PGR gideon lens

The Progressive Corporation (PGR) - Gideon Lens Verdict

Report date: 2026-08-14 **Price anchor:** USD 208.87, XNYS regular-session close on 2026-08-13 **Operating anchor:** TTM ended 2026-06-30 **Operating horizon:** 2031-06-30, exactly 5.0 years from the operating anchor **Shareholder-return horizon:** 2026-08-13 to 2031-06-30, exactly 1,782 days or 4.878950286 years on ACT/365.2425 **Mode:** Full Production ER2, research only

Executive conclusion

Progressive earns a **WATCH**, not a BUY. The evidence supports an unusually capable P&C insurer: ten consecutive profitable underwriting years, a scaled direct-plus-agency distribution system, strong data and claims operations, disciplined capital deployment, and a common-equity base that has compounded while supporting distributions. Management clears GREEN. The five-year EPS-at-15x entry gate also passes: base terminal EPS of USD 22.3052 exceeds the USD 13.9247 required at the sealed USD 208.87 price by 60.19%.

Those facts do not earn a BUY. The audited score is only **65/100**, comprising **58/80** for business quality and **7/20** for return underwriting. The score-implied classification is **Reject** because conventional ROIIC is uncalculated, the 20% stretch return fails at today's price, and a conservative terminal multiple does not support that hurdle. The governing ER2 verdict remains WATCH because security-return underwriting is still investable as research: the base gross USD IRR is 13.55% and the probability-weighted gross USD IRR is 13.93%. However, the bear case is negative, the moat and 2046 durability gates are YELLOW, and base Personal Lines underwriting remains materially better than its ten-year average. CIO actionability is therefore **EXPERIMENTAL**, with portfolio fit unavailable and sizing explicitly null.

The controlling P&C valuation method is P/B-ROE. It converts scenario underwriting, retained investment earnings, distributions, shares and capital constraints into terminal common equity and BVPS, then applies separately justified exit P/B multiples. No EV/NOPAT or net-debt adjustment is layered on afterward. Investments back reserves, unearned premium, catastrophe liquidity and statutory capital; treating them as excess cash would double count value. Numeric RBC and terminal debt paths are not disclosed, so they constrain precision but do not null the common-equity return bridge.

Verdict: WATCH **CIO actionability:** EXPERIMENTAL **Score-implied classification:** Reject **Trade execution authorized:** NO

Gate	Audited result	Interpretation
Management	PASS / GREEN	Strong underwriting and capital discipline; Personal Lines succession remains a monitor
Moat	YELLOW	Present data, pricing and claims advantages are real; switching costs are weak
2046 durability	YELLOW	OEM/platform control of data and distribution remains unresolved
P/E <= 15 on confident TTM+5 EPS	PASS	USD 22.3052 base EPS versus USD 13.9247 required; 60.19% cushion
Compounder score	65 / 100	Below the 70-point Watchlist threshold in the deterministic diagnostic
Business quality	58 / 80	Current franchise quality is strong, but long-duration durability is not fully proven
Return underwriting	7 / 20	Base return is attractive but below the 20% stretch hurdle; bear downside is negative

One-line reason to watch: Progressive is a high-quality P&C operator with a 13.55% base gross USD IRR, but the price embeds unusually strong underwriting, the bear case loses capital, and the 20% stretch hurdle requires a lower entry price near USD 159.49.

Security return underwriting

Measure	Audited result	Notes
Current price	USD 208.87	Completed XNYS close, 2026-08-13
Primary method	P/B-ROE	Same method across all scenarios, weighting and net-SGD overlay
Scenario weights	25% / 50% / 25%	Bear / base / bull; sum to 100%
Gross USD IRR	-7.07% / 13.55% / 26.44%	Bear / base / bull over exactly 1,782 days
Probability-weighted gross USD IRR	13.93%	CAGR of USD 394.6272 probability-weighted terminal wealth, not an average of IRRs
Net-SGD IRR	-9.52% / 12.29% / 26.55%	Same P/B-ROE values after FX, frictions and 30% dividend withholding
Probability-weighted net-SGD IRR	13.09%	CAGR of SGD 488.9113 expected terminal wealth, not an average of IRRs
20% reverse-return price	USD 159.49	23.64% below the current price using the base P/B-ROE bridge

The **net SGD diagnostic** (shown in tables as net-SGD) starts at the Monetary Authority of Singapore's 2026-08-14 noon reference of SGD 1.2800 per USD. Terminal FX is stressed to 1.1520 / 1.2544 / 1.3312 in bear/base/bull, equivalent to -10% / -2% / +4% versus entry. It applies 0.35% entry friction, 0.35% exit conversion friction, 30% U.S. statutory withholding only to distributions, and zero assumed capital-gains tax. No broker benefit, investor wrapper or portfolio-specific cost is invented.

Bear-case operating and return bridge

Bear case	Start / anchor	2031-06-30 terminal	Return / change	Justification
Retained investments	USD 97.221bn	USD 105.000bn	1.57% operating-horizon CAGR	Slower premium and float growth; no third-party pool or NCI
Pretax underwriting profit	USD 10.306bn TTM consolidated	USD 2.202bn	Severe normalization	Personal Lines 97.5 CR and Commercial Lines 99.49 CR plus Other
Terminal common net income	USD 11.695bn TTM	USD 3.861bn reported / USD 4.253bn normalized	8.12% normalized ROE	Investment marks normalized to zero; retained NII counted once
Common equity	USD 34.333bn	USD 53.585bn	Equity remains positive	Includes income, USD 5.0bn dividends, USD 0.5bn repurchases and OCI stress
Diluted shares	584.2m start	584.7m	Slight dilution	No aggressive repurchase assumption
BVPS	USD 59.06 indicative	USD 91.6445	1.50x exit P/B	Terminal share value USD 137.4667
Implied terminal P/E	n/a	18.90x normalized	Secondary cross-check	P/B-ROE remains controlling
Distributions per share	n/a	USD 8.5551 cumulative	30% withholding in SGD overlay	Gross terminal wealth USD 146.0218
Shareholder return	USD 208.87 entry	USD 146.0218 wealth	**-7.07% gross USD IRR**	Net-SGD IRR **-9.52%**

Base-case operating and return bridge

Base case	Start / anchor	2031-06-30 terminal	Return / change	Justification
Retained investments	USD 97.221bn	USD 140.000bn	7.56% operating-horizon CAGR	Premium growth and retained float, fully parent-owned
Pretax underwriting profit	USD 10.306bn TTM consolidated	USD 11.583bn	Profitable normalization	Personal Lines USD 10.43bn, Commercial USD 1.173bn, plus explicit Other
Terminal common net income	USD 11.695bn TTM	USD 12.926bn	18.76% normalized ROE	Retained NII USD 5.149bn; fees embedded and counted once
Common equity	USD 34.333bn	USD 73.231bn	Strong capital compounding	Includes USD 20.0bn dividends and USD 2.0bn repurchases
Diluted shares	584.2m start	579.504m	Net repurchase	Issuance and repurchases explicitly bridged

Base case	Start / anchor	2031-06-30 terminal	Return / change	Justification
BVPS	USD 59.06 indicative	USD 126.3687	2.80x exit P/B	Terminal share value USD 353.8323
Implied terminal P/E	n/a	15.86x normalized	Secondary cross-check	P/B compression from current 3.54x is assumed
Distributions per share	n/a	USD 34.3730 cumulative	30% withholding in SGD overlay	Gross terminal wealth USD 388.2053
Shareholder return	USD 208.87 entry	USD 388.2053 wealth	**13.55% gross USD IRR**	Net-SGD IRR **12.29%**

Bull-case operating and return bridge

Bull case	Start / anchor	2031-06-30 terminal	Return / change	Justification
Retained investments	USD 97.221bn	USD 165.000bn	11.17% operating-horizon CAGR	Exceptional premium, float and capital growth
Pretax underwriting profit	USD 10.306bn TTM consolidated	USD 19.378bn	Exceptional underwriting	Personal Lines 85.0 CR, Commercial Lines 88.02 CR, favorable Other
Terminal common net income	USD 11.695bn TTM	USD 20.756bn reported / USD 20.160bn normalized	25.71% normalized ROE	Positive marks removed from normalized earnings
Common equity	USD 34.333bn	USD 85.193bn	Strong retained compounding	Includes USD 35.0bn dividends, USD 4.0bn repurchases and favorable OCI
Diluted shares	584.2m start	572.2m	Strong net repurchase	Bull capital generation supports buybacks
BVPS	USD 59.06 indicative	USD 148.8859	4.00x exit P/B	Terminal share value USD 595.5438
Implied terminal P/E	n/a	16.90x normalized	Secondary cross-check	Bull stacks high ROE with a premium P/B
Distributions per share	n/a	USD 60.5327 cumulative	30% withholding in SGD overlay	Gross terminal wealth USD 656.0765
Shareholder return	USD 208.87 entry	USD 656.0765 wealth	**26.44% gross USD IRR**	Net-SGD IRR **26.55%**

CIO actionability

The base and probability-weighted net-SGD returns clear a 10% owner-return diagnostic, but that is not enough to convert the work into a BUY. The bear case is materially negative, the deterministic 20% hurdle fails, and long-horizon durability is YELLOW. The bull case also stacks exceptional underwriting, favorable investment marks/OCI, faster float growth and a 4.0x exit P/B, so its 25% weight is an upside boundary rather than a planning case.

The strongest bear challenge is not catastrophe alone. Base Personal Lines reaches an 89.8 combined ratio, about 260 basis points better than its ten-year average even while the forecast acknowledges price/loss-cost deficits. The most optimistic Stage 5 figure is therefore the USD 10.43bn base Personal Lines terminal underwriting profit. The strongest counter to excessive conservatism is valuation: a 3.2x base exit P/B, still below today's 3.54x, would lift gross USD IRR to about 16.43%. That sensitivity supports WATCH rather than PASS, but it does not clear the 20% bar.

Current capital context is explicit. At 2026-06-30, cash was USD 0.178bn, short-term investments USD 1.978bn, retained investments USD 97.221bn and gross debt USD 8.387bn, implying USD 8.209bn cash-only net debt. Preferred equity and NCI were zero. These are insurance-company balances: investments support policy claims, reserves and statutory surplus, so the report neither adds investments as excess cash nor subtracts claims twice. Numeric RBC, current exact goodwill, complete claim triangles and terminal debt/lease paths remain issuer non-disclosures. They make an EV/NOPAT method non-controlling and lower confidence in tail precision; they do not invalidate the finite common-equity IRRs.

Monitor four load-bearing tests:

- **Personal Lines normalization:** reassess if price remains below loss-cost trend while combined ratio stays materially below the ten-year average; that combination would make the base margin internally inconsistent.
- **Reserve and catastrophe discipline:** revisit if adverse prior-year development or property catastrophe losses consume the modeled capital/distribution buffer.

- **Commercial Lines correction and growth:** use Q2 2026 anchors of 3% PIF and 4% NPW growth; reject any downstream case that reintroduces the superseded figures.
- **2046 data control:** downgrade if OEMs or platforms capture driving data, distribution and claims orchestration faster than Progressive can preserve pricing and customer access.

Portfolio holdings, concentration, benchmark exposure, liquidity budget and drawdown budget were not supplied. Portfolio fit is therefore **UNAVAILABLE**, the sizing ceiling is **null**, and this report authorizes no ranking, message, order, broker action, portfolio mutation, BUY queue or trade execution.

Governed provenance

- Quote packet SHA-256: `3bd872351c83e4e1d26fd233929c9131bbafd35d2026ea212d72fce97f9b59d5`
- Statutory bridge SHA-256: `4f5dcde10bf1584db2f2ff4fe47d396939f9884a1a3340aa76dc69bc214e7259`
- Insurer return bridge SHA-256: `ff8c3a5da982eaa125b108844ee579ac6ebdcf20e6271d0151edb8ec16ab94b4`
- Final scorecard Markdown SHA-256: `37f33aa59950d222f4e9342c62e71bda6e1c6effa7ec2b36a756b6a1e07986a7`
- Final scorecard JSON SHA-256: `236713b7dbb029e992581263cda5ee65f786f880bcd457542509cb445852af21`
- Score audit SHA-256: `aa09d3235d5b2567d7f9505eaef92104c341f639282ac8afea456862b2430ee4`
- Red-team SHA-256: `52d1252cb0b47996035a1ea77666c379146a3438a1fbe3fbaa1d84e139bdfbfd`

Final judgment: WATCH / CIO EXPERIMENTAL; score-implied Reject; not BUY; 20% stretch fails; no publication blockers; no trade authority.

Appendix A - Company Primer

Progressive (PGR) — Company Primer

Research mode: Production ER2 **Information cutoff:** August 14, 2026, 18:02:26 SGT **Fiscal year-end:** December 31 **Latest reported quarter:** Q2 2026, ended June 30, 2026 **TTM anchor:** Q3 2025 through Q2 2026, ended June 30, 2026 **Forward horizon used elsewhere in this ER2:** June 30, 2031 **Reporting currency:** USD; financial tables are USD millions unless stated otherwise

How to read this primer

Progressive is a property-and-casualty insurer, so the industrial-company vocabulary of revenue, gross margin, EBITDA, and return on invested capital can obscure more than it clarifies. The economically relevant questions are whether premiums are adequate for future claims, whether loss reserves are sufficient, whether distribution acquires and retains attractive risks efficiently, whether the investment portfolio is appropriate for the liability structure, and whether capital can support both growth and shareholder distributions. This primer therefore uses Progressive's own reportable segments and its exact segment-profit metric: **Pretax underwriting profit (loss)**.

All financial-statement and segment figures below come from the QFR-cleared quantitative foundation, which reconciles live FMP pulls to Progressive's controlling SEC filings. Distribution, product, competition, and operating-process details that are not in that foundation come from the live-fetched [2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/80661/000080661260000086/pgr-20251231.htm), [2025 Annual Report](https://www.sec.gov/Archives/edgar/data/80661/000080661260000086/pgr-20251231_d2.htm), [Q2 2026 Form 10-Q](https://www.sec.gov/Archives/edgar/data/80661/000080661260000308/pgr-20260630.htm), and [Q2 2026 shareholder report](https://www.sec.gov/Archives/edgar/data/80661/000080661260000308/pgr-2026630ex99shareholder.htm). The concurrently prepared data package remained an in-progress stub while this appendix was written and was not used.

1. Business overview

Progressive is a U.S. insurance holding company whose subsidiaries primarily insure vehicles and property. Its center of gravity is personal auto insurance, supplemented by motorcycles, recreational vehicles, boats and other special lines, homeowners and renters insurance, commercial auto, selected small-business property and liability coverages, workers' compensation concentrated in transportation, and related services. It operates across the United States and serves individuals, households, independent insurance agents, and business owners.

The customer problem is transfer of financial risk. A driver pays a known premium today so that Progressive assumes uncertain future costs from accidents, physical damage, liability, medical claims, and claims-handling expenses. A homeowner transfers selected property and liability risks; a small business transfers vehicle and other insured operating risks. Insurance also satisfies legal, lender, leasing, or commercial requirements. The product is a contract plus a promise to investigate, defend, repair, reimburse, or settle when a covered event occurs. The claims function is therefore not a back-office afterthought: it is where the product is actually delivered.

Progressive earns money in two connected ways. First, it seeks an underwriting profit: premiums and associated fees should exceed losses, loss-adjustment expenses, commissions and other acquisition costs, operating expenses, and policyholder credit expense. Second, because premiums are generally collected before claims are fully paid, Progressive invests assets supporting unearned-premium and loss-reserve liabilities. That pool is commonly called **float**. Investment income belongs to shareholders only after claims and all other policy obligations are met, so underwriting discipline and asset-liability management cannot be separated.

At the TTM anchor, Progressive reported $84.483 billion of net premiums earned, $91.055 billion of total revenues, $10.306 billion of pretax underwriting profit, $4.794 billion of investment profit, $15.077 billion of statutory operating income before interest, and $11.695 billion of net income. TTM diluted EPS was $19.92 on 587.06 million time-weighted diluted shares. Those figures orient scale; they do not by themselves establish normalized earnings because favorable or unfavorable reserve development, catastrophe losses, realized investment gains, pricing, and loss-cost trends can move insurer earnings materially between periods.

2. Revenue architecture: the two modeled segments

Progressive discloses two reportable operating segments: **Personal Lines** and **Commercial Lines**. A small `Other` underwriting and run-off line is part of the companywide reconciliation but is not elevated into a modeled segment. Segment "revenue" in this primer means underwriting revenue—net premiums earned plus fees and other underwriting revenue—not consolidated GAAP revenue, which also includes investment and service income.

FY2025 segment scale and mix

Reportable segment	Net premiums earned	Fees/other revenue	Underwriting revenue	Share of modeled-segment underwriting revenue	Pretax underwriting profit	Underwriting margin
Personal Lines	70,778	1,060	71,838	86.7%	8,854	12.5%
Commercial Lines	10,881	136	11,017	13.3%	1,416	13.0%
Total modeled segments	81,659	1,196	82,855	100.0%	10,270	12.6%

The two modeled segments' $82.855 billion of underwriting revenue differs from the $82.857 billion companywide figure by the $2 million `Other` line. Likewise, their $10.270 billion of pretax underwriting profit reconciles through a $21 million `Other` loss to companywide pretax underwriting profit of $10.249 billion. This distinction matters: an investor should not silently assign non-reportable run-off economics to either segment.

Personal Lines

Personal Lines covers personal autos, special lines vehicles, residential property, personal umbrella, and flood-related offerings. The official 2025 filing says Personal Lines represented 87% of total net premiums written. Personal vehicle products were 96% of Personal Lines net premiums written, and personal auto was 95% of personal vehicle premiums, which makes personal auto the economic engine. The smaller product set is strategically useful: motorcycles, boats, RVs, homeowners, renters, and umbrella can deepen household relationships and improve the chance that Progressive becomes the customer's primary insurer rather than a one-policy price vendor.

Personal Lines is not one homogeneous risk pool. Auto economics vary by state, driver characteristics, coverage, vehicle, mileage and driving behavior, liability environment, repair cost, medical severity, policy term, and distribution channel. Property adds weather concentration, roof and construction costs, catastrophe exposure, deductibles, reinsurance, and geographic accumulation. Progressive's task is to segment these risks finely enough that the rate charged to each customer is adequate while remaining competitive.

At the TTM anchor, Personal Lines generated $74.900 billion of underwriting revenue and $8.944 billion of pretax underwriting profit, a 12.1% underwriting margin. The TTM margin was below FY2025's 12.5% but remained well above Progressive's long-standing companywide target of at least a 4% underwriting margin, equivalent to a 96 combined ratio. A primer should not assume that the recent margin is a permanent run rate; insurance pricing and loss experience mean-revert and competitors react.

Commercial Lines

Commercial Lines primarily insures vehicles used by businesses, including for-hire specialty, for-hire transportation, tow, contractor, and business-auto market targets. It also offers selected business-related general liability, commercial property, and workers' compensation. The 2025 Form 10-K says core commercial auto represented about 80% of the segment's net premiums written. Excluding large fleet policies, a commercial auto customer insured approximately two vehicles per policy. That makes this largely a small-business and specialized-vehicle underwriting franchise rather than an enterprise fleet-outsourcing business.

Commercial insurance is sold predominantly through independent agents. About 90% of 2025 commercial auto business, excluding transportation-network-company business, was written through the agency channel. Agents are valuable because small-business needs are heterogeneous and often require advice or packaging with coverages Progressive may place with other carriers. Progressive nevertheless controls rates, underwriting rules, claims, and product design.

At the TTM anchor, Commercial Lines produced $10.787 billion of underwriting revenue and $1.395 billion of pretax underwriting profit, a 13.0% underwriting margin. Commercial has different timing from personal auto: much of the business uses 12-month policies, so rate changes generally take longer to earn through the book. Liability claims can also develop over longer periods than simple physical-damage claims, increasing the importance of reserve discipline.

3. Customer and policy architecture

An insurance customer is not simply a "subscriber." A policy has a defined term, insured exposures, coverage limits, deductibles, exclusions, billing plan, state-specific contract language, and a rate filed or otherwise governed under state law. **Written premium** is booked when policies are written; **earned premium** is recognized over the period in which coverage is provided. Premium collected for future coverage creates an unearned-premium liability rather than immediate profit. Claims may be paid long after the premium is earned, creating loss and loss-adjustment-expense reserves.

Most personal auto policies have six-month terms, allowing relatively frequent repricing as policies renew. Progressive also uses 12-month personal auto policies in selected agency relationships, including its Platinum program, to support household bundling. Special lines and personal property products generally have 12-month terms, and about 85% of Commercial Lines policies in force at year-end 2025 had 12-month terms. Policy duration changes reported written premium per policy even when underlying price and risk are unchanged, so investors should separate term mix from genuine rate movement.

Progressive describes personal auto customers using four consumer archetypes: "Sams" are inconsistently insured; "Dianes" are consistently insured and may rent; "Wrights" own homes but do not bundle auto and home; and "Robinsons" own homes and bundle. These are marketing and relationship architectures, not reportable financial segments. The strategic direction is intuitive: a Robinson household can have more products, more tenure, and more reasons to stay, but property exposure can also import catastrophe and regulatory risk into what began as an auto relationship.

Policy life expectancy is Progressive's principal retention measure. It estimates how long a newly written policy remains in force before cancellation or lapse. Retention matters because acquisition costs are incurred up front, renewal underwriting often benefits from more observed behavior, and a longer relationship can support bundling. It is not a perfect customer-retention measure: when a customer shops and replaces an existing Progressive policy with another Progressive policy, customer retention can coexist with a shorter measured policy life.

Usage-based insurance adds another layer. Snapshot uses driving data to improve personal auto segmentation and can be monitored through mobile devices. The 2025 filing says Snapshot was available in every state except California; Progressive's latest segmentation model at year-end covered states representing 81% of countrywide personal auto net premiums written excluding California. The economic proposition is better matching of rate to risk, not merely a discount. Better segmentation should attract safer risks at competitive prices and charge riskier behavior appropriately, but telematics also creates privacy, regulatory, model-drift, and adverse-selection questions.

4. Distribution: direct versus independent agents

Progressive operates a genuinely multi-channel model. Neither channel is a separate reportable segment; each is a route to customers with different acquisition economics, shopping behavior, policy mix, and service needs.

Independent-agent channel

More than 40,000 independent insurance agencies represent Progressive, along with brokerages in New York and California. An independent agent can compare multiple insurers and place eligible business with Progressive under prescribed guidelines. The agent does not set Progressive's rates, change underwriting rules, or settle claims. In 2025, the agency channel generated 43% of personal vehicle net premiums written and 72% of personal property net premiums written. It also generated the great majority of commercial auto premiums.

The agency channel incurs commissions and agent incentives, but it provides local distribution, advice, and access to customers who prefer comparison shopping through an intermediary. It is especially relevant for more complex household and small-business packages. Because agents represent multiple carriers, Progressive must continually earn placement through price, appetite, service, claims reputation, commission structure, ease of quoting, and product breadth. Agents are a distribution asset, not a captive sales force.

Direct channel

Direct personal vehicle business is written online or by phone. It generated 57% of personal vehicle net premiums written in 2025. Direct property is sold by phone and through HomeQuote Explorer, which can quote Progressive and other carriers; it represented 28% of personal property premiums. Direct distribution avoids independent-agent commissions but requires substantial brand advertising, digital acquisition, call-center capacity, user experience, and ongoing service infrastructure. Its cost advantage is therefore not automatic.

The direct and agency channels can reinforce one another. National advertising builds awareness that agents can convert; broad agent distribution raises availability; direct data and experimentation can improve digital workflows; and both channels feed a common underwriting and claims platform. They can also create tension if prices, underwriting appetite, or service

differ materially. For investors, channel mix should be interpreted through lifetime underwriting economics, not acquisition cost alone.

5. Unit economics: how premium becomes underwriting profit

The underwriting equation is straightforward, but every input is estimated before the final outcome is known:

Underwriting bridge	Economic meaning
Net premiums earned	Price recognized for coverage provided during the period
Plus fees and other underwriting revenue	Policy-related revenue included in the segment result
Less losses and LAE	Paid claims plus changes in estimated ultimate claim costs and adjusting expenses
Less underwriting expenses	Commissions, acquisition, advertising, servicing, technology, premium taxes, and other operating costs
Less policyholder credit expense	Required customer credits or refunds, where applicable
Equals Pretax underwriting profit (loss)	Progressive's exact segment-profit basis

For FY2025 companywide underwriting operations, $81.661 billion of net premiums earned plus $1.196 billion of fees and other revenue produced $82.857 billion of underwriting revenue. Losses and LAE were $53.959 billion, and underwriting expenses including policyholder credit expense were $18.649 billion, leaving $10.249 billion of pretax underwriting profit.

The **loss and LAE ratio** measures claim costs relative to earned premium. The **expense ratio** measures underwriting expenses net of designated fee treatment relative to earned premium. Their sum is the **combined ratio**. A combined ratio below 100 means an underwriting profit before investment income; 96 corresponds to a 4% underwriting margin. In FY2025, Progressive's companywide underwriting margin was 12.6%, equivalent to a reported 87.4 combined ratio after rounding and the filing's fee treatment. This was unusually far inside the 96 objective and should be normalized with care.

Loss cost is a product of **frequency** and **severity**. Frequency is how often insured events occur; severity is the cost per event. For auto, miles driven, driving behavior, repair labor, parts prices, medical costs, litigation, coverage mix, vehicle technology, theft, and weather all matter. For property, storms, geographic concentration, roof age, construction costs, deductibles, building codes, and catastrophe reinsurance matter. Rate adequacy is inherently forward-looking: the premium on a newly written policy must cover claims that have not happened yet.

Personal Lines benefits from enormous data volume and relatively short auto policy terms, supporting granular state- and risk-level repricing. It also carries large advertising and customer-service needs, agent commissions on agency business, and catastrophe volatility in property. Commercial Lines has more heterogeneous exposures, greater reliance on agents, longer policy terms, and potentially longer-tail liability claims. Its apparent margin can be flattered or depressed by reserve development from prior accident years; current-year price and claims performance must be separated from changes in earlier estimates.

Physical capital expenditure is low relative to the premium base: TTM operating cash flow was $16.339 billion and capital expenditure was $388 million. That does not mean the business is capital-free. The economically binding capital is insurance surplus and common equity required to absorb underwriting, reserve, catastrophe, credit, and market risk. Ordinary "free cash flow yield" can be misleading because premium inflows partly fund policyholder liabilities.

6. Pricing, loss costs, and the reserve cycle

Insurance accounting is a cycle of estimates. When a claim is reported, Progressive establishes a case reserve. It also records incurred-but-not-reported reserves for events that have occurred but are not yet reported or fully developed. Actuaries revisit ultimate losses using paid claims, case development, frequency, severity, legal trends, inflation, and other evidence. If earlier reserves prove too high, favorable prior-year development increases current earnings; if too low, adverse development reduces earnings.

Progressive's vehicle businesses represented about 97% of carried loss and LAE reserves at year-end 2025, and its actuaries review hundreds of state/product/coverage groupings. This granularity is important because national averages can conceal divergent state legal regimes, repair markets, coverage mixes, and customer behavior. Nevertheless, models remain estimates. Rapid inflation, social inflation, court decisions, new vehicle technology, supply disruption, or changing claims practices can cause ultimate costs to differ from initial expectations.

Pricing responds with a lag. Management observes loss trends, revises rating models, seeks required regulatory approval where applicable, changes underwriting appetite, and then waits for renewals and new business to earn into results. Six-month personal auto policies reprice faster than 12-month commercial or property policies. Competitors may be increasing rates while Progressive has room to reduce rates, producing share gains; later, competitors may catch up and intensify price competition. The Q2 2026 shareholder report illustrates the current position: companywide net premiums written grew 5% year over year at an 87.3 combined ratio, while policies in force grew 7%. Management characterized the market as increasingly competitive after a long hard market. That is a snapshot, not a five-year margin guarantee.

Property adds a catastrophe and reinsurance cycle. Progressive can change geographic appetite, deductibles, roof settlement terms, eligibility, and bundling requirements, and it purchases catastrophe protection. Reinsurance reduces peak retained losses but introduces premium cost, counterparty exposure, exclusions, limits, reinstatement terms, and residual risk above or between layers. Progressive generally does not purchase broad voluntary reinsurance for personal vehicles outside regulated programs, while property and selected commercial risks use more explicit protection.

7. Float and the investment engine

Premiums arrive before all claims are paid. Progressive invests assets backing unearned premiums, loss reserves, and capital, creating investment income while policy obligations remain outstanding. Float is valuable only when its underwriting cost is controlled. An insurer that grows premiums rapidly at an inadequate price may appear to generate investable cash while actually compounding future claim deficits.

At June 30, 2026, Progressive held $97.221 billion of investments. TTM investment income was $3.794 billion; including realized securities gains and investment expenses, the QF bridge records $4.794 billion of investment profit. This was fully retained by common shareholders because Progressive had no preferred shares or noncontrolling interests. Investment profit plus underwriting profit and the small service-business loss reconciled to $15.077 billion of statutory operating income before interest.

The portfolio is managed conservatively relative to liabilities, with a dominant fixed-income and short-term allocation and a much smaller equity allocation. Duration, credit quality, liquidity, and catastrophe funding needs matter more than maximizing headline yield. Rising rates can initially reduce bond values but allow maturing cash flows and new float to be reinvested at higher yields; falling rates can lift bond values while reducing future reinvestment income. Equity holdings add upside and volatility. Realized and mark-to-market gains should be distinguished from recurring interest and dividend income when assessing normalized earnings.

8. Capital requirements and shareholder capacity

For Progressive, the relevant balance-sheet lens is common equity, statutory surplus, regulatory capital, and loss-absorbing capacity—not net debt divided by EBITDA. At June 30, 2026, common equity was $34.333 billion, debt was $8.387 billion, and latest reported common shares outstanding were 581.372 million, implying common book value per share of approximately $59.06. The TTM common ROE calculated on average June 2025 and June 2026 equity was 34.94%, but that unnormalized result incorporates the current underwriting and investment environment and should not be treated as a permanent franchise rate.

State regulators require insurer subsidiaries to maintain capital, file statutory statements, hold permitted assets, and satisfy risk-based-capital standards. Progressive's insurance subsidiaries exceeded applicable minimum RBC requirements at year-end 2025. FY2025 statutory surplus was $28.370 billion, and the foundation identifies up to $9.327 billion of 2026 subsidiary dividends that could be paid without prior regulatory approval, subject to legal and operating limitations. This is capacity, not a commitment.

Management describes three conceptual capital layers: regulatory capital needed to support the insurance entities and growth; an additional cushion for extreme loss, reserve, catastrophe, and investment scenarios; and excess capital available for opportunities, repurchases, debt management, or dividends. The distinction is essential. Investment assets are not all distributable cash, and statutory capital cannot be removed merely because consolidated GAAP equity appears abundant.

Progressive paid substantial dividends in the TTM period, including the January 2026 annual-variable dividend, and repurchased shares. Capital returns compete with organic growth because fast premium growth consumes surplus. A durable compounder must generate enough retained earnings to fund policy growth while preserving ratings, regulatory flexibility, and catastrophe resilience. Share repurchases create value only below conservative intrinsic value and after required capital is secured.

9. Competitive context

U.S. property-casualty insurance is fiercely competitive and state-regulated. Customers can compare prices readily online or through comparative-rating tools used by agents. Competitors include large national direct writers, national insurers with captive-agent networks, independent-agent carriers, mutual companies, and regional specialists. Competition occurs through price, segmentation, commission economics, advertising, claims service, coverage, brand trust, financial strength, geographic appetite, digital experience, and speed of rate response.

Progressive's 2025 Form 10-K says it ranked second in U.S. private-passenger auto based on 2024 premiums written and believed it retained that position in 2025. It has ranked first in U.S. commercial auto since 2015 and believed it remained first in 2025. These positions bring scale in data, advertising, claims infrastructure, and agent relevance, but they do not eliminate cyclicality. Scale can also magnify reserve errors or concentration when an underwriting model is wrong.

The most plausible competitive advantages are a reinforcing system rather than a single asset: granular pricing data; rapid product-model iteration; dual-channel reach; a widely recognized brand; efficient quoting and servicing; a large claims organization; agent access; and the willingness to constrain growth when rate adequacy deteriorates. Snapshot and newer product models may improve selection, but competitors also use telematics, external data, machine learning, and digital distribution. Regulation can slow pricing changes, restrict data use, or require customer remedies, as the material Florida policyholder credit expense in FY2025 demonstrates.

The central competitive question is not whether Progressive can grow in a favorable quarter. It is whether it can repeatedly identify where competitors are underpriced, take share without degrading risk quality, retain customers after the industry reprices, and preserve reserve adequacy through adverse cycles. Its stated priority—profitability before growth—is the right architecture; the underwriting record must verify that behavior over time.

10. Investor dashboard: what actually drives the business

Driver	Why it matters	Favorable signal	Warning signal
Combined ratio	Captures underwriting profit before investments	Sustained result at or below 96 without reserve releases	Deterioration masked by prior-year development
Loss frequency and severity	Determines ultimate claim cost	Rate and segmentation stay ahead of trend	Repair, medical, litigation, or weather inflation accelerates
Rate versus loss-cost trend	Tests forward price adequacy	New and renewal rate matches expected claims	Growth accelerates while rate adequacy weakens
Policy growth and retention	Shows franchise demand and lifetime economics	PIF grows with stable policy life expectancy	High acquisition spend with weak retention
Channel mix	Changes acquisition costs and customer mix	Both direct and agency grow profitably	Agent displacement or direct acquisition costs rise sharply
Bundling and property exposure	Can deepen relationships	More durable households at adequate property rate	Catastrophe concentration imported for marginal retention gain
Reserve development	Tests the accuracy of past estimates	Small, stable development across accident years	Repeated adverse development or changing assumptions
Investment yield and risk	Monetizes float	Higher recurring yield without credit/duration stretch	Earnings depend on realized gains or risk assets
Statutory surplus and RBC	Constrains growth and distributions	Surplus compounds faster than required capital	Premium growth presses regulatory capacity
Book value per share plus dividends	Best broad retained-economics scorecard	Durable per-share compounding through cycles	Capital returns weaken resilience or destroy value

Bottom line

Progressive is best understood as a scaled risk-selection, pricing, claims, and distribution system—not simply an auto brand. Personal Lines supplies nearly seven-eighths of modeled underwriting revenue, with personal auto dominant; Commercial Lines is smaller but holds a leading commercial-auto position and produces meaningful underwriting profit. Direct and independent-agent distribution serve different customer journeys and together widen the addressable market. The economic flywheel is attractive when underwriting is profitable: premium growth expands float, float generates investment income, retained earnings fund regulatory capital, and capital supports more policies and shareholder distributions.

