trailing 12 months ended 3Q22 was \$18 million. We expect it will be around \$30 million in 2024 and similarly dilutive well into the future. Since going public just over five years ago, Goosehead founders/insiders have sold well over \$1 billion worth of stock (current market cap of \$2.6 billion) in addition to the benefit of debt-financed dividends received. EBITDA margins excluding the benefit of reversing away the non-cash stock compensation (and a \$3.5 million restructuring charge) was 22% in 3Q23 and 16% for the trailing 12 months ended September 30, 2023.

Exhibit 14: Different measures of Goosehead earnings margins

The exclusion of stock compexpense from Goosehead's margins has a material impact on the degree to which the company appears to have double-digit earnings margins.



Source: Company filings

BofA GLOBAL RESEARCH



There is another item that we believe is also currently serving to overstate earnings/EBITDA modestly. To start a Goosehead franchises requires a one-time payment to Goosehead of \$40k for a Texas franchise or \$25k for a non-Texas franchise. In accordance with AS606 accounting (adopted in 2019), the initial franchise fee is amortized into earnings in equal increments over 10 years or 2.5% per quarter. However, when franchises close prematurely as has been the case in a significant way over the past two years, Goosehead is able to fully recognize the remaining unearned portion of that fee immediately. Despite being intuitively negative for the business model, to close many franchises in a short period of time serves to boost Goosehead's revenues. We expect that there is essentially 100% margin on these revenues. Over the 12 months ended September 30, 2023, this amounted to an incremental \$6.3 million in revenue (compared with \$3.7 million in the year before and \$1.2 million in the year before that). Again, we think this is near 100% margin revenues and GAAP earnings for the 12 months ended September 30, 2023 was \$21 million. (Though it is a non-cash item ... the cash was received when the franchisee appeared for training.)

The unusual accounting for the recognition of franchise fees may be serving to modestly inflate earnings.

(Similarly, in the past we have regarded another unusual accounting quirk as overstating earnings that we believe is worth mentioning here. Goosehead begins to recognize the revenue from amortizing the initial franchise fee, not from the date or receipt of the fee nor from the date of the opening of the franchise, but rather from the date of having received a signature with a hopeful commitment that the signature will evolve into a new franchise. This represented about \$2.0 million in revenue in 2021, \$2.5 million in 2022 and \$900k in 9M23. We also argue that this revenue is 100% margin. While we see this revenue recognition accounting as intuitively nonsensical—recognizing the revenue before the receipt of the cash or a firm commitment—we expect Goosehead is following what the accounting rules advise properly. However, something has changed in the past couple of years which seems to reward our view of this accounting treatment as formerly misleading. So many of these contracts have turned out to be signed by individuals who do not open Goosehead franchises such that this formerly recognized revenue has had to be reversed with a bad debt expense. These bad debt expenses have totaled \$1.2 million, \$4.1 million and \$1.0 million in 2021, 2022 and 9M23, respectively. This treatment formerly inflated earnings and EBITDA, but the significant degree to which contracts have not materialized into actual franchises has served to negate the benefit or even have a negative impact in the past few years. Regardless, this is – as with the revneues described in the prior paragraph – an entirely non-cash issue. Goosehead never received any cash associated with these earnings, and it does not need to return cash associated with the bad debt.)

Deeper dive on contingent commissions

One other item worth mentioning in this earnings quality examination is the role of contingent commissions. Contingent commissions are payments to agents by insurance carriers for sending them business that achieves heightened levels of profitability for the carrier. In some ways, it is a "thank you" for the business earning more than merely adequate levels of profitability. We believe there are several issues that arise when discussing contingent commissions:

- 1. Contingent commissions represent the majority of Goosehead's earnings.
- 2. It might be perhaps argued that Goosehead is currently undereaming on contingents that may be higher in the future.



3. Contingent commissions are a prime example of what may be an agency distribution model rigged against the policyholder, which may have longer term implications for the business model.

Most of Goosehead's earnings

Contingent commissions are extra payments to agents when the profitability of the business exceeds certain levels to the benefit of the carrier. That is to say that the carrier made so much money on the customer that it wishes to incentivize the agent by sending a bonus with extra remuneration. This is very profitable compensation for the agent. We assume that the earnings on contingent commissions is near 100%. It is a cash revenue where pretty much all of the revenue from contingent commissions flows to the bottom line.

GAAP earnings for 2020, 2021, 2022 and 9M23 were \$9.2 million, \$5.4 million, \$556k and \$10.5 million, respectively. "Free cash flow" (excluding cap/ex, stock comp and tax deferrals) was \$9.8 million, \$15.3 million, \$1.2 million and \$8.3 million in the same periods. By comparison, contingent commission revenue (which mostly falls to the bottom line) was \$16.7 million, \$9.9 million, \$7.7 million and \$10.7 million in each of those time periods. Without contingent commissions, Goosehead business appears only negligibly profitable. We have some concerns about the viability of a business model whose (so far slight) profitability relies significantly on contingent commissions.

Could Goosehead be underearning?

That said, this view might find some very reasonable pushback from bullish investors who argue the company is currently underearning on the amount of contingent commissions and more can be expected in the future. Across 2022-2023, the profitability of the US auto insurance market has gone from elevated levels of profitability during the peak pandemic period (2Q20-1H21) due largely to shelter-at home suppressed driving behavior, which transitioned quickly into inflationary costs of accident repair (among other drivers). Currently, the margins among agency auto insurance carriers (other than Progressive) are broadly sub-profitable. Additionally, the US experienced unprecedented convective storm activity in 1H23 (tornados, hail, thunderstorms), significant homeowners' losses with Hurricanes Ida (3Q21) and lan (3Q22) and a never-before-seen Texas freeze in February 2021. The profitability of personal lines business has been below multi-year averages and so contingent commissions can be argued to be currently depressed.

The majority of Goosehead's earnings have been coming from contingent commissions, which bulls may argue as being currently depressed.

Contingent commissions as a proportion of controlled premium represented 155bps, 64bps, 35bps and 49bps in 2020, 2021, 2022 and 2023, respectively. (2020 likely represents a high watermark for contingent commissions. Traffic had materially declined in the first year of the pandemic, so there were comparatively few auto accidents.) We fully believe that Goosehead may be currently underearning with potential upside from higher contingent commissions in the future, and Goosehead bulls will likely point to this as a weakness in our bearish outlook (along with a depressed housing market pushing producer activity to merely cyclical lows). However, we also don't expect a return to 2020-levels of contingent earnings power. The profitability of auto insurance in the 2020 period was a bigger tailwind than current unprofitability is a headwind. (This is similar to being bullish because of a cyclical trough in the housing market: yes, new housing purchasing is depressed, but we don't expect it to return to pandemic peak levels.)

A compensation model that serves customers poorly

The third area of exploration with regards to contingent commissions is the way compensation structures have evolved to better serve the carrier-agent relationship at the expense of the customer. In theory, the insurance buyer uses the agent to help navigate a marketplace the customer finds difficult to access. Historically, there have been few options for customers to purchase the product directly from the seller, and the buyer doesn't have a good sense of the price/value of the product. Like the driver who takes a car to the mechanic, the driver doesn't know how to fix their own car and isn't sure one way or the other whether the price quoted by the mechanic is fair. Purchasing insurance has many of the same complexities/opacities. In a perfectly efficient system, the agent should place the customer's policy with the carrier offering the best price/value for that customer.

In practice, however, it does not work that way in agency distribution. (This issue is not Goosehead-specific.) The agent is not a fiduciary of the customer and has no obligation to deliver the best price/value. As such, carriers look to way to incentivize agents to send business their way that stretch/defy the price/value paradigm. The most essential of these is commission structures. As a rule of thumb, carriers tend to offer agents commission rates of 14-18% on new business and 12-15% on renewal business. Additionally, many offer contingent commissions of up to a few hundred basis points for sending business their way that exceeds normative levels of profitability. Imagine two nearly identical insurance policies. The policy costs \$2,500 at carrier A, but \$2,800 at carrier B. (B is 12% more expensive than A.) Carrier A offers the policy with a 14% commission, while Carrier B offers the policy with a 17% commission. The agent will get \$350 up front for booking with Carrier A, but \$476 for booking it with Carrier B. (B is offering 36% more commission to the agent than A.) Additionally, Carrier B offers a special bonus to agents. "Act like a 'front line' underwriter on our behalf. When a customer comes to you who you perceive to be a better risk, send them to us. When a customer seems to be a worse than average risk, send them to one of our competitors. If your front-line 'sorting' turns out to be correct, we'll send you an additional kickback on having sent us the best business, an additional \$100." (Suddenly, B's offering jumps to 65% more than A's offering.) The Agent has no fiduciary obligation to the customer. Policy B is \$300 more expensive than Policy A, and Carrier B is essentially offering the agent \$226 more to place the policy with it. Magnified over hundreds of policies the difference in earnings potential for the agent to channel business to the carrier with the best commission economics is significant. Further, that commission is largely an annuity that will continue to be paid to the agent year after year as long as it controls the customers ... over \$500 per year ... over \$200 per year more than having put the customer with Carrier A.

We believe the current personal lines agency model does not serve customers well in terms of delivering best execution. The temptation for agents to seek out the most attractive commission structures does not serve customers well and presents a major opportunity for direct-to-consumer and artificial intelligence to disintermediate the agent.

Our view is that this market inefficiency will face challenges as emerging technologies aim to correct these inefficiencies. In 1996, Progressive and GEICO, who had already been experimenting with various direct-to-consumer insurance strategies, activated the websites progressive.com and geico.com. In 1998, each bound their first insurance policies over the Internet. From a combined marketshare of 5% of US personal auto in 1996, the two companies now represent 27% of the market combined. The direct-to-consumer market continually takes share from the agency-directed marketplace. (The only other scale carrier who has organically grown marketshare over that time is USAA,

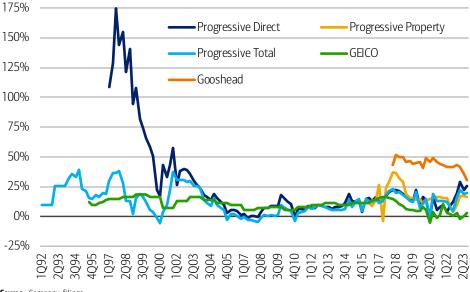


which targets US veterans. The high growth in the number of veterans due to the wars in Iraq and Afghanistan combined with USAA expanding its footprint to include families and friends of veterans explains its unique growth despite a (captive) agency channel strategy.)