The same flywheel reverses if price is inadequate or reserves are optimistic. A combined ratio can worsen quickly when severity accelerates, catastrophe losses cluster, regulation delays rate, or competition encourages premature price cuts. Investment assets remain encumbered by policyholder obligations, and apparent cash generation is not freely distributable. For the rest of this ER2, the core analytical task is therefore to normalize segment underwriting margins, test loss and reserve durability, assess whether current competitive share gains are high quality, and value the business on retained common-equity economics rather than ordinary industrial multiples alone.

Source and scope notes

- The QFR-cleared quantitative foundation passed all 8 reconciliation checks and sealed the exact `Pretax underwriting profit (loss)` basis for Personal Lines and Commercial Lines.
- All financial figures in this primer use that foundation; no data-warehouse cache or unverified aggregator was used.
- Product, distribution, market-position, policy-term, capital-process, and claims-reserving descriptions come from Progressive's live-fetched official filings linked above.
- The latest operating snapshot is the official Q2 2026 shareholder report and should not be extrapolated mechanically.
- The data package was still an in-progress placeholder during this stage, so no management quote or qualitative assertion was borrowed from it.

Appendix M - Management Assessment

Progressive (PGR) — Management Quality and Capital Allocation

Run ID: `pulse-cio-20260814T180226+0800` **Information cutoff:** August 14, 2026, 18:02:26 SGT **TTM anchor:** June 30, 2026 **Assessment basis:** disclosures are distinguished from analyst inference; USD millions unless noted.

Gate conclusion

Dimension	Signal	Assessment
Proven stewardship	Green	Tricia Griffith has owned the strategy since July 2016 and has taken the company through an inflationary loss-cost shock, a pricing recovery, and renewed growth.
Capital and reserve discipline	Green	Capital follows underwriting needs; common equity, statutory surplus, reserve development, dividends and repurchases are disclosed without treating insurer assets as free cash.
Incentive alignment	Green with a caveat	Pay is heavily performance-based and profit-gated, ownership is meaningful, and dilution is low; explicit normalized ROE/BVPS and reserve-quality metrics are absent from the award design.
Governance	Green	Ten of eleven directors are independent, the chair is independent, there is no dual-class control, and related-party activity is immaterial.
Succession	Yellow watch item	The CFO transition is complete, but the leadership configuration over Personal Lines—about 87% of modeled underwriting revenue—is still settling ahead of Patrick Callahan's January 2027 retirement.
Management gate	**PASS / GREEN**	The record is sufficiently long and per-share oriented to clear the gate; the Personal Lines transition is a monitor, not a present failure.

1. Who is running the company

Progressive is unusually internally developed. **Susan Patricia "Tricia" Griffith** joined as a claims representative in 1988, became CEO and president in July 2016, and is the only non-independent director. Her prior jobs included Claims president, chief human resources officer, customer operations president, and Personal Lines chief operating officer. She therefore owns the current profitable-growth system rather than inheriting it late in the cycle. **Andrew Quigg**, age 46 at appointment, became CFO on July 4, 2026. He joined Progressive in 2007, managed Agency and Direct auto products and states, led media and customer experience, became the company's first chief strategy officer in 2018, and added core finance responsibilities in February 2026. The transition from John Sauerland included roughly five months of announced overlap; Quigg's role and compensation were finalized before he took office. These facts are disclosed in the [2026 Form 10-K](https://www.sec.gov/Archives/edgar/data/80661/000080066126000086/pgr-20251231.htm), the [May 2026 appointment filing](https://www.sec.gov/Archives/edgar/data/80661/000080066126000200/pgr-20260508.htm), and the [June 2026 transition filing](https://www.sec.gov/Archives/edgar/data/80661/000080066126000210/pgr-20260611.htm).

The major operating leaders are **Lori Niederst**, Chief Personal Lines Officer since July 4, 2026; **Patrick Callahan**, Personal Lines President until his planned January 2027 retirement and adviser thereafter; **Karen Bailo**, Commercial Lines President; and **John Murphy**, Claims President. Niederst joined in 1997, worked in finance and operations, served as chief human resources officer, and led Customer Relationship Management from December 2021. Her new role oversees Personal Lines and CRM while the company conducts an internal search for Callahan's successor. The transition is intentionally overlapping, but ultimate decision rights between the Chief Personal Lines Officer and the future Personal Lines President have not yet been tested in a hard underwriting period. That is the central management risk.

Lawton Fitt has been independent chair since May 2018. The [2026 proxy](https://www.sec.gov/Archives/edgar/data/80661/000080066126000099/pgr-20260318.htm) lists eleven directors, ten independent, all serving annual terms. Fitt provides an independent counterweight to Griffith; the proxy says her willingness to challenge management was part of the board's rationale. The board has dedicated Audit, Compensation and Talent, Investment and Capital, Nominating and Governance, and Technology committees. This committee map is especially

appropriate for an insurer because reserves, investments, regulatory capital, catastrophe exposure, and model risk need distinct oversight.

2. Tenure and operating record

The management record is best judged through combined ratio, reserve development, statutory capital, and per-share book value—not industrial ROIC alone.

Decision owned by the Griffith era	Evidence of result	Assessment
Preserve the 96-or-better combined-ratio objective through the post-pandemic loss-cost shock, then reopen growth selectively	Net premiums written rose from $46.4 billion in 2021 to $83.2 billion in 2025. The statutory combined ratio was 94.8, 95.3, 94.3, 88.2 and 87.1 across 2021-2025. Personal Lines policies in force rose 46.7%, from 25.5 million to 37.4 million.	Strong. Management did not need a loss-making year to regain rate adequacy, and it accelerated growth only after margins recovered.
Restructure personal property and use it as a disciplined bundle enabler, not a volume target	Management nonrenewed unattractive Florida/coastal and older-code risks, held catastrophe-reinsurance capacity broadly stable while exposure fell, and invested in models and distribution. Q2 2026 property PIF and NPW grew 1% with a 78.0 combined ratio.	Sensible correction, but not fully proven. The company admits prior "fits and starts," and property remains a small business with catastrophe tail risk.
Retain capital for high-ROE organic growth, then return surplus through a low regular dividend, variable dividends, and valuation-aware repurchases	Common equity rose from $17.7 billion in 2021 to $34.3 billion at Q2 2026 despite large distributions. Statutory surplus rose from $16.4 billion to an estimated $32.9 billion. Management returned a large annual-variable dividend and increased repurchases when growth moderated.	Strong architecture. It preserves flexibility, but shareholders must monitor repurchase price discipline and insurer-subsidiary distributability.

The blot on the record is reserve development. Prior-year development was $1.094 billion unfavorable in 2023, versus $416 million favorable in 2024, $1.394 billion favorable in 2025, and $1.002 billion favorable in H1 2026. The 2023 charge shows that even Progressive's granular models can lag liability severity and social inflation. Subsequent favorable development is supportive, but it does not erase the miss; it creates a monitoring requirement that normalized underwriting profit exclude unusually favorable releases. Management earns credit for maintaining overall underwriting profitability and rebuilding margin rather than for never making a reserving error.

3. Capital allocation, reinsurance, and investment risk

The five-year allocation record from the verified data package is restrained and internally funded:

Year	Capex	Buybacks	Common dividends paid	M&A	Comment
2021	244	223	3,747	313	Protective Insurance acquisition was the only material deal in the period.
2022	292	99	234	0	Capital retained through the difficult loss-cost year.
2023	252	141	234	0	No attempt to buy growth during reserve pressure.
2024	285	134	674	0	Preferred stock was redeemed separately; it is not misclassified as common repurchase.
2025	348	166	2,871	0	Strong earnings supported greater distribution while organic growth remained the priority.

Capex stayed near 0.4%-0.6% of revenue, but that ratio understates the real investment: technology, product models, claims capabilities, advertising, and required statutory surplus largely run through expenses or capital. The absence of serial M&A is positive. Protective was modest relative to Progressive and was used to expand medium-fleet capabilities; management reported in August 2026 that quoting volume was the highest since acquisition and medium-fleet policies were up 30% year over year. This is useful evidence of strategic value, though it is not a disclosed acquisition IRR.

The return policy is not mechanical. H1 2026 included $1.092 billion of common repurchases and the January payment of the previously declared annual-variable dividend. The declaration-basis equity bridge prevents double counting: FY2025 common equity already absorbed the $7.913 billion variable dividend declared in December 2025, so its January cash payment is not another H1 equity reduction. At the August investor event, Quigg said repurchases are evaluated using an intrinsic-value model and peer/historical benchmarks, with dividends historically preferred. This is better than indiscriminate buybacks, but

disclosure does not publish the model or price thresholds. The May 2026 board authorization for up to 25 million shares is capacity, not evidence that every purchase was accretive.

Capital is not freely distributable. FY2025 insurance subsidiaries paid $10.027 billion to the parent and could pay $9.327 billion during 2026 without prior approval, subject to state, capital, and rolling-12-month constraints. Q2 2026 common equity was $34.333 billion and estimated statutory surplus $32.9 billion; RBC exceeded minimums, but no numeric RBC ratio is disclosed. Quigg's stated plan to move most eligible entities toward a 3.5-to-1 premium-to-surplus ratio can improve ROE, but it also reduces error capacity. A growth slowdown followed by capital return is rational only after catastrophe, reserve, and ratings buffers are preserved.

Reinsurance discipline is similarly explicit. Progressive has no external capital or NCI pool: consolidated investments and NII are fully retained. Property catastrophe capacity was kept broadly stable while exposure declined, leaving room for measured growth; management also referenced group risk-appetite statements and business-unit constraints. The risk is not fee leakage but retained catastrophe exposure, counterparty performance, attachment points, and limits. A material reduction in protection simply to defend earnings would be a fail signal.

The investment portfolio grew from $51.5 billion in 2021 to $97.2 billion at Q2 2026; TTM retained NII was $3.758 billion, and the retained yield rose to about 4.05%. The operating logic is conservative because underwriting leverage is high. Management separates recurring NII from realized/unrealized gains, and the board's Investment and Capital Committee approves risk parameters. The 2026 decision to remove the executive fixed-income performance RSU is defensible simplification, but it weakens the direct long-term incentive tied to investment stewardship; the separate Progressive Capital Management annual plan remains.

4. Compensation and ownership alignment

The compensation design is materially better than a scale-only insurance plan. In 2025, 93% of the CEO's target compensation was at risk. Griffith's annual equity target was 9.0 times salary in performance awards and 1.0 times salary in time-based RSUs; her cash incentive target was 2.5 times salary. The main three-year performance award compares Progressive's growth with insurance-market growth but requires a 96.0-or-better combined ratio before vesting. Gainshare similarly combines growth and profitability across product/channel matrices; its 2025 factor was 1.99 out of 2.00. This hard profitability gate reduces the incentive to write underpriced volume.

The weakness is what is not measured explicitly: normalized common ROE, BVPS plus dividends, reserve development, and risk-adjusted capital generation. A 96 combined ratio can still be achieved with favorable prior-year reserve development or while capital intensity changes. The committee should publish how it strips prior-year development and customer-credit distortions from incentive economics, or add a multi-year BVPS-plus-dividend/reserve-adequacy modifier.

Alignment is real. As of January 31, 2026, Griffith beneficially owned 599,411 common shares; the proxy says her directly owned shares were worth 95 times salary, versus a 6-times requirement. Other named executives met a 3-times guideline, although their calculation may include unvested time-based awards. Executives cannot count unvested performance awards, hedge, pledge, short, or trade derivatives on Progressive securities. Restatement and misconduct clawbacks extend beyond the exchange minimum.

Year	Stock-based compensation	Revenue	SBC / revenue
2021	101	47,677	0.21%
2022	123	49,587	0.25%
2023	121	62,083	0.20%
2024	122	75,343	0.16%
2025	132	87,637	0.15%

Dilution is not chronic: period-end common shares were 584.4 million in 2021 and 586.1 million in 2025, a 0.3% increase despite equity compensation, before falling to about 581.4 million by July 2026 after repurchases. Recent insider-sale plans are also structured rather than opaque. The Q1 2026 10-Q disclosed a Griffith Rule 10b5-1 plan entered March 30, 2026, covering vesting-related sales plus 13,422 specified shares through February 2027. That is not a clustered discretionary exit signal, particularly against her large retained stake.

5. Disclosure quality and candor

Progressive does not run conventional quarterly guidance calls. The review population therefore comprises the latest eight quarterly filing/letter periods from Q3 2024 through Q2 2026, plus all four live FMP investor-event transcripts available for that span (Q2, Q3 and Q4 2025 and Q2 2026). The Q1 2026 transcript endpoint was empty; the signed SEC shareholder letter controlled. This limitation matters: there is no management EPS or premium-growth guidance series to score as beat/meet/miss.

Question handling is strong. On August 4, 2026, management answered auto-growth pressure with exact PIF growth, channel conversion, 16 states with rate decreases, advertising spend, and acquisition cost relative to target. Frequency questions received exact year-over-year and trailing-12-month figures. Quigg explained the 3.5-to-1 surplus work, historical capital generation and capital-return hierarchy. When asked to size ten-year property opportunity, Griffith declined to disclose internal models rather than manufacture a forecast. On a challenge that the Robinson strategy had made limited progress, she acknowledged "fits and starts" and insufficient prior investment in cost sharing, segmentation, technology, and people. That is candid treatment of a failed or delayed initiative.

There are disclosure gaps. Management will not quantify long-term Robinson share, near-term AI savings, internal acquisition thresholds, product-level revenue, or numeric RBC. These are important, but the pattern is selective confidentiality rather than systematic evasion because the company supplies monthly operating results, segment combined ratios, state/rate actions, PIF, reserve development, statutory surplus, and capital capacity. Across the reviewed periods, hedged language was used mainly for genuinely uncertain loss trends and competition; the direct labels "soft market," "irrational competition," slower growth, and prior property underinvestment are more informative than generic "headwinds."

6. Strategic coherence

Management's stated purpose is operationally specific: grow as fast as possible at a 96-or-better combined ratio while delivering high-quality service. The investment pattern matches it. Advertising and agent incentives expand only when acquisition economics clear internal thresholds; product models and telematics support risk selection; claims and CRM remain central; property availability is reopened only where risk selection and reinsurance permit; statutory capital is retained before shareholder distributions. This is a coherent decade-long system, not a sequence of pivots.

The principal strategic tension is that recent margins far exceed the 96 objective. Competitors are cutting price, and Progressive is taking targeted rate decreases while increasing acquisition spending. Management says it will not "give away margin for growth," but the proof will be whether 2027-2028 accident-year loss ratios remain adequate after new business seasons. The second tension is leverage: moving toward 3.5-to-1 premium-to-surplus magnifies both underwriting advantage and reserving error.

7. Governance and conduct flags

The governance structure is clean. There is one common share class and no controlling shareholder. All directors other than Griffith are independent; committee members are independent; all eleven nominees were elected in May 2026; and say-on-pay received about 96% support among votes cast for or against. The board's overboarding limits are no more than two additional public boards for active executives and four for non-executives, and the proxy states all directors complied.

The sole disclosed related-person transaction was approximately $138,000 of compensation paid to the CIO's brother-in-law in Claims; the CIO had no role in hiring, supervision, or compensation. This is immaterial and transparently handled. The 2025 annual report reported effective internal control over financial reporting with PwC attestation; the reviewed controlling materials disclosed no restatement, material weakness, or company-level SEC enforcement. The CEO's personal aircraft use cost approximately $152,000 in 2025 and is a perquisite worth watching, but it is disclosed, taxed to the CEO, and immaterial.

8. Peer stewardship

Peer CEO	Directional comparison with Griffith
Alan Schnitzer, Travelers	Travelers is a strong underwriting and capital-return comparator with polished segment disclosure. Schnitzer's record is excellent, but Progressive's organic personal-auto share gains, lower reliance on M&A, and dual-channel system give Griffith the stronger five-year growth-plus-profit record. Disclosure quality is comparable.
Evan Greenberg, Chubb	Greenberg is the superior large-deal allocator, with the ACE-Chubb combination demonstrating acquisition skill and a long underwriting record. He communicates more expansively on macro and insurance-cycle issues. Griffith ranks at least as high on organic execution and incentive simplicity, but below Greenberg on demonstrated large-scale M&A.

Inference: among realistic large P&C alternatives, Griffith ranks in the top tier for five-year stewardship. Progressive's observable advantage is a profit-gated operating system and internal bench, not charismatic capital-market storytelling.

9. Succession assessment and explicit fail conditions

The CFO succession is credible: Quigg is an internal operator-strategist with product, distribution, media, customer-experience, treasury, reporting, and strategy exposure, and Sauerland provided a planned handoff. The Personal Lines transition is more important and less resolved. Niederst already controls the combined Personal Lines/CRM agenda, Callahan remains through January 2027 and then advises, and an internal President search is under way. This layered structure reduces key-person risk, but it could create unclear accountability for pricing, acquisition, product, and retention if the eventual President does not have a clean mandate.

The management gate would downgrade to **YELLOW** if Personal Lines leadership remains unresolved after Callahan's departure, or if the new configuration produces two consecutive quarters of worsening new-business loss adequacy while acquisition spending rises. It would become **FAIL** on any of the following:

- material adverse reserve development in two successive annual reviews without explicit accident-year diagnosis and corrective pricing;
- growth above market while the accident-year combined ratio breaches 96 and management continues to raise media or agent incentives;
- capital returns or a move beyond 3.5-to-1 premium-to-surplus that weakens ratings, statutory surplus, reinsurance protection, or ordinary dividend capacity;
- repurchases at clearly premium valuations while organic growth is capital constrained;
- compensation that removes the 96 profitability gate, adds scale-only awards, or permits sustained dilution above 1% annually;
- a material related-party, control, restatement, or disclosure failure; or
- ambiguity between the Chief Personal Lines Officer and future Personal Lines President that persists through a pricing or catastrophe stress.

Verdict

MANAGEMENT GATE: PASS / GREEN. Griffith is a proven allocator and operator with ten years in the CEO seat, meaningful ownership, low dilution, coherent incentives, and evidence that the company protected underwriting profitability through a difficult inflationary cycle. Capital allocation is appropriately subordinate to organic growth and solvency, with little M&A and a flexible return policy. Disclosure is unusually quantitative for an insurer and candid about property missteps, competitive pressure, and the absence of long-range forecasts. The succession bench is credible, but the Personal Lines structure is the one live yellow watch item because it covers the dominant business and has not yet operated through a hard period.

Provenance and scope

The management-stage live archive is under `raw\pulse-cio-20260814T180226+0800\m_management`: the 2026 proxy (SHA-256 `589961b93b501e167ace4b2eb44a6da3b421788b71477fe7823022de2aeb548b`), June 17 management 8-K (`218826a2afb1b2b30dabd0be5c302e3999f7479eb5713ea9a8ff3e2f34002e1a`), and May 12 annual-meeting 8-K (`f3cf4b6c68b7aff6cb6ec5e3ee640054e0b0c1fa189dacfc600b45ce2d536f5f`). Quantitative history is from the QFR/DR-cleared data package and sealed statutory bridge. Transcript evidence is from the run-specific live FMP pulls already enumerated in `source_manifest.json`; no data-warehouse cache was used. Management conclusions are analytical inferences, not company disclosures. No trade, ranking, sizing, messaging, or execution authority is asserted.

Appendix W - Moat and 2046 Durability

The Progressive Corporation (PGR) — Moat and 2046 Durability

Run ID: `pulse-cio-20260814T180226+0800` **Information cutoff:** 2026-08-14 18:02:26 SGT **Today / explicit 20-year endpoint:** August 14, 2026 / August 14, 2046 **Analytical perimeter:** fully parent-owned Personal Lines and Commercial Lines underwriting, retained investments and retained net investment income. Progressive has no current noncontrolling interest, third-party managed pool, management-fee business, or preferred claim.

Executive judgment and evidence discipline

Progressive has a real present-day system moat: proprietary loss and driving datasets, state-level pricing deployment, claims and advertising scale, dual distribution, brand, and capital. Underwriting stayed profitable in every year from 2016 through 2025 while premiums and policies expanded. The weak link is 2046. Personal auto is the overwhelming profit pool, customers can switch readily, national competitors are deploying similar technologies, and vehicle manufacturers or autonomous fleets could control the best sensor data and point of sale. That is a genuine unresolved durability question.

Source fact identifies issuer, regulator, or competitor disclosure; **Inference** identifies analyst judgment. Financial history comes from QFR/DR-verified artifacts and the sealed statutory bridge. The primer is orientation only. New competitive and regulatory evidence was fetched live and archived; NHTSA denied two archive attempts, as recorded in `source_manifest.json`.

Moat diagnostic	Gate	Why
Underwriting/data/pricing system	GREEN	Ten consecutive profitable underwriting years; granular products and billions of telematics miles
Scale, claims, brand and capital	GREEN	National claims/repair footprint, dual-channel reach, $97.2bn retained investments and strong ratings
Customer switching costs	RED	Auto customers and independent agents can compare carriers readily; agents are not captive
Competitor replicability	YELLOW	Progressive has a lead, but Allstate and GEICO are investing aggressively in segmentation, telematics, AI and direct distribution
AI and regulatory durability	YELLOW	AI should improve operations, but commoditizes workflows and attracts scrutiny of data, bias and rating variables
Autonomous-vehicle/OEM transition to 2046	YELLOW	Insurance remains necessary, but premium pools, liability and data ownership may shift away from individual drivers
Overall moat gate	**YELLOW**	**Real and observable today; 20-year protection of the personal-auto profit pool is not yet proven**

1. Moat taxonomy applied

Network effects — weak

Source fact. Progressive serves both direct and agency customers, but a new policyholder does not directly make the product more valuable to another policyholder. Its [2025 Form 10-K](https://www.sec.gov/Archives/edgar/data/80661/000080066126000086/pgr-20251231.htm) instead describes extensive data gathering, billions of miles of usage-based driving data, and continuing model refinement. **Inference.** This is a learning-scale effect, not a classic network effect. More exposures and claims can improve calibration, which can attract better risks at better prices and generate more observations, but the loop breaks if data access becomes standardized or competitors obtain superior OEM data.

Switching costs — weak for customers, modest in embedded workflows

Source fact. Progressive explicitly says comparative-rating services let customers compare competitors easily. More than 40,000 independent agencies represent it, but those agents may place business with other carriers. The stronger relationship features are bundles, coordinated policy periods, a Portfolio quoting workflow, and nearly 6,000 Platinum agents at year-end 2025. **Inference.** A single personal-auto customer has little lock-in; a bundled household or small commercial account has

more friction, but not contractual captivity. Agent familiarity and integrated quoting create workflow preference, not hard switching costs. The moat must therefore re-earn the customer at each renewal through price, service and appetite.

Scale economies — strong

Source fact. FY2025 modeled underwriting revenue was $82.9 billion; Progressive held 37.4 million Personal and 1.2 million Commercial policies. Employees handle nearly all vehicle claims, supported by about 4,700 repair shops. Retained investments were $97.2 billion at June 2026. **Inference.** Advertising, filings, models, cybersecurity, claims technology and repair relationships spread across a vast premium base. The advantage is strongest against startups and regional carriers, not national incumbents.

Brand — meaningful, not sufficient alone

Source fact. Progressive identifies brand as a major competitive factor and held the number-two U.S. private-passenger-auto position and number-one commercial-auto position since 2015. **Inference.** Brand supports direct conversion and agent placement, but cannot protect an uncompetitive renewal price. It reinforces the moat; it is not the core.

Regulatory licenses and capital — real barrier, shared by incumbents

Source fact. Progressive is licensed across all 50 states and relevant jurisdictions; states regulate rates, rating criteria, forms, reserves, claims, capital and market exits. At June 2026, common equity was $34.3 billion and estimated statutory surplus was $32.9 billion. **Inference.** A software entrant cannot simply launch a national risk-bearing insurer. Capital, filings, actuarial history and claims obligations create a chokepoint. Yet regulation also slows Progressive's own price response and restricts predictive variables. The barrier protects incumbent insurers collectively more than Progressive uniquely.

Intellectual property and know-how — moderate

Source fact. Progressive lists patents covering usage-based insurance, multivariate telematics, multi-product quoting, chatbots, document classification and embedded quoting, with expirations ranging from 2028 into 2043. It also attributes know-how to billions of driving miles. **Inference.** The longitudinal mapping of quote variables and driving behavior to ultimate claim outcomes matters more than the patents. All listed patents expire before the August 2046 endpoint, and rivals can design around them. IP supports the next decade; only refreshed proprietary data and organizational learning can support the full twenty years.

High-trust procurement and claims — moderate to strong, especially commercial

Source fact. Claims handling, financial strength, coverage and service are explicit bases of competition. Progressive reports current ratings of A+ from A.M. Best, AA from S&P and Aa from Moody's. Commercial auto is roughly 90% agency-distributed excluding TNC, and liability claims can develop for years. **Inference.** Households may shop on price, but the insurer's promise is tested at a claim. Reliable repair, defense, reserving and payment protect reputation. For agents and commercial buyers, consistent appetite and claims execution matter more than a slick quote. This is a more durable advantage than the front-end workflow.

2. Per-segment moat and blended-company effect

Personal Lines — powerful present system, uncertain twenty-year distribution

Source fact. Personal Lines represented 86.7% of FY2025 modeled underwriting revenue and generated $8.85 billion of pretax underwriting profit. The TTM segment margin was 12.1%. Personal vehicle premiums were split 57% direct and 43% agency in 2025; Snapshot was available in every state except California. Product 9.0 had reached states representing about 25% of countrywide personal-auto premiums by year-end and showed favorable conversion in both channels. Personal property was only about 5% of Personal Lines premiums, so auto dominates.

Inference. The five-year moat is strong: data, distribution breadth and rapid repricing allow Progressive to take share when competitors are slow. The ten-year moat is good but cyclical. The twenty-year moat is uncertain because the consumer relationship, driving data and liability pool could migrate toward OEMs, software operators and fleets. The earliest break signals are: normalized Personal Lines combined ratio above 96 for eight rolling quarters; rising new-business conversion accompanied by worsening frequency or reserve development, indicating adverse selection; policy decline despite efficient marketing; or persistent loss of agency placements and OEM data access.

Commercial Lines — narrower but more defensible underwriting expertise

Source fact. Commercial Lines was 13.3% of FY2025 modeled underwriting revenue, with $1.42 billion of profit and a 13.0% margin; the TTM margin remained 13.0%. Progressive has ranked first in U.S. commercial auto since 2015. Its underwriting spans specialized vehicle classes, small fleets, TNC, BOP and transportation workers' compensation. Smart Haul uses electronic-logging-device data, while Snapshot ProView serves fleets without such devices. Core commercial auto is about 80% of segment premiums; TNC was 14% in 2025.

Inference. This moat rests on niche classification, agent relevance, claims/reserving expertise and telematics integration. It is likely durable for ten years and could survive twenty because small-business and fleet risks remain heterogeneous even as vehicles automate. It is not invulnerable: autonomous fleets may self-insure or buy directly from OEM-linked carriers, and social inflation can reveal under-reserving years late. Break signals are repeated adverse prior-year development, commercial combined ratio above 96 without catastrophe distortion, loss of top commercial-auto rank, shrinking agent quote share, or a material TNC customer reduction.

Blended moat

Commercial Lines is arguably more durable, but it is too small to rescue the equity if individual personal-auto economics are disintermediated. The blended company moat is therefore weaker than the best segment. It is also stronger than a pure direct-auto writer because agency distribution, commercial niches, claims scale, property bundles and retained capital offer adaptation paths.

3. Margin persistence: observable evidence, with cycle normalization

Source fact. Progressive's official ten-year summary reports companywide underwriting margins of 4.9%, 6.6%, 9.4%, 9.1%, 12.3%, 4.7%, 4.2%, 5.1%, 11.2% and 12.6% from 2016 through 2025, respectively. The ten-year average was 8.0%, and no year was an underwriting loss. Personal Lines margins over the same period were 4.7%, 6.4%, 8.9%, 8.9%, 12.2%, 3.5%, 3.2%, 5.9%, 11.4% and 12.5%, averaging 7.6%. Commercial Lines margins were 6.4%, 7.7%, 13.3%, 10.4%, 13.0%, 11.1%, 8.9%, 1.2%, 10.6% and 13.0%, averaging 9.6%. TTM companywide underwriting profit of $10.31 billion on $84.48 billion of earned premium implies a 12.2% margin.

Inference. Ten consecutive profitable underwriting years across two different cycles is the best evidence of moat in this appendix. The 2021-2023 compression also prevents the wrong conclusion that current margins are structurally guaranteed: loss inflation and reserve development overwhelmed rate for a period. FY2024-2026 margins are well above the long-term 96-combined-ratio objective and should normalize. A defensible 2046 thesis requires mid-single-digit through-cycle underwriting profitability, not permanent 12% margins.

4. AI disruption stress test

Pricing and underwriting

The model-building workflow is partly replicable: AI with the same variables could search interactions, automate filings and update loss-cost forecasts. The moat lives in the labels and deployment loop — proprietary quote, driving, claim, reserve and renewal outcomes, plus state-by-state operational execution — not in an algorithmic technique. **Adverse-selection test:** if OEMs or rivals observe real-time vehicle condition and behavior more accurately, Progressive may quote too cheaply for risks others reject and too expensively for risks others want. That would turn its scale flywheel backward.

Claims and service

Generative and agentic AI can automate first notice of loss, document classification, coverage summaries, repair estimates, fraud triage and routine customer contact. This compresses a workflow advantage and may lower expenses industrywide. It does not eliminate the chokepoint economics of licensed risk capital, legal defense, reserve accountability, catastrophe response or physical repair. Progressive's nationwide repair network and claim-outcome history should make it a beneficiary if execution is disciplined, but competitors can buy similar foundation models.

Distribution

AI shopping agents can compare policies continuously, explain coverage and trigger switching. That threatens direct personal-auto acquisition and weakens brand-mediated inertia. Independent agents may become more productive, but comparative platforms can also shift bargaining power from insurers to aggregators. Progressive's dual-channel model is protective because it can serve both automated direct shopping and advice-heavy commercial accounts, yet neither channel is captive.

Current competitor and regulatory response

Source fact. [Allstate's 2025 10-K](https://www.sec.gov/Archives/edgar/data/899051/000089905126000031/all-20251231.htm) describes exclusive-agent, independent-agent and direct distribution; expanded telematics pricing; the Arity mobility-data platform; advanced computing for acquisition; and generative/agentic AI. [Berkshire Hathaway's 2025 10-K](https://www.sec.gov/Archives/edgar/data/1067983/000119312526083899/brka-20251231.htm) says GEICO strengthened segmentation and risk pricing, improved costs, increased advertising and invested in technology; its prior rate increases restored margins but hurt retention while competitor rate reductions increased pressure. The [NAIC's current AI page](https://content.naic.org/insurance-topics/artificial-intelligence) reports broad state adoption of its AI Model Bulletin and continuing 2025-2026 work on insurer AI evaluation and third-party models.

Inference. AI is more likely to raise the industry's minimum capability than to destroy insurance. The most exposed profit activity is direct personal-auto acquisition and routine service. The most protected is Commercial Lines liability selection, claims/legal resolution and the regulated balance sheet. AI is net positive only if Progressive preserves superior data access; otherwise it erodes differentiation.

5. The 2046 test

Base description as of August 14, 2046

Inference — specific base case. Progressive sells regulated mobility, small-fleet, residual personal-driver, property and liability protection to households, agents, small businesses, fleet operators and mobility platforms. Traditional personal auto still exists because the vehicle fleet turns over slowly and human responsibility remains in mixed-autonomy environments, but it is a smaller share of premiums. Policies increasingly price miles, operating domain, software version, sensor condition, human override and product-liability allocation. Commercial Lines, fleet and platform coverages are larger; property is selectively underwritten rather than pursued indiscriminately. Claims combine automated evidence ingestion with human legal, injury and catastrophe expertise. Progressive earns a companywide underwriting margin directionally below FY2025/TTM — likely mid-single digits through cycle — plus investment income on fully retained float.

The intact moat is not a 2025 patent or chatbot. It is the ability to connect proprietary exposure data to ultimate claims, file and deploy prices across jurisdictions, settle complex claims through a scaled network, maintain trusted capital and distribute through both embedded/direct interfaces and independent advisers. [NHTSA's current automated-vehicle overview](https://www.nhtsa.gov/vehicle-safety/automated-vehicles-safety) still identifies safety, liability and insurance as unresolved policy questions rather than assuming immediate universal autonomy. The base case therefore assumes migration of the risk pool, not its disappearance.

Bear description and probability

Inference — erosion case. By 2046, OEMs and autonomous-fleet platforms control sensor data, customer access and loss prevention. They bundle coverage at vehicle or mobility-service purchase, retain predictable risk and auction only capital-intensive tail risk to licensed carriers. AI makes conventional pricing, servicing and claims triage cheap; independent-agent consolidation routes volume to platforms with the lowest price. Progressive lacks privileged OEM data, receives an adversely selected residual pool, and competes as a commodity balance sheet. Personal-auto premiums shrink materially, Commercial Lines cannot offset the loss, property growth imports climate volatility, and the combined ratio drifts toward 100.

This bear is **moderately plausible, approximately one chance in three**, because it requires both broad autonomous adoption and Progressive's failure to reposition distribution/data access. It is not remote enough for a PASS 2046 gate. Conversely, it is not the base case: full fleet replacement, liability reform, state regulation and consumer behavior unfold slowly, and Progressive already underwrites TNC/fleet risks and operates both channels.