We estimate that non-affinity group placement direct-to-consumer US auto insurance marketshare has gone from low-single-digits to mid-20% over the past 25 years and will continue to grow. That mid-20% marketshare represents customers who accessed the marketplace directly presently or have remained loyal to their direct-to-consumer insurance purchased in the past. We suspect that the flow of new business (first time purchasers and carrier switchers) to direct options represents around half of industry flow (though that number may have declined in the past year or so as GEICO has temporarily pulled back from the marketplace). Progressive and GEICO have revolutionized the US auto insurance marketplace with their direct-to-consumer offerings. This has included periods of extreme growth in the late 1990s when Internet sales were introduced (noting the sharp deceleration of Progressive Direct's growth 3Q97-4Q00) or in 2016-2017 when Progressive launched its homeowners offering. But these periods of growth tended to be a function of a small base on which to grow from. 20%+ growth rates appear very difficult to sustain. (One can make the argument that it *might* be easier for an agent to sustain it compared with a carrier, but we know of no example of any personal lines agency network who has maintained such growth as it achieved scale profitability.) It is further worth noting that Goosehead's largest channel partner—Progressive—is seeing notable acceleration in its premium growth ... just as Goosehead is witnessing deceleration in its pace of premium growth.

Exhibit 15: Year-over-year change in premium growth

Goosehead management guides investors to 30%+ premium growth through 2027, but the company has already hit the lower 30% bound in 3Q23, despite unprecedented price increases in US personal lines insurance and significant acceleration in the growth rate of Goosehead's largest channel partner Progressive. It is very difficult to maintain 20%+ premium growth except off a very small base of policies.



Source: Company filings

BofA GLOBAL RESEARCH

In late October, a federal jury in Kansas City, MO found that the National Association of Realtors and several residential real estate brokerages liable for \$1.8 billion in damages for artificially inflating commissions on home sales. This ruling is viewed as having longer-term implications for what has historically been a market where the home seller has had to pay a 3% commission on sale to the buyer's agent and another 3% commission to the seller's agent (or 6% with the buyer's and seller's agent is one and the same). In a world where buyers can find homes to purchase directly online through websites like Zillow and Redfin, buyers argue that paying the seller's agency fees no

longer represents commission for a value-add service. The 6% cost of agency fees has come to be perceived as a tax on home sales in an increasingly direct-to-consumer/self-serve world.

We believe, like the 6% real estate broker commission, the 15% insurance agent commission could be at risk over the long term. Direct-to-consumer options offer means of circumventing this add-on cost.

Two decades ago, GEICO created the tagline, "Give us 15 minutes and we could save you 15% or more on auto insurance." Over the intervening years, that 15 minutes has been reduced through improved website design, data speed and predictive analytics, but the "15%" number remains, and it is not arbitrary. "15%" essentially represent the disintermediation of the agents whose role acts as a "tax" on the customer, inflating the cost of the insurance (both to cover the cost of the annual commission and perhaps inflating the premium by not prioritizing best execution). At minimum, one might argue that the price of personal lines insurance is 10-15% inflated by the cost of maintaining the agency/middle-man distribution infrastructure in place. Among the reasons why GEICO and Progressive have been successful for so long is because the product they are selling is quite often cheaper as it circumvents the—perhaps superfluous—cost of the agents. (Progressive also sells though agents, though it is generally considered a lower commission payer among competitors. Agents would likely prefer the commission structure of non-Progressive carriers who usually will pay more.) We believe that the sales of US auto insurance will continue to increasingly favor the direct-to-consumer offerings due to brand, price and transparency benefits.

Goosehead tends to sell home/auto bundled policies, and, while direct-to-consumer US auto premium represents a mid-20% share of the market and perhaps half of all new business, direct-to-consumer US homeowners' premium and sales remains a product category in its infancy. The industry hasn't quite "cracked the code" on selling home insurance online. That doesn't mean that the industry isn't trying to make it work. Progressive's Home Quote Explorer and Allstate's Answer Financial are online agencies that hope to be able to book you into a Progressive or Allstate policy, but will place customers with a third-party if it represents the better option. GEICO, who does not write homeowners' insurance, will offer their competitors' homeowners products to bundle to a GEICO auto policy. Insurtechs like Hippo, Kin and Lemonade offer direct-to-consumer homeowners' policies. Even Goosehead added a direct-to-consumer online agency option in 2022 that competes directly against its franchisees. We would argue that Goosehead also senses which way the wind is blowing.

It is still early in consumer preference for direct-to-consumer homeowners' insurance sales. However, the speed at which the US auto insurance embraced direct-to-consumer might be an indicator of what is to come.

We have no reliable data to comfortably estimate the policycount or premium currently generated by direct-to-consumer homeowners' insurance, but we have tried to estimate the growth trajectory of this marketplace in our June 13, 2023 note on artificial intelligence in insurance "Underwriting margins: T&E, high acquisition costs and artificial intelligence." Regardless, it is currently small. However, we believe that the large-language model artificial intelligence revolution has significant implications for the direct-to-consumer insurance marketplace, reducing the complexity barriers around a product like homeowners' insurance where direct-to-consumer sales have been formerly



limited. Just as direct-to-consumer sales have been taking share in auto for over two decades, we expect similar trends to arise in homeowners. There will always be policies (high limits, key exemptions, etc.) that will require a human intermediary, but we generally assume the 80/20 rule applies with the vast majority of home policies not so complex that the needs couldn't be solved in a direct-to-consumer manner.

Small picture vs big picture: short-term and long-term

Long-term, we believe businesses like Goosehead are fighting a very real headwind. Just as GEICO and Progressive materially disintermediated the agency distribution model for US personal auto insurance over the past 25 years, the same headwind seems a risk for the personal lines insurance industry more broadly. That doesn't mean an old economy business model like personal lines agency distribution can't succeed (see USAA), but it means there are material headwinds to success. Goosehead has made 3 pledges to its shareholders: 1) compounded premium growth of at least 30% through at least 2027, 2) a long-term eye toward a 40% EBITDA margin and 3) a goal of being, within founder Mark Jones's lifetime (currently age 61), the largest distributor of personal lines insurance in the United States, a position currently held by 101-year old State Farm both in US homeowners insurance (\$24.4 billion in 2022 direct written premium and 18.2% industry market share) and in US personal auto insurance (\$46.7 billion in 2022 direct written premium and 16.8% industry market share). Contrasting with a multi-year experience of modest market share decline, State Farm appears to be gaining share in the unique 2023 competitive environment. Goosehead, through September 30, 2023, has processed policies totaling direct written premium of \$2.8 billion (home/auto combined) over the previous 12 months. It has a long way to go before it displaces State Farm. Even if it doesn't achieve this lofty goal, it doesn't preclude a lesser level of very real success, nonetheless. We would like to frame the prospects for achieving these three goals.

The smaller picture: management's feedback

From a high of \$181 two years ago, the stock fell to a bottom of \$29.42 a year ago, but has subsequently more than doubled off that bottom. Our Underperform rating on the stock has in part reflected the attrition rate of producers, and we believe that onboarding just 30 new franchises in 3Q23 and receiving signatures for new potential franchises of just 20-30 in the quarter is a vindication of our concerns around expectations for a rapid decline in the prospects for the business's growth. Bullish investors and others argued that our research only focuses on what might be considered negative trends and does not acknowledge the positive trends. Likewise, some have commented that our revenue/earnings forecasts for 4Q23 are toward the high-end of management guidance or are even, in some cases, above management guidance. We believe it worthwhile to address both of these critiques.

Focusing on the positive: franchisee quality

The key factor bullish investors and others point to when they argue our research tends to highlight negative trends while paying too little attention to positive ones is the much-improved quality of the average franchises recruit in 2023 as compared with 2022 or 2021. We have touched in this above, but we would make several additionally comments regarding franchisee quality as we see it today.

- Yet-to-be-seen. There is no actual data being supplied to investors that should lead it to conclude that the 2023 recruits are better than the 2022 recruits. It takes a year or more for a franchisee to get comfortable with the business and begin producing at a pace that indicates the beginnings of a successful career. Let us assume the new 2023 recruits are indeed of higher quality than in the past. They should be expected to produce better in the future. It is not available in the data today.
- **We've heard this before.** As detailed above, Goosehead management was adamant on multiple occasions that the quality of the average new franchisee and



the quality of its prospective franchisee pipeline was better in 2022 than in 2021 and prior years. Management now acknowledges that 2022 was a poor recruitment class.

- For Porate conversions. Goosehead onboarded 30 new franchisees in 3Q23 (down from 144 in 3Q22) and 185 new franchises in 9M23. Additionally, the company has recently been converting high performing corporate agents into franchisees at a pace of about 7-8 per quarter. Goosehead has said that the corporate conversions are 6x more productive than the traditional new franchisees. This rings to us as potentially true. In individual already deeply imbedded within Goosehead's systems and model will start to produce from a standing start, while those true neophytes will require a ramp time. However, there is an aspect of the "robbing Peter to pay Paul" colloquialism in this enthusiasm. Goosehead is removing its best producers from the Goosehead Corporate agency and moving them to the Franchise segment. Investors can readily see the declining production statistics in the corporate agency as its best produces begin to produce for the other segment. We fully expect the success rate of corporate conversions to be much higher than the franchisee who buys after having previously been unaffiliated with Goosehead. This seems like common sense.
- Restricting the aperture. With onboardings down almost 80% over the past year and prospective franchise signings down around 90%, it seems logical to assume that a more restrictive admissions process will yield a higher quality in the applicant pool. It seems entirely reasonable to assume that, of the 30 new franchises onboarded on 3Q23, the success rate ought to be better than among the 144 franchises onboarded in 3Q22. If not, Goosehead's has bigger headwinds than we currently model. The company should be able to provide more help and attention to 30 new franchises than 144. That said, while it may be true that the process for acquiring a new Goosehead franchise has become more restrictive, we believe the greater factor driving the decline in franchise formation is a decline in interest among prospective entrepreneurs.
- Steepening ramp. While we generally expect "the law of small numbers" should help increase the success rate among vintage 2023 franchises compared with, say, 2022 franchises, the macroeconomic backdrop does not favor the 2023 starters. With the pace of mortgage issuance and home purchasing at decade-lows and the pace of migration to Texas slower than in the recent prior years, newer franchisees have less natural opportunity to exploit than in recent prior years. This may turn around in 2024, and starting a franchise in the depths of the housing market cycle may turn out fortuitous. The fall in Treasury yields over the past 2-3 months may be an indicator presaging that outcome. That said, we generally believe 2023 has been a difficult year to start a Goosehead franchise, even among the most naturally talented agents.

4Q23 forecasts: "the high end of the range"

Bullish investors and others have taken issue that our forecasts tend to be near or in some cases modestly above the high-end of its guidance and at the high-end of the consensus forecast. Some seem concerned that the company could deliver results within its previously enshrined guidance, and our research might call it a miss. The longstanding habit of management teams providing guidance ranges below its ultimate expectations in order to deliver earnings "beats" notwithstanding, we believe those very focused on \$500k one way or the other in 4Q23 results are probably missing the broader point. 4Q23 is not a watershed quarter for the company (though we do expect weak new business production). Below, we provide our 4Q23 expectations alongside management guidance. It may be that we expect the company to deliver at or slightly above the high range of guidance, and we believe that when companies fail to deliver at or above the high range of guidance, investors often construe it as a "miss."



Exhibit 16: BofA 4Q23E forecast vs Management Guidance

We forecast 4Q23E revenue and revenue growth a hair above the upper end of management guidance while also forecasting total written premiums and growth towards the upper end of management guidance. Our 4Q23E adjusted EBITDA margin forecast of 29.7% represents and expansion from the 20.7% margin reported in 4Q22.