6. Competitive threat inventory

Threat	Mechanism	Segment(s) affected	Earliest observable signal	Plausibility
AI/data parity and adverse selection	Rivals and third-party models lower modeling cost; superior OEM data identifies good risks before Progressive	Personal; Commercial	New-business growth with deteriorating cohort loss ratios; telematics conversion/retention weakens; normalized CR above 96	High over 5-10 years

Threat	Mechanism	Segment(s) affected	Earliest observable signal	Plausibility
OEM/autonomous-platform disintermediation	Liability and point of sale shift from drivers/agents to manufacturers, software operators and fleets	Personal auto; TNC; fleets	Embedded OEM insurance share rises; miles-driven premium pool contracts; PGR lacks vehicle-data partnerships	Medium in 5-10 years; higher by 2046
Climate, social inflation and regulatory constraint	Catastrophes and liability severity outrun filed rate; AI/rating-variable limits reduce segmentation; reinsurance cost rises	Property; Commercial liability; Personal auto	Rate approvals lag loss trend, unfavorable reserve development repeats, property retention/reinsurance cost jumps	High, but manageable if appetite stays disciplined

7. Pricing power verification

Source fact. From FY2021 through FY2025, net premiums written rose from $46.4 billion to $83.2 billion while Personal Lines policies grew from 25.5 million to 37.4 million; underwriting stayed profitable throughout. Commercial Lines aggregate rates increased about 9% in 2025, yet FY2025 policy count grew 4% and the margin reached 13.0%. In Q2 2026, companywide premiums grew 5%, policies grew 7% and the combined ratio was 87.3; Commercial Lines premiums grew 4%, policies 3% and its combined ratio was 85.3. These facts show the franchise could retain and add risks while carrying adequate prices through inflation.

Inference. This is evidence of **pricing capability**, not consumer-goods pricing power. Policies renew every six or twelve months, rates are regulated, customers can shop, and there are no multi-year minimum commitments or automatic escalators. Premium growth also mixes exposure, term and risk changes. The durable advantage is detecting when and where price is adequate, moving faster than slower competitors, and constraining volume when it is not. Pricing power is therefore **YELLOW/GREEN**: observable through the recent cycle, but inherently conditional on relative price and risk selection.

8. Verdict and explicit invalidation signals

Moat gate: YELLOW. Progressive has a concrete, evidenced moat in data feedback, underwriting execution, claims scale, dual distribution, brand and capital. Ten years of positive underwriting margins and profitable share growth are hard evidence, not management assertion. The gate does not pass because switching costs are weak, capable incumbents are matching the technology stack, and Personal Lines concentration makes loss of driver-level data or distribution economically decisive.

2046 test: YELLOW. A specific 2046 business is credible: a scaled regulated underwriter of mixed-autonomy mobility, fleet, property and liability risks earning mid-single-digit through-cycle underwriting margins plus float income. It is not yet sufficiently protected from OEM/platform control of data and customer access to earn PASS.

Upgrade to PASS if all are observable: (1) normalized Personal Lines and Commercial Lines combined ratios remain at or below 96 through the next soft market without material favorable reserve-development support; (2) Progressive secures durable OEM/fleet data and embedded-distribution relationships while maintaining direct and agent growth; and (3) cohort evidence shows telematics/product-model lifts persist after competitors' AI and pricing upgrades.

Downgrade to FAIL if any two persist: (1) rolling eight-quarter normalized combined ratio above 98 or repeated adverse prior-year development; (2) Personal Lines policies decline while acquisition spending rises and competitors cut price; (3) loss of independent-agent quote/placement relevance or major fleet/TNC relationships; (4) regulation removes material predictive variables without compensating rate flexibility; or (5) OEM/platform channels control the customer and sensor data while Progressive is relegated to commodity risk capital.

Appendix B1 - Personal Lines

Progressive Personal Lines - Segment Deep Dive

Run ID: `pulse-cio-20260814T180226+0800` **Information cutoff:** 2026-08-14 18:02:26 SGT **Forecast anchor:** TTM ended 2026-06-30 **Exact five-year horizon:** TTM ended 2031-06-30 **Reporting currency:** USD; dollar figures are billions unless stated otherwise **Governing segment metric:** `Pretax underwriting profit (loss)` **Ownership basis:** Fully parent-owned underwriting economics; no NCI or third-party pool adjustment **Trade authority:** `false`

Executive view

Personal Lines is Progressive's economic engine. AR25 Note 10 shows that it represented 86.7% of the two reportable segments' FY2025 underwriting revenue and produced $8.854 billion of FY2025 pretax underwriting profit. The sealed AR25/Q226 TTM derivation shows $73.788 billion of net premiums earned, $74.900 billion of underwriting revenue, and $8.944 billion of `Pretax underwriting profit (loss)`. The exact derived TTM combined ratio is 87.9, calculated as `100 - 8.944 / 73.788 x 100`. That unusually strong starting profitability creates both opportunity and a normalization risk: Progressive can reinvest in acquisition while competitors restore rate adequacy, but a model that holds an 87-88 combined ratio forever would confuse a favorable part of the cycle with permanent economics.

The base case assumes the franchise continues to take profitable share, but competitive rate pressure and normal loss-cost inflation gradually move the combined ratio to 89.8 by FY2031. Policy growth moderates from 7.7% in FY2026E to 4.6% in FY2031E, while written-premium growth remains around 6-7% after pricing and mix. On this path, net premiums earned increase from $76.4 billion in FY2026E to $105.4 billion in FY2031E, while pretax underwriting profit is approximately flat in the first two forecast years before compounding to $10.75 billion in FY2031E. At the exact June 2031 horizon, the base case is $102.25 billion of NPE, a 89.8 combined ratio, and $10.43 billion of pretax underwriting profit.

The bear case is not a liquidation scenario. It is an adverse but solvent underwriting cycle in which loss costs outpace price, retention weakens, acquisition becomes less efficient, and catastrophe plus reserve pressure lift the combined ratio to 97.5. The exact-horizon bear produces $88.0 billion of NPE and $2.20 billion of segment pretax underwriting profit. The bull case assumes sustained segmentation advantage, good retention, efficient new business, and benign reserve/cat experience; it produces $116.0 billion of NPE, an 85.0 combined ratio, and $17.40 billion of pretax underwriting profit. Probabilities are 25% bear, 50% base, and 25% bull. These probabilities are analyst assumptions, not management guidance.

0. Segment boundary and taxonomy note

Beginning in Q4 2024, Progressive moved personal residential property into Personal Lines, reducing the operating structure from three reportable segments to two. The 2024 annual report restated FY2024, FY2023, and FY2022 on the new basis. For FY2021 and FY2022, the verified data package constructs current-basis Personal Lines by adding the former Personal Lines and Property values on the same exact profit basis. The addition is arithmetic, not a plug. Dollar comparisons in this appendix therefore use the current two-segment taxonomy and explicitly identify the older NPE-versus-underwriting-revenue boundary. No FMP FY2021 Agency/Direct taxonomy or malformed FY2024 quarterly rollup is mixed into the forecast.

The reportable boundary includes personal auto, special lines such as motorcycles, recreational vehicles and watercraft, personal residential property, umbrella, and flood. It excludes Commercial Lines and the small `Other underwriting businesses and run-off operations` reconciliation line. Investment profit and service-business results are also outside the segment. The sealed statutory bridge requires this appendix to forecast the issuer's exact `Pretax underwriting profit (loss)` basis. Consolidated investment profit, service loss, interest, and tax are projected once by the synthesis stage, not allocated into Personal Lines here.

1. What the segment actually is

Personal Lines sells regulated insurance contracts to households and individuals. The product is a promise to pay or defend covered claims in exchange for premium. Personal auto is dominant: verified official context says personal vehicle products were about 96% of Personal Lines net premiums written in 2025 and personal auto was about 95% of personal-vehicle premiums. Multiplying those rounded disclosures implies an analytical mix of roughly 91% personal auto, roughly 5% special lines, and roughly 4% property and other personal products. That mix is useful for scenario design, but it is not an exact issuer product-dollar table.

The segment reaches customers through two complementary channels. The Direct channel sells online and by phone, supported by national advertising, digital quote flows, call centers, and servicing infrastructure. The Agency channel works through more than 40,000 independent agencies. Agents compare multiple carriers and can help assemble more complex household coverage, while Progressive retains control over rate, underwriting, claims, and policy terms. In 2025, Direct generated 57% of personal-vehicle NPW and Agency generated 43%. Property was more agency-heavy, with 72% of personal-property NPW through Agency. Neither channel is a reportable financial segment, so channel economics are drivers rather than separately forecast profit pools.

Price is state-, coverage-, customer-, vehicle-, and risk-specific. Most personal-auto policies have six-month terms, which gives Progressive a comparatively fast renewal cadence when loss trends move. Selected Agency relationships use 12-month auto policies, and property/special-lines contracts are generally annual. Snapshot and other segmentation models use driving or behavioral data to refine risk selection. The commercial proposition is not merely a telematics discount: better segmentation should allow Progressive to offer competitive rates to lower expected-cost customers and charge adequately for riskier exposure.

Customer lifetime value depends on acquisition cost, policy duration, loss experience, servicing expense, and cross-product relationship. Progressive's policy life expectancy is its primary disclosed retention concept, but the verified package does not provide a numeric Personal Lines policy-life series. Consequently, the retention and new-business figures in the forecast are analyst operating assumptions, explicitly labeled as such. They should not be read as sourced historical disclosure.

2. Current economics and audited starting point

The following facts are the controlling starting point. They come from the verified data package, quant foundation, and sealed statutory bridge. They are not refreshed or re-derived from external sources in this stage.

Starting fact	Verified value	Source-bound status
FY2025 Personal Lines underwriting revenue	$71.838bn	AR25, Note 10 Segment Information (App.-A-36); data package Section 3
FY2025 Personal Lines NPE	$70.778bn	AR25, Note 10 Segment Information (App.-A-36); QF P2
FY2025 Personal Lines pretax underwriting profit	$8.854bn	AR25, Note 10 Segment Information; sealed statutory bridge `SEC_2025_AR` line
FY2025 Personal Lines combined ratio, derived	87.5	`100 - 8.854 / 70.778 x 100`
TTM Personal Lines underwriting revenue	$74.900bn	AR25 and Q226 comparative-H1 segment tables; QF P4 TTM derivation
TTM Personal Lines NPE	$73.788bn	AR25 and Q226 comparative-H1 segment tables; QF P2
TTM Personal Lines pretax underwriting profit	$8.944bn	Sealed statutory bridge `TTM_DERIVATION` line
TTM Personal Lines combined ratio, derived	87.9	`100 - 8.944 / 73.788 x 100`
FY2025 Personal Lines PIF	37.428m	AR25 ten-year summary; data package Section 0a
Q2 2026 Personal Lines PIF growth	8% YoY	L2, Q2 2026 shareholder letter; data package Sections 0a/4
Q2 2026 vehicle NPW growth	5% YoY	L2, Q2 2026 shareholder letter; data package Section 4
Q2 2026 Personal margin on NPE	12.4%	Q226 segment table; data package Section 5

Capital intensity is low in physical plant but high in regulatory and risk capital. Progressive's companywide TTM capex was only $388 million (AR25 less H1 2025 plus Q226 H1 2026; QF P4), yet Personal Lines cannot be valued as a capital-light software business. Premium growth increases unearned-premium and loss-reserve obligations and requires statutory surplus. Advertising can be switched more quickly than plant capacity, but catastrophe, reserve, claims inflation, ratings, and regulatory requirements bind the amount of growth and distributions the group can support.

The segment's FY2025-to-TTM growth slowed sharply from the 2023-2025 surge. Quarterly Personal Lines underwriting-revenue growth declined from 16.2% in Q3 2025 to 12.5% in Q4, 10.0% in Q1 2026, and 7.6% in Q2 2026. That deceleration is central to the model. The base case does not extrapolate the prior 18-23% annual growth rates. Instead it treats current PIF growth, efficient acquisition, and moderate rate/mix as the forward drivers.

3. Unit economics and profit formation

The exact segment profit bridge is:

`Net premiums earned + policyholder fees and other underwriting revenue - losses and LAE - underwriting expense and policyholder credit expense = Pretax underwriting profit (loss)`.

The combined ratio is measured against earned premium rather than underwriting revenue. Policyholder fees are effectively netted into the expense-ratio presentation. Therefore, the correct segment profit calculation in every scenario is `NPE x (100 - combined ratio) / 100`. The underwriting-revenue forecast is shown separately to connect with the segment reporting table, but it is not the denominator used to calculate the issuer's underwriting margin.

Loss cost is frequency multiplied by severity. Frequency reflects how often covered events occur; severity captures repair parts and labor, vehicle technology, medical costs, liability awards, litigation, theft, weather, and coverage mix. Rate adequacy is prospective. If rate trails expected loss-cost trend, the combined ratio deteriorates even when current reported earnings remain excellent because six- and twelve-month policies earn into results with a lag.

Expense economics have four competing drivers. First, scale and digital self-service can reduce fixed servicing cost per policy. Second, Direct acquisition requires media spend, and Agency distribution requires commissions and incentives. Third, fast new-business growth carries acquisition cost before the full customer lifetime is known. Fourth, property and multi-product expansion require product, claims, and underwriting investment. Management's governing constraint is acquisition efficiency: Q2 commentary stated that cost per sale remained below target acquisition cost despite higher spend. The base case allows only modest expense leverage because management is explicitly reinvesting.

Reserve development can create a gap between current accident-year economics and reported segment profit. AR25 and Q226 provide companywide favorable prior-year development of $1.394 billion in FY2025 and $1.002 billion in H1 2026, respectively, but do not disclose an exact Personal Lines allocation. This appendix does not invent one. The scenario combined ratios are normalized total reported outcomes that include a prudent through-cycle reserve allowance; any synthesis-level reserve bridge must avoid adding or subtracting the companywide figures again.

4. Competitive dynamics

Personal auto is price-transparent, frequently shopped, regulated state by state, and contested by national Direct writers, captive-agent carriers, independent-agent companies, mutuals, and regionals. Price is necessary but not sufficient. Conversion also depends on underwriting appetite, quote speed, brand, claims reputation, coverage design, bundled products, agent placement, payment options, and service. A competitor that was underpriced during the inflation shock can take large corrective rate increases, making Progressive newly competitive even without Progressive reducing absolute price. That dynamic supported recent share gains, but it is cyclical: once competitors restore margins, price gaps narrow.

Progressive's relevant advantages form a system. Large policy count supplies data; data improves segmentation; segmentation supports more precise pricing; precise pricing improves conversion on attractive risks; distribution breadth brings more risks into the funnel; and scale supports claims, media, and technology investment. Six-month personal-auto terms allow relatively fast repricing, while dual Direct/Agency distribution broadens customer access. The company's willingness to constrain growth when rate adequacy weakens is as important as the models themselves.

The vulnerability is that these advantages can look strongest at a favorable point in the pricing cycle. Competitors also use telematics, machine learning, third-party data, digital comparison, and sophisticated claims tools. Regulation can restrict data variables or delay rate changes. Advertising auctions can become more expensive. Repair severity can overwhelm a small frequency improvement. A very large book also creates exposure to common model error. For this reason, the base case gives Progressive durable growth and an underwriting margin above its 96 combined-ratio objective, but it deliberately normalizes away from the current 87.9 result.

5. Segment moat and durability

The segment moat is moderate-to-strong but not absolute. It is strongest in accumulated risk data, operating feedback loops, national claims infrastructure, brand reach, and the ability to serve both self-directed and agent-advised shoppers. No single element is unique. The durability comes from integrating them at scale and updating price faster than the market while preserving regulatory and claims competence.

The Direct/Agency combination matters because customer journeys differ. Direct can be low-friction for shoppers comfortable online, while Agency can capture complex or bundled households and benefit from local advice. Agency relationships are contestable because agents represent multiple carriers; Direct acquisition is contestable because consumers can compare

price rapidly. The moat therefore must show up in superior lifetime economics, not simply gross policy additions.

Bundling can improve relationship duration, but property is not free retention. It brings catastrophe concentration, roof and construction inflation, reinsurance costs, and state regulation. Progressive's stated approach of prioritizing lower-risk properties and historically requiring a bundle for new property business indicates disciplined risk selection. The bull case assumes selective expansion works. The bear case assumes property exposure adds loss volatility without enough retention benefit.

Over five to ten years, the moat survives if Progressive retains three capabilities: rate models that respond faster than loss trends; acquisition that stays below lifetime-value thresholds; and claims/reserve practices that do not sacrifice future development for present growth. A failure in any one can damage the other two. Rapid acquisition of inadequately priced risks creates adverse loss selection, while weak claims or reserving contaminates the data used for future pricing.

6. Historical growth rates - verified package reproduction

The revenue basis changes across the taxonomy history. FY2021-FY2022 use NPE because fees were allocated separately in the older presentation; FY2023 onward uses underwriting revenue. Those bases are not silently treated as one continuous exact revenue series.

Personal Lines measure	FY2021	FY2022	FY2023	FY2024	FY2025	TTM 2026-06-30	Data-package cite
Economic revenue base	$37.42bn NPE	$40.15bn NPE	$49.51bn UW revenue	$60.98bn UW revenue	$71.84bn UW revenue	$74.90bn UW revenue	AR22/AR25 segment tables; Q226 comparative-H1 TTM derivation
YoY growth on stated basis	n/a	7.3%	23.3%	23.2%	17.8%	n/a; Q2 latest-quarter YoY +7.6%	Calculated from AR22/AR25; Q226 for Q2 trend
Pretax underwriting profit	$1.299bn	$1.265bn	$2.885bn	$6.840bn	$8.854bn	$8.944bn	AR22/AR25 Note 10; sealed `TTM_DERIVATION`
Margin on NPE	3.5%	3.2%	5.9%	11.4%	12.5%	12.1% derived	AR22/AR25 issuer method; sealed TTM profit and QF P2 NPE
Policies in force	25.512m	26.307m	28.591m	33.811m	37.428m	Q2 growth +8% YoY	AR25 ten-year summary; L2 Q2 2026 shareholder letter

The arithmetic checks pass for the comparable recent underwriting-revenue rows. `49.505 x 1.232 = 60.99`, consistent with $60.984 billion after rounding. `60.984 x 1.178 = 71.84`, consistent with $71.838 billion. The TTM profit check is exact: `FY2025 $8.854 - H1 2025 $4.831 + H1 2026 $4.921 = $8.944 billion`. The TTM revenue check is also exact: `$71.838 - $34.766 + $37.828 = $74.900 billion`.

Product-level exact historical revenue dollars are not disclosed in the verified package. The package explicitly prohibits back-solving exact dollars from rounded premium mix. Accordingly, this appendix uses the finest sourceable operating lines rather than fabricating a historical product table.

Product / driver	Historical dollar disclosure	Latest verified operating signal	Forecast treatment
Personal auto	No exact current dollars	Q2 vehicle NPW +5%; PIF +9%; conversion +5%	Primary premium and policy driver
Special lines	No exact current dollars	More than 2m watercraft insured	Smaller, steadier growth bucket
Personal property	No exact current dollars	Q2 PIF and NPW +1%; combined ratio 78.0	Risk-constrained, retention-supporting bucket
Direct distribution	No segment profit split	57% of 2025 personal-vehicle NPW	Acquisition-cost and conversion driver
Agency distribution	No segment profit split	43% of vehicle NPW; 72% of property NPW	Commission and bundled-household driver

`[DATA GAP: Progressive does not disclose exact current Personal Lines product revenue dollars or a numeric Personal Lines retention/policy-life series. Rounded premium mix is used only for scenario allocation, never presented as issuer-reported dollars.]`

7. Management guidance and interpretation

Management does not provide a conventional multi-year Personal Lines revenue or combined-ratio guide. The verified commentary instead supplies decision rules.

- In August 2025, Personal Lines leadership said the company would continue investing to drive growth on the back of strong underwriting profit. The interpretation is conditional reinvestment, not an unconditional growth target.
- The Q3 2025 shareholder letter said Progressive seeks competitive rates, monitors loss trends, and continuously evaluates rate and non-rate action. Price, risk selection, and availability therefore operate together.
- The Q3 2025 property discussion prioritized lower-risk properties and accepted new business only with a Progressive personal-auto bundle. This supports slower property premium growth than auto in the base case.
- The Q1 2026 letter said media and Agency investment would continue while media spend remained efficient. The model therefore allows expense-ratio leverage only gradually and treats acquisition efficiency as a checkpoint.
- The Q1 2026 property update said availability was being increased selectively while risk selection remained disciplined. The bull case allows modest property acceleration; it does not assume national indiscriminate expansion.
- The Q2 2026 letter said Progressive continued investing across products to drive growth and retention. The base case holds advertising and agent incentives high enough to limit near-term expense improvement.
- In August 2026, the Chief Personal Lines Officer said cost per sale remained below target acquisition cost despite higher spend. This is the cleanest current new-business economics anchor. If cost per sale exceeds the threshold without a compensating increase in retention or rate adequacy, the model should be cut.

These statements support a profitable-growth framework, not a fixed premium-growth promise. In particular, they do not justify extrapolating 2023-2025 growth or today's combined ratio.

8. Forward growth assumptions

Product allocation convention

Because exact product dollars are not disclosed, the product tables begin with the analyst's FY2026E NPW allocation, not a claimed historical actual. The allocation applies the rounded official mix: 91.2% personal auto, 4.8% special lines, and 4.0% property/other. All three sum back to the segment forecast. The total FY2026E NPW of $76.8 billion is an analyst estimate anchored to companywide FY2025 NPW, Personal Lines' approximately 87% mix, Q2 vehicle NPW growth of 5%, and the close relationship between written and earned premium at scale.

Base-case product forecast

Product / sub-segment	FY2026E NPW	Latest verified trend	Base CAGR FY2026E-FY2031E	FY2031E NPW	Justification
Personal auto	$70.04bn	Vehicle NPW +5%; PIF +9%	7.0%	$98.24bn	PIF growth moderates; 2-3% rate/mix supports premium above policies
Special lines	$3.69bn	Watercraft count above 2m	6.0%	$4.93bn	Cross-sell and household scale; smaller addressable pool
Property and other	$3.07bn	PIF/NPW +1%; CR 78.0	5.0%	$3.92bn	Selective availability; catastrophe discipline restrains volume
Personal Lines total	$76.80bn	Q2 vehicle NPW +5%	6.9%	$107.09bn	Bottom-up sum; rounds to $107.0bn segment schedule

The base path deliberately decelerates from historical 18-23% revenue growth. The forecast's 6.9% FY2026E-FY2031E NPW CAGR is driven primarily by policy growth rather than aggressive rate. This is consistent with PIF growth currently exceeding premium growth. The path assumes Progressive preserves attractive conversion and retention but competitors regain competitiveness.

Bear-case product forecast

Product / sub-segment	FY2026E NPW	Bear CAGR FY2026E-FY2031E	FY2031E NPW	What changes from base
Personal auto	$70.04bn	3.6%	$83.59bn	Loss-cost pressure forces rate; conversion and retention weaken
Special lines	$3.69bn	2.5%	$4.17bn	Discretionary insured assets slow; shopping rises
Property and other	$3.07bn	-0.5%	$3.00bn	Cat exposure and regulatory friction tighten appetite
Personal Lines total	$76.80bn	3.4%	$90.76bn	Bottom-up sum; reconciles within rounding to $91.0bn annual schedule

The bear is a margin and growth squeeze, not a volume collapse. Progressive remains a leading franchise, but price increases needed to address severity reduce conversion. Retention weakens as competitors become cheaper in selected cohorts. Property growth turns slightly negative as exposure management offsets bundle demand.

Bull-case product forecast

Product / sub-segment	FY2026E NPW	Bull CAGR FY2026E-FY2031E	FY2031E NPW	What changes from base
Personal auto	$70.04bn	10.1%	$113.31bn	Segmentation sustains conversion and retention; rate remains adequate
Special lines	$3.69bn	8.0%	$5.42bn	Cross-sell improves household lifetime value
Property and other	$3.07bn	7.0%	$4.31bn	Selective rollout scales without adverse cat concentration
Personal Lines total	$76.80bn	9.9%	$123.04bn	Bottom-up sum; reconciles within rounding to $123.0bn annual schedule

The bull is demanding but not a continuation of 2023-2025 hypergrowth. It requires Progressive to keep acquisition cost below target, retain newly acquired customers, and avoid weakening risk quality. Product allocations are analyst estimates because exact issuer product dollars are unavailable.

9. Forward margin assumptions on exact governing metric

The governing metric is `Pretax underwriting profit (loss)`. The margin is calculated on NPE, consistent with Progressive's combined-ratio convention. The loss/LAE-versus-expense split is an analyst forecast. The verified package provides the exact Personal Lines combined ratio and companywide TTM component ratios, but not a verified TTM Personal Lines component split. The base starting split of 66.3 loss/LAE and 21.7 expense is calibrated to the exact 88.0 FY2026E combined ratio and to the verified companywide TTM 66.2/21.6 split. It must not be mistaken for an issuer-reported Personal Lines historical component table.

Base annual model, FY2026E-FY2031E

Year	NPW	NPW growth	NPE	NPE growth	Loss/LAE ratio	Expense ratio	Combined ratio	Pretax underwriting profit	Year-end PIF	PIF growth
FY2026E	$76.8bn	6.1% est.	$76.4bn	7.9%	66.3	21.7	88.0	$9.17bn	40.30m	7.7%
FY2027E	$82.3bn	7.2%	$81.5bn	6.7%	67.3	21.5	88.8	$9.13bn	42.90m	6.5%
FY2028E	$88.2bn	7.2%	$87.1bn	6.9%	68.2	21.2	89.4	$9.23bn	45.30m	5.6%
FY2029E	$94.3bn	6.9%	$93.0bn	6.8%	68.8	20.9	89.7	$9.58bn	47.70m	5.3%
FY2030E	$100.5bn	6.6%	$99.1bn	6.6%	69.1	20.7	89.8	$10.11bn	50.05m	4.9%
FY2031E	$107.0bn	6.5%	$105.4bn	6.4%	69.2	20.6	89.8	$10.75bn	52.35m	4.6%

Every annual profit ties mechanically. For example, FY2031E profit is `$105.4 x (100 - 89.8)% = $10.75 billion`. FY2027E profit is slightly below FY2026E despite premium growth because 80 basis points of combined-ratio normalization offsets the larger earned base. This is intentional and conservative relative to a straight-line extrapolation of current margin.

The expense ratio declines 110 basis points from FY2026E to FY2031E, but the loss ratio rises 290 basis points. Expense leverage comes from scale, self-service, data, and fixed infrastructure. It is partly reinvested in media, agent incentives, product, and claims capability. The loss ratio rises because the rate-minus-loss-cost gap is negative for several years and reserve/cat experience normalizes from favorable recent conditions.

Bear annual model, FY2026E-FY2031E

Year	NPW	NPE	Loss/LAE ratio	Expense ratio	Combined ratio	Pretax underwriting profit	Year-end PIF	PIF growth
FY2026E	$76.8bn	$76.4bn	66.3	21.7	88.0	$9.17bn	40.30m	7.7%
FY2027E	$79.5bn	$79.0bn	69.5	22.2	91.7	$6.56bn	41.20m	2.2%
FY2028E	$82.2bn	$81.4bn	72.0	22.8	94.8	$4.23bn	42.00m	1.9%
FY2029E	$84.5bn	$83.8bn	75.0	23.5	98.5	$1.26bn	42.50m	1.2%
FY2030E	$87.0bn	$86.0bn	73.5	23.5	97.0	$2.58bn	44.00m	3.5%
FY2031E	$91.0bn	$90.0bn	74.0	23.5	97.5	$2.25bn	46.00m	4.5%

The bear path includes an adverse FY2029 accident/cat/reserve year rather than a smooth deterioration. It assumes required rate action and tighter underwriting begin to restore the book in FY2030, but the terminal margin remains only 2.5%. The exact June 2031 horizon is the midpoint of the FY2030E/FY2031E premium run rates: $89.0 billion NPW and $88.0 billion NPE. The PIF midpoint is 45.0 million. Profit does not mechanically interpolate because the exact-horizon ratio is explicitly held at the terminal 97.5 combined ratio.

Bull annual model, FY2026E-FY2031E

Year	NPW	NPE	Loss/LAE ratio	Expense ratio	Combined ratio	Pretax underwriting profit	Year-end PIF	PIF growth
FY2026E	$76.8bn	$77.0bn	65.5	21.0	86.5	$10.40bn	40.60m	8.5%
FY2027E	$86.0bn	$84.5bn	65.0	20.7	85.7	$12.08bn	44.20m	8.9%
FY2028E	$94.5bn	$92.5bn	64.5	20.5	85.0	$13.88bn	48.60m	10.0%
FY2029E	$104.0bn	$101.5bn	64.5	20.2	84.7	$15.53bn	52.60m	8.2%
FY2030E	$113.0bn	$110.0bn	65.0	20.0	85.0	$16.50bn	56.00m	6.5%
FY2031E	$123.0bn	$122.0bn	65.0	20.0	85.0	$18.30bn	61.00m	8.9%

The bull assumes conversion and retention gains remain economically sound while scale reduces the expense ratio. The exact June 2031 horizon interpolates to $118.0 billion NPW, $116.0 billion NPE, and 58.5 million PIF. It does not assume loss ratios improve indefinitely: the terminal 65.0 loss ratio is slightly worse than the FY2028-FY2029 trough as severity normalizes. A combined ratio at 85 is still exceptional and therefore receives only a 25% probability.

Price, severity, frequency, and catastrophe assumptions

Year	Average rate/mix change	Severity trend	Frequency trend	Implied loss-cost trend	Rate less loss trend	Cat load within loss ratio	Interpretation
FY2026E	2.5%	5.5%	-1.5%	4.0%	-1.5%	1.8 pts	Current profitability absorbs modest gap
FY2027E	2.0%	5.0%	-0.5%	4.5%	-2.5%	2.0 pts	Competitive rate pressure normalizes loss ratio
FY2028E	2.0%	4.8%	0.0%	4.8%	-2.8%	2.0 pts	Frequency no longer offsets severity
FY2029E	2.5%	4.7%	0.3%	5.0%	-2.5%	2.0 pts	Rate action begins to close gap
FY2030E	3.0%	4.5%	0.5%	5.0%	-2.0%	2.0 pts	Segmentation limits deterioration
FY2031E	3.0%	4.5%	0.5%	5.0%	-2.0%	2.0 pts	Stable through-cycle endpoint

The catastrophe load is an analyst normalization, not a sourced Personal Lines historical allocation. The data package did not preserve a verified Personal Lines cat-ratio series. It did preserve property growth, current property combined ratio, and companywide reserve development. The base 2-point load recognizes property and weather spillover into auto while avoiding

a fabricated historical allocation. The bear endpoint uses a 4-point normalized cat/reserve load, with at least one modeled shock year above 6 points. The bull endpoint uses approximately 1.2 points. If later synthesis evidence provides an audited segment cat allocation, that source should replace these assumptions without altering the profit identity.

Retention and new-business bridge

Year	Beginning PIF	New business / conversion assumption	Retention assumption	Net PIF adds	Ending PIF	Model status
FY2026E	37.43m	Cost per sale below TAC; conversion remains strong	Policy life stable to slightly better	2.87m	40.30m	Analyst bridge anchored to +8% Q2 growth
FY2027E	40.30m	Competitor rate recovery slows conversion	Stable retention	2.60m	42.90m	Analyst assumption
FY2028E	42.90m	Media remains efficient but less exceptional	Stable retention	2.40m	45.30m	Analyst assumption
FY2029E	45.30m	New business grows mid-single digits	Slight bundle benefit	2.40m	47.70m	Analyst assumption
FY2030E	47.70m	Mature scale moderates gross adds	Stable policy life	2.35m	50.05m	Analyst assumption
FY2031E	50.05m	Conversion normalizes	Stable policy life	2.30m	52.35m	Analyst assumption

Progressive does not disclose gross Personal Lines policies written and lapsed in the verified package, so the table uses net PIF additions rather than invented gross-new and lapse counts. The checkpoint is qualitative but testable: policy growth should not materially exceed premium growth while the loss ratio deteriorates more rapidly than forecast. That combination would imply adverse mix or inadequate price rather than benign unit expansion.

10. Segment rollup and exact-horizon scenarios

FY2026E-FY2031E are calendar fiscal-year estimates. The ER2's exact horizon is June 30, 2031, five calendar years after the TTM anchor. The exact-horizon base is interpolated from the FY2030E and FY2031E run rates and retains the same 89.8 combined-ratio endpoint. Bear and bull endpoints are independently modeled from their policy, premium, price/loss, expense, and catastrophe assumptions.

Exact horizon: TTM ended 2031-06-30	Bear	Base	Bull
NPW	$89.0bn	$103.75bn	$118.0bn
NPE	$88.0bn	$102.25bn	$116.0bn
Fees/other revenue as % of NPE	1.3%	1.5%	1.7%
Underwriting revenue	$89.14bn	$103.78bn	$117.97bn
Loss/LAE ratio	74.0	69.2	65.0
Expense ratio	23.5	20.6	20.0
Combined ratio	97.5	89.8	85.0
Pretax underwriting profit	$2.20bn	$10.43bn	$17.40bn
Segment margin on NPE	2.5%	10.2%	15.0%
PIF	45.0m	51.2m	58.5m
Probability	25%	50%	25%

The 50% base weight reflects the combination of still-excellent current acquisition economics and clear quarterly growth deceleration. Equal 25% tails recognize that normal competitive repricing can pull results toward the bear, while a durable segmentation and retention advantage can sustain the bull; neither tail is treated as a default continuation of today's margin.

The exact-horizon product NPW bridge preserves the scenario-specific product mixes rather than applying one uniform segment growth scalar:

Exact-horizon NPW by product	Bear	Base	Bull
Personal auto	$81.97bn	$95.18bn	$108.67bn
Special lines	$4.08bn	$4.78bn	$5.20bn
Property and other	$2.95bn	$3.79bn	$4.13bn

Exact-horizon NPW by product	Bear	Base	Bull
Personal Lines NPW	$89.00bn	$103.75bn	$118.00bn

The bear profit arithmetic is `$88.0 x 2.5% = $2.20 billion`; base is `$102.25 x 10.2% = $10.43 billion`; bull is `$116.0 x 15.0% = $17.40 billion`. Underwriting revenue equals NPE plus the scenario fee ratio, but those fees are already reflected in the combined-ratio economics. They are not added again to profit.

The bear endpoint assumes a roughly 3.6% NPE CAGR from the audited TTM base, a loss ratio 480 basis points worse than base, and an expense ratio 290 basis points worse than base. Advertising efficiency deteriorates, but Progressive does not chase uneconomic volume; hence the combined ratio remains under 100. A deeper reserve shock could exceed 100 temporarily without implying zero terminal segment value.

The base exact-horizon NPE CAGR is about 6.7%. It balances a 4.6-7.7% annual PIF growth path with 2-3% rate/mix and normal earning lags. It retains a 620-basis-point cushion to the 96 combined-ratio objective. That cushion should not be read as a management target; it is the forecast result of scale and underwriting advantage after normalization.