	BofA 4Q23E Forecast	Management Guidance
Total Revenue	\$69.3mn	\$61.7mn - \$68.7mn
Total Revenue Growth	21%	8% - 20%
Total Written Premiums	\$743mn	\$662mn - \$782mn
Total Written Premiums - growth	27%	13% - 34%
Adjusted EBITDA Margin	29.7%	Expected to expand

Source: Company filings, BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 17: BofA FY23E forecast vs Management Guidance

We forecast FY23 revenue and revenue growth slightly higher than the upper end of management guidance while also forecasting total written premiums and growth towards the upper end of management guidance. Our FY23E adjusted EBITDA margin forecast of 27.1% represents an expansion from the 18% margin reported in FY22.

	BofA FY23E Forecast	Management Guidance
Total Revenue	\$267.5mn	\$260mn - \$267mn
Total Revenue Growth	28%	24% - 28%
Total Written Premiums	\$2.95bn	\$2.87bn - \$2.99bn
Total Written Premiums - growth	33%	29% - 35%
Adjusted EBITDA Margin	27.1%	Expected to expand

Source: Company filings, BofA Global Research

BofA GLOBAL RESEARCH

In the grand scheme of things, we believe that 4Q23 revenue results matter little. If the company fails to reach our revenue forecast for 4Q23, which is \$600k above management guidance, it does not reflect the broader trend about what we believe important in terms of where investors should focus (new business production and new franchise formation). The valuation for the company includes an assumption that Goosehead will be a much, much larger company than it is today 5 and 10 years out. As mentioned earlier, the company's earnings production is the result of a waterfall effect where today's earnings were engendered by actions taken a number of years earlier. Goosehead sells franchises; those franchises take a few years to reach productivity; and a year after they become productive, Goosehead's royalty structure supercharges its take by 150%. The 4Q23 result heavily rests on the work of franchises appointed in 2018-2020. We would suggest that, were a time traveler from the future to tell Goosehead management in 2019 or 2022 that revenue growth in 3Q23 would be just 23%, it would be generally seen through the lens of disappointment for a company projective a 30% premium CAGR through 2027. (When compounded with the fact that US auto insurance premiums are up 19% year-over-year and homeowners' premiums are probably up 8-12%, this decelerating 23% revenue growth seems less impressive.)

The bigger picture: what is Goosehead worth?

On September 30, 2023, Goosehead controlled \$2.8 billion in premium worth about \$275-280 million in annual revenue. Presuming that we could snap our fingers, and Goosehead would be at its 40% EBITDA margin today, that translates to about \$110 million of EBITDA. Assuming current interest costs (\$7 million annually that probably underestimate long-term leverage) and a tax rate of 21%, it translates to about \$80 million of cash earnings. Assuming an 87% annual policyholder retention, a 5% annual inflationary CAGR on insurance premiums and a perhaps too-low 10% discount rate on future cash flows, this math would suggest that the run-off of the current portfolio of policies is worth about \$370 million discounted to present. Of course, this is a run-off value and assumes no future policies are written by Goosehead, which is, of course, incorrect. (And, of course, the company is nowhere near a 40% EBITDA margin, which suggests that the run-off value could be as much as half that \$370 million number.) However, the first point we would make here is that the gap between \$370 million in run-off value today and the current \$2.6 billion enterprise value suggests that there is a lot of future growth presumed in the current valuation.

How Much Growth?

How much growth is, of course, a key fulcrum on which valuation rests. Management says a 30%+ premium CAGR through 2027 in a business currently growing at just 30% in an environment where insurance costs are up the most in 50 years. Revenue growth in 3Q23 was just 23%. Our view is that the rapid growth previously seen at Goosehead were a function of a) a very small starting basis and b) significant tailwinds provided by the pandemic economy, particularly in the state of Texas. We would expect that the



company is already in the process of seeing its growth trajectory take on a normative growth rate (low teens? 10%? high-single-digits?). One way we might view this trajectory is to compare it against the trajectory of personal lines business that have been revolutionizing how people buy insurance. GEICO and Progressive have been antagonistic share takers compared with the rest of the personal lines industry. Despite their consistent growth (until recently for GEICO), growth in excess of low-double-digits is difficult to achieve as evidenced in Exhibit 15.

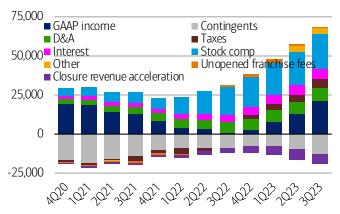
Historically, growth near or in excess of 20% off anything more than a small base has been nearly impossible to reach/maintain for personal lines business. Revenue growth at Goosehead has already decelerated materially despite a once-in-50-years personal lines pricing cycle as a significant tailwind.

There are times when there is excessive growth, and this can be seen in the early days of Progressive entry into the direct-to-consumer space or its 2015 entry into the homeowners' market. But, even superior business models like GEICO and Progressive usually struggle to achieve 20%+ revenue growth (though Progressive is currently achieving it, a remarkable feat for a company of its size). In the long run, we believe Goosehead's long-term growth is probably a function of macro factors (a GDP/insurance pricing growth rate in the mid-single-digits partly offset by not-to-be-dismissed technological disintermediation) plus success in franchise growth (which could rebound, but appears currently in a state of decline). There will be a lag effect of a few years on how the latter impacts the overall trend.

How Much Margin?