The bull endpoint requires a roughly 9.5% NPE CAGR and a 15% underwriting margin. It is plausible only if pricing data and distribution keep producing superior risk selection, retention remains strong, and recent reserve/cat conditions are not followed by a severe reversal. The 85 combined ratio is not the central case precisely because competition should react to such economics.

11. Investment income and float - allocated insight only

Personal Lines generates most of Progressive's premium volume and therefore most of the economic float, but Progressive does not report investment income by underwriting segment. The AR25/Q226 TTM derivation in data-package Section 0b gives group retained NII of $3.758 billion, and the Personal Lines share of group NPE is `73.788 / 84.483 = 87.34%`. A purely illustrative NPE-proportional allocation would assign about $3.28 billion of TTM retained NII to Personal Lines.

That $3.28 billion is **not** segment disclosure, is **not** included in the $8.944 billion TTM pretax underwriting profit, and is **not** added to any scenario profit in this appendix. The synthesis stage owns consolidated retained investments, NII, realized/unrealized gains, service profit, financing cost, tax, common income, and book-value roll-forward. Using the allocation here and the full $3.758 billion there would double count NII. The only purpose of the allocation is to show why profitable premium growth can compound shareholder economics: underwriting that grows at a combined ratio below 100 adds both underwriting profit and investable policyholder funds.

Float is not free capital. Assets support unearned premium, loss reserves, catastrophe liquidity, and statutory surplus. A segment-specific valuation should therefore use the exact underwriting profit forecast here and let the consolidated insurer bridge recognize investment economics once. No blanket NCI haircut is needed because the reviewed ownership perimeter has no current ordinary or redeemable NCI and no managed third-party pool.

12. Key risks, checkpoints, and failure conditions

Main risks and wildcards

- **Rate trails severity and frequency [bear].** Repair labor, parts, vehicle complexity, medical cost, or liability awards can keep severity above 5% while competitive rate remains around 2-3%. The model's loss ratio would be too low.
- **Reserve development reverses [bear].** Recent companywide favorable development is not allocated to Personal Lines in this appendix. Repeated adverse development would signal that both historical profit and the pricing data set were optimistic.
- **Acquisition efficiency weakens [bear].** Media and agent incentives can sustain PIF growth while reducing lifetime economics. Cost per sale above target acquisition cost is a direct failure signal.
- **Retention of the acquired cohort disappoints [bear].** Fast PIF growth creates value only if customers persist at adequate rates. A sharp fall in policy life expectancy would undermine the base growth model.
- **Competitive repricing closes the gap [base/bear].** Competitors recovering rate adequacy can become more competitive, reducing Progressive's conversion advantage and forcing either lower growth or lower margin.

- **Property imports catastrophe concentration [bear].** Bundling may help retention but can add severe weather and reinsurance volatility. Growth beyond the modeled 4-5% base product CAGR without evidence of geographic risk control is a warning.
- **Segmentation keeps widening advantage [bull].** Better telematics and risk models could sustain both strong conversion and superior loss ratios. This is the central upside wildcard.
- **Frequency remains structurally lower [bull].** Safer vehicles, behavior, or claims prevention could keep frequency below historical norms and more than offset severity.
- **Regulatory constraints [bear].** State rate approval, use-of-data rules, policyholder credits, non-rate restrictions, or claims practices can slow response to loss trends and alter economics.
- **Model correlation [bear].** A pricing or claims model error at Progressive's scale can affect millions of policies. Data volume reduces random error but cannot eliminate systematic error.

Quarterly and annual checkpoints

Checkpoint	Base expectation	Warning threshold	Failure condition / model response
Personal PIF growth	5-8% near term, easing toward 4-5%	Below 3% for two quarters	Cut premium CAGR unless retention improves materially
Vehicle NPW growth	Approximately 5-7%	PIF growth exceeds NPW by more than 5 pts	Test price adequacy and mix; raise loss ratio
Personal combined ratio	88-91 through cycle	Above 94 without discrete cat explanation	Move toward bear margin path
Loss ratio	Gradual normalization	More than 200 bps above annual plan	Re-estimate price/loss gap and reserves
Expense ratio	Slow leverage despite investment	Rises above 23 while growth slows	Acquisition economics failed; cut growth and profit
Cost per sale versus TAC	Below threshold	At/above threshold for two periods	Remove assumed media-driven net adds
Policy life expectancy	Stable or improving	Material deterioration	Lower retention and PIF endpoint
Property growth and cat load	Selective mid-single-digit growth	Double-digit growth in exposed states	Increase cat load; review bundle economics
Reserve development	Small and stable through cycle	Repeated adverse development	Bear case becomes central until reserve basis resets
Rate less loss-cost trend	Negative but narrowing	Worse than -3 pts for two years	Combined ratio likely above base 89.8 endpoint

The base thesis fails if Personal Lines grows policies faster than premium while both the loss ratio and acquisition cost deteriorate, because that would mean growth is consuming rather than creating franchise value. It also fails if the combined ratio exceeds 96 on a normalized, non-cat basis for four consecutive quarters without decisive rate or underwriting action. A single catastrophe quarter is not sufficient; the failure condition concerns the underlying book and management response.

The bear is too mild if Progressive reports material adverse prior-year development, a persistent non-cat combined ratio above 100, or capital/rating constraints that force abrupt contraction. Conversely, the bull becomes more credible if cost per sale stays below TAC, PIF grows at least 8%, policy life improves, and the Personal combined ratio remains below 88 after competitors have restored rate adequacy.

Summary table

Case	Segment TTM+5y underwriting revenue	Exact profit metric	Segment TTM+5y profit margin	Segment TTM+5y profit	Probability
Bear	$89.14bn	Pretax underwriting profit (loss)	2.5% on NPE	$2.20bn	25%
Base	$103.78bn	Pretax underwriting profit (loss)	10.2% on NPE	$10.43bn	50%
Bull	$117.97bn	Pretax underwriting profit (loss)	15.0% on NPE	$17.40bn	25%

The appendix distinguishes all verified facts from analyst derivations. Historical dollars, policy counts, management commentary, ownership, and statutory metric identity come from the reviewed package. Product dollar allocations, Personal Lines loss/expense component splits, severity/frequency paths, cat loads, retention bridges, and scenario probabilities are analyst assumptions. They are designed to be replaced when audited issuer disclosure becomes available, not defended as historical facts.

Appendix B2 - Commercial Lines

Progressive Commercial Lines - Segment Deep Dive

Run ID: `pulse-cio-20260814T180226+0800` Information cutoff: `2026-08-14T18:02:26+08:00` Reporting currency: USD billions unless stated otherwise Fiscal year-end: December 31 TTM anchor: Q3 2025 through Q2 2026, ended June 30, 2026 Exact forward horizon: TTM ended June 30, 2031 Exact governing segment metric: `Pretax underwriting profit (loss)` Modeling basis: insurer underwriting; profit equals net premiums earned multiplied by one minus the combined ratio

Source and derivation discipline

This appendix forecasts only Progressive's reportable Commercial Lines segment. It uses the independently reviewed `data_package.md`, `data_package_review.md`, `quant_foundation.md`, and the sealed `statutory_bridge.json` as the sole historical and accounting authorities. No historical figure, management quote, or Progressive accounting classification was re-fetched. The sealed statutory packet has SHA-256 `4f5dcde10bf1584db2f2ff4fe47d396939f9884a1a3340aa76dc69bc214e7259`; its exact common segment-profit label is `Pretax underwriting profit (loss)`. The Data Reviewer explicitly cleared that bridge and the P&C ownership perimeter for forecasting.

The distinction between a source fact and an analyst derivation is important here. Progressive does not disclose exact current dollar revenue for core commercial auto, transportation-network-company business, Fleet & Specialty, or business owners policies. It also does not provide a Commercial Lines-only catastrophe ratio, current accident-year loss ratio, numeric retention rate, new-business conversion rate, or frequency/severity series in the verified package. This appendix therefore does not manufacture those histories. It uses disclosed segment totals and directional product commentary, then labels forward pricing, loss trend, catastrophe, retention, new-business, and product-mix inputs as analyst scenario assumptions.

Item	Status	Controlling value or treatment
TTM net premiums earned	Source fact	$10.691B [2025 Annual Report Note 10, App.-A-36; Q2 2026 Form 10-Q segment table; quant foundation P2/P4]
TTM fees and other underwriting revenue	Source fact	$0.096B [2025 Annual Report Note 10, App.-A-36; Q2 2026 Form 10-Q segment table; quant foundation P2]
TTM underwriting revenue	Source fact	$10.787B [2025 Annual Report Note 10, App.-A-36; Q2 2026 Form 10-Q segment table; quant foundation P4]
TTM Pretax underwriting profit (loss)	Source fact	$1.395B [sealed statutory bridge `TTM_DERIVATION`; 2025 Annual Report Note 10 and Q2 2026 Form 10-Q]
TTM combined ratio	Analyst arithmetic from source facts	100 - 1.395 / 10.691 x 100 = 86.95
Q2 2026 PIF growth	Corrected source fact	3% year over year; 1.226M versus 1.189M [July 15, 2026 earnings release; data-package review Repair 1]
Q2 2026 NPW growth	Corrected source fact	4% year over year [Q2 2026 shareholder letter, Tricia Griffith; data-package review Repair 2]
Q2 2026 combined ratio	Source fact	85.3 [Q2 2026 shareholder letter, Tricia Griffith]
2026E-2031E forecast schedules	Analyst derivation	Scenario assumptions and arithmetic shown below
Investment income and float	Allocated insight only	Not included in segment profit; consolidated retained NII is modeled once by synthesis

0. Segment boundary and taxonomy note

Commercial Lines is a stable current reportable segment. The Q4 2024 taxonomy change moved residential property into Personal Lines and reduced the company from three operating segments to two; it did not move Commercial Lines out of its current boundary. Current Commercial Lines includes commercial auto, business-related general liability and commercial property, selected workers' compensation, transportation-network-company or TNC business, and Fleet & Specialty. The verified data package identifies FY2023-FY2025 and the TTM period on the same current basis. No old Personal Lines/Property taxonomy amount is blended into this Commercial Lines forecast.

The segment-profit boundary is equally clear. Commercial Lines contributes its own `Pretax underwriting profit (loss)` to the statutory bridge. The small `Other underwriting businesses and run-off operations` line is

corporate/unallocated and is not assigned to Commercial Lines. Investment profit, service-business profit or loss, interest, and tax are also outside this segment metric. Synthesis must project those lines once at the consolidated level.

1. What Commercial Lines actually is

Progressive Commercial Lines is principally a commercial-vehicle insurer for small businesses and specialized transportation risks, supplemented by selected small-business property, liability, and workers' compensation products. The 2025 Annual Report says core commercial auto was about 80% of Commercial Lines net premiums written [2025 Annual Report, App.-A-47 and App.-A-63]. The remaining approximate 20% includes TNC, Fleet & Specialty, business owners policies or BOP, and related coverages. Because the 80% figure is rounded and exact product dollars are not reported, it is used only as a scenario-weighting aid, not as a claimed audited product revenue split.

The core customer is not usually a multinational buying a complex global risk program. Excluding large fleet policies, the company describes a commercial auto customer as having about two insured vehicles per policy [2025 Form 10-K, Item 1, Commercial Lines]. That makes the segment economically tied to contractors, small fleets, for-hire operators, tow businesses, specialized transport, and other owner-operated or small-enterprise vehicle risks. The customer buys compliance, balance-sheet protection, claims handling, and continuity of operations. Coverage is often legally or contractually required.

Distribution is predominantly independent-agent based. The 2025 Form 10-K states that about 90% of commercial auto business excluding TNC was written through agents [2025 Form 10-K, Item 1, Commercial Lines]. Agents matter because small businesses have heterogeneous vehicles, usage, liability limits, and companion coverage needs. They compare several carriers and can redirect placement when Progressive's rate, appetite, commissions, or service become less attractive. Progressive retains control over rates, underwriting rules, product design, and claims.

Pricing is not a simple subscription increase. Most Commercial Lines policies have 12-month terms; about 85% of segment PIF at year-end 2025 carried 12-month terms [2025 Annual Report, App.-A-54]. Rate actions therefore earn through more slowly than in six-month personal auto. Written premium reflects new and renewed contracts when bound, whereas earned premium is recognized during the coverage period. This lag is why the forecast shows net premiums written and net premiums earned separately.

Commercial liability is also longer-tailed than physical damage. A vehicle repair can settle quickly; bodily injury, litigation, or workers' compensation claims can take years. Current reported profit can therefore contain changes in estimates for prior accident years. A sound forecast must distinguish rate versus expected future loss cost from favorable reserve development. This model assumes no permanent reserve-release contribution in the base case.

2. Current economics

Commercial Lines generated TTM underwriting revenue of $10.787B, consisting of $10.691B of net premiums earned and $0.096B of fees and other underwriting revenue. The segment produced $1.395B of `Pretax underwriting profit (loss)`. Profit divided by NPE was 13.05%, implying an 86.95 combined ratio on Progressive's disclosed margin convention. FY2025 was similar: $10.881B of NPE, $0.136B of fees, $11.017B of underwriting revenue, $1.416B of segment profit, and about a 13.0% margin [2025 Annual Report Note 10, App.-A-36; TTM values are the sealed FY2025-minus-H1-2025-plus-H1-2026 derivation].

Recent premium growth is much weaker than recent profitability. Underwriting revenue fell 3.4% year over year in Q2 2026, after declines of 8.3% in Q4 2025 and 4.9% in Q1 2026. Yet Q2 2026 NPW grew 4%, PIF grew 3%, and the segment reported an excellent 85.3 combined ratio. That combination is consistent with written growth beginning to turn before it fully earns into revenue. It also argues against extrapolating the trailing revenue decline through 2031.

The corrected Q2 growth figures are binding in this appendix: PIF growth was 3%, not 5%, and NPW growth was 4%, not 2%. The independent review tied PIF to 1.226M policies versus 1.189M. Management also said strong profitability leaves the company able to focus more on growth. Those facts support a positive 2027 earned-premium inflection in base and bull cases, but they do not prove a return to double-digit growth.

Commercial Lines' physical capital intensity is low, but regulatory and economic capital intensity is not. Claims reserves, unearned premium, catastrophe exposure, liability tail, and rating requirements require retained investments and statutory surplus. No standalone segment capital or float allocation is disclosed in the verified package. Accordingly, this appendix evaluates underwriting economics and only discusses float directionally. It does not allocate consolidated investment income into Commercial Lines profit.

3. Unit economics

The exact underwriting equation is:

`Pretax underwriting profit (loss) = NPE x (100 - loss/LAE ratio - underwriting expense ratio) / 100`.

Fees are presented in underwriting revenue and netted through Progressive's combined-ratio convention; they are not added a second time to profit. The check on the TTM base is $10.691B x (100 - 86.95) / 100 = approximately $1.395B. This treatment preserves the sealed statutory metric and avoids double counting the $0.096B fee component.

Loss and LAE are driven by frequency, severity, catastrophe, and reserve development. Frequency reflects how often covered accidents occur. Commercial mileage, employment, freight activity, driving behavior, and risk selection matter. Severity reflects repair labor and parts, vehicle technology, replacement costs, medical inflation, attorney involvement, jury awards, policy limits, and litigation. Catastrophe affects commercial vehicles and property, though the verified package does not disclose a Commercial Lines-only historical catastrophe load. Reserve development reflects revisions to earlier accident-year estimates.

Underwriting expense includes independent-agent commissions and incentives, premium taxes, acquisition and quoting costs, servicing, technology, claims administration not in LAE, and allocated operating overhead. Growth can initially raise expense through commissions and product investment. Scale and automation can reduce unit cost later, but the agency-heavy mix puts a floor under expense leverage. The base case therefore holds the expense ratio near 23 points instead of assuming a dramatic decline.

The present 86.95 TTM combined ratio is far better than Progressive's companywide 96 objective and better than the segment's five-year average. It includes an unusually favorable pricing and reserve environment. A 92.5 terminal base combined ratio still represents an attractive 7.5-point underwriting margin and is not a pessimistic industry outcome. It is a normalization assumption that gives away roughly 550 basis points from the TTM result while allowing premium growth and product scale to offset part of the margin compression in dollars.

4. Competitive dynamics

Progressive states that it has ranked first in U.S. commercial auto since 2015 and believed it retained that position in 2025 [2025 Form 10-K, Item 1, Commercial Lines]. The defensible part of this position is not merely size. It is the combination of granular vehicle-risk data, specialized market segmentation, an agent-facing quoting platform, broad state coverage, claims infrastructure, recognized pricing discipline, and the capacity to keep investing when competitors are constrained.

The segment competes with national multiline carriers, commercial specialists, regional insurers, and niche underwriters. Independent agents can compare Progressive with alternatives at the point of sale. That makes headline price important, but appetite and execution matter too: a carrier that quotes quickly, accepts a specific business class, handles certificates and endorsements efficiently, and settles claims competently can win despite not always being cheapest.

Commercial auto has historically been difficult for the industry because bodily-injury severity, litigation, repair inflation, and adverse reserve development can outrun filed rates. Progressive's advantage is strongest if its segmentation identifies loss-cost differences earlier than peers and if management acts on that evidence. The Q1 2026 management statement that rising industry rate levels should make Progressive pricing more competitive illustrates the cycle: Progressive can lose new business when peers underprice, then regain conversion as competitors repair their books.

TNC, Fleet & Specialty, and BOP are potential growth vectors but also sources of model risk. TNC exposure can be mileage-sensitive and concentrated. Fleet risks create correlated loss behavior and more complex safety management. BOP and workers' compensation add property, premises, payroll, and liability variables beyond the familiar small commercial auto core. The bull case assumes successful controlled expansion; the bear case assumes these initiatives either fail to scale or produce adverse loss emergence.

Price competition is the most immediate threat. An 85.3 quarterly combined ratio creates room to reduce relative price or spend more on acquisition. Management explicitly said profitability permits more focus on growth. That is rational, but insurance cycles often turn when multiple carriers reach the same conclusion. If new-business conversion rises while price falls below forward loss trend, the current margin can disappear before reported earned results reveal the problem.

5. Segment moat and durability

Commercial Lines has a real but conditional moat. The strongest elements are accumulated underwriting data in specialized commercial vehicle classes, claims scale, agent connectivity, product segmentation, and a reputation for maintaining availability across cycles. A large insurer can spread fixed technology and claims infrastructure over more policies and learn faster from more exposures. Agents benefit from a carrier that can quote a wide set of vehicle risks consistently.

The moat is conditional because pricing algorithms and agent access are not exclusive. Competitors can buy external data, improve telematics, hire underwriters, and raise commissions. Agents are not captive. Regulatory filings can reveal rate direction, and high margins attract capital. The durable edge is therefore an operating cadence: detect loss changes, update rates and underwriting appetite, deploy models across states, and remain disciplined when others chase volume.

The five-to-ten-year durability test is whether Progressive can expand beyond core commercial auto without diluting the information advantage that made the core successful. If BOP, Fleet & Specialty, or TNC growth requires underwriting exposures with less credible data, the apparent adjacency could weaken the franchise. If those products reuse distribution, claims, and customer knowledge while adding diversification at adequate price, the moat broadens.

This appendix therefore does not assign the bull case merely because the market is large. The bull case requires continued rate adequacy, stable reserve development, successful new model rollout, agent adoption, and expense leverage. The base case assumes a useful franchise but normal cyclical competition. The bear case assumes the moat is narrower than believed and that liability trend or expansion errors overwhelm price.

6. Historical growth and underwriting results

The historical table reproduces the verified package. FY2021-FY2022 use NPE as the economic revenue base because fees were allocated separately in that presentation. FY2023 onward uses underwriting revenue. No product dollars are back-solved from rounded mix disclosures.

Metric	FY2021	FY2022	FY2023	FY2024	FY2025	TTM ended Jun-2026	Data-package citation
Economic revenue base	$6.95B	$9.09B	$10.05B	$10.88B	$11.02B	$10.787B	2022 Annual Report segment table; 2025 Annual Report Note 10, App.-A-36; Q2 2026 Form 10-Q; sealed TTM derivation
YoY growth	N/A	30.9%	10.6%	8.3%	1.3%	TTM not a comparable FY growth rate	Calculated from the cited annual-report values
Pretax underwriting profit (loss)	$0.768B	$0.810B	$0.123B	$1.136B	$1.416B	$1.395B	2022 Annual Report segment table; 2025 Annual Report Note 10, App.-A-36; sealed statutory bridge
Margin on NPE	11.1%	8.9%	1.2%	10.6%	13.0%	13.05% derived	Issuer method applied to the cited NPE/profit values
Implied combined ratio	88.9	91.1	98.8	89.4	87.0	86.95 derived	100 less sourced profit/NPE margin
Policies in force, thousands	971	1,046	1,099	1,141	1,191	1,226 at Q2 2026	2022/2025 Annual Reports; July 15, 2026 earnings release

The three-year FY2022-FY2025 revenue-base CAGR is about 6.7%, calculated from $9.09B to $11.02B. That period includes a 30.9% surge followed by deceleration to 1.3%; it is not a steady-state growth path. From FY2021 to FY2025, PIF compounded at roughly 5.2%. The profit record is more volatile than premium: the implied combined ratio deteriorated to 98.8 in 2023 and then improved to 87.0 in 2025. A base forecast should respect both the franchise's growth record and the underwriting cycle.

The recent quarterly revenue sequence provides an additional timing check. Commercial underwriting revenue was $2.794B in Q3 2025, $2.681B in Q4 2025, $2.603B in Q1 2026, and $2.709B in Q2 2026. Year-over-year changes were 0.9%, negative 8.3%, negative 4.9%, and negative 3.4%, respectively [Q3 2025 Form 10-Q; 2025 Annual Report less nine-month 2025; Q1/Q2 2026 Forms 10-Q]. At the same time, Q2 NPW and PIF turned positive. This supports a written-to-earned lag rather than a claim that the franchise has structurally stopped growing.

Arithmetic checks on reproduced rows pass. The FY2024-to-FY2025 revenue change is approximately $11.02B / $10.88B - 1 = 1.3%. TTM profit checks to $10.691B x 13.05% = approximately $1.395B. No row combines non-comparable old product dollars, and no exact product revenue is asserted.

7. Management guidance and operating anchors

Progressive does not provide a conventional multi-year Commercial Lines premium or combined-ratio guide. The relevant statements in the verified data package are operating anchors, not numeric forecasts.

- Q3 2025, CEO Tricia Griffith: "We continue to invest in product segmentation and underwriting capabilities to drive future growth and profitability." [data package S6] This supports continuing technology and product expense even when near-term premiums slow.
- Q1 2026, Griffith: "As the commercial auto industry rate levels rise, we expect our pricing to become more competitive." [data package S6] This is a prospective new-business conversion signal and a reason the base forecast grows faster from 2027 than the trailing earned trend.
- Q1 2026, Griffith: "We expect to launch in the first state in the third quarter of this year." [data package S6] This refers to the next core commercial model. The forecast gives it gradual, not immediate, benefit.
- Q2 2026, Griffith: "Our Commercial Lines (CL) business finished the second quarter with NPW growth of 4% YOY at an excellent 85.3 CR." [data package S6] This is the key corrected operating anchor. The separate release reports PIF growth of 3%.
- August 4, 2026, Griffith: "We are really in a good position from a profit perspective, which really allows us to focus more on growth." [data package S6] The base case increases acquisition and product investment rather than preserving every point of current margin.
- August 4, 2026, CFO Andrew Quigg: "But our top priority will be to grow our business and to reinvest in our high-ROE business." [data package S6] Segment reinvestment comes before residual capital return.

The model translates these statements into three bounded cases. Base assumes conversion recovers, the model rollout works adequately, and PIF growth rises into the mid-single digits. Bull assumes the rollout and adjacent products create sustained high-single-digit PIF growth with price adequacy. Bear assumes competitors re-price faster, new business disappoints, and loss trend outruns price.

8. Forward growth assumptions

Product and sub-segment growth framework

Because exact product dollars are not disclosed, the following tables use approximate mix weights only to test whether the aggregate segment CAGR is plausible. They are not historical revenue estimates. Core commercial auto uses the disclosed approximate 80% NPW mix; all growth initiatives together use the residual approximate 20%.

Base case

Product pool	Approximate modeling weight	Historical anchor	Latest signal	Base CAGR TTM to TTM+5y	Justification
Core commercial auto	80%	Segment FY2022-FY2025 revenue CAGR about 6.7%	Industry rates rising; new model rollout	5.0%	Conversion improves, but 12-month terms and mature leadership limit acceleration
TNC / Fleet & Specialty / BOP	20%	Exact dollars not disclosed	TNC moderated in Q2; quoting and rollout continue	11.5%	Smaller initiatives scale from a lower base but remain controlled
Compounded mix result	100%	TTM underwriting revenue $10.787B	Q2 NPW +4%; PIF +3%	6.43%	Compounds the 80/20 starting mix separately; nearly identical to the explicit 6.45% aggregate revenue CAGR

Bear case

Product pool	Approximate modeling weight	Historical anchor	Latest signal	Bear CAGR TTM to TTM+5y	Justification
Core commercial auto	80%	Mature leading position	Current earned revenue still declining	1.0%	Price competition and weak conversion offset rate and exposure growth
TNC / Fleet & Specialty / BOP	20%	Exact dollars not disclosed	Execution and loss emergence uncertain	8.0%	Nominal growth continues, but initiatives remain too small to rescue the segment
Compounded mix result	100%	TTM underwriting revenue $10.787B	Q2 NPW +4%; PIF +3%	2.56%	Compounds the 80/20 starting mix separately; close to the 2.49% aggregate modeled revenue CAGR

Bull case

Product pool	Approximate modeling weight	Historical anchor	Latest signal	Bull CAGR TTM to TTM+5y	Justification
Core commercial auto	80%	Segment leadership and agent reach	Pricing becomes more competitive	8.0%	New model and agent conversion drive share gains without rate inadequacy
TNC / Fleet & Specialty / BOP	20%	Exact dollars not disclosed	Expansion products still early	14.0%	Successful rollout, broad state adoption, and cross-sell create scale
Compounded mix result	100%	TTM underwriting revenue $10.787B	Strong profit funds growth	9.31%	Compounds the 80/20 starting mix separately; close to the 9.21% aggregate modeled revenue CAGR

Policy, new-business, retention, and price assumptions

Progressive does not disclose a numeric Commercial Lines retention or new-business conversion series in the verified package. The values below are scenario assumptions and monitoring proxies. PIF is a model output anchored to 1.191M at FY2025 and the corrected 1.226M at Q2 2026.

Driver	Bear	Base	Bull
2026E PIF growth	1.0%	3.5%	4.5%
2027E-2031E PIF growth range	0.5%-2.0%	5.0%-6.0%	7.0%-8.0%
Retention proxy	Down about 2 points versus current	Stable to up about 1 point	Up 1-2 points
New-business proxy	Flat to negative through 2028	Mid-single-digit conversion improvement	Double-digit quote-to-bind improvement
Core commercial price	Initially below loss trend	Roughly tracks loss trend	At or modestly above loss trend
Expansion appetite	Restricted after adverse emergence	Selective and state-phased	Broad but still rate-disciplined

The 2026 PIF outputs are 1.203M bear, 1.233M base, and 1.245M bull. Base then rises to 1.295M in 2027, 1.373M in 2028, 1.455M in 2029, 1.535M in 2030, and 1.612M in 2031. Bear reaches only 1.289M by 2031; bull reaches 1.788M. These are not issuer guidance.

Price versus loss-cost trend

The FY2025 source record reports aggregate Commercial Lines rate of approximately positive 9% while average written premium declined 6% [2025 Annual Report, Commercial Lines discussion, App.-A-63], a reminder that term, mix, exposure, and product changes can make average written premium differ from filed or effective rate. This model therefore does not treat rate as the sole NPW driver.

Year	Bear price	Bear loss trend	Base price	Base loss trend	Bull price	Bull loss trend
2026E	4.0%	8.0%	6.0%	5.5%	6.5%	4.5%
2027E	3.5%	8.0%	5.5%	5.5%	6.0%	4.5%
2028E	3.5%	7.5%	5.0%	5.0%	5.5%	4.5%
2029E	4.0%	7.0%	4.5%	5.0%	5.0%	4.5%
2030E	5.0%	6.5%	4.5%	5.0%	4.5%	4.5%
2031E	6.0%	5.5%	4.5%	5.0%	4.0%	4.5%

Base loss trend is composed of roughly 0%-0.5% frequency and 4.5%-5.5% severity. Bear assumes 1%-2% frequency plus 6%-7% severity, reflecting more mileage, attorney involvement, medical inflation, and reserve pressure. Bull assumes flat-to-negative frequency offsetting approximately 4.5%-5.0% severity through selection, safety, and claims execution. These are analyst assumptions because the verified package does not disclose segment frequency/severity.

9. Forward margin assumptions on Pretax underwriting profit (loss)

The loss/LAE and expense ratios below are explicit analytical components. Catastrophe and prior-year reserve development are included within the loss/LAE ratio and are not added again to combined ratio or profit.

Catastrophe and reserve treatment

The verified package does not provide a Commercial Lines-only catastrophe history, so no historical cat ratio is claimed. Base allocates 1.5-1.7 loss-ratio points to catastrophe and assumes zero net prior-year reserve benefit over the horizon. Bear allocates 2.5-4.5 catastrophe points and 1-2 points of adverse reserve development during the stress. Bull allocates 0.8-1.0 catastrophe points and no more than 0.5 point of favorable reserve development. These are scenario allocations inside the published loss-ratio totals.

Year	Base attritional loss	Base cat	Base reserve development	Base loss/LAE ratio	Base expense ratio	Base combined ratio
2026E	63.3	1.5	0.0	64.8	23.2	88.0
2027E	64.3	1.5	0.0	65.8	23.2	89.0
2028E	65.2	1.6	0.0	66.8	23.0	89.8
2029E	66.1	1.6	0.0	67.7	22.9	90.6
2030E	66.9	1.7	0.0	68.6	22.8	91.4
2031E	67.8	1.7	0.0	69.5	23.0	92.5

Base combined ratio rises from 88.0 in 2026E to 92.5 in 2031E. The loss ratio normalizes as current pricing advantage fades and severity compounds. Expense ratio is broadly stable: product investment and agent acquisition offset scale and automation. This is a more conservative endpoint than recent results but still implies durable underwriting outperformance.

The bear and bull loss-ratio allocations below make the stated catastrophe and reserve assumptions reproducible. They are analytical allocations inside the total loss/LAE ratio, not issuer-reported Commercial Lines histories.

Year	Bear attritional loss	Bear cat	Bear adverse reserve development	Bear loss/LAE ratio	Bull attritional loss	Bull cat	Bull reserve development	Bull loss/LAE ratio
2026E	63.0	2.5	2.0	67.5	62.7	0.8	0.0	63.5
2027E	65.0	3.5	2.0	70.5	63.0	0.8	0.0	63.8
2028E	66.5	4.0	2.0	72.5	63.4	0.8	0.0	64.2
2029E	68.0	4.5	2.0	74.5	63.9	0.9	0.0	64.8
2030E	69.5	4.5	1.5	75.5	64.5	1.0	0.0	65.5
2031E	70.5	3.5	1.0	75.0	64.8	1.0	0.0	65.8

Bear combined ratio reaches 100.5 in 2030 before recovering to 98.5 in 2031 as corrective price earns through and the explicit reserve/cat load recedes. The modeled underwriting loss is an earnings event, not a capital-depletion assumption. Bull combined ratio moves from 85.5 to 88.5 as growth investment and normal severity modestly erode the unusually strong starting point; favorable reserve development is not needed to produce the bull outcome.

10. Segment rollup and 2026E-2031E forecasts

All tables use the same equations. Underwriting revenue equals NPE plus modeled fees. `Pretax underwriting profit (loss)` equals NPE multiplied by `(100 - combined ratio) / 100`. NPW is shown separately because it leads earned premium. Values may differ by $1M from displayed arithmetic due to rounding.

Bear case annual forecast

Year	NPW	NPE	Fees/other	Underwriting revenue	PIF, M	PIF growth	Loss/LAE ratio	Expense ratio	Combined ratio	Pretax underwriting profit (loss)
2026E	$11.200B	$10.800B	$0.105B	$10.905B	1.203	1.0%	67.5	23.5	91.0	$0.972B
2027E	$11.420B	$11.050B	$0.106B	$11.156B	1.209	0.5%	70.5	24.0	94.5	$0.608B
2028E	$11.650B	$11.280B	$0.108B	$11.388B	1.221	1.0%	72.5	24.5	97.0	$0.338B
2029E	$12.000B	$11.580B	$0.110B	$11.690B	1.239	1.5%	74.5	25.0	99.5	$0.058B
2030E	$12.360B	$11.910B	$0.112B	$12.022B	1.264	2.0%	75.5	25.0	100.5	$(0.060)B
2031E	$12.730B	$12.260B	$0.114B	$12.374B	1.289	2.0%	75.0	23.5	98.5	$0.184B

Bear reflects cumulative price inadequacy and adverse liability emergence. NPW remains slightly above NPE, so the scenario does not assume immediate runoff. The segment loses money briefly in 2030, corrective rate earns through, and 2031 returns to a small profit. The underwriting loss does not justify assigning zero segment or company equity; retained investment income and other segments are outside this appendix.

Base case annual forecast

Year	NPW	NPE	Fees/other	Underwriting revenue	PIF, M	PIF growth	Loss/LAE ratio	Expense ratio	Combined ratio	Pretax underwriting profit (loss)
2026E	$11.450B	$10.900B	$0.110B	$11.010B	1.233	3.5%	64.8	23.2	88.0	$1.308B
2027E	$12.310B	$11.650B	$0.120B	$11.770B	1.295	5.0%	65.8	23.2	89.0	$1.282B
2028E	$13.170B	$12.480B	$0.120B	$12.600B	1.373	6.0%	66.8	23.0	89.8	$1.273B
2029E	$14.090B	$13.360B	$0.130B	$13.490B	1.455	6.0%	67.7	22.9	90.6	$1.256B
2030E	$14.960B	$14.190B	$0.140B	$14.330B	1.535	5.5%	68.6	22.8	91.4	$1.220B
2031E	$15.780B	$15.020B	$0.140B	$15.160B	1.612	5.0%	69.5	23.0	92.5	$1.126B

Base underwriting revenue grows faster than the exact TTM-to-horizon CAGR in the later full-year columns because FY2031 includes a later half-year than the June 2031 endpoint. Profit declines from $1.395B TTM to $1.126B in FY2031 even while premium grows, because the combined ratio normalizes by about 550 basis points. That is deliberate. A model that compounds both high-single-digit premium and an 87 combined ratio would treat a cyclical peak as permanent.

Bull case annual forecast

Year	NPW	NPE	Fees/other	Underwriting revenue	PIF, M	PIF growth	Loss/LAE ratio	Expense ratio	Combined ratio	Pretax underwriting profit (loss)
2026E	$11.600B	$11.000B	$0.110B	$11.110B	1.245	4.5%	63.5	22.0	85.5	$1.595B
2027E	$12.820B	$11.900B	$0.120B	$12.020B	1.332	7.0%	63.8	22.0	85.8	$1.690B
2028E	$14.230B	$13.050B	$0.130B	$13.180B	1.439	8.0%	64.2	22.0	86.2	$1.801B
2029E	$15.730B	$14.400B	$0.140B	$14.540B	1.554	8.0%	64.8	22.0	86.8	$1.901B
2030E	$17.220B	$15.850B	$0.150B	$16.000B	1.671	7.5%	65.5	22.0	87.5	$1.981B
2031E	$18.770B	$17.350B	$0.165B	$17.515B	1.788	7.0%	65.8	22.7	88.5	$1.995B

Bull requires several things to go right simultaneously: conversion improves, the new core model scales, expansion initiatives grow without adverse selection, severity stays near 4.5%, catastrophe is benign, and expense leverage absorbs acquisition investment. Even then, terminal combined ratio rises to 88.5 rather than holding at the Q2 2026 level.

Exact TTM+5 horizon bridge

The ER2 horizon is June 30, 2031, not December 31, 2031. Because this appendix publishes calendar-year schedules, the exact-horizon TTM is approximated as one-half FY2030 plus one-half FY2031. Dollar NPE, fees, revenue, and profit are interpolated first; loss/LAE, expense, combined ratio, and profit margin are then derived from those dollar amounts rather than averaged independently. This is an analyst interpolation; synthesis can replace it with quarterly phasing if its consolidated model has finer granularity.

Case	TTM+5 NPE	TTM+5 fees	TTM+5 underwriting revenue	Loss/LAE ratio	Expense ratio	Combined ratio	Pretax underwriting profit (loss)	Revenue CAGR from TTM
Bear	$12.085B	$0.113B	$12.198B	75.246	24.239	99.486	$0.062B	2.49%
Base	$14.605B	$0.140B	$14.745B	69.063	22.903	91.966	$1.173B	6.45%
Bull	$16.600B	$0.158B	$16.758B	65.657	22.366	88.023	$1.988B	9.21%

Scenario probabilities are 25% bear, 55% base, and 20% bull. The base carries the largest weight because Q2 written premium and PIF have turned positive while profitability remains strong; the bear retains more weight than the bull because earned revenue is still declining and commercial-liability severity/reserve risk is asymmetric; the bull gets 20% because it requires simultaneous high-single-digit growth, successful expansion, and benign loss emergence. Probability-weighted exact-horizon underwriting revenue is about $14.511B and probability-weighted segment profit is about $1.059B. These weighted values are scenario diagnostics, not a substitute for preserving the three discrete cases.

Arithmetic self-checks

Check	Formula	Result
TTM source identity	$10.691B x 13.05%	Approximately $1.395B; pass
Base 2031 profit	$15.020B x 7.5%	$1.1265B; displayed $1.126B; pass
Bear 2030 loss	$11.910B x negative 0.5%	Negative $0.0596B; displayed negative $0.060B; pass
Bull 2031 profit	$17.350B x 11.5%	$1.9953B; displayed $1.995B; pass
Bear exact-horizon dollar interpolation	One-half negative $0.060B plus one-half $0.184B	$0.062B; pass
Base exact-horizon dollar interpolation	One-half $1.220B plus one-half $1.126B, using unrounded schedule values	$1.173B; pass
Bull exact-horizon dollar interpolation	One-half $1.981B plus one-half $1.995B	$1.988B; pass
Probabilities	25% + 55% + 20%	100%; pass
Metric identity	All scenario profits use Pretax underwriting profit (loss)	Pass; no relabeling
Segment ownership	No NCI or third-party underwriting allocation	Fully parent-owned; pass
Fee count once	Fees shown in revenue, not added again to profit	Pass
NII double count	No investment income included in segment profit	Pass

Allocated float and investment-income insight

Commercial Lines generates investable float because premiums are collected before claims are paid, especially for liability claims with longer settlement tails. Growth in NPW should therefore increase the consolidated retained investment base over time, all else equal. A longer claims tail can increase investable duration but also increases reserve uncertainty. Float is valuable only if the combined ratio remains adequate; inadequate pricing can create more assets today and larger claim deficits later.

No segment investment portfolio or NII allocation is disclosed in the verified package. Consolidated investments of $97.221B and TTM retained NII of $3.758B belong to the fully retained Progressive perimeter [Q2 2026 Form 10-Q balance sheet; data package Section 0b], but allocating a percentage to Commercial Lines would require assumptions about reserves, unearned premium, capital, duration, and shared assets. This appendix therefore gives synthesis a qualitative direction only: Commercial Lines NPW growth adds to retained float, while worsening loss ratios and reserve development increase claim liabilities and capital needs. Synthesis must model consolidated retained investments and NII once and must not add an allocated Commercial Lines NII amount on top.

The same count-once discipline applies to fees. Policyholder fees are embedded in underwriting revenue. Progressive has no management-fee or performance-fee business and no external investor pool. Service-business revenue and expense sit outside Commercial Lines in the statutory bridge. There is no segment fee stream to add separately.

11. Key risks, checkpoints, and failure conditions

Risks and wildcards

- **Liability severity outruns price - bear.** Commercial auto bodily-injury and litigation severity can develop after the policy year. A reported combined ratio may remain attractive while recent accident years deteriorate. The bear case captures this through an 8% loss trend against 3.5%-4% price in 2026-2027 and adverse reserve development.
- **Growth after a profitability peak - base/bear.** An 85.3 Q2 combined ratio gives management room to seek growth. If acquisition and pricing loosen simultaneously, written premium can accelerate before adverse loss experience earns into results.
- **Twelve-month earning lag - all cases.** NPW improvement does not immediately become NPE. A reader who applies Q2 NPW growth directly to 2026 earned revenue would overstate the near-term inflection.
- **New model execution - bull/base.** The next core commercial model can improve selection and conversion, but a model change can also produce blind spots. State rollout should be evaluated against loss emergence, not quote volume alone.
- **TNC concentration and mileage - bear/bull.** TNC can add scale quickly, but contract timing, mileage, driver behavior, and concentration create volatility. Q1 growth moderated in Q2 according to the package.
- **Fleet & Specialty and BOP adjacency risk - bear.** Expansion can reduce reliance on core auto, but unfamiliar exposures may dilute underwriting advantage. The bull case requires profitable, not merely rapid, expansion.
- **Agent economics - base/bear.** Independent agents control most commercial placement and can shift business to competitors. Higher commissions or incentives can preserve volume while raising the expense ratio.
- **Catastrophe and weather - bear.** Commercial property and vehicle accumulation create cat exposure. Because no segment cat history is disclosed in the package, the model's cat load has lower confidence than total combined ratio.
- **Reserve development - bear.** Progressive's companywide reserve tables report large swings in prior-year development, including unfavorable $1.094B in 2023 and favorable $1.394B in 2025 [2025 Annual Report, reserve-development discussion]. Those are companywide, not Commercial Lines allocations, but they demonstrate the sensitivity of insurer earnings to prior estimates.
- **Regulatory delay - bear.** Rate filings and policy rules vary by state. Loss trend can change faster than approved rates earn through.

Operating checkpoints

Checkpoint	Base expectation	Bull confirmation	Bear warning
Commercial PIF growth	4%-6% from 2027	At least 7% with stable loss ratio	Below 2% for two quarters
NPW growth	Leads NPE and reaches 6%-8%	Above 9% with price adequacy	Below PIF plus loss trend
Combined ratio	Normalizes toward 90-93	Holds 86-89 despite growth	Above 96 before cat noise
Price minus loss trend	Near zero	Positive 0-2 points	Negative more than 2 points for two renewals
New-business conversion	Improves as peer rates rise	Double-digit improvement without mix deterioration	Rises only after material price concession
Retention proxy	Stable to modestly better	Up with policy life and cross-sell	Down about 2 points or more
Core model rollout	State-phased and loss-validated	Faster rollout with favorable early cohorts	Pause, rollback, or adverse early development
Expense ratio	Approximately 23	22-23 with growth	Above 25 absent temporary launch spend
Reserve development	Approximately neutral through cycle	Small favorable, not thesis-critical	Repeated adverse development
Cat allocation	1.5-1.7 points analytical load	Below 1 point	Above 3 points repeatedly or concentration surprise

Explicit forecast failure conditions

The base case fails if any two of the following persist for two reporting periods, or if one is sufficiently severe to impair rate adequacy:

- Commercial Lines PIF growth remains below 2% after industry rate increases should have improved Progressive's relative price.
- NPW growth falls below PIF growth plus reasonable exposure/rate change, suggesting mix deterioration or declining premium per risk.
- The accident-year combined ratio exceeds 96 without a clearly isolated catastrophe.
- Effective price trails frequency-plus-severity loss trend by more than two percentage points.
- Adverse prior-year reserve development recurs and management changes core severity assumptions upward.
- Expense ratio exceeds 25 while new business and retention fail to improve.
- New product cohorts grow faster than core commercial auto but carry materially worse loss ratios.
- The new core commercial model rollout is delayed beyond 2027, paused, or reversed because of selection issues.
- Agent conversion improves only after commissions or rate cuts that erase underwriting economics.
- Commercial Lines contributes to statutory-capital pressure that constrains otherwise attractive growth or shareholder distributions.

The bull case fails with a lower bar: any evidence that high-single-digit PIF growth is being purchased through inadequate rate, optimistic reserves, or a sustained expense ratio above 23 removes the bull case. The bear case begins to recede if price exceeds loss trend for four consecutive quarters, PIF growth exceeds 5%, and the accident-year combined ratio remains below 92 without material favorable reserve development.

Segment conclusion

Commercial Lines is a valuable, fully parent-owned underwriting franchise with a leading commercial-auto position and a credible path from the current written-premium inflection to renewed earned growth. The source facts are strong: TTM profit is $1.395B on $10.691B of NPE, Q2 2026 combined ratio was 85.3, corrected NPW growth was 4%, and corrected PIF growth was 3% [sealed statutory bridge; Q2 2026 shareholder letter and July 15, 2026 earnings release]. Management is reinvesting from a position of profitability, and rising competitor rates may improve Progressive's relative price.

The investment case should not capitalize the 87 combined-ratio neighborhood indefinitely. Base revenue grows at 6.45% from the TTM anchor to the exact June 2031 horizon, but combined ratio normalizes to 91.97 and segment profit falls to $1.173B. Bull produces $16.758B of exact-horizon underwriting revenue and $1.988B of profit at an 88.02 combined ratio. Bear produces $12.198B of revenue and only $0.062B of profit at a 99.49 combined ratio after a temporary FY2030 underwriting loss.

The key judgment is price versus loss trend, not raw PIF growth. If conversion and retention improve while price remains adequate and reserve development is neutral, the segment can compound premium and float at attractive returns. If growth accelerates only because Progressive gives back too much price during a liability-severity upcycle, the current profit pool can unwind rapidly. This is why the base forecast normalizes margin even while management's growth commentary is taken seriously.

Case	Segment TTM+5y underwriting revenue	Exact profit metric	Segment TTM+5y profit margin on NPE	Segment TTM+5y profit	Probability
Bear	$12.198B	Pretax underwriting profit (loss)	0.51%	$0.062B	25%
Base	$14.745B	Pretax underwriting profit (loss)	8.03%	$1.173B	55%
Bull	$16.758B	Pretax underwriting profit (loss)	11.98%	$1.988B	20%

STATUTORY_BRIDGE_COMPATIBILITY: PASS P&C_SEGMENT_OWNERSHIP: FULLY_PARENT_OWNED
NII_DOUBLE_COUNT_CHECK: PASS FEE_COUNT_ONCE_CHECK: PASS TRADE_EXECUTION_AUTHORIZED: FALSE

Appendix S - Synthesis and P&C Insurer Return Bridge

The Progressive Corporation — Synthesis, Earnings Power, and P&C Return Bridge

Run ID: `pulse-cio-20260814T180226+0800` Report ID: `PGR-ER2-20260814T180226+0800` Information cutoff: 2026-08-14T18:02:26+08:00 Primary valuation method: **P/B-ROE** Currency: USD; operating amounts are USD billions unless noted; per-share values are USD per NYSE-listed common share.

This appendix mechanically consolidates the reviewed Personal Lines and Commercial Lines forecasts, preserves Progressive's exact disclosed profit metric, and extends the statutory bridge through retained investment income, tax, common equity, book value, and shareholder wealth. It does not introduce a managed-capital haircut: the reviewed ownership perimeter found wholly owned operations, no ordinary or redeemable noncontrolling interest, no third-party investment pool, and no preferred claim at the anchor. P/B-ROE controls because Progressive is a P&C insurer whose capital, float, distributability, and normalized common ROE are economically prior to a terminal P/E. The P/E 15 test remains a separate entry-price gate.

1. Anchors and immutable packet controls

- Today and cutoff date: 2026-08-14; information cutoff 18:02:26 SGT.
- Fiscal year-end: December 31.
- Latest completed fiscal year: FY2025.
- Operating anchor: TTM ended 2026-06-30, constructed as FY2025 minus H1 2025 plus H1 2026.
- Non-overlapping TTM quarters: Q3 2025, Q4 2025, Q1 2026, and Q2 2026.
- Terminal operating date: 2031-06-30, exactly 5.0 calendar years after the operating anchor.
- Shareholder entry price date: 2026-08-13. The exact shareholder-return horizon is 1,782 days, or 4.87895028645352 years on ACT/365.2425.
- Quote: XNYS:PGR completed close of USD 208.87 per common share on 2026-08-13. The packet is actionable until 2026-08-15T04:00:00+08:00.
- Raw quote-source SHA-256: `86430c6b6fb40af0cfe25df7d7b231a7fd27b4a1ae9ce504c817078925d601de`.
- QFR-sealed quote-packet SHA-256: `3bd872351c83e4e1d26fd233929c9131bbafd35d2026ea212d72fce97f9b59d5`.
- Sealed statutory-bridge SHA-256: `4f5dcde10bf1584db2f2ff4fe47d396939f9884a1a3340aa76dc69bc214e7259`.
- Reporting and quote currency are both USD; FX is 1.0. The financial and listed units are the same common share. Depositary ratio and share-class factor are both 1.0.
- The Q2 2026 financial-statement diluted share count is 584.2 million. No intervening split occurred, so 584.2 × 1.0 = 584.2 million quote-basis diluted shares, and 584.2 ÷ 1.0 = 584.2 million listed-equivalent diluted units.
- The strict quote validator returned `QUOTE_PACKET_VALID` at 2026-08-14T19:36:02+08:00 with the expected packet hash. The statutory validator returned `STATUTORY_BRIDGE_VALID` with the expected statutory hash. The gate manifest records both reviewed segment gates with no unresolved issues and the durable DR clearance.

The operating and shareholder horizons differ deliberately. Operating results compound for exactly five years from June 30, 2026. Shareholder returns start at the completed August 13, 2026 close and therefore use 4.87895028645352 years. Applying a rounded five-year return denominator would overstate or understate every IRR and is prohibited.

2. Segment-level forward assumptions

The segment rows below reproduce the reviewed appendices. Personal Lines margin is on net premiums earned, while the displayed revenue is underwriting revenue including policyholder fees. Commercial Lines uses the same exact profit metric and also expresses margin on NPE. The metric is not renamed operating income.

Segment	Exact profit metric	TTM underwriting revenue	Bear TTM+5 revenue	Base TTM+5 revenue	Bull TTM+5 revenue	Bear margin	Base margin	Bull margin
Personal Lines	Pretax underwriting profit (loss)	74.900	89.140	103.780	117.970	2.50% on NPE	10.20% on NPE	15.00% on NPE
Commercial Lines	Pretax underwriting profit (loss)	10.787	12.198	14.745	16.758	0.51% on NPE	8.03% on NPE	11.98% on NPE

Sources: reviewed `appendix_B_personal_lines.md` Sections 6, 8-10 and reviewed `appendix_B_commercial_lines.md` Sections 6, 8-10. Personal terminal profit is USD 2.200 billion, USD 10.430 billion, and USD 17.400 billion across bear/base/bull. Commercial terminal profit is USD 0.062 billion, USD 1.173 billion, and USD 1.988 billion. Policyholder fees remain inside underwriting revenue and combined-ratio economics; they are not added a second time.

The segment cases describe different operating states, not mechanical continuations. Bear assumes slower policy growth, weaker price-versus-loss-cost performance, reserve/cat pressure, and reduced acquisition efficiency. Base assumes profitable growth moderates, Personal's unusually strong margin normalizes, and Commercial's earned growth inflects after written premium. Bull requires durable segmentation, retention, and claims advantages while competitors react more slowly. Consolidated probabilities are fixed at 25% bear, 50% base, and 25% bull. This preserves the common 25% downside weight, assigns the greatest weight to the central operating path, and does not use a uniform one-third distribution.

3. Combined revenue build

Progressive's consolidated revenue includes more than reportable-segment underwriting revenue. The bridge therefore adds the explicit Other underwriting revenue, investment result included in statutory revenue, and service-business revenue. There are no intersegment ownership eliminations or third-party managed pools.

Line	Bear	Base	Bull
Personal Lines underwriting revenue	89.140	103.780	117.970
Commercial Lines underwriting revenue	12.198	14.745	16.758
Sum of reportable segments	101.338	118.525	134.728
Other underwriting/run-off revenue	0.040	0.030	0.020
Investment result in consolidated revenue	3.166250	5.149000	7.030000
Service-business revenue	0.500	0.550	0.600
Combined TTM+5 revenue	**105.044250**	**124.254000**	**142.378000**
TTM-to-TTM+5 CAGR from 91.055	**2.899603%**	**6.414624%**	**9.352274%**

The investment revenue/result consists of retained NII plus the scenario realized/unrealized mark. This classification mirrors the statutory bridge's investment-profit operating line. Service revenue is shown here to reconcile consolidated revenue, while only the net service profit or loss enters statutory operating income. The Other underwriting/run-off revenue is small and is not used as a balancing plug; it follows the reviewed line's shrinking run-off profile.

4. Consolidated statutory operating-income build

Line	Bear	Base	Bull
Personal Lines pretax underwriting profit	2.200	10.430	17.400
Commercial Lines pretax underwriting profit	0.062	1.173	1.988
Sum of reportable segment profit	2.262	11.603	19.388
Other underwriting businesses and run-off operations	(0.060)	(0.020)	(0.010)

Line	Bear	Base	Bull
Consolidated pretax underwriting profit	2.202	11.583	19.378
Retained net investment income	3.666250	5.149000	6.280000
Realized and unrealized investment gains or losses	(0.500000)	0.000000	0.750000
Investment profit	3.166250	5.149000	7.030000
Service businesses profit or loss	(0.050000)	(0.020000)	0.000000
Statutory operating income before interest	**5.318250**	**16.712000**	**26.408000**
Statutory operating margin	5.062866%	13.449869%	18.547809%

Every projected bridge line retains the issuer's historical classification. Other underwriting remains corporate/unallocated. Investment profit and service-business profit remain operating lines. Interest remains below the operating subtotal. Bear uses a USD 60 million run-off loss, a USD 500 million adverse investment mark, and a USD 50 million service loss. Base moves run-off toward zero, normalizes marks to zero, and holds the service loss near the TTM level. Bull assumes only a USD 10 million run-off loss, USD 750 million favorable mark, and service break-even. Realized/unrealized marks are included in reported earnings but removed from normalized common earnings.

5. Net income and EPS build

Line	Bear	Base	Bull
Statutory operating income before interest	5.318250	16.712000	26.408000
Interest expense	(0.400000)	(0.350000)	(0.300000)
Pretax income	4.918250	16.362000	26.108000
Tax rate	21.50%	21.00%	20.50%
Tax expense	(1.057423750)	(3.436020000)	(5.352140000)
Common net income	**3.860826250**	**12.925980000**	**20.755860000**
Terminal diluted quote-basis shares, millions	584.700000000	579.504347826	572.200000000
Reporting EPS per quote-basis financial share	6.603089191	22.305233858	36.273785390
Financial shares per listed unit	1.000000	1.000000	1.000000
FX, quote currency per reporting currency	1.000000	1.000000	1.000000
USD EPS per listed common share	**6.603089191**	**22.305233858**	**36.273785390**

The mandatory unit bridge is `common NI ÷ quote-basis diluted financial shares × 1.0 financial shares per listed unit × 1.0 USD per USD`. No ADR conversion, class conversion, split adjustment, or currency translation is needed, but all factors are shown rather than assumed.

The base result is not simply the Personal and Commercial terminal profits taxed. It also includes retained NII once, excludes external NCI because none exists, includes service loss once, subtracts interest, and applies the source-bound scenario tax rate. The bear remains profitable even after a severe underwriting normalization and adverse investment mark, so no zero-equity shortcut is permissible.

5a. Return-method inputs, senior claims, and claims context

P/B-ROE is the primary method. EV/NOPAT is not controlling for an insurer because most investments support insurance liabilities and statutory capital rather than constituting separable excess cash. The table nevertheless makes the terminal claim perimeter explicit.

Return-method input	Bear	Base	Bull	Treatment
Statutory operating income	5.318250	16.712000	26.408000	Reconciled above
Normalized cash tax rate	21.50%	21.00%	20.50%	Recent 20.5%-20.9% history with stress range

Return-method input	Bear	Base	Bull	Treatment
Diagnostic normalized NOPAT	4.174826	13.202480	20.994360	Not controlling valuation
Terminal retained investments	105.000	140.000	165.000	Insurance asset base, not excess cash
Gross debt	Source-bound terminal path unavailable	Source-bound terminal path unavailable	Source-bound terminal path unavailable	Q2 anchor is 8.387; no residual plug
Lease liabilities	Unavailable separately	Unavailable separately	Unavailable separately	No invented allocation
Preferred equity	0	0	0	Series B redeemed in 2024
Minority interest or NCI	0	0	0	Reviewed perimeter has none
Other senior claims	Policy liabilities and reserves remain inside book	Same	Same	Captured through common equity and solvency
Separately valued non-operating assets	0	0	0	No double count
Terminal diluted listed-equivalent shares, millions	584.700000	579.504348	572.200000	Explicit share roll-forward

Q2 2026 cash was USD 0.178 billion, short-term investments USD 1.978 billion, total investments USD 97.221 billion, and debt USD 8.387 billion. Calling that position "net cash" would be economically misleading because the portfolio backs unearned premium, loss reserves, catastrophe liquidity, and statutory surplus. Claims and reserves are not subtracted again after valuing common book. Debt, insurance claims, and capital requirements are reflected in the common-equity and normalized-ROE framework. Numeric RBC is undisclosed; the model therefore uses statutory surplus, dividend restrictions, and ratings as conservative solvency constraints instead of inventing an RBC percentage.

5b. Managed versus common-shareholder-retained economics

Economic line	Total managed or consolidated	Inside GAAP	External-investor share	Common-shareholder retained	Statutory location and driver
Q2 2026 investments	97.221	97.221	0	97.221	Balance sheet; wholly owned perimeter
TTM NII	3.758	3.758	0	3.758	Investment profit bridge
TTM underwriting profit	10.306	10.306	0	10.306	Personal + Commercial + Other
TTM service profit or loss	(0.023)	(0.023)	0	(0.023)	Separate operating line
TTM policyholder fees	1.208	1.208	0	1.208	Embedded in underwriting revenue
Management or performance fees	0	0	0	0	No asset-manager business
Preferred claims	0	0	0	0	No preferred shares outstanding

For every line, consolidated amount equals retained amount plus zero external allocation. This is a line-specific zero, not a blanket NCI haircut. Progressive has no managed vehicle, sidecar, fund, or third-party capital pool in the reviewed perimeter. Policyholder installment, late-payment, and ceding-commission revenue is already embedded in underwriting. Service revenue and expense are bridged separately. Older references to investment-management fees describe expenses for managing Progressive's own portfolio, not third-party fee income.

At the terminal date, managed investments equal retained investments: USD 105.000 billion bear, USD 140.000 billion base, and USD 165.000 billion bull. Terminal retained NII is derived directly from retained average assets and earned yield: USD 104.750 billion × 3.50% = USD 3.666250 billion bear; USD 135.500 billion × 3.80% = USD 5.149000 billion base; and USD 157.000 billion × 4.00% = USD 6.280000 billion bull. External NII is zero in each case.

The terminal fee ledger is also count-once. Embedded policyholder fees are USD 1.253 billion, USD 1.670 billion, and USD 2.128 billion across bear/base/bull. Each amount enters underwriting revenue and combined-ratio economics once. Embedded investment fee income, separately reported manager fee income, performance fees, and external fee allocations are all zero. The service-business result is not relabeled as manager fee income.

5c. Annual common-equity and BVPS roll-forward

The equity anchor is USD 34.333 billion at June 30, 2026, after preferred claims. Each row covers one exact June-to-June year. Common issuance represents award-related equity movements; repurchases reduce equity at cost and shares using the same scenario average purchase prices. "Other" preserves modeled award/issuer equity movements and is never used as a balancing residual.

Bear year ended	Beginning equity	Common NI	Dividends	Repurchases	Issuance	OCI	Other	Ending equity	Ending diluted shares, m	BVPS
2027-06-30	34.333000	8.212826215	1.000	0.100	0.040	(0.400)	0.060	41.145826215	584.300	70.419008
2028-06-30	41.145826215	6.382050000	1.000	0.100	0.040	(0.400)	0.060	46.127876215	584.400	78.932026
2029-06-30	46.127876215	4.224870000	1.000	0.100	0.040	(0.400)	0.060	48.952746215	584.500	83.751491
2030-06-30	48.952746215	3.570965000	1.000	0.100	0.040	(0.400)	0.060	51.123711215	584.600	87.450755
2031-06-30	51.123711215	3.860826250	1.000	0.100	0.040	(0.400)	0.060	53.584537465	584.700	91.644497

Base year ended	Beginning equity	Common NI	Dividends	Repurchases	Issuance	OCI	Other	Ending equity	Ending diluted shares, m	BVPS
2027-06-30	34.333000	11.543021800	4.000	0.400	0.060	0.000	0.100	41.636021800	583.260870	71.384905
2028-06-30	41.636021800	11.597990000	4.000	0.400	0.060	0.000	0.100	48.994011800	582.321739	84.135639
2029-06-30	48.994011800	11.740190000	4.000	0.400	0.060	0.000	0.100	56.494201800	581.382609	97.172156
2030-06-30	56.494201800	12.291017500	4.000	0.400	0.060	0.000	0.100	64.545219300	580.443478	111.199836
2031-06-30	64.545219300	12.925980000	4.000	0.400	0.060	0.000	0.100	73.231199300	579.504348	126.368680

Bull year ended	Beginning equity	Common NI	Dividends	Repurchases	Issuance	OCI	Other	Ending equity	Ending diluted shares, m	BVPS
2027-06-30	34.333000	13.689526748	7.000	0.800	0.080	0.400	0.120	40.822526748	581.800	70.165911
2028-06-30	40.822526748	15.740602500	7.000	0.800	0.080	0.400	0.120	49.363129248	579.400	85.196978
2029-06-30	49.363129248	17.568903750	7.000	0.800	0.080	0.400	0.120	59.732032998	577.000	103.521721
2030-06-30	59.732032998	19.104645000	7.000	0.800	0.080	0.400	0.120	71.636677998	574.600	124.672255
2031-06-30	71.636677998	20.755860000	7.000	0.800	0.080	0.400	0.120	85.192537998	572.200	148.885945

The cumulative roll-forwards reproduce the structured artifact exactly. Bear common NI of USD 26.251537465 billion, less USD 5.0 billion dividends and USD 0.5 billion repurchases, plus USD 0.2 billion issuance, negative USD 2.0 billion OCI, and USD 0.3 billion other movements, yields USD 53.584537465 billion. Base yields USD 73.231199300 billion. Bull yields USD 85.1925379975 billion. None approaches depletion, consistent with strong ratings and estimated Q2 statutory surplus of USD 32.9 billion.

5d. Terminal ROE, P/B, P/E coherence, and shareholder return

Current P/B is USD 208.87 ÷ USD 59.06 = 3.536573x. Exit multiples deliberately vary with sustainable ROE and capital quality rather than extrapolating the current multiple. Bear uses 1.5x because normalized ROE falls below a roughly 10% cost-of-equity hurdle and underwriting capital quality weakens. Base uses 2.8x for an 18.76% normalized ROE with adequate reserves and retained growth, below the current P/B despite high profitability. Bull uses 4.0x for a 25.71% normalized ROE, strong growth, and robust capital generation; this is demanding and receives only 25% probability.

Case	Probability	Terminal common equity, $m	Diluted shares, m	BVPS	Normalized NI, $m	Average equity, $m	Normalized ROE	Exit P/B	Terminal price	Distributions	Terminal wealth	Gross USD IRR
Bear	25%	53584.537465	584.700000000	91.64449711818025	4253.326250	52354.124340	8.124147435602014%	1.500000	137.46674567727038	8.555051758063136	146.02179743533353	-7.074068897481 9%
Base	50%	73231.199300000001	579.504347826087	126.36867967378419	12925.980000	68888.209300	18.763704458783195%	2.800000	353.832303 0865957	34.3729917953163	388.205294881912	13.546253240732508%
Bull	25%	85192.5379975	572.200000000	148.8859454692415	20159.610000	78414.6079975	25.708997997723493%	4.000000	595.5437818769660	60.532687651 33171	656.0764695282977	26.439346426375643%

Case	Reported EPS	Normalized EPS	Direct normalized P/E	P/B divided by normalized ROE	Coherence explanation
Bear	6.603089191	7.274373610	18.897399699	18.463475853	Average equity is below ending equity; direct P/E uses ending-share EPS

Case	Reported EPS	Normalized EPS	Direct normalized P/E	P/B divided by normalized ROE	Coherence explanation
Base	22.305233858	22.305233858	15.863196295	14.922426465	Average-versus-ending equity is the only material basis difference
Bull	36.273785390	35.231754631	16.903608353	15.558754956	Favorable mark is removed from normalized EPS and ROE

Terminal price equals BVPS times exit P/B in every case. Terminal wealth equals terminal price plus cumulative distributions. Each IRR is `(terminal wealth ÷ 208.87)^(1 ÷ 4.87895028645352) - 1`. The probability-weighted terminal price is USD 360.1687834318569. Probability-weighted distributions are USD 34.45843075000686. Probability-weighted terminal wealth is USD 394.6272141818638, producing a **13.928736635960748%** gross local USD IRR. The arithmetic average of scenario IRRs would be 11.614446%, which is not used.

No negative-EPS or zero-equity override is applied. Even the bear has positive common earnings and materially higher terminal common equity than the anchor. A temporary Commercial Lines underwriting loss in the annual path is an earnings event, not insolvency.

5e. Solvency, retention, and distributable-capital constraint

Progressive's FY2025 statutory surplus was USD 28.370 billion and Q2 2026 estimated statutory surplus was USD 32.9 billion. RBC ratios exceeded regulatory minimums, but the issuer did not disclose a numeric ratio. The model therefore does not assert a made-up RBC cushion. The capital floor is source-bound to positive statutory surplus, Best A+, S&P AA, Moody's Aa ratings, and the absence of an adverse Q2 capital update. Subsidiary dividend capacity is subject to state-specific, capital, and rolling 12-month restrictions; 2026 ordinary capacity without prior approval was USD 9.327 billion.

Retention is modeled through the equity roll-forward after dividends and repurchases. Bear retains most earnings and limits cumulative distributions to USD 5.0 billion because adverse marks, reserve risk, and weaker underwriting require capital conservation. Base pays USD 20.0 billion over five years and repurchases USD 2.0 billion, while still growing common equity to USD 73.231 billion. Bull distributes USD 35.0 billion and repurchases USD 4.0 billion, but stronger earnings still grow equity to USD 85.193 billion. These are common-shareholder capital actions, not claims that statutory surplus is freely distributable.

6. Share-count path

Scenario year	Starting diluted shares, m	Repurchase cost, $bn	Assumed average price	Shares retired, m	Award issuance, m	Ending diluted shares, m
Bear annual, each of five years	varies	0.100	200.00	0.500000	0.600000	prior + 0.100000
Base annual, each of five years	varies	0.400	230.00	1.739130435	0.800000	prior - 0.939130435
Bull annual, each of five years	varies	0.800	250.00	3.200000000	0.800000	prior - 2.400000000

Starting from 584.2 million, bear issues 3.0 million and retires 2.5 million, ending at 584.7 million. Base issues 4.0 million and retires 8.695652174 million, ending at 579.504347826 million. Bull issues 4.0 million and retires 16.0 million, ending at 572.2 million. The same repurchase cash reduces common equity at cost. Award issuance is explicit and prevents a false assumption that gross repurchases equal net share reduction. Listed-equivalent and financial-share bases are identical because all unit factors are 1.0.

7. Binary P/E 15 entry-price test

Case	TTM+5 USD EPS per listed unit	EPS × 15	Packet price	Cushion	Pass?
Bear	6.603089191	99.046337866	208.87	-52.579911971%	FAIL
Base	22.305233858	334.578507870	208.87	**60.185047096%**	**PASS**
Bull	36.273785390	544.106780846	208.87	160.500206275%	PASS

Required EPS for P/E 15 at USD 208.87 is USD 13.924666667 per listed share. The confident base case exceeds that threshold by USD 8.380567191 per share, or **60.185047096%** on the required cushion formula. The base case controls the binary gate; the bull result is not used to rescue a weak base. This pass does not make 15x the terminal valuation multiple.

P/B-ROE remains the primary security-return method.

8. Reflexivity and historical anchor checks

TTM segment underwriting revenue is USD 74.900 billion plus USD 10.787 billion, or USD 85.687 billion. Adding Other underwriting revenue of approximately USD 0.040 billion, investment profit of USD 4.794 billion, and service revenue of USD 0.534 billion reproduces consolidated TTM revenue of USD 91.055 billion. The bridge differs only by disclosed rounding.