In our thought exercise above where we valued Goosehead's backbook as being worth \$370 million in run-off, we presume a 40% EBITDA margin, in-line with Goosehead's long-term guidance/goal. This 40% number is far in excess of Goosehead's current EBITDA margin, which stands at 16% for the 12 months ended 3Q23. Management would argue that its EBITDA margin in closer to 26% as it excludes \$22 million for severance costs and restructuring. It is common for insurance brokers (excluding Brown & Brown) to exclude severance, integration and restructuring costs from its reported EBITDA margins and call them "adjusted." We generally object to this practice, as such costs seem to be recurring, and we expect that for proudly "up or out" corporate cultures like Goosehead, severance is almost certainly a recurring cost. Investors can make their own decisions about what to adjust out of reported margins.

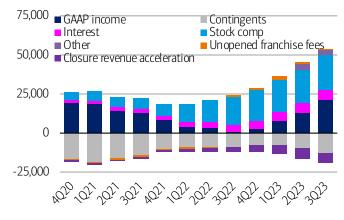
Exhibit 18: Adjusted EBITDA split among components (\$ in ks, T12M) Stock comp has been growing significantly and largely serves to inflate management's reporting of EBITDA margins.



Source: Company filings

BofA GLOBAL RESEARCH

Exhibit 19: Adjusted earnings split among components (\$ in ks, T12M)Stock comp has been growing significantly and largely serves to inflate management's reporting of earnings margins.



Source: Company filings

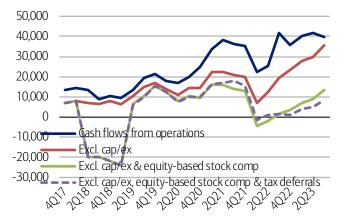
BofA GLOBAL RESEARCH



However, it is our contention that whether one points to 26% or 16% as the current EBITDA margin at Goosehead, both numbers significantly overstate the cash earnings power of the company. "Free" cash flow is conventionally understood to mean cash flow from operating activities less capital expenditures, and, on this definition of "free" cash flow, Goosehead produced \$36 million of "free" cash flow on a basis of \$256 million in revenues over the 12 months ending 3Q23. Included in this \$36 million of free cash flow is the benefit of \$22 in non-cash stock-based compensation. Stock comp tends to move employee compensation (particularly often executive compensation) out of operating cash flows, but it is moved ostensibly into the financing function of the company through shareholder dilution. One can make the argument that a one-time stock grant might be worth excluding from expenses when one wants to put a multiple on earnings or cash flows, but we believe recurring stock compensation overstates a company's cash flow from operations. Goosehead's stock comp expense was \$18 million and \$22 million in 2022 and 9M23, and the company advised that the 1Q23 number of \$6-7 million was good run-rate number to embrace. Goosehead's "free" cash flow as defined as cash flows from operations less capital expenditures, stock compensation expense and change in deferred income tax (those taxes will need to be paid eventually) was \$8 million on that \$256 million revenue base for the trailing 12 months ended 3Q23 or just 3.3%. One can get a sense of earnings quality at Goosehead from the graphs below.

Exhibit 20: Cash flow from operations/"Free" cash flow (\$ in ks)

Once one adjusts out the very significant non-cash compensation boost from cash flows from operations, cash flow generation in 2023 falls below that of 2020-2021.

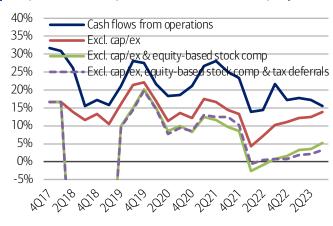


Source: Company filings

BofA GLOBAL RESEARCH

Exhibit 21: Cash flow from ops./"Free" cash flow (as a % of revenues)

Even including the equity comp, cash flow generation as a % of revenue has been stagnant for the past 5 years. After adjusting out the benefit of stock comp, the business has produced almost no cash flow this past year.



Source: Company filings

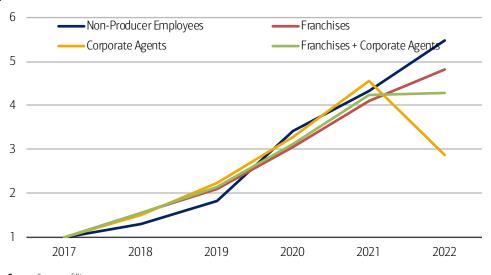
BofA GLOBAL RESEARCH

One might make the argument that current Goosehead margins are irrelevant because the company still has not achieved the scale it will enjoy long term (which will help drive EBITDA margins to 40%). We're not so certain that the business is as scalable as bullish investors might hope. Over the past 5 years, the pace of hiring of corporate agents and enshrining new franchise appointments has generally kept pace with the hiring of non-customer-facing employees. The pace of hiring of support staff that allows Goosehead's producers to produce did not seem to slow as Goosehead's client-facing operations grew: that is, until 2022 when non-producer employees continued to grow while customer-facing agent growth stagnated. We don't have the 2023 data as we only know this information from the annual employee count in the 10-K. 2023 may be different, and Goosehead may be cutting staff to improve operating margins. Whether this is the case, and whether it has an impact of the company's net promoter scores (which continue to be quite stable in the low 90s) will be determined in the future.



Exhibit 22: Employee headcount indexed to December 31, 2017

For much of its public existence, non-producer employees at Goosehead have grown at the same pace as producers. In 2022, non-client facing personnel grew much more quickly than producers. This data is a year old and will be updated with the 2023 10-K. Producers are down in 2023, and we do not anticipate non-producing employees to have declined as quickly as producers.