TTM reportable segment profit is USD 8.944 billion plus USD 1.395 billion, or USD 10.339 billion. Adding Other underwriting/run-off of negative USD 0.033 billion yields USD 10.306 billion consolidated underwriting profit. Adding USD 4.794 billion investment profit and negative USD 0.023 billion service result yields USD 15.077 billion statutory operating income. Less USD 0.297 billion interest equals USD 14.780 billion pretax; less USD 3.085 billion tax equals USD 11.695 billion net income. The latest-FY bridge likewise ties with zero residual.

The base first-forward-year consolidated revenue run rate is approximately USD 96.65 billion, versus USD 91.055 billion TTM, an increase of about 6.1%. It stays within the required 10% recency band. The increase reflects continued Personal growth, a Commercial written-to-earned recovery, and retained investment income; it does not assume the terminal growth rate appears immediately.

9. Latest interim-period integrity

The cumulative interim bridge is triggered. The construction is exactly `FY2025 - H1 2025 + H1 2026`, with identical January 1 through June 30 coverage in both H1 periods. It produces USD 91.055 billion revenue, USD 15.077 billion statutory operating income, USD 11.695 billion net income, and 587.0586 million time-weighted diluted shares. No quarterly and cumulative periods overlap. The operating anchor remains June 30, 2026 and no FY2025 number is silently substituted for the TTM base.

10. Sensitivity — what matters most

Sensitivity around base	Low case EPS	Base EPS	High case EPS	EPS change
Personal revenue CAGR -200 bps / +200 bps	21.022152	22.305234	23.688170	-1.283082 / +1.382936
Commercial terminal margin -200 bps / +200 bps	21.907033	22.305234	22.703434	-0.398201 / +0.398201
Diluted shares -5% / +5%	23.479194	22.305234	21.243080	+1.173960 / -1.062154
Tax rate 18% / 24%	23.152268	22.305234	21.458200	+0.847034 / -0.847034

Personal Lines revenue and margin durability dominate the EPS gate because the segment supplies most premium and underwriting profit. Share count is the next-largest mechanical sensitivity but is not a substitute for operating performance. Commercial margin matters, especially under reserve stress, but its smaller earnings base limits the terminal EPS effect. Tax has a symmetric but secondary effect. The terminal return is additionally sensitive to the exit P/B: a 0.5x change in base P/B moves terminal price by USD 63.18 per share before distributions.

11. Combined earnings summary

Case	Revenue	Statutory OI	OI margin	Common NI	USD EPS per listed unit	Probability	EPS × 15	Versus USD 208.87
Bear	105.044250	5.318250	5.062866%	3.860826250	6.603089191	25%	99.046337866	-52.58%
Base	124.254000	16.712000	13.449869%	12.925980000	22.305233858	50%	334.578507870	+60.19%
Bull	142.378000	26.408000	18.547809%	20.755860000	36.273785390	25%	544.106780846	+160.50%
Probability-weighted	123.982563	16.287563	13.14%	12.617161563	21.871835574	100%	328.077533613	+57.07%

The 25/50/25 weights reflect a central profitable-growth path with balanced tail recognition. The downside tail remains meaningful because reserve development, catastrophe, liability severity, and acquisition-cost reflexivity can compress underwriting profit quickly. The upside tail requires both growth and underwriting discipline to persist despite competitive response.

12. Scenario operating and return bridges

Bear-case operating and return bridge

Bear case	Start 2026-08-13	Horizon 2031-06-30	CAGR or change	Justification
Retained investments	97.221bn at operating anchor	105.000bn	1.55% operating CAGR	Weak premium growth and capital conservation
Retained NII	3.758bn TTM	3.666250bn	-0.49% operating CAGR	3.50% yield on 104.750bn average assets
Parent-owned underwriting income excluding incremental fees	10.306bn	2.202bn	-26.47% operating CAGR	Margin normalization and reserve/cat stress
Fee income counted once	1.208bn embedded	1.253bn embedded	0.73% operating CAGR	No separately added fee line
Normalized common NI	11.695bn reported anchor	4.253326bn	-18.33% operating CAGR	Adverse mark removed; underwriting remains profitable
Beginning common equity	34.333bn	34.333bn	—	Common equity excludes preferred claims
Cumulative common NI	—	26.251537bn	cumulative	Five annual retained-economics bridges
Common dividends	—	5.000bn	cumulative	Capital conservation
Repurchases net of issuance	—	0.300bn net cost	cumulative	0.5bn repurchase less 0.2bn equity issuance
OCI and other	—	-1.700bn	cumulative	Adverse mark/capital stress
Terminal common equity	34.333bn	53.584537bn	9.30% operating CAGR	Complete roll-forward
Diluted shares	584.2m	584.7m	+0.09% operating CAGR	Awards exceed limited buybacks
BVPS	59.06	91.644497	9.19% operating CAGR	Common equity divided by diluted shares
Normalized common ROE	n/a	8.124147%	terminal	Below assumed cost of equity
Valuation	3.536573x P/B	1.500000x P/B	-2.036573x	Multiple compresses with weaker ROE
P/E cross-check	10.484758x current reported	18.897400x normalized	+8.41x	Lower EPS and average-equity basis
Share value	208.87	137.466746	-8.22% price CAGR	BVPS × exit P/B
Cumulative distributions	—	8.555052	cumulative	Dividends counted once
Total ending value	208.87	146.021797	**-7.074069% gross USD IRR**	Exact 1,782-day horizon

Base-case operating and return bridge

Base case	Start 2026-08-13	Horizon 2031-06-30	CAGR or change	Justification
Retained investments	97.221bn	140.000bn	7.56% operating CAGR	Premium, float, and retained earnings grow
Retained NII	3.758bn	5.149000bn	6.50% operating CAGR	3.80% yield on 135.500bn average assets
Parent-owned underwriting income excluding incremental fees	10.306bn	11.583bn	2.36% operating CAGR	Premium growth offsets margin normalization
Fee income counted once	1.208bn embedded	1.670bn embedded	6.69% operating CAGR	Embedded only; no manager fees
Normalized common NI	11.695bn reported anchor	12.925980bn	2.03% operating CAGR	No terminal investment-mark normalization
Beginning common equity	34.333bn	34.333bn	—	No preferred or NCI
Cumulative common NI	—	60.098199bn	cumulative	Full annual bridge
Common dividends	—	20.000bn	cumulative	Residual return after growth capital
Repurchases net of issuance	—	1.700bn net cost	cumulative	2.0bn repurchase less 0.3bn issuance
OCI and other	—	0.500bn	cumulative	Award/issuer movements
Terminal common equity	34.333bn	73.231199bn	16.35% operating CAGR	Earnings exceed distributions

Base case	Start 2026-08-13	Horizon 2031-06-30	CAGR or change	Justification
Diluted shares	584.2m	579.504348m	-0.16% operating CAGR	Modest net buyback
BVPS	59.06	126.368680	16.46% operating CAGR	Capital compounds despite dividends
Normalized common ROE	n/a	18.763704%	terminal	Supports premium P/B, below current multiple
Valuation	3.536573x P/B	2.800000x P/B	-0.736573x	Conservative multiple normalization
P/E cross-check	10.484758x current	15.863196x normalized	+5.38x	Terminal direct normalized basis
Share value	208.87	353.832303	11.42% price CAGR	BVPS × exit P/B
Cumulative distributions	—	34.372992	cumulative	Exact weighted-share calculation
Total ending value	208.87	388.205295	**13.546253% gross USD IRR**	Exact 1,782-day horizon

Bull-case operating and return bridge

Bull case	Start 2026-08-13	Horizon 2031-06-30	CAGR or change	Justification
Retained investments	97.221bn	165.000bn	11.17% operating CAGR	Strong premium and float generation
Retained NII	3.758bn	6.280000bn	10.82% operating CAGR	4.00% yield on 157.000bn average assets
Parent-owned underwriting income excluding incremental fees	10.306bn	19.378bn	13.45% operating CAGR	Durable selection and expense advantage
Fee income counted once	1.208bn embedded	2.128bn embedded	12.01% operating CAGR	Embedded in underwriting once
Normalized common NI	11.695bn reported anchor	20.159610bn	11.46% operating CAGR	Favorable terminal mark removed
Beginning common equity	34.333bn	34.333bn	—	Common-only capital anchor
Cumulative common NI	—	86.859538bn	cumulative	Strong underwriting and NII
Common dividends	—	35.000bn	cumulative	High but capital-supported payout
Repurchases net of issuance	—	3.600bn net cost	cumulative	4.0bn repurchase less 0.4bn issuance
OCI and other	—	2.600bn	cumulative	Favorable capital movements
Terminal common equity	34.333bn	85.192538bn	19.92% operating CAGR	Complete bridge
Diluted shares	584.2m	572.2m	-0.41% operating CAGR	Repurchases exceed awards
BVPS	59.06	148.885945	20.34% operating CAGR	Strong retained capital
Normalized common ROE	n/a	25.708998%	terminal	Supports 4.0x P/B under demanding quality case
Valuation	3.536573x P/B	4.000000x P/B	+0.463427x	Strong ROE offsets competitive normalization
P/E cross-check	10.484758x current	16.903608x normalized	+6.42x	Favorable mark excluded from normalized EPS
Share value	208.87	595.543782	23.96% price CAGR	BVPS × exit P/B
Cumulative distributions	—	60.532688	cumulative	Dividends counted once
Total ending value	208.87	656.076470	**26.439346% gross USD IRR**	Exact 1,782-day horizon

13. Eleven arithmetic tie-out checks

- **PASS — Reported financial and statutory bridge.** FY2025: 8.854 + 1.416 - 0.021 + 4.276 - 0.024 = 14.501 statutory OI; 14.501 - 0.278 - 2.915 = 11.308 NI. TTM: 8.944 + 1.395 - 0.033 + 4.794 - 0.023 = 15.077 OI; 15.077 - 0.297 - 3.085 = 11.695 NI. Both residual sets are zero and consolidated revenue ties within rounding. Source: statutory bridge and data package Sections 2-3a.

- **PASS — NI, shares, unit, and FX equal EPS.** Bear 3,860.826250 ÷ 584.700000 × 1 × 1 = 6.603089191. Base 12,925.980000 ÷ 579.504347826 × 1 × 1 = 22.305233858. Bull 20,755.860000 ÷ 572.200000 × 1 × 1 = 36.273785390. Source: quote packet and this appendix Section 5.

- **PASS — Segment sum at horizon.** Reportable segment revenue sums are 101.338, 118.525, and 134.728. Named additions are Other underwriting revenue, investment result, and service revenue; no unexplained residual exists. Source: reviewed segment appendices and Section 3.

- **PASS — Product-to-segment rollups.** Personal exact-horizon product NPW sums to 89.00, 103.75, and 118.00. Commercial's reviewed approximate product-pool compounding reconciles to 2.49%, 6.45%, and 9.21% aggregate revenue CAGRs. Review gates report no unresolved issue. Source: appendix B Section 10 tables.

- **PASS — Weighted margin.** Personal product margins are not fabricated because exact product profit is undisclosed; the segment margin is directly modeled on NPE. Commercial likewise derives profit from NPE and combined ratio rather than mixing non-additive product margins. The governing profit metric remains Pretax underwriting profit (loss). Source: reviewed appendices Sections 9-10.

- **PASS — Share and security-unit path.** 584.2 × split factor 1.0 = 584.2 quote-basis shares; ÷ listed-unit factor 1.0 = 584.2 listed equivalents. Starting shares plus award issuance minus repurchases equals 584.7, 579.504347826, and 572.2. Source: quote packet and Section 6.

- **PASS — Growth plausibility.** Personal base revenue CAGR of about 6.74% and Commercial base 6.45% are well below Personal's recent high-teens growth and around Commercial's FY2022-FY2025 6.7% CAGR. Neither exceeds the historical guardrail. Source: reviewed appendices Sections 6 and 8.

- **PASS — Historical arithmetic.** Personal 74.900 compounded at 6.739796% for five years equals 103.780. Commercial 10.787 compounded at 6.45% approximates 14.745 within reviewed rounding. Every exact-horizon row uses five calendar years, not six. Source: segment appendices and Section 2.

- **PASS — Recency anchor.** Approximate base first-forward-year consolidated revenue of 96.65 is 6.1% above TTM 91.055, within the 10% band. The comparison uses June-to-June run rates and retains written-to-earned lag. Source: data package Section 5 and annual segment schedules.

- **PASS — Period and horizon integrity.** TTM equals FY2025 less like-for-like H1 2025 plus H1 2026. Operating terminal date is exactly 2031-06-30; shareholder return uses the separate 1,782-day entry-price horizon. No overlap or six-year compounding exists. Source: run manifest and statutory derivation.

- **PASS — Valuation, packet hash, and probability arithmetic.** Packet hashes match sealed values. EPS × 15 and cushions reproduce Section 7. 25% + 50% + 25% = 100%. Weighted EPS is 21.871835574. Expected wealth is 394.627214182 and its CAGR is 13.928736636%, not the arithmetic-average IRR. Source: quote packet, statutory bridge, and insurer JSON.

SYNTHESIS CLEARED — 11/11 TIE-OUTS PASSED

14. Fifteen P&C insurer economic checks

- **PASS — Managed investments reconcile.** FY2025 97.373 - 0 = 97.373; Q2 2026 97.221 - 0 = 97.221; terminal 105.000/140.000/165.000 less zero equals retained. Source: data package Section 0b; JSON investment anchors and scenario balance bridges.

- **PASS — Managed NII reconciles.** TTM 3.758 - 0 = 3.758. Terminal retained NII equals average retained assets × yield: 104.750 × 3.50% = 3.666250; 135.500 × 3.80% = 5.149000; 157.000 × 4.00% = 6.280000. Source: Section 5b; JSON earnings investment paths.

- **PASS — Underwriting ownership is modeled by pool.** Personal, Commercial, and Other are wholly parent-owned. Terminal retained underwriting profit is 2.200 + 0.062 - 0.060 = 2.202 bear; 10.430 + 1.173 - 0.020 = 11.583 base; 17.400 + 1.988 - 0.010 = 19.378 bull. Source: reviewed segment appendices and JSON underwriting line.

- **PASS — Fee income counted once.** Terminal economic fees of 1.253/1.670/2.128 are fully embedded in underwriting; zero is embedded in investment result, separately reported, or allocated to NCI. Inclusion count is one. Source: data package fee table; JSON fee ledger.

- **PASS — Common NI reconciles to retained economics.** Bear 2.202 + 3.166250 - 0.050 - 0.400 - 1.057423750 = 3.860826250. Base 11.583 + 5.149 - 0.020 - 0.350 - 3.436020 = 12.925980. Bull 19.378 + 7.030 + 0 - 0.300 - 5.352140 = 20.755860. Source: Sections 4-5 and JSON earnings bridge.

- **PASS — Beginning common equity excludes preferred.** Q2 total common equity is 34.333 and preferred equity is zero after the 2024 redemption. No NCI is included. Source: data package Sections 0b and 8; JSON equity anchors.

- **PASS — Terminal common-equity roll-forward.** The five annual rows chain without gaps. Cumulative formulas yield 53.584537465, 73.231199300, and 85.1925379975. Source: Section 5c; JSON equity roll-forward.

- **PASS — Buyback cost reconciles to shares and equity.** Bear 0.500bn ÷ 200 = 2.5m retired; base 2.000bn ÷ 230 = 8.695652174m; bull 4.000bn ÷ 250 = 16.0m. The same costs reduce equity. Source: Sections 5c and 6; JSON equity and share paths.

- **PASS — Terminal BVPS reconciles.** 53,584.537465 ÷ 584.7 = 91.644497118; 73,231.199300 ÷ 579.504347826 = 126.368679674; 85,192.5379975 ÷ 572.2 = 148.885945469. Unit and FX factors are 1.0. Source: Section 5d; JSON terminal metrics.

- **PASS — Terminal normalized ROE reconciles.** 4,253.326250 ÷ 52,354.124340 = 8.124147%; 12,925.980000 ÷ 68,888.209300 = 18.763704%; 20,159.610000 ÷ 78,414.6079975 = 25.708998%. Source: Section 5d; JSON terminal metrics.

- **PASS — Share value equals BVPS × exit P/B.** 91.644497118 × 1.5 = 137.466745677; 126.368679674 × 2.8 = 353.832303087; 148.885945469 × 4.0 = 595.543781877. Source: Section 5d; JSON terminal metrics.

- **PASS — Wealth and exact-horizon IRR reproduce.** Adding distributions yields wealth of 146.021797435, 388.205294882, and 656.076469528. Using USD 208.87 over 4.87895028645352 years gives -7.074069%, 13.546253%, and 26.439346%. Source: Section 5d; JSON terminal metrics.

- **PASS — Probability and expected wealth reconcile.** Weights total 100%. Weighted price 360.168783432 plus weighted distributions 34.458430750 equals wealth 394.627214182. Its CAGR is 13.928736636%; arithmetic-average IRR is not used. Source: JSON probability-weighted block.

- **PASS — Negative EPS does not force zero equity.** All terminal EPS values are positive; the annual Commercial bear loss does not deplete consolidated book. Zero-equity overrides are false and no negative-EPS shortcut is applied. Source: Section 5c and JSON zero-equity blocks.

- **PASS — P/E, P/B, and ROE are coherent.** Direct normalized P/E and P/B divided by average-equity ROE are both shown. Differences arise from ending-versus-average common equity and reported-versus-normalized investment marks, not an arithmetic failure. Source: Section 5d; JSON P/E reconciliation notes.

P&C INSURER BRIDGE CLEARED — 15/15 ECONOMIC CHECKS PASSED

15. Consolidated judgment and constraints

The operating model says Progressive can pass the framework's FY+5 P/E 15 entry gate even after base-case underwriting normalization. The base case does not require today's exceptional combined ratio to persist: Personal margin falls toward 10.2%, Commercial margin to 8.03%, and current P/B compresses from 3.54x to 2.8x. Retained NII and book-value compounding remain important, but they are not used to obscure underwriting deterioration. At the immutable USD 208.87 close, the base EPS cushion is 60.185047096% and the base gross USD IRR is 13.546253241%.

The return distribution is still asymmetric enough to demand reserve and capital discipline. Bear terminal book value remains positive, yet a 1.5x exit P/B and much lower underwriting earnings produce a negative 7.07% annualized shareholder return. Bull produces 26.44%, but requires sustained superior selection, acquisition economics, pricing, and claims execution. The probability-weighted gross USD IRR is 13.928736636%, a result driven by expected terminal wealth rather than an average of headline IRRs.

Key constraints are explicit. Numeric RBC is unavailable, so the report must not claim a precise RBC cushion. Terminal debt and lease paths are not source-bound, so EV/NOPAT cannot control. Current exact goodwill is not separately disclosed, so exact BVPS, not estimated tangible BVPS, controls. No managed pool, NCI, preferred claim, or manager-fee business exists in the reviewed perimeter. Policyholder fees, service economics, investment marks, claims context, distributions, and repurchases are each counted once. Trade execution is not authorized.

Appendix CS - Compounder Score and CIO Actionability

The Progressive Corporation (PGR) - Deterministic ER2 Scorecard

Run ID: `pulse-cio-20260814T180226+0800` Report ID: `PGR-ER2-20260814T180226+0800` Information cutoff: `2026-08-14T18:02:26+08:00` Scorecard stage: **CSA re-audited after RT withholding repair** Primary valuation method: **P/B-ROE (**PB_ROE**)** Price anchor: **USD 208.87**, NYSE completed close on 2026-08-13 Operating anchor / terminal date: 2026-06-30 / 2031-06-30 Shareholder-return horizon: **1,782 days / 4.87895028645352 years** Trade execution authorized: **NO**

1. Executive decision

ER2 research verdict: WATCH. Management passes, the binary P/E-15 entry-price test passes with a 60.185047096% EPS cushion, and the moat is YELLOW rather than PASS because the 2046 durability of the personal-auto data and distribution advantage is unresolved. The installed decision table assigns WATCH when exactly one of the three ER2 gates is YELLOW and the other two pass. The diagnostic score does not override those gates.

CIO actionability: EXPERIMENTAL. This is separate from the ER2 verdict. Base and probability-weighted net-SGD returns clear 10% under the explicitly bounded diagnostic, but CORE_ELIGIBLE is unavailable because the moat is YELLOW and no portfolio risk-budget evidence was supplied. The negative bear result, weak customer switching costs, long-horizon OEM/data-access risk, and absence of portfolio concentration information prevent Core treatment. Portfolio fit is UNAVAILABLE and the sizing ceiling is null. No allocation, ranking, order, or trade is authorized.

Score-implied classification: Reject. The re-audited Compounder Score is **65/100**, comprising **58/80** for Business Quality and **7/20** for 20% Return Underwriting/Stretch. Those score values remain unchanged because the withholding repair affects only the net-SGD overlay, whose revised arithmetic CSA independently replayed. This diagnostic result does not override the separate ER2 WATCH verdict. Progressive has substantial business quality, but the installed rubric requires Category 1B to score zero when ROIIC is not calculated, and the current price does not support 20% without a lower entry price or terminal P/B expansion. The frozen base P/B-ROE bridge produces 13.55% gross USD. The 20% reverse-return diagnostic requires a price near USD 159.49 under the base terminal bridge, or a materially more demanding terminal book-value/multiple outcome.

Gate or diagnostic	Result	Deterministic conclusion
Management	PASS / GREEN	Long operating record, profit-gated incentives, low dilution, disciplined capital allocation; Personal Lines succession remains a monitor.
Moat	YELLOW	Strong current underwriting/data/claims system, but weak switching costs and unresolved 2046 OEM/data/distribution control.
2046 durability	YELLOW	A viable mixed-autonomy insurer is plausible, but protection of the dominant personal-auto profit pool is not proven.
P/E <= 15 on confident TTM+5 EPS	PASS	Base EPS USD 22.305233858 versus required USD 13.924666667; 60.185047096% cushion.
Compounder Score	**Audited 65/100**	Reject under the diagnostic rubric; this score does not override the ER2 WATCH verdict.
Business Quality Score	**Audited 58/80**	Promising but incomplete quality evidence because ROIIC is uncalculated and 2046 durability is unresolved.
20% Return UW Score	**Audited 7/20**	Today's price does not support the 20% stretch without a lower entry or P/B expansion.
ER2 verdict	**WATCH**	Exactly one ER2 gate is YELLOW; no gate fails.
CIO actionability	**EXPERIMENTAL**	Net-SGD base and expected wealth clear 10%, but moat/downside/portfolio evidence bar Core status.

2. Deterministic rubric audit

The industrial-company ROIC framework is not used blindly. For a P&C insurer, insurance liabilities, retained investments, statutory surplus, reserve adequacy, common equity, BVPS, normalized retained-common ROE, and distributable capital are the economically controlling capital measures. Diagnostic ROIC and ordinary FCF are retained as secondary checks only. Scores below map every rubric sub-item to insurer-relevant evidence and do not award points merely because reported

current earnings are unusually high.

Category 1 - Incremental returns on capital: 12/25

Item	Score	Evidence and deduction
1A. Normalized returns are high	3/5	The five-year median diagnostic ROIC is 16.7% using the cleared package's insurer-aware calculation. Current and base normalized common ROE are stronger, but the present cycle is above long-run underwriting margins and does not justify the maximum.
1B. Incremental returns are high	0/8	The scorecard carries both three-year and five-year ROIIC as null. Common BVPS growth plus distributions supports franchise quality but is not a calculated ROIIC denominator; the CSA contract therefore requires zero points.
1C. Returns are not deteriorating sharply	2/3	Returns recovered strongly after the inflation/reserve shock, but the 2023 USD 1.094 billion adverse reserve development and expected margin normalization show real cyclicality.
1D. Unit economics support returns	3/3	Ten consecutive years of positive underwriting margins, granular risk pricing, short auto policy repricing, claims scale, and profitable policy growth corroborate reported economics.
1E. Cash/capital conversion is real	2/3	Statutory surplus, common equity, NII, dividends, and repurchases show genuine capital generation. Ordinary FCF is less meaningful for an insurer because premium cash supports future claims.
1F. Returns are not an accounting artifact	2/3	The statutory and retained-economics bridges reconcile with zero residual and investment marks are normalized. Reserve estimation and favorable development remain material sources of period distortion.

The audited 12/25 result recognizes real economic compounding without treating insurer float as free capital, while enforcing the explicit no-calculated-ROIIC cap. FY2021-FY2025 statutory combined ratios were 94.8, 95.3, 94.3, 88.2, and 87.1; TTM was approximately 87.8. The company remained profitable through the weaker years, but the very strong recent margin cannot be capitalized as permanent.

Category 2 - Reinvestment runway: 17/20

Item	Score	Evidence and deduction
2A. Large remaining opportunity	4/5	Progressive continues to gain share in a very large U.S. vehicle-insurance market and has property, fleet, BOP, TNC, and specialty adjacencies. The mature personal-auto pool and 2046 mobility transition cap the score.
2B. Proven ability to reinvest at scale	5/5	NPW expanded from USD 46.405 billion in 2021 to USD 83.174 billion in 2025 while statutory underwriting remained profitable; investments grew from USD 51.514 billion to USD 97.221 billion by Q2 2026.
2C. Organic growth opportunity	4/4	Growth is overwhelmingly organic, supported by direct and agency distribution, product segmentation, telematics, claims, advertising, and capital rather than serial acquisitions.
2D. Repeatable expansion playbook	3/3	Management has repeatedly flexed rate, appetite, advertising, agent incentives, product models, and capital to grow when acquisition economics are adequate.
2E. Market structure supports long growth	1/2	Regulation and capital are barriers, but they protect the incumbent class more than Progressive uniquely; national peers are capable.
2F. Growth need not collapse returns	0/1	The base case supports profitable growth, but moving toward 3.5-to-1 premium-to-surplus and entering new risk pools could reduce error capacity. The evidence is not strong enough for the final point.

Personal Lines supplies about 86.7% of modeled underwriting revenue. Its TTM revenue was USD 74.900 billion and pretax underwriting profit was USD 8.944 billion. Commercial Lines was USD 10.787 billion and USD 1.395 billion, respectively. Base terminal revenue growth of roughly 6.4% consolidated and terminal Personal/Commercial margins of 10.2%/8.03% are materially below current conditions, so the base runway does not require preserving peak margins.

Category 3 - Durability of moat: 11/15

Item	Score	Evidence and deduction
3A. Clear source of advantage	4/4	Proprietary loss/telematics data, state-level deployment, claims scale, dual distribution, brand, capital, and organizational pricing cadence are concrete.
3B. Pricing power	2/3	The company priced through inflation while growing, but auto is shopped frequently and rates are regulated. This is pricing capability, not captive consumer pricing power.
3C. Competitive evidence	3/3	Ten years of positive underwriting margins and major share gains are stronger evidence than management claims.
3D. Customer stickiness	0/2	Customers and independent agents can compare and switch; bundling and workflows create only modest friction.
3E. Resilience through stress	2/2	Progressive remained profitable through the recent loss-cost shock and rebuilt rate adequacy without a group underwriting loss.
3F. Low disruption risk	0/1	AI, OEM sensor-data control, autonomous fleets, aggregators, and liability migration are unresolved over twenty years.

The 11/15 score is consistent with the installed YELLOW moat gate. A strong present system is not the same as a protected 2046 profit pool. Commercial Lines may be more durable because liability selection, claims, agents, and heterogeneous fleets matter, but it is too small to offset a severe erosion of personal auto.

Category 4 - Accounting honesty and financial quality: 9/10

The score is 2/2 for clean statutory bridging, 1/2 for cash-flow support because ordinary FCF is not an insurer distributability measure, 2/2 for conservative SBC/dilution treatment, 2/2 for balance-sheet strength, 1/1 for transparency, and 1/1 for no material accounting/governance red flag. The QFR and DR reviews independently cleared the financial statements, unit bridge, ownership perimeter, fee count, common-equity bridge, and official-source overrides. Numeric RBC is not disclosed, current goodwill is only estimated from the last separate disclosure, and full claims triangles were not carried into the package. Those are explicit data limits, not hidden residuals.

Q2 2026 common equity was USD 34.333 billion, estimated statutory surplus USD 32.9 billion, retained investments USD 97.221 billion, cash USD 0.178 billion, short-term investments USD 1.978 billion, and debt USD 8.387 billion. The investment portfolio backs unearned premium, claim reserves, catastrophe liquidity, and statutory capital; it is not added as excess cash after valuing book. Policy liabilities and reserves remain inside the P/B-ROE framework and are not subtracted twice.

Category 5 - Capital allocation discipline: 9/10

The score is 2/2 for rational reinvestment priority, 2/2 for acquisition discipline, 1/2 for buyback discipline, 2/2 for incentive alignment, 1/1 for owner mentality, and 1/1 for evidence from past decisions. Management prioritizes profitable organic growth and solvency, has made little material M&A beyond Protective, and uses a low regular dividend plus variable distributions. Repurchases are described as valuation-aware, but internal thresholds are not published. CEO ownership is meaningful, 93% of target pay was at risk in 2025, and the main performance award is gated by a 96-or-better combined ratio. The deduction reflects the absence of explicit normalized ROE, BVPS-plus-dividend, and reserve-quality metrics in compensation, plus unresolved Personal Lines succession architecture.

Category 6 - Price and 20% return underwriting: 7/20

Item	Score	Evidence and deduction
6A. Base-case IRR >= 20%	2/6	Base gross USD IRR is 13.546253241%, in the rubric's 10%-15% band.

Item	Score	Evidence and deduction
6B. Conservative exit multiple	2/4	Base exit P/B is 2.8x versus current 3.536573x, but that bridge returns only 13.55%. Achieving 20% at today's price requires about 3.7511x, 34% above the modeled base P/B and modestly above today's multiple, so the CSA cap limits this item to two points.
6C. Bear case acceptable	0/3	Bear gross USD IRR is -7.074068897% and net-SGD is -9.52%; ending SGD wealth is about 38.62% below entry cost.
6D. Reverse-return hurdle beatable	0/3	A 20% return at current price requires terminal BVPS of USD 169.291969 at 2.8x plus base distributions, versus modeled USD 126.368680. Required BVPS CAGR is 24.09%, versus base 16.46%.
6E. Price does not imply perfection	1/2	The base bridge clears 10% after multiple compression, but current P/B is high and the 20% hurdle would require a roughly 3.75x exit P/B on base BVPS.
6F. Cash returns help	2/2	Base cumulative distributions are USD 34.372992 per share and materially support terminal wealth.

The method-matched maximum entry price for a 20% gross USD IRR under the base terminal wealth bridge is **USD 159.492436**, 23.640333% below USD 208.87. This is a diagnostic, not a buy order or target price. P/E remains a secondary cross-check only and the binary P/E-15 gate is not used as the exit multiple.

3. Hard-veto screen

Veto	Status	Conclusion
ROIIC below cost of capital with no path	PASS	Insurer-equivalent retained-equity returns and underwriting economics are above the hurdle in base, though cyclical.
High ROIC is only tiny/negative capital	PASS	Common equity and statutory surplus are large, positive, and explicitly rolled.
Growth requires external financing	PASS	Growth has been funded by retained earnings/float with strong surplus; debt is modest versus operating income.
Material dilution without value creation	PASS	Share count was broadly flat over 2021-2025 and fell in 2026; award issuance and buybacks are explicit.
Large acquisitions without returns disclosure	PASS	M&A is limited; Protective is the only material recent deal.
Structural FCF/earnings gap	PASS WITH INDUSTRY ADAPTATION	Ordinary FCF is not controlling; statutory capital and equity conversion are source-bound.
Concentration/regulation/cycle can impair equity	WATCH	Personal-auto concentration, reserve severity, regulation, and OEM/data access are material.
20% case requires terminal multiple expansion	FAIL AT CURRENT PRICE	Base 20% requires about 3.75x terminal P/B, above current and far above modeled base 2.8x; a lower entry price repairs this.
Flawless execution needed at today's price	WATCH	The 13.55% base case is not flawless, but 20% needs much stronger BVPS/multiple outcomes.
Moat cannot be explained	PASS	Data/selection, claims scale, dual distribution, brand, and capital are clear; 2046 durability remains YELLOW.
Accounting/governance trust issue	PASS	No material control, restatement, auditor, or related-party issue was found.
Balance sheet can wipe out equity in modeled downturn	PASS	Bear terminal common equity is USD 53.585 billion; no zero-equity shortcut is used.

4. Mandatory security-return underwriting

All returns use PB_ROE. Terminal share value is terminal BVPS times scenario exit P/B. Terminal shareholder wealth adds cumulative common distributions once. No terminal cash, investments, debt, claims liability, fee-platform value, NCI, or preferred claim is added or subtracted after book value. The insurer bridge SHA-256 is `ff8c3a5da982eaa125b108844ee579ac6ebdcf20e6271d0151edb8ec16ab94b4` and all 15 economic checks pass.

Measure	Bear	Base	Bull	Probability-weighted
Probability	25%	50%	25%	100%
Terminal common equity, USD m	53,584.537465	73,231.199300	85,192.537998	N/A
Terminal diluted shares, m	584.700000	579.504348	572.200000	N/A
Terminal BVPS, USD	91.644497	126.368680	148.885945	N/A
Normalized common ROE	8.124147%	18.763704%	25.708998%	N/A
Exit P/B	1.500000x	2.800000x	4.000000x	N/A
Implied normalized P/E	18.897400x	15.863196x	16.903608x	N/A
Terminal share price, USD	137.466746	353.832303	595.543782	360.168783 expected
Cumulative distributions, USD/share	8.555052	34.372992	60.532688	34.458431 expected
Terminal shareholder wealth, USD/share	146.021797	388.205295	656.076470	394.627214 expected
Gross USD IRR	**-7.074068897%**	**13.546253241%**	**26.439346426%**	**13.928736636%**

The probability-weighted result is `(394.6272141818638 / 208.87)^(1 / 4.87895028645352) - 1`. It is the CAGR of probability-weighted terminal wealth, never an arithmetic average of scenario IRRs.

The scenario tables below show USD billions except shares and per-share values. Parent-owned underwriting income includes embedded policyholder fees once; the separate fee row is a count-once memorandum and is not added again.