Source: Company fillings

BofA GLOBAL RESEARCH

What we can say is that compared with the insurance broker peer group, Goosehead looks expensive. The company trades at 300-400x trailing-12-month cash flows (operating cash flows less capex, stock comp and tax deferrals). These cash flow margins are marginally better than they were a year ago, but worse than they were two and three years ago. These same numbers of 11x trailing revenues and 67x trailing EBITDA. Some may point to the 23% revenue growth and note that this is higher than the peer group. We would merely point out that a lot of that growth is conversions from 20% royalty payments to 50% royalty payments and also note that the growth rate of some insurance brokers trading at 25x EBITDA are a very healthy 8-10%. One might note that Goosehead is not comparable to these companies as more a seller of franchises than an agent of insurance sales, per se. We find this line of argument somewhat persuasive, but note that more franchises are currently closing than opening.

Exhibit 23: Comparing Goosehead's margins, growth and valuation against US insurance brokers

Goosehead isn't precisely an insurance broker/agent. It is an insurance agent and a seller of insurance agency franchises. It may not be perfectly apt to compare Goosehead with the insurance brokers, but it has imperfect relevance. Generally, Goosehead's valuation and margins compare unfavorably with this group. However, it is growing faster. That said, the 23% revenue growth is not so wildly in excess of insurance brokers enough so to explain the valuation gap.

		Arthur J.	Brown &					
A	on	Gallagher	Brown	BRP Group	Goosehead	MarshMcLennan	Ryan	WTW
Trailing 12 months ended 3Q23		_		-			-	
Price-to-revenues	4.5x	5.0x	4.8x	1.4x	10.4x	4.2x	5.6x	2.7x
EV-to-revenues	5.4x	5.7x	5.7x	2.6x	10.8x	4.9x	6.6x	3.2x
Price-to-trailing earnings	21x	43x	27x	NM	128x	27x	61x	24x
EV/EBITDAC	17x	23x	17x	24x	67x	18x	28x	15x
EV/Free cash flow (conventional)	24x	24x	25x	172x	77x	30x	31x	31x
EV/Free cash flow (stricter)	24x	22x	28x	NM	331x	33x	42x	35x
As a % of revenue								
Earnings 2	1.6%	11.8%	18.1%	NM	8.2%	15.8%	9.2%	11.1%
EBIT 2	9.0%	17.3%	28.4%	NM	12.9%	23.2%	17.7%	16.0%
EBITDAC 3	0.9%	24.9%	33.8%	10.8%	16.1%	26.5%	23.6%	21.7%
Free cash flow (conventional) 2	2.8%	23.8%	22.4%	1.5%	13.9%	16.1%	21.0%	10.4%
Free cash flow (stricter) 2	2.7%	25.3%	20.4%	NM	3.3%	14.5%	15.6%	9.1%
3Q23 vs 3Q22								
Revenue growth	7.6%	21.9%	15.1%	74.6%	23.1%	12.8%	21.8%	10.9%
Organic growth	6.2%	8.0%	9.6%		23.1%	8.2%	14.9%	
Organic growth (incl. fiduciary income)	8.0%	10.8%	11.2%	18.6%	23.1%	10.0%	14.7%	8.9%

Source: Company filings and Bloomberg

BofA GLOBAL RESEARCH



Goosehead's valuation trades at multiples well in excess of the insurance brokerage peer group. Its growth rate of 23% over the past 12 months exceeds that of BRP at 19% or Ryan at 15%. However, we believe its growth rate is not so far superior as to justify these valuations. Further, we believe its business model—selling retail personal insurance—is of far greater risk of technological disintermediation that would upend the Goosehead business model entirely such that the other public insurance brokers/agents have much higher earnings visibility when compared with Goosehead.

Price objective basis & risk

Goosehead Insurance Inc. (GSHD)

Our \$41 price objective is based on discounted-cash-flow analysis using our earnings projections for a 15-20% revenue CAGR through 2028 and a residual growth rate of 10%. The 10% residual growth rate runs ahead of mature large-cap brokers, but smaller outfits have tended to grow more quickly. We select an 12% discount rate to reflect the surge in interest rates beginning last in 2021.

Downside risks are disintermediation of the agency sales model to captives and direct channels as well as declining interest from potential franchisees. Upside risks are acceleration in franchise growth and increased pace of homeownership.

Analyst Certification

I, Joshua Shanker, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

US - Insurance Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Aflac	AFL	AFL US	Joshua Shanker
	Allstate Corp.	ALL	ALL US	Joshua Shanker
	American International Group	AIG	AIG US	Joshua Shanker
	Arch Capital	ACGL	ACGL US	Joshua Shanker
	Assurant	AIZ	AIZ US	Grace Carter, CFA
	Axis Capital	AXS	AXS US	Joshua Shanker
	BRP Group, Inc.	BRP	BRP US	Joshua Shanker
	Cincinnati Financial Corporation	CINF	CINF US	Grace Carter, CFA
	Corebridge Financial	CRBG	CRBG US	Joshua Shanker
	Everest Group LTD	EG	EG US	Joshua Shanker
	Intact Financial	YIFC	IFC CN	Grace Carter, CFA
	Intact Financial	IFCZF	IFCZF US	Grace Carter, CFA
	MetLife	MET	MET US	Joshua Shanker
	Progressive	PGR	PGR US	Joshua Shanker
	RenaissanceRe	RNR	RNR US	Joshua Shanker
	The Hartford	HIG	HIG US	Joshua Shanker
	Voya	VOYA	VOYA US	Joshua Shanker
	W.R. Berkley	WRB	WRB US	Joshua Shanker
NEUTRAL				
	Aon	AON	AON US	Joshua Shanker
	Brown & Brown	BRO	BRO US	Grace Carter, CFA
	CNA Financial	CNA	CNA US	Joshua Shanker
	Lincoln National	LNC	LNC US	Joshua Shanker
	Marsh McLennan	MMC	MMC US	Joshua Shanker
	Principal Financial Group	PFG	PFG US	Joshua Shanker
	Prudential Financial	PRU	PRU US	Joshua Shanker
	The Hanover	THG	THG US	Grace Carter, CFA
	Trupanion	TRUP	TRUP US	Joshua Shanker