Bear-case operating and return bridge

Bear case	Start (2026-06-30 / price 2026-08-13)	Horizon (2031-06-30)	CAGR / change	Justification
Retained investments	97.221	105.000	1.55%	Weak premium growth and capital conservation; no external pool.
Retained net investment income	3.758 TTM	3.666250	-0.49%	3.50% yield on USD 104.750bn average retained assets.
Parent-owned underwriting income excluding incremental fees	10.306	2.202	-26.47%	Margin normalization plus reserve/cat stress; embedded policyholder fees remain counted once.
Fee income counted once	1.208 embedded	1.253 embedded	0.73%	Memorandum only; separately added fee income is zero.
Normalized common net income	11.695 reported anchor	4.253326	-18.33%	Adverse investment mark removed from normalization.
Beginning common equity	34.333	34.333	-	Common equity after preferred claims.
Cumulative common net income	-	26.251537	cumulative	Five annual retained-economics bridges.
Common dividends	-	5.000	cumulative	Capital conservation.
Common-share repurchases net of issuance	-	0.300 net cost	cumulative	USD 0.500bn repurchase less USD 0.200bn issuance.
OCI and other common-equity movements	-	-1.700	cumulative	USD -2.000bn OCI plus USD 0.300bn other.
Terminal common equity	34.333	53.584537	9.30%	Complete residual-free roll-forward.
Diluted common share count	584.2m	584.7m	+0.09%	Awards exceed limited repurchases.
Book value per common share	59.06	91.644497	9.19%	Common equity divided by diluted shares.
Normalized common ROE	N/M on forward basis	8.124147%	terminal	Below the approximate cost of equity.
Valuation	3.536573x P/B	1.500000x P/B	-2.036573x	Multiple compresses with weaker ROE/capital quality.

Bear case	Start (2026-06-30 / price 2026-08-13)	Horizon (2031-06-30)	CAGR / change	Justification
P/E cross-check	10.484758x current reported	18.897400x normalized	+8.412642x	Ending- versus average-equity basis is explained in the bridge.
Share value	208.87	137.466746	-8.22% price CAGR	Terminal BVPS times exit P/B.
Cumulative distributions	-	8.555052/share	cumulative	Dividends counted once.
Total ending value	208.87	146.021797	**-7.074069% gross USD IRR**	Exact 1,782-day horizon.

Base-case operating and return bridge

Base case	Start (2026-06-30 / price 2026-08-13)	Horizon (2031-06-30)	CAGR / change	Justification
Retained investments	97.221	140.000	7.56%	Premium, float, and retained earnings grow.
Retained net investment income	3.758 TTM	5.149000	6.50%	3.80% yield on USD 135.500bn average assets.
Parent-owned underwriting income excluding incremental fees	10.306	11.583	2.36%	Premium growth offsets significant margin normalization.
Fee income counted once	1.208 embedded	1.670 embedded	6.69%	Memorandum only; no manager-fee addition.
Normalized common net income	11.695	12.925980	2.03%	Terminal investment marks normalized to zero.
Beginning common equity	34.333	34.333	-	No preferred claim or NCI.
Cumulative common net income	-	60.098199	cumulative	Full annual bridge.
Common dividends	-	20.000	cumulative	Residual distribution after growth capital.
Common-share repurchases net of issuance	-	1.700 net cost	cumulative	USD 2.000bn repurchase less USD 0.300bn issuance.
OCI and other common-equity movements	-	0.500	cumulative	Other issuer equity movements.
Terminal common equity	34.333	73.231199	16.35%	Earnings exceed distributions/capital returns.
Diluted common share count	584.2m	579.504348m	-0.16%	Modest net buyback.
Book value per common share	59.06	126.368680	16.46%	Capital compounds despite dividends.
Normalized common ROE	N/M on forward basis	18.763704%	terminal	Supports a premium P/B below the current multiple.
Valuation	3.536573x P/B	2.800000x P/B	-0.736573x	Conservative multiple normalization.
P/E cross-check	10.484758x current reported	15.863196x normalized	+5.378438x	Secondary cross-check, not controlling.
Share value	208.87	353.832303	11.42% price CAGR	Terminal BVPS times exit P/B.
Cumulative distributions	-	34.372992/share	cumulative	Weighted-share dividend calculation.
Total ending value	208.87	388.205295	**13.546253% gross USD IRR**	Exact 1,782-day horizon.

Bull-case operating and return bridge

Bull case	Start (2026-06-30 / price 2026-08-13)	Horizon (2031-06-30)	CAGR / change	Justification
Retained investments	97.221	165.000	11.17%	Strong premium and float generation.
Retained net investment income	3.758 TTM	6.280000	10.82%	4.00% yield on USD 157.000bn average assets.
Parent-owned underwriting income excluding incremental fees	10.306	19.378	13.45%	Durable selection, claims, and expense advantage.

Bull case	Start (2026-06-30 / price 2026-08-13)	Horizon (2031-06-30)	CAGR / change	Justification
Fee income counted once	1.208 embedded	2.128 embedded	12.01%	Memorandum only; embedded in underwriting once.
Normalized common net income	11.695	20.159610	11.46%	Favorable USD 0.750bn mark removed.
Beginning common equity	34.333	34.333	-	Common-only capital anchor.
Cumulative common net income	-	86.859538	cumulative	Strong underwriting and NII path.
Common dividends	-	35.000	cumulative	High but modeled capital-supported payout.
Common-share repurchases net of issuance	-	3.600 net cost	cumulative	USD 4.000bn repurchase less USD 0.400bn issuance.
OCI and other common-equity movements	-	2.600	cumulative	Favorable USD 2.000bn OCI plus USD 0.600bn other.
Terminal common equity	34.333	85.192538	19.92%	Complete roll-forward.
Diluted common share count	584.2m	572.2m	-0.41%	Repurchases exceed awards.
Book value per common share	59.06	148.885945	20.34%	Strong retained capital compounding.
Normalized common ROE	N/M on forward basis	25.708998%	terminal	Supports demanding 4.0x P/B.
Valuation	3.536573x P/B	4.000000x P/B	+0.463427x	Multiple expansion receives only 25% probability.
P/E cross-check	10.484758x current reported	16.903608x normalized	+6.418850x	Favorable mark excluded from normalized earnings.
Share value	208.87	595.543782	23.96% price CAGR	Terminal BVPS times exit P/B.
Cumulative distributions	-	60.532688/share	cumulative	Dividends counted once.
Total ending value	208.87	656.076470	**26.439346% gross USD IRR**	Exact 1,782-day horizon.

5. Net-SGD diagnostic and CIO actionability

The entry USD/SGD anchor is **1.2800 SGD per USD**, the Monetary Authority of Singapore daily value as of noon on 2026-08-14. Raw evidence is archived at `raw/pulse-cio-20260814T180226+0800/cs_mas_usd_sgd_2026-08-14.json` with SHA-256 `d05c3725989ee00f0ac8b3d761cb8fae91c631f6d664558b4c5fe32dfa5b0305`, and the record is appended to `source_manifest.json`.

Terminal FX rates are not presented as forecasts. They are transparent scenario stresses around the source-bound 1.2800 anchor: bear **1.1520** (-10% USD versus SGD), base **1.2544** (-2%), and bull **1.3312** (+4%). Entry friction is 0.35% of initial SGD notional. Exit/conversion friction is 0.35% of terminal SGD proceeds. In the absence of governed investor-wrapper or treaty-eligibility evidence, U.S. dividend withholding is the conservative **30% statutory rate** and applies only to distributions; no capital-gains tax is assumed. The rate is bound to current [IRS guidance](https://www.irs.gov/individuals/international-taxpayers/federal-income-tax-withholding-and-reporting-on-other-kinds-of-us-source-income-paid-to-nonresident-aliens), archived at `raw/pulse-cio-20260814T180226+0800/cs_irs_dividend_withholding_2026.json` with SHA-256 `dea4452f46f30ebd1d07b28c5aca4e37737c6360dd2fd112d18f2e0d7275b394`. No custody fee, platform charge, fund fee, financing cost, portfolio fee, or other invented cost is included.

For one share, entry cost is `208.87 x 1.2800 x 1.0035 = SGD 268.28933760000007`. Each scenario uses `(terminal share price + 70% x cumulative distributions) x terminal USD/SGD x 0.9965`. This preserves the same P/B-ROE terminal price and distributions as the gross USD bridge.

Net-SGD diagnostic	Bear	Base	Bull	Probability-weighted
Terminal USD/SGD	1.1520	1.2544	1.3312	Scenario-weighted wealth, not an average FX forecast
Gross distributions, USD/share	8.555051758	34.372991795	60.532687651	34.458430750 gross expected
Distributions after 30% withholding, USD/share	5.988536231	24.061094257	42.372881356	Applied only to distributions, scenario by scenario

Net-SGD diagnostic	Bear	Base	Bull	Probability-weighted
Net terminal USD wealth before FX/exit friction	143.455281908	377.893397343	637.916663233	Scenario-specific
Net terminal SGD wealth	164.682073061	472.370374456	846.222480778	**488.911325688 expected**
Net-SGD IRR	**-9.52%**	**12.29%**	**26.55%**	**13.09%**

The probability-weighted net-SGD return is `(488.9113256877715 / 268.28933760000007)^(1 / 4.87895028645352) - 1 = 13.088540227%`. It is the CAGR of probability-weighted net terminal SGD wealth using 25%/50%/25% weights, not the arithmetic average of the three net-SGD IRRs.

CIO measure	Result	Reason
Status	**EXPERIMENTAL**	No hard accounting/qualitative fail; exactly one qualitative YELLOW; base and expected net-SGD exceed 10%, but uncertainty/downside bar Core.
Bear / base / bull net-SGD IRR	**-9.52% / 12.29% / 26.55%**	Exact 1,782-day annualization after stated FX, friction, and withholding assumptions.
Probability-weighted net-SGD IRR	**13.09%**	CAGR of expected net terminal SGD wealth; 25/50/25 weights.
10% mandate hurdle	PASS on return diagnostic	Both base and probability-weighted net-SGD exceed 10%; this does not override the moat or portfolio gates.
15% stretch hurdle	FAIL in base/expected case	Only bull exceeds 15%.
Security downside	WATCH	Bear net terminal SGD wealth is about 38.07% below entry cost; insurer book remains positive but market-value downside is large.
Portfolio fit	UNAVAILABLE	No holdings, concentration, sector/factor, liquidity-budget, or drawdown-budget data supplied.
Proposed sizing ceiling	null / unavailable	No sizing authority and no portfolio data.
Trade execution authorized	NO	Research only.

6. Monitoring, upgrade, and failure conditions

The ER2 verdict upgrades from WATCH to BUY only if the Moat/2046 gate becomes PASS while Management and P/E-15 remain PASS. Evidence should include normalized Personal and Commercial combined ratios at or below 96 through a softer market without material favorable reserve-development support, durable OEM/fleet data or embedded-distribution access, and cohort evidence that model/telematics lift persists after competitor AI upgrades. A lower price can improve the stretch-return score but cannot by itself repair the qualitative moat gate.

The verdict falls to PASS if the moat becomes FAIL, management becomes FAIL, the confident P/E-15 gate fails, or two gates are YELLOW. Specific monitored failure conditions include a rolling eight-quarter normalized combined ratio above 98, repeated adverse prior-year development, Personal policies declining while acquisition spending rises, loss of material agent/OEM/fleet relevance, capital returns that weaken ratings or statutory surplus, unresolved Personal Lines decision rights after succession, or regulation that removes important predictive variables without compensating rate flexibility.

The CIO diagnostic should be refreshed when the quote expires, when USD/SGD changes materially, or when new portfolio context becomes available. CORE_ELIGIBLE cannot be assigned with the current YELLOW moat and absent portfolio risk budget. EXPERIMENTAL here is an actionability classification only; it is not a sizing proposal, ranking, order instruction, or message authorization.

7. Artifact integrity and constraints

The QFR-sealed quote packet SHA-256 is `3bd872351c83e4e1d26fd233929c9131bbafd35d2026ea212d72fce97f9b59d5`. The expected insurer bridge SHA-256 is `ff8c3a5da982eaa125b108844ee579ac6ebdcf20e6271d0151edb8ec16ab94b4`. Synthesis cleared 11/11 statutory tie-outs and 15/15 P&C economic checks. The prior CSA pass changed only deterministic scoring and status fields: Category 1B from 6/8 to 0/8, Category 6B from 4/4 to 2/4, Business Quality from 64/80 to 58/80, Valuation/20% Underwriting from 9/20 to 7/20, Compounder from 73/100 to 65/100, and diagnostic classification from Watchlist to Reject. RT then replaced the unsupported 15% withholding assumption with source-bound 30% statutory withholding. CSA independently

replayed the repaired net-SGD overlay and cleared it without changing the scores, ER2 WATCH verdict, or EXPERIMENTAL actionability. The quote packet, statutory bridge, insurer bridge, synthesis, management, moat, and segment artifacts were not modified.

Known constraints are explicit: Progressive does not disclose a numeric current RBC ratio; current exact goodwill is not separately re-disclosed; full claim triangles and product-level revenue dollars were not carried into the package; terminal debt and lease paths are not source-bound; and portfolio holdings/risk budgets are unavailable. Those items cap confidence and portfolio fit but do not null the finite security-level or net-SGD return calculations.

Appendix CSA - Independent Scoring Audit

The Progressive Corporation (PGR) - Independent CSA Scorecard Audit

Audit date: 2026-08-14 Audit status: **CLEARED AFTER RT WITHHOLDING REPAIR AND CSA RE-AUDIT** Primary valuation method: **P/B-ROE (**PB_R0E**)** Security price: **USD 208.87** at the 2026-08-13 completed NYSE close Return horizon: **1,782 days**, or **4.87895028645352 years** on ACT/365.2425 Trade execution, portfolio ranking, and portfolio sizing authorized: **NO**

1. Audited decision and scores

The independently audited ER2 verdict is **WATCH**. The three controlling ER2 gates are Management **PASS**, Moat **YELLOW**, and P/E at or below 15 on confident TTM+5 EPS **PASS**. Exactly one gate is YELLOW and the other two pass, so WATCH follows mechanically. The base TTM+5 diluted EPS is USD 22.305233858019594 versus required EPS of USD 13.924666666666667, a 60.185047096% cushion. The P/E gate is only the binary entry-price test and does not select the security-return method.

The audited CIO actionability status is **EXPERIMENTAL**. Base and probability-weighted net-SGD IRRs clear 10%, but the YELLOW moat, negative bear return, uncertain 2046 personal-auto data/distribution control, and unavailable portfolio risk budget prevent CORE ELIGIBLE treatment. Portfolio fit remains UNAVAILABLE, sizing remains null, and no score, verdict, or actionability label is a trade instruction.

Item	Pre-audit	Audited	Audit conclusion
Compounder Score	73/100	**65/100**	Reject under the diagnostic rubric; does not override ER2 WATCH
Business Quality Score	64/80	**58/80**	Promising but incomplete evidence; ROIIC is not calculated
20% Return UW Score	9/20	**7/20**	Current price fails the 20% stretch without lower entry or P/B expansion
Score-implied classification	Watchlist	**Reject**	Total is below 70 and the current-price 20% hard veto is present

The quality subtotal is 12/25 Incremental Returns on Capital, 17/20 Reinvestment Runway, 11/15 Durability of Moat, 9/10 Accounting and Financial Quality, and 9/10 Capital Allocation, totaling 58/80. Price and 20% underwriting scores 7/20. The combined audited total is therefore exactly 65/100.

2. Deterministic rubric repairs

Two score defects were repairable and have been corrected in `scorecard.md` and `scorecard.json`.

First, Category 1B was reduced from 6/8 to **0/8**. The scorecard's own structured metrics record both three-year ROIIC and five-year ROIIC as null. Common BVPS growth plus distributions, underwriting performance, and normalized common ROE are useful insurer-quality evidence, but they are not a calculated ROIIC denominator. The CSA contract is explicit: if ROIIC is not calculated, Category 1B must score zero. The insurer adaptation explains why industrial ROIIC is not controlling; it does not authorize six unsupported points under a rubric item that specifically requires a credible calculation. Category 1 remains 3/5, 0/8, 2/3, 3/3, 2/3, and 2/3, totaling **12/25**.

Second, Category 6B was reduced from 4/4 to **2/4**. The modeled base exit P/B of 2.8x is below the current 3.536573x P/B, but the resulting gross USD IRR is only 13.546253240732508%, not the rubric's 20% hurdle. At today's USD 208.87 price, the method-matched reverse-return bridge requires a 3.751068011988083x exit P/B on the modeled base BVPS, 34% above the modeled 2.8x base multiple and modestly above today's multiple. The CSA cap therefore limits 6B to 0-2 points; two points recognize that the required expansion versus the current multiple is modest, while refusing full credit for a bridge that does not clear the stated hurdle. Category 6 now totals 2/6 + 2/4 + 0/3 + 0/3 + 1/2 + 2/2 = **7/20**.

No other rubric deductions are required. The 16.7% five-year median diagnostic ROIC is calculated and properly treated as secondary for an insurer. The combined-ratio history, retained capital generation, unit economics, accounting bridge, low dilution, compensation profit gate, and organic growth record support the remaining points. Weak customer switching costs, regulation, reserve-cycle risk, OEM/data control, and AI/autonomy disruption already receive explicit deductions. The

score-implied classification was changed to Reject because the audited total is below 70; the diagnostic classification remains separate from the three-gate ER2 verdict.

3. P&C insurer economic-coherence audit

The controlling `insurer_return_bridge.json` has SHA-256 **ff8c3a5da982eaa125b108844ee579ac6ebdcf20e6271d0151edb8ec16ab94b4**, exactly matching the expected hash. It parses as JSON and the repository validator returned `INSURER_RETURN_BRIDGE_VALID`. The security is PGR common stock, reporting and return currency are USD, the current price is USD 208.87, operating anchor is 2026-06-30, price anchor is 2026-08-13, and terminal date is 2031-06-30. Scenario probabilities are 25% bear, 50% base, and 25% bull and sum to 100%.

The retained/managed perimeter reconciles. Progressive has no modeled third-party investment pool, redeemable NCI, ordinary NCI, or preferred claim. Managed and retained investments are therefore equal at the FY2025, Q2 2026, and all scenario endpoints. Net investment income has the same wholly owned perimeter. External NCI allocations are zero line by line rather than the result of a blanket percentage haircut.

Fees are counted once. Scenario policyholder fee amounts of USD 1.253 billion, USD 1.670 billion, and USD 2.128 billion are embedded in underwriting presentation. Separately added fee income is zero. They are not added again as a manager-fee business or separate terminal asset. Investment income and service-business economics are also separate, so the common-income bridge has no residual plug.

The common-equity roll-forwards reconcile in every scenario. Bear terminal equity is 34,333 + 26,251.537465 - 5,000 - 500 + 200 - 2,000 + 300 = USD 53,584.537465 million. Base is USD 73,231.19930000001 million and bull is USD 85,192.5379975 million by the same signed identity. Repurchases reduce both equity and share count: USD 500 million at USD 200 retires 2.5 million bear shares; USD 2.0 billion at USD 230 retires 8.695652173913043 million base shares; and USD 4.0 billion at USD 250 retires 16.0 million bull shares. Issuance is explicit in both equity and shares.

Terminal BVPS independently reproduces as USD 91.64449711818025, USD 126.36867967378419, and USD 148.8859454692415. Normalized common ROE reproduces as 4,253.326250 / 52,354.124340 = 8.124147435602014%, 12,925.980000 / 68,888.209300 = 18.763704458783195%, and 20,159.610000 / 78,414.6079975 = 25.708997997723493%. Exit P/B values of 1.5x, 2.8x, and 4.0x are scenario-specific, tied to ROE, approximately 10% cost of equity, growth, reserve/capital quality, and the current 3.536573x anchor. The bull multiple is demanding and receives only 25% weight; the base multiple compresses materially. Implied normalized P/Es are 18.897399699235393x, 15.863196294594298x, and 16.90360835303857x. The difference from P/B divided by average-equity ROE is explicitly caused by ending-versus-average equity and normalization basis, not a broken identity.

The optimism test passes. Base Personal and Commercial underwriting margins normalize materially, base P/B compresses, realized marks normalize to zero, growth capital, dividends, and repurchases all consume the same reconciled equity, and no fee or investment asset is valued twice. The correlated favorable bull stack - strong selection, claims execution, benign reserve/cat outcomes, high growth, and 4.0x P/B - is visible and limited to 25% probability. The excessive-bearishness test also passes. Bear includes lower underwriting profit, lower earned yield, a USD 500 million adverse investment mark, USD 2.0 billion negative OCI, restrained distributions, dilution, and 1.5x P/B, yet it preserves USD 53.585 billion of common equity. No negative-EPS-to-zero-equity shortcut, liquidation assumption, or unsupported third-party loss absorption is used.

All mandatory P&C gates are therefore true: insurer bridge valid; economic coherence passed; retained/managed perimeter reconciled; fees counted once; line-specific NCI reconciled; common-equity roll-forward reconciled; terminal BVPS reconciled; terminal normalized ROE reconciled; exit P/B independently justified; no solvent-negative-EPS zero-equity shortcut; and both optimism-direction tests completed.

4. Audited security returns and CIO overlay

PB_R0E is frozen across bear, base, bull, probability weighting, reverse-return/max-buy-price, and net-SGD. Terminal share value equals BVPS times exit P/B; terminal shareholder wealth adds distributions once. No cash, investments, debt, claims liability, fee-platform value, NCI, or preferred claim is added after book value.

Return	Bear	Base	Bull	Probability-weighted
Gross USD IRR	**-7.0740688974819%**	**13.546253240732508%**	**26.439346426375643%**	**13.928736635960748%**
Net-SGD IRR	**-9.52%**	**12.29%**	**26.55%**	**13.09%**

Gross terminal wealth per share is USD 146.02179743533353, USD 388.205294881912, and USD 656.0764695282977. Probability-weighted terminal price is USD 360.1687834318569, expected distributions are USD 34.45843075000686, and expected terminal wealth is USD 394.6272141818638. The published probability-weighted gross return is `(394.6272141818638 / 208.87)^(1 / 4.87895028645352) - 1`; it is not an average of scenario IRRs.

The net-SGD overlay is transparent and arithmetically exact. Entry FX is 1.2800 SGD/USD from the archived MAS record, whose SHA-256 is **d05c3725989ee00f0ac8b3d761cb8fae91c631f6d664558b4c5fe32dfa5b0305**. Entry friction is 0.35%, exit/conversion friction is 0.35%, U.S. dividend withholding is the conservative **30% statutory rate** on distributions only, and assumed capital-gains tax is zero. The 30% rate is source-bound to archived IRS guidance with SHA-256 **dea4452f46f30ebd1d07b28c5aca4e37737c6360dd2fd112d18f2e0d7275b394**; no treaty or investor-wrapper eligibility is invented. Terminal FX stresses remain 1.1520, 1.2544, and 1.3312 SGD/USD. Initial SGD cost is unchanged at 208.87 x 1.28 x 1.0035 = SGD 268.28933760000007. Net terminal SGD wealth independently reproduces as SGD 164.6820730612649, SGD 472.37037445576084, and SGD 846.2224807782994. Expected net wealth is SGD 488.9113256877715. Exact 1,782-day annualization produces -9.519117944392374%, 12.293582662217561%, 26.546966149970586%, and probability-weighted 13.08854022667103%. The probability-weighted return annualizes expected terminal wealth rather than averaging scenario returns. Mandatory return fields are finite; visible net-SGD returns use exactly two decimals.

5. File edits, integrity, and clearance

The initial CSA input hashes were `17325e289f2cca31e35dc6fbf26609661ac6b14c12c9332d4e4eb784996dd50c` for Markdown and `9d48fef34a976a4c6dc73a047113f3a3023c51380a782bcf2a234862000790d2` for JSON; the first audited outputs were `944089e43ea94382b48eef5d9fa47d6335f4d46e4c3853f1713440cd4e3da45b` and `92e1aa355e1add59273f42d3bea4eb8e5e8b5bdcffc577ef87ab452349407a2c`. RT withholding-repair inputs to this re-audit were `e1432a56856aa28e39d6b5e4073412318837e235b212b321d3eed7001887ecce` for Markdown and `0eb7f598be662703f0aa68a13d010e58b8abdb87b5f1934fd8f2b6388711a9cc` for JSON. Final CSA re-audited scorecard hashes are `37f33aa59950d222f4e9342c62e71bda6e1c6effa7ec2b36a756b6a1e07986a7` for Markdown and `236713b7dbb029e992581263cda5ee65f786f880bcd457542509cb445852af21` for JSON.

Initial CSA edits were limited to scorecard audit status, Category 1B, Category 6B, affected category subtotals and aggregate scores, the diagnostic classification, threshold flags, explanatory notes, and the explicit CSA edit record. RT then changed only dividend withholding from 15% to 30%, its source fields, and the resulting net-SGD values. This CSA re-audit changed only audit statuses and re-audit disclosures. No price, gross scenario assumption, insurer bridge, gate, score, ER2 verdict, CIO actionability, quote packet, statutory packet, synthesis, segment, management, moat, portfolio ranking, sizing, or trade field was changed by the re-audit.

The repaired scorecard is **CLEARED FOR REPORT ASSEMBLY**. RT corrected the investor-agnostic U.S. dividend-withholding assumption from 15% to the conservative 30% statutory rate, and CSA independently replayed that same-method net-SGD overlay. Gross USD economics, insurer book-value mechanics, scores, gates, verdict, and actionability are unchanged. True residual constraints remain disclosed rather than treated as blockers: no numeric current RBC ratio; current exact goodwill not re-disclosed; full claim triangles and exact product revenue dollars not carried into the package; no source-bound terminal debt/lease path for EV/NOPAT; and no portfolio holdings or risk-budget context. These constraints cap confidence and preserve portfolio-fit UNAVAILABLE, but they do not impair the reconciled P/B-ROE security returns.

Appendix RT - Two-Sided Red Team

The Progressive Corporation (PGR) - Two-Sided Red Team

Run ID: `pulse-cio-20260814T180226+0800` Report ID: `PGR-ER2-20260814T180226+0800` Information cutoff: `2026-08-14T18:02:26+08:00` Price anchor: USD 208.87 on 2026-08-13 Primary valuation method: `PB_ROE` Exact shareholder horizon: 1,782 days, or 4.87895028645352 years

Executive red-team verdict

Thesis survives with unconditional red-team clearance as a WATCH, not as a BUY; CIO actionability remains EXPERIMENTAL. The statutory, retained-perimeter, common-book, BVPS, ROE, terminal-wealth, gross-USD, and repaired net-SGD arithmetic are internally correct. The strongest operating challenge is that the base case calls a 10.2% Personal Lines underwriting margin "normalized" even though Progressive's ten-year Personal Lines average was 7.6% and the modeled price-minus-loss-cost gap remains negative. The strongest rebuttal is that the base exit P/B compresses from 3.536573x to 2.8x despite a modeled 18.76% normalized ROE; a still-discounted 3.2x exit P/B would produce 16.43% gross USD rather than 13.55%.

The audited 65/100, 58/80, and 7/20 scores correctly imply **Reject under the diagnostic CompounderScorer**, especially for the 20% return objective. That diagnostic does not mechanically override the installed ER2 decision table. Management PASS, Moat/2046 YELLOW, and P/E-15 PASS map exactly to WATCH. EXPERIMENTAL is also mechanically defensible because there is one qualitative YELLOW, no hard accounting or data FAIL, and base/expected net-SGD returns remain above 10% even after the withholding repair described below. Portfolio fit and sizing must remain unavailable.

Red-team clearance: CLEARED FOR FINAL PUBLICATION; no publication blockers remain. The sole RT blocker was repaired by replacing unsupported 15% U.S. dividend withholding with the source-bound 30% statutory rate, and CSA independently replayed and cleared the same-method net-SGD overlay. The operating and insurer bridge remains cleared with the nonblocking confidence limits enumerated below.

1. Source confidence and artifact integrity

Accounting and arithmetic confidence is high. The strict insurer validator returned `INSURER_RETURN_BRIDGE_VALID` for SHA-256 `ff8c3a5da982eaa125b108844ee579ac6ebdcf20e6271d0151edb8ec16ab94b4`; the statutory validator returned `STATUTORY_BRIDGE_VALID` for SHA-256 `4f5dcde10bf1584db2f2ff4fe47d396939f9884a1a3340aa76dc69bc214e7259`. After the withholding repair and CSA re-audit, scorecard hashes reproduce as `37f33aa59950d222f4e9342c62e71bda6e1c6effa7ec2b36a756b6a1e07986a7` for Markdown and `236713b7dbb029e992581263cda5ee65f786f880bcd457542509cb445852af21` for JSON; audit hashes are `aa09d3235d5b2567d7f9505eaef92104c341f639282ac8afea456862b2430ee4` and `2b1c6e41423e8611789210c0f7edbefdfb931cd7ec6abf0c49893beba5f5c8b2`. Live SEC/FMP reviews independently tied the TTM, official segment results, quote, and capital bridge.

Forward-assumption confidence is only medium. Exact product dollars, Personal and Commercial loss/catastrophe component histories, retention, conversion, full claim triangles, current numeric RBC, and a terminal debt path are unavailable. Those gaps do not break the arithmetic, but they directly limit confidence in the most important forecast variables. The product allocations, severity/frequency paths, catastrophe loads, reserve-development loads, scenario probabilities, exit P/Bs, and terminal FX rates are analyst assumptions, not issuer guidance.

2. Most fragile assumption and most optimistic Stage 5 number

The single most fragile assumption is **Personal Lines base terminal underwriting profitability**. The synthesis forecasts June 2031 Personal Lines NPE of USD 102.25 billion at an 89.8 combined ratio, producing USD 10.43 billion of pretax underwriting profit. Personal Lines is approximately 87% of modeled underwriting revenue, so this line overwhelms smaller errors elsewhere.

Calling 89.8 "normalized" is too generous. The moat appendix gives a ten-year Personal Lines average underwriting margin of 7.6%, equivalent to a 92.4 combined ratio. The segment model also assumes rate/mix trails loss cost by 2.0-2.8 percentage points in each of 2027-2031, while the expense ratio falls from 21.7 to 20.6 despite continued media, agent, product, and

claims reinvestment. Data and claims scale may justify some structural improvement, but the package does not source-bind a durable 260 basis-point improvement over the ten-year average.

The single Stage 5 number most likely to be revised down is therefore the **USD 10.43 billion base Personal Lines terminal pretax underwriting profit**, not revenue. A terminal 92.4 combined ratio would produce about USD 7.77 billion on the same NPE, USD 2.66 billion less pretax. The synthesis sensitivity shows that a 200-basis-point Personal revenue-CAGR miss cuts EPS by USD 1.28, but it does not show the larger margin-normalization risk.

As a clearly non-controlling sensitivity, linearly increasing the modeled base Personal combined ratio by 52 basis points per year until it reaches 92.4 reduces five-year cumulative after-tax common income by approximately USD 5.99 billion. Terminal common equity falls from USD 73.231 billion to USD 67.241 billion, BVPS from USD 126.37 to USD 116.03, and terminal normalized ROE to about 16.82%. Holding 2.8x P/B still gives an 11.76% gross USD IRR; pairing the weaker economics with 2.5x P/B gives about 9.45%. Terminal EPS remains about USD 18.57, leaving a 33.36% P/E-15 cushion, so this challenge weakens actionability but does not by itself turn WATCH into PASS.

3. Strongest bear case, in its strongest form

Progressive is monetizing an unusually wide pricing and selection advantage at the top of an auto-insurance margin cycle while competitors restore rate adequacy. Over the next two to eight quarters, targeted rate decreases and higher acquisition spending can raise new-business volume before the weaker cohorts' loss ratios and retention economics become visible; liability severity and social inflation then emerge through adverse reserve development. Personal Lines margin reverts toward its 7.6% ten-year average or worse, Commercial Lines' written-premium recovery fails to translate into adequate earned returns, and the market stops paying a high P/B for accumulated equity whose incremental ROE is declining. The validating signal is a rolling four-quarter normalized Personal combined ratio above 96 while cost per sale is at or above TAC for two reporting periods, followed by adverse prior-year development in two successive reviews.

The downside is not insolvency. It is a re-rating of a still-solvent, still-profitable insurer. That distinction matters because the bear terminal book remains USD 53.585 billion and the published negative return comes from 1.5x P/B plus weak earnings, not from a false zero-equity shortcut.

4. Cross-examination of management commentary

- Lori Niederst said, "our cost per sale remains below our TAC" (2026-08-04; data package Section 6). TAC is an internal, undisclosed threshold. Being below it does not prove that the acquired cohorts persist, carry adequate price, or avoid adverse selection. The first contradiction would be PIF growth exceeding NPW growth by more than five points while the loss ratio worsens by more than 200 basis points versus plan.

- Management said Commercial pricing should "become more competitive" as industry rates rise (Q1 2026 letter; data package Section 6). That may improve conversion, but Commercial earned revenue was still down 3.4% year over year in Q2 2026 and liability losses earn slowly. The first contradiction would be better quote-to-bind accompanied by price trailing loss trend by more than two points for two renewals or adverse development from the new core model.

- Andrew Quigg said the priority is to "grow our business and to reinvest in our high-ROE business" (2026-08-04; data package Section 6). Current ROE benefits from exceptional underwriting margins and a low common-equity denominator following a large declared variable dividend. Without numeric RBC and cohort return disclosure, "high ROE" may not describe incremental business. The first contradiction would be movement toward 3.5-to-1 premium-to-surplus while normalized combined ratio exceeds 96 or ordinary dividend capacity/ratings weaken.

5. Stage 5 tie-out and operating cross-check

The TTM recency anchor is sound: FY2025 less H1 2025 plus H1 2026 yields Q3 2025, Q4 2025, Q1 2026, and Q2 2026 without overlap. The quarterlies show Personal revenue growth decelerating from 16.2% to 12.5%, 10.0%, and 7.6%, while Commercial revenue growth was 0.9%, negative 8.3%, negative 4.9%, and negative 3.4%. The base first-year consolidated run rate of about 6.1% above TTM is plausible, but the trend argues against giving the bull an equal tail weight to the bear without stronger cohort evidence.

The segment aggregation is correct. Personal plus Commercial plus the named Other/run-off, investment-result, and service-revenue lines reconcile consolidated revenue. Other is too small to be a hidden plug. Policyholder fees are embedded

in underwriting revenue/combined-ratio economics and not added to profit. Service economics remain separate.

The share path is arithmetically correct but mildly optimistic in assumed repurchase execution: base retires USD 2.0 billion at a fixed USD 230 average even as modeled terminal value rises. Repricing those repurchases to USD 300 raises terminal shares from 579.50 million to 581.53 million and trims gross base IRR only from 13.546% to 13.472%, so it is nonblocking. Conversely, rolling from the July 2 point-in-time 581.372 million shares rather than the Q2 weighted diluted 584.2 million would increase base IRR to roughly 13.65%. The starting-basis mismatch is therefore slightly bearish and immaterial.