US - Insurance Coverage Cluster

Investment rating	Company Unum	BofA Ticker UNM	Bloomberg symbol UNM US	Analyst Joshua Shanker
UNDERPERFORM				
	Arthur J. Gallagher & Co.	AJG	AJG US	Joshua Shanker
	Chubb Ltd	CB	CB US	Joshua Shanker
	Goosehead Insurance Inc.	GSHD	GSHD US	Joshua Shanker
	Selective	SIGI	SIGI US	Grace Carter, CFA
	Travelers Cos	TRV	TRV US	Joshua Shanker
	Willis Towers Watson	WTW	WTW US	Joshua Shanker

Qmethod [™] Measures Definitions

Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) \times (1 – Tax Rate) + Goodwill Amortization	Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill Amortization
Return On Equity Operating Margin	Net Income Operating Profit Expected 5 Year CACR From Latest Actual	Shareholders' Equity Sales N/A
Earnings Growth Free Cash Flow	Expected 5 Year CAGR From Latest Actual Cash Flow From Operations — Total Capex	N/A
Quality of Earnings Cash Realization Ratio Asset Replacement Ratio Tax Rate Net Debt-To-Equity Ratio Interest Cover	Numerator Cash Flow From Operations Capex Tax Charge Net Debt = Total Debt — Cash & Equivalents EBIT	Denominator Net Income Depreciation Pre-Tax Income Total Equity Interest Expense
Valuation Toolkit Price / Earnings Ratio Price / Book Value Dividend Yield Free Cash Flow Yield Enterprise Value / Sales	Numerator Current Share Price Current Share Price Annualised Declared Cash Dividend Cash Flow From Operations — Total Capex EV = Current Share Price × Current Shares + Minority Equity + Net Debt + Other LT Liabilities	Denominator Diluted Earnings Per Share (Basis As Specified) Shareholders' Equity / Current Basic Shares Current Share Price Market Cap = Current Share Price × Current Basic Shares Sales
EV / EBITDA	Enterprise Value	Basic EBIT + Depreciation + Amortization

**Monethod Shis the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and validations. The key features of iQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

Modatabase is our real-time global research database that is sourced directly from our equity analysts' earnings models and includes forecasted as well as historical data for income statements, balance sheets, and cash flow statements for companies covered by BofA Global Research.

IQprofile 5M, IQmethod 5M are service marks of Bank of America Corporation. IQdatabase 8 is a registered service mark of Bank of America Corporation.



Disclosures

Important Disclosures

Goosehead (GSHD) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

Equity Investment Rating Distribution: Financial Services Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	156	53.79%	Buy	94	60.26%
Hold	72	24.83%	Hold	48	66.67%
Sell	62	21.38%	Sell	35	56.45%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

RI Issuers that were investment banking dients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. VOLATILITY RISK RATINGS, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. INVESTMENT RATINGS reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster, 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R2}
Buy	≥ 10%	≤ 70%
Mautral	> 00/-	< 200/

Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. Coverage Cluster is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

Price Charts for the securities referenced in this research report are available on the Price Charts website, or call 1-800-MERRILL to have them mailed.

N/A

BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: Goosehead.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: Goosehead Insurance.

The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: Goosehead Insurance.

BofAS or one of its affiliates is willing to sell to, or buy from, clients the common equity of the issuer on a principal basis: Goosehead.

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.



Underperform

≥ 20%

Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

Officers of BofAS or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments. Refer to BofA Global Research policies relating to conflicts of interest.

BofA Securities' includes BofA Securities, Inc. (*BofAS*) and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. 'BofA Securities' is a global brand for BofA Global Research.

Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudential et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofaml.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch (Forgalized (Australia): Merrill Lynch (Hong Kong): Merrill (H (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSFC); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch (Canada): Merrill Lynch (Canada): Merrill Lynch (Mexico): Merrill Ly de Bolsa, regulated by the Comisión Nacional Bancaría y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch (Israel) Merrill Merrill Lynch (Israel) Merrill Merril Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSFC; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is admited by the Australian Prudentia

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities. This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such



securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information. In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

BofA ESGMeter Methodology:

ESGMeter is a proprietary metric based on quantitative analysis and fundamental analyst inputs that reflects our assessment of a company's Environmental, Social and Governance-related attributes. The ESGMeter is intended to indicate a company's likelihood of experiencing stronger financial stability (higher return on equity and lower earnings and price volatility) over the next three years relative to peer group. There are three ESGMeter levels - Low, Medium, and High - which indicate whether a company has attributes most likely to translate into superior financial stability (in the case of a High level) or weaker financial stability (in the case of a Low level) over the next three years relative to its peer group. A Medium level suggests that a company exhibits ESG characteristics that are likely associated with financial stability results in line with its peer group over the next three years. Full details of our methodology, financial stability definition and disclaimers are available at BofA ESGMeter methodology. ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of the BofA Global Research fundamental equity analyst's investment rating, volatility risk rating, income rating or price objective for that company.

Copyright and General Information:

Copyright 2024 Bank of America Corporation. All rights reserved. iQdatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities. Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public inform

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofAS any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and BofA Securities policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current.

Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofAS or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.