6. Score-derived 20% claim

The red team agrees with the audited 7/20 return score and Reject classification. There is no defensible score-derived claim that 20% is plausible at USD 208.87 under the frozen base bridge. The exact method-matched maximum buy price is USD 159.4924. At today's price, 20% requires terminal BVPS of USD 169.292 at 2.8x, or an exit P/B of 3.7511x on modeled base BVPS. That is above today's 3.5366x and 34% above the modeled base multiple. The first assumption to break is not the share count; it is the combination of Personal margin persistence and exit P/B.

7. Two-sided valuation challenge

Strongest reason the model is too optimistic. The 25% bull case stacks correlated favorable states: 15% Personal margin, 11.98% Commercial margin, strong premium/float growth, 4.0% earned yield, a USD 750 million favorable reported investment mark, USD 2.0 billion positive OCI, and a 4.0x exit P/B. The Commercial appendix itself assigns 20% to its bull and 55% to base, yet synthesis changes the consolidated weights to 25/50/25. Using the reviewed Commercial weighting of 25/55/20 on the frozen consolidated wealth outcomes reduces expected wealth from USD 394.63 to USD 381.23 and gross expected IRR from 13.93% to 13.13%. A more adverse but still bounded 30/55/15 mix produces 11.53%. The current 25% bull weight is not empirically source-bound and is the valuation feature most likely to overstate expected wealth.

Strongest reason the model is too bearish. Base P/B compresses from 3.5366x to 2.8x even though normalized ROE remains 18.76%, ratings/capital remain strong, and the franchise has ten consecutive profitable underwriting years. On frozen base BVPS and distributions, a 3.2x exit P/B yields USD 438.75 of terminal wealth and 16.43% gross USD; retaining today's 3.5366x produces USD 481.29 and 18.66%. This is a legitimate bull countercase, but even today's multiple does not clear 20%. It supports WATCH/EXPERIMENTAL, not BUY.

Exit multiple confidence remains medium because the package does not show a hash-bound through-cycle peer/historical P/B range. ROE/P/B/P/E arithmetic is coherent, but 1.5x, 2.8x, and 4.0x remain analyst judgments.

8. Mandatory P&C insurer return-bridge challenge

Retained perimeter, fees, and NCI

Progressive is simpler than the contract's managed-capital examples. The reviewed perimeter has wholly owned underwriting operations, no third-party investment pool, no ordinary/redeemable NCI, no preferred claim, and no asset-manager fee business. FY2025 investments of USD 97.373 billion and Q2 2026 investments of USD 97.221 billion are fully retained. Terminal managed and retained investments are equal at USD 105/140/165 billion. The largest perimeter mismatch is therefore **USD 0**.

The fee bridge also passes. Scenario policyholder fees of USD 1.253/1.670/2.128 billion are memorandum amounts embedded once in underwriting revenue and combined-ratio economics. Separately added manager/performance fees and NCI allocations are zero. No fee or third-party share is removed twice.

Common-book roll-forward and terminal consistency

Case	Reproduced common-equity roll-forward, USD m	Terminal equity	Shares, m	BVPS	ROE	Exit P/B	Price	Wealth	Gross IRR
Bear	34,333 + 26,251.537 - 5,000 - 500 + 200 - 2,000 + 300	53,584.537	584.700	91.6445	8.1241%	1.5x	137.4667	146.0218	-7.0741%
Base	34,333 + 60,098.199 - 20,000 - 2,000 + 300 + 0 + 500	73,231.199	579.504	126.3687	18.7637%	2.8x	353.8323	388.2053	13.5463%

Case	Reproduced common-equity roll-forward, USD m	Terminal equity	Shares, m	BVPS	ROE	Exit P/B	Price	Wealth	Gross IRR
Bull	34,333 + 86,859.538 - 35,000 - 4,000 + 400 + 2,000 + 600	85,192.538	572.200	148.8859	25.7090%	4.0x	595.5438	656.0765	26.4393%

Every identity reproduces. Repurchases reduce equity and shares at the same modeled cost. Terminal price equals BVPS times P/B; wealth adds distributions once; exact-horizon IRRs reproduce. Probabilities sum to 100%, and USD 394.6272 expected wealth annualizes to 13.9287%, not the arithmetic average of scenario IRRs.

ROE/PB/P/E coherence also passes mechanically. Direct normalized P/Es are 18.90x, 15.86x, and 16.90x. The difference from P/B divided by ROE arises from ending-share/ending-book EPS versus average-equity ROE. Economically, the bear's 1.5x P/B for an 8.1% sub-cost-of-equity ROE may be generous, while bull 4.0x is demanding. The range is two-sided rather than a disguised zero-value stress.

Reserves, marks, solvency, debt, and claims

Claims and debt are correctly left inside common book rather than subtracted again. However, terminal debt is unavailable while interest expense is simply assumed at USD 400/350/300 million. Numeric RBC is also undisclosed. Strong ratings, USD 32.9 billion estimated statutory surplus, and USD 9.327 billion 2026 ordinary dividend capacity support solvency, but they do not independently validate USD 20/35 billion five-year base/bull distributions or a move toward 3.5-to-1 premium-to-surplus under a reserve shock. These are nonblocking confidence limits because all scenarios retain large positive equity, but the final report must not describe the capital paths as source-bound commitments.

Investment marks are counted once: bear reports negative USD 500 million and normalizes it out of ROE; bull reports positive USD 750 million and removes it from normalized earnings. Separate OCI of negative/positive USD 2.0 billion is possible for AFS marks, but its correlation with earned yield and underwriting state is not independently modeled. The bull's favorable mark, positive OCI, strong underwriting, and 4.0x P/B should be read as a joint tail, not independent evidence.

No negative-EPS-to-zero-equity shortcut exists. Bear EPS stays positive and common book rises to USD 53.585 billion. A temporary Commercial loss is carried through earnings and capital rather than converted to zero equity. This is a substantive strength of the package.

Insurer bridge too optimistic because: the bull jointly capitalizes exceptional underwriting, favorable investment marks/OCI, strong float growth, and 4.0x P/B at a 25% weight not supported by the reviewed Commercial probability.

Insurer bridge too bearish because: base compresses P/B to 2.8x despite 18.76% normalized ROE, and the share roll-forward begins from weighted diluted rather than point-in-time shares, modestly suppressing BVPS.

9. Net-SGD arithmetic and completed repair

The original 15% withholding was not conservative for an unidentified Singapore-resident direct holder. IRS Publication 515 states that U.S.-source dividends to a foreign person generally face 30% withholding unless a treaty reduces it, and the IRS treaty A-to-Z list does not include Singapore. The current sources are [IRS Publication 515](https://www.irs.gov/publications/p515) and the [IRS treaty list](https://www.irs.gov/businesses/international-businesses/united-states-income-tax-treaties-a-to-z). The repaired scorecard now uses the source-bound 30% statutory rate without inventing wrapper or treaty eligibility.

At 30% withholding, with all frozen FX and friction assumptions unchanged, final net-SGD IRRs are **bear -9.519117944392374%, base 12.293582662217561%, bull 26.546966149970586%, probability-weighted 13.08854022667103%**; visible values are **-9.52% / 12.29% / 26.55% / 13.09%**. Net terminal SGD wealth is SGD 164.6820730612649, SGD 472.37037445576084, and SGD 846.2224807782994; expected net terminal wealth is SGD 488.9113256877715. CSA independently replayed the exact 1,782-day arithmetic. The repair changes no gross USD field, ER2 gate, score, primary method, WATCH verdict, or EXPERIMENTAL status.

Terminal FX stresses and 0.35% entry/exit friction are finite and reproducible but are not forecasts. Dividends are translated at terminal FX rather than receipt-date FX; that is a nonblocking simplification. Capital-gains tax at zero is reasonable for the generic U.S. nonresident/Singapore diagnostic absent special investor facts, but it should remain explicitly conditional.

10. Falsification signals and monitoring priority

The signal that should force exit/reclassification is: **rolling four-quarter normalized Personal Lines combined ratio above 96, excluding discrete catastrophe noise and favorable prior-year development, while cost per sale is at or above TAC for two consecutive reporting periods.** This invalidates the claim that growth remains both well selected and acquisition-efficient. If accompanied by adverse prior-year development in two successive annual reviews, the Management gate should move from PASS to FAIL, not merely YELLOW.

Monitoring order:

- Personal accident-year loss ratio, rate-minus-loss-cost, PIF versus NPW, cost per sale/TAC, and policy life.
- Prior-year reserve development, especially repeated adverse liability emergence; do not accept favorable releases as normalized margin.
- Commercial price-minus-loss trend, new-model cohorts, and the written-to-earned recovery.
- Statutory surplus, ordinary dividend capacity, ratings, reinsurance protection, and any numeric RBC disclosure before accepting higher premium-to-surplus leverage.
- OEM/fleet sensor-data access and agent/embedded distribution evidence needed to move the 2046 moat from YELLOW to PASS.

11. Blocking versus nonblocking conclusions

Blocking before publication: none. The sole RT blocker, U.S. dividend withholding, was repaired to 30% and independently CSA-cleared; all mandatory net-SGD fields were replayed at full precision.

Nonblocking but decision-relevant: base Personal margin is above its ten-year average; scenario weights are judgmental and modestly favor the joint bull versus the Commercial appendix; full claims triangles, numeric RBC, terminal debt, and through-cycle peer/historical P/B evidence are absent; the share-count starting basis is slightly conservative; and FX/distribution timing is simplified.

Final red-team verdict and unconditional clearance: `CLEARED - THESIS SURVIVES AS WATCH / CIO EXPERIMENTAL; NOT BUY; 20% STRETCH FAILS; NO PUBLICATION BLOCKERS.` The audited Reject classification and WATCH verdict can coexist because they answer different rules. The final report should make that distinction prominent and should not let the word EXPERIMENTAL imply sizing, ranking, or trade authority.

Appendix D - Verified Data Package

Progressive (PGR) — Production ER2 Data Package

Run ID: \pulse-cio-20260814T180226+0800\ Information cutoff: 2026-08-14 18:02:26 SGT Fiscal year-end: December 31 Reporting currency and scale: USD millions unless stated otherwise Forecast-base TTM: Q3 2025 + Q4 2025 + Q1 2026 + Q2 2026, ended 2026-06-30 Primary sources: Progressive's 2025 Annual Report, Q2 2026 Form 10-Q and shareholder letter, prior annual reports and quarterly filings, all fetched live in this D-stage run. FMP stable endpoints were fetched live for structured comparison. No data-warehouse cache was read.

Source key

ID	Live source	Period / purpose	D-stage raw evidence
AR25	[2025 Annual Report](https://www.sec.gov/Archives/edgar/data/80661/000008066126000086/pgr-20251231_d2.htm)	FY2025/FY2024/FY2023 and ten-year summary	\d_data_package/d_sec_2025_annual_report.html\
AR24	[2024 Annual Report](https://www.sec.gov/Archives/edgar/data/80661/000008066125000007/pgr-20241231_d2.htm)	FY2024/FY2023/FY2022; taxonomy change	\d_data_package/d_sec_2024_annual_report.html\
AR22	[2022 Annual Report](https://www.sec.gov/Archives/edgar/data/80661/000008066123000006/pgr-20221231_d2.htm)	FY2022/FY2021 backfill	\d_data_package/d_sec_2022_annual_report.html\
Q325	[Q3 2025 10-Q](https://www.sec.gov/Archives/edgar/data/80661/000008066125000129/pgr-20250930.htm)	Q3 segment/consolidated results	\d_data_package/d_sec_2025q3_10q.html\
Q126	[Q1 2026 10-Q](https://www.sec.gov/Archives/edgar/data/80661/000008066126000177/pgr-20260331.htm)	Q1 results	\d_data_package/d_sec_2026q1_10q.html\
Q226	[Q2 2026 10-Q](https://www.sec.gov/Archives/edgar/data/80661/000008066126000308/pgr-20260630.htm)	Q2/H1 results, reserves, capital	\d_data_package/d_sec_2026q2_10q.html\
L3/L1/L2	SEC shareholder letters for [Q3 2025](https://www.sec.gov/Archives/edgar/data/80661/000008066125000129/pgr-20250930ex99shareholder.htm), [Q1 2026](https://www.sec.gov/Archives/edgar/data/80661/000008066126000177/pgr-20260331ex99shareholder.htm), [Q2 2026](https://www.sec.gov/Archives/edgar/data/80661/000008066126000308/pgr-20260630ex99shareholder.htm)	Signed CEO commentary	\d_data_package/d_sec_*_shareholder.html\
FMP-A	FMP annual statements/key metrics	Five-year structured comparison	\d_data_package/d_fmp_*_annual.json\
FMP-P	FMP annual/quarter product segmentation	Independent segment comparison	\d_fmp_product_annual.json\; \d_fmp_product_quarter.json\
FMP-T	FMP earning-call-transcript	Investor-event dates and text	\d_fmp_transcript_*.json\
RAT	[Progressive third-party financial ratings](https://www.progressive.com/auto/ratings/)	Current insurer ratings	Live web fetch; direct archive request returned HTTP 403

0a. Industry classification and disclosure inventory

Progressive is a U.S. domestic property-and-casualty insurer reporting under U.S. GAAP on Forms 10-K and 10-Q. It operates principally in personal and commercial vehicle insurance, with personal property, special lines, fleet/specialty and small-business products. SEC-filed annual reports, quarterly reports, shareholder letters and investor-event transcripts control. FMP is useful for comparisons, but not where insurer classification fails. FMP reported FY2024 investments of $156.197 billion versus official $80.250 billion, and its \operatingIncome\ maps to pretax income rather than Progressive's operating subtotal before interest. Official filings control.

The inventory was mandatory because Progressive is an insurer, FMP's Q2 2026 product feed was stale, FY2021/FY2024 FMP segment taxonomies were not additive standalone quarters, and official reports contain combined-ratio, reserve, investment, statutory-capital and distributability tables absent from FMP. Searches included "net premiums written," "net

premiums earned," "pretax underwriting profit," "loss and loss adjustment expense ratio," "underwriting expense ratio," "combined ratio," "catastrophe losses," "prior accident years development," "loss reserves," "reinsurance," "total investments," "net investment income," "management fees," "performance fees," "noncontrolling interest," "preferred shares," "book value per common share," "statutory surplus," "risk-based capital," "dividends without prior approval," "repurchases," and "financial strength ratings."

Completeness matrix

Dataset / table family	Official source searched	Search terms / table names	Years	Included?	Exclusion reason	Downstream use
Segment economics	AR25/AR24/AR22/Q filings	Segment Information; pretax underwriting profit	FY2021-FY2025/TTM	Yes	None	Segment models/statutory bridge
Premium/policy growth	AR25 summary; letters	NPW/NPE/policies in force	FY2021-FY2025/latest	Yes	Exact Q2 PIF count unnecessary	Growth/moat
Combined-ratio components	AR25/AR22 MD&A	Underwriting Performance	FY2021-FY2025/latest CR	Yes	Quarterly subproduct detail summarized	Pricing/margin
Catastrophe/reserve development	AR25/AR22/Q226	catastrophe; prior accident years	FY2021-FY2025/H1 2026	Yes	Full triangles omitted due size	Reserve adequacy
Investments/NII	AR25/AR24/AR22/Q226	Total investments; NII	FY2021-FY2025/TTM	Yes	Security holdings omitted	Retained economics
Managed/third-party capital	AR25/Q226	managed; NCI; third-party	Current/history	Yes, N/A proof	No pool/current NCI	Ownership
Fee income	AR25/Q226	management/performance/service fees	FY2021-FY2025/TTM	Yes	Manager-fee rows are N/A	Count-once
Equity/BVPS	AR25/AR22/Q226	common/preferred/BVPS	FY2021-FY2025/Q2	Yes	Current goodwill estimate flagged	PB_ROE
Solvency/distributability	AR25/Q226	surplus/RBC/dividends	FY2021-FY2025/Q2	Yes	Numeric RBC undisclosed	Capital floor
Financial-strength ratings	Progressive ratings page/AR25	Best/S&P/Moody's	Current	Yes	Page archive blocked 403	Solvency
Forward commentary	FMP-T/SEC letters	expect/plan/continue/pricing	Four available events	Yes	Q1 2026 FMP transcript empty	Forecasts

Mandatory P&C KPI history

KPI	Granularity	FY2021	FY2022	FY2023	FY2024	FY2025	Latest interim / TTM	Source
Net premiums written	Companywide, $m	46,405	51,081	61,550	74,424	83,174	Q2 2026 YoY +5%	AR25/L2
Net premiums earned	Companywide, $m	44,369	49,241	58,665	70,799	81,661	TTM 84,483	AR25/sealed derivation
Personal Lines PIF	Thousands	25,512	26,307	28,591	33,811	37,428	Q2 2026 +8% YoY	AR25/L2
Commercial Lines PIF	Thousands	971	1,046	1,099	1,141	1,191	Q2 2026 +3% YoY	AR25/Q2 2026 release
Statutory combined ratio	Points	94.8	95.3	94.3	88.2	87.1	Q2 2026 GAAP 87.3; TTM 87.8	AR25/L2/calc
GAAP loss/LAE ratio	Points	75.7	77.3	77.6	69.1	65.9	TTM 66.2	AR22/AR25/calc
GAAP underwriting-expense ratio	Points	19.6	18.5	17.3	19.7	21.5	TTM 21.6	AR22/AR25/calc
Prior-year reserve development	Favorable/(unfavorable), $m	5	86	(1,094)	416	1,394	H1 2026 favorable 1,002	AR22/AR25/Q226
Total investments	Period-end, $m	51,514	53,548	65,999	80,250	97,373	Q2 2026 97,221	Official balance sheets
Net investment income	Annual/TTM, $m	835	1,236	1,866	2,803	3,549	TTM 3,758	Official NII tables
Common equity	Period-end, $m	17,738	15,397	19,783	25,591	30,323	Q2 2026 34,333	Official/calc
Common BVPS	Period-end, $	30.35	26.32	33.80	43.69	51.74	Q2 2026 59.06	AR25/Q226 calc
Statutory surplus	Period-end, $m	16,424	17,880	22,250	27,171	28,370	Q2 2026 est. 32,900	AR25/Q226

TTM loss/LAE of $55,949 million divided by TTM NPE $84,483 million equals 66.2%. TTM pretax underwriting profit of $10,306 million makes combined ratio \`100 - 10,306 / 84,483 × 100 = 87.8\`; the residual 21.6 points is

underwriting expense after Progressive's fee netting. These are calculated, not issuer-quoted TTM ratios.

0b. P&C insurer ownership perimeter

AR25 states the consolidated statements include The Progressive Corporation and wholly owned insurance/non-insurance subsidiaries in which it has a controlling financial interest; intercompany balances are eliminated. Current balance sheets contain no redeemable or ordinary NCI. Searches found no managed-investment pool, third-party capital, management fee, or performance fee revenue. "Fees and other revenues" are policyholder installment/late-payment/ceding-commission revenues embedded in underwriting. "Service revenues" are separately bridged. External adjustments are therefore genuinely not applicable.

Investments and NII ownership

Ownership line	FY2021	FY2022	FY2023	FY2024	FY2025	Latest / TTM	Identity
Consolidated investments	51,514	53,548	65,999	80,250	97,373	Q2 97,221	Official
Managed investments, separately defined	N/A	N/A	N/A	N/A	N/A	N/A	No managed pool
Less: external-investor adjustment	0	0	0	0	0	0	No external vehicle/NCI
Retained investments	51,514	53,548	65,999	80,250	97,373	Q2 97,221	Consolidated less zero
Consolidated NII	835	1,236	1,866	2,803	3,549	TTM 3,758	Income less investment expense
Less: NII attributable to external investors	0	0	0	0	0	0	No external investor
Retained NII	835	1,236	1,866	2,803	3,549	TTM 3,758	Exact
Ownership residual	0	0	0	0	0	0	Exact

Average retained-investment yield was about 2.35% in 2022, 3.12% in 2023, 3.83% in 2024 and 4.00% in 2025. TTM NII $3,758 million divided by average June 2025/June 2026 retained investments $92,916 million is 4.05%. Realized/unrealized gains are outside NII and enter statutory investment profit separately.

Underwriting, fees and NCI

Profit / ownership line	FY2021	FY2022	FY2023	FY2024	FY2025	Latest / TTM	Treatment
Pretax underwriting profit — Personal Lines	1,299	1,265	2,885	6,840	8,854	TTM 8,944	Fully parent-owned
Pretax underwriting profit — Commercial Lines	768	810	123	1,136	1,416	TTM 1,395	Fully parent-owned
Other underwriting/run-off	(1)	(11)	(16)	(18)	(21)	TTM (33)	Parent-owned reconciliation
Management fees	N/A	N/A	N/A	N/A	N/A	N/A	No asset-manager business
Performance fees	N/A	N/A	N/A	N/A	N/A	N/A	No asset-manager business
Service-business profit/(loss)	19	3	(39)	(33)	(24)	TTM (23)	Separate/once
Redeemable NCI — underwriting	0	0	0	0	0	0	No NCI
Redeemable NCI — investment	0	0	0	0	0	0	No NCI
Redeemable NCI — other/roll-forward	0	0	0	0	0	0	No NCI
Net income available to common	3,324	695	3,865	8,463	11,308	TTM 11,695	After preferred deductions

FY2021/FY2022 Personal Lines adds exact old Personal Lines and Property values to conform to the current taxonomy. No plug is used.

Fee presentation/count once

Fee component	Gross amount	Embedded in underwriting	Through NCI	External adjustment	Incremental common model	Counted line
Policyholder fees/other underwriting revenue, TTM	1,208	1,208	0	0	0	Segment profit
Service revenue, TTM	534	0	0	0	534 less expense 557	Service loss 23
Management fees	N/A	N/A	N/A	N/A	0	None
Performance fees	N/A	N/A	N/A	N/A	0	None
Fee-count-once residual	0	0	0	0	0	Exact

Older "investment management fees" are expenses of managing Progressive's own portfolio, not third-party revenue. No manager economics are added.

Common equity, capital actions and solvency

Capital line	FY2021	FY2022	FY2023	FY2024	FY2025	Latest interim	Source / constraint
Common equity	17,738	15,397	19,783	25,591	30,323	Q2 34,333	Total equity less preferred
Common shares outstanding, m	584.4	584.9	585.3	585.8	586.1	581.372 on 2026-07-02	AR25/Q226
Common BVPS, $	30.35	26.32	33.80	43.69	51.74	59.06	Exact calculation
Tangible BVPS, $	29.37	25.79	33.41 est.	43.30 est.	51.35 est.	58.67 est.	Deduct $228m last-disclosed goodwill
Preferred equity	494	494	494	0	0	0	Series B redeemed Feb-2024
Common dividends paid (cash flow; not equity roll-forward)	3,747	234	234	674	2,871	H1 8,030	Cash flow; timing differs from declaration
Preferred dividends paid	27	27	44	8	0	0	Cash flow
Common issuance	Equity awards only	Equity awards	Equity awards	Equity awards	Equity awards	Equity awards	No material cash issue
Common repurchases	223	99	141	134	166	H1 1,092	Open market + tax withholding
Preferred issuance/redemption	0	0	0	500 redemption	0	0	$508m incl. dividend
Statutory surplus	16,424	17,880	22,250	27,171	28,370	Q2 est. 32,900	Official
RBC	Above minimum	Above minimum	Above minimum	Above minimum	Above minimum	No adverse update	Numeric ratio undisclosed
Ratings	Not repulled	Not repulled	Not repulled	Not repulled	Strong	Best A+; S&P AA; Moody's Aa	RAT
Dividend capacity	State-law constrained	2023 cap 2,949	State constrained	State constrained	2026 cap 9,327	RBC/state/12-month limits	Note 8

Current common book excludes preferred because none is outstanding. Conservative TBVPS carries the last separately disclosed $228 million goodwill; AR25/Q226 no longer disclose a current amount. It does not replace exact BVPS in PB_ROE.

The following declaration-basis roll-forward is the controlling common-equity bridge. The $7,913 million annual-variable dividend declared in December 2025 reduced FY2025 equity and was paid in January 2026; its cash payment therefore does not reduce H1 2026 common equity a second time.

Common-equity roll-forward, $m	FY2025	H1 2026	Source / treatment
Beginning common equity	25,591	30,323	Prior-period closing shareholders' equity; no preferred outstanding
Net income available to common	11,308	6,129	No NCI or preferred dividend deduction
OCI attributable to common	1,526	(950)	Statement of changes in shareholders' equity
Common dividends declared	(8,146)	(116)	Declaration basis; H1 excludes the January cash payment of the December 2025 declaration

Common-equity roll-forward, $m	FY2025	H1 2026	Source / treatment
Common-share repurchases at cost	(166)	(1,092)	Par, paid-in-capital and retained-earnings effects combined
Common issuance/SBC and other equity movements	210	39	Equity compensation and other issuer-reported movements; no material cash issuance
Closing common equity	30,323	34,333	Exact reconciliation
Roll-forward residual	0	0	Exact

At June 30, 2026, the balance sheet reports 581 million net common shares on its rounded face; the Form 10-Q cover reports 581,371,770 shares outstanding on July 2, 2026. Using that near-period-end exact disclosed count, $34,333 million / 581.371770 million = $59.06 BVPS. The two-day proxy is immaterial and is not a weighted-average diluted share count.

Solvency is not distributability. FY2025 statutory surplus was $28,370 million and Q2 2026 estimated surplus $32.9 billion. RBC exceeded minimums, but no numeric ratio is disclosed. Subsidiaries paid $10,027 million to the parent in 2025 and could pay $9,327 million during 2026 without prior approval, subject to state-specific, capital and 12-month restrictions. Statutory surplus is not automatically distributable common equity.

\P&C_OWNERSHIP_PERIMETER_STATUS: VERIFIED — CLEARED FOR FORECASTING\

\STATUTORY_BRIDGE_SHA256: 4f5dcde10bf1584db2f2ff4fe47d396939f9884a1a3340aa76dc69bc214e7259\

1. Reporting structure and taxonomy

Current segments are Personal Lines and Commercial Lines. Personal Lines writes personal auto, special lines, residential property, umbrella and NFIP flood. Commercial Lines writes commercial auto, BOP/general liability/property, workers' compensation, TNC and Fleet & Specialty. Operations are throughout the U.S.; no material geographic segment is disclosed.

Beginning Q4 2024, personal residential property moved into Personal Lines, reducing three operating segments to two. AR24 presents FY2024/FY2023/FY2022 on the new basis. FY2021/FY2022 current-basis Personal Lines in this package adds old Personal Lines and old Property using the exact common profit metric. FMP FY2021 uses Agency/Direct taxonomy and FY2024 quarterly rows retain Property early in the year; neither is silently mixed.

FY2025 segment	Underwriting revenue, $m	Share of modeled total	Description
Personal Lines	71,838	86.7%	Personal vehicles/property
Commercial Lines	11,017	13.3%	Commercial auto/TNC/Fleet/BOP
Modeled total	82,855	100.0%	Excludes $2m Other

2. Consolidated historicals

Metric	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Revenue, $bn	47.70	49.61	62.11	75.37	87.67	Official/FMP comparison
Statutory operating income before interest, $bn	4.43	1.17	5.17	10.99	14.50	Official components/FMP EBIT
Operating margin	9.3%	2.3%	8.3%	14.6%	16.5%	Calculated
Net income, $bn	3.35	0.72	3.90	8.48	11.31	Official
Diluted EPS, $	5.66	1.18	6.58	14.40	19.23	Official
Diluted shares, m	587.1	587.1	587.5	587.7	588.1	Official
Capex, $bn	0.244	0.292	0.252	0.285	0.348	Cash flow
FCF, $bn	7.52	6.56	10.39	14.83	17.20	OCF-capex
Diagnostic ROIC	15.5%	4.0%	16.7%	29.2%	33.1%	Calculation below

ROIC is \EBIT × (1-effective tax rate) / average(common equity + preferred + debt)\. Effective rates were 20.4%, 21.8%, 20.4%, 20.8%, 20.5%; NOPAT about $3.53bn, $0.91bn, $4.12bn, $8.70bn, $11.53bn. This diagnostic does not replace common ROE/statutory-capital analysis for an insurer.

3. Segment historicals

Personal Lines

Metric	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Economic revenue base, $bn	37.42 NPE	40.15 NPE	49.51 UW revenue	60.98 UW revenue	71.84 UW revenue	AR22/AR25
YoY growth	N/A	7.3%	23.3%	23.2%	17.8%	Calculated; basis boundary
Pretax underwriting profit (loss), $bn	1.30	1.27	2.89	6.84	8.85	Official
Margin on NPE	3.5%	3.2%	5.9%	11.4%	12.5%	Issuer method

FY2021/FY2022 combine old Personal Lines and Property. Older revenue is NPE because fees were allocated separately; FY2023 onward is underwriting revenue. Profit is exact/additive.

Commercial Lines

Metric	FY2021	FY2022	FY2023	FY2024	FY2025	Source
Economic revenue base, $bn	6.95 NPE	9.09 NPE	10.05 UW revenue	10.88 UW revenue	11.02 UW revenue	AR22/AR25
YoY growth	N/A	30.9%	10.6%	8.3%	1.3%	Calculated
Pretax underwriting profit (loss), $bn	0.77	0.81	0.12	1.14	1.42	Official
Margin on NPE	11.1%	8.9%	1.2%	10.6%	13.0%	Issuer method

3a. Historical statutory-profit bridge and forecast-driver ledger

Sealed packet SHA-256: \`4f5dcde10bf1584db2f2ff4fe47d396939f9884a1a3340aa76dc69bc214e7259\`. Exact common segment basis: \`Pretax underwriting profit (loss)\`.

FY2025

Bridge line	Classification	Value	Source ID	Running subtotal
Personal Lines	segment profit	8,854	SEC_2025_AR	8,854
Commercial Lines	segment profit	1,416	SEC_2025_AR	10,270
Sum of reportable segment profit	segment profit	10,270	SEC_2025_AR	10,270
Other underwriting businesses and run-off operations	corporate unallocated	(21)	SEC_2025_AR	10,249
Consolidated pretax underwriting profit	subtotal	10,249	SEC_2025_AR	10,249
Investment profit (loss)	operating	4,276	SEC_2025_AR	14,525
Service businesses profit (loss)	operating	(24)	SEC_2025_AR	14,501
Statutory operating income before interest	statutory subtotal	14,501	SEC_2025_AR	14,501
Interest expense	below line	(278)	SEC_2025_AR	14,223
Income before income taxes	statutory subtotal	14,223	SEC_2025_AR	14,223
Provision for income taxes	tax	(2,915)	SEC_2025_AR	11,308
Net income	statutory subtotal	11,308	SEC_2025_AR	11,308

TTM ended 2026-06-30

Bridge line	Classification	Value	Source ID	Running subtotal
Personal Lines	segment profit	8,944	TTM_DERIVATION	8,944
Commercial Lines	segment profit	1,395	TTM_DERIVATION	10,339
Sum of reportable segment profit	segment profit	10,339	TTM_DERIVATION	10,339
Other underwriting businesses and run-off operations	corporate unallocated	(33)	TTM_DERIVATION	10,306

Bridge line	Classification	Value	Source ID	Running subtotal
Consolidated pretax underwriting profit	subtotal	10,306	TTM_DERIVATION	10,306
Investment profit (loss)	operating	4,794	TTM_DERIVATION	15,100
Service businesses profit (loss)	operating	(23)	TTM_DERIVATION	15,077
Statutory operating income before interest	statutory subtotal	15,077	TTM_DERIVATION	15,077
Interest expense	below line	(297)	TTM_DERIVATION	14,780
Income before income taxes	statutory subtotal	14,780	TTM_DERIVATION	14,780
Provision for income taxes	tax	(3,085)	TTM_DERIVATION	11,695
Net income	statutory subtotal	11,695	TTM_DERIVATION	11,695

Historical line	FY2025	TTM	Forecast treatment	Driver	Bear/base/bull rule
Other underwriting/run-off	(21)	(33)	Fixed/range	Run-off history	More negative / TTM / toward zero
Investment profit	4,276	4,794	Retained NII + through-cycle gains	Retained assets/yield	Stress / normalize / favorable
Service profit/loss	(24)	(23)	% service revenue or fixed	Revenue 534; expense 557	Wider loss / TTM / break-even
Interest expense	(278)	(297)	Debt/rate schedule	Q2 debt 8,387	Higher / current / lower
Tax	(2,915)	(3,085)	Effective tax rate	Recent 20.5%-20.9%	21.5% / ~21% / 20.5%

\STATUTORY_BRIDGE_STATUS: VERIFIED — CLEARED FOR FORECASTING\

4. Product / sub-segment historicals

Current filings do not separately disclose exact product revenue dollars for personal auto, special lines, personal property, core commercial auto, TNC, Fleet & Specialty or BOP. They disclose approximate premium mix and growth. No dollars were back-solved from rounded percentages.

Segment	Product	Description	Dollar disclosure?	Historical disclosure
Personal	Personal auto	Private passenger auto	No exact current dollars	~90% Personal NPW; just under 80% companywide
Personal	Special lines	Motorcycles/RVs/watercraft	No	~5% Personal NPW
Personal	Property	Homeowners/renters/flood	Old-taxonomy dollars only	~5% Personal NPW currently
Commercial	Core commercial auto	Five BMTs	No	~80% Commercial NPW
Commercial	TNC	Transportation-network policies	No	Growth/timing only
Commercial	Fleet & Specialty	Medium fleet/workers' comp	No	Quoting/PIF commentary
Commercial	BOP	Small-business package	No	Rollout commentary

Segment	Product	Method	Latest trend	Source
Personal	Auto	PIF/NPW/conversion	Q2 PIF +9%; vehicle NPW +5%; conversion +5%	L2
Personal	Property	PIF/NPW/CR	Q2 PIF/NPW +1%; CR 78.0	L2
Personal	Special lines	Milestone	>2m watercraft insured	L2
Commercial	Total	PIF/NPW/CR	Q2 PIF +3%; NPW +4%; CR 85.3	Q2 2026 release/L2
Commercial	Core auto	Mix/rates	FY2025 AWP -6%; aggregate rates +9%	AR25
Commercial	TNC	Renewal/mileage	Drove Q1 growth; moderated Q2	L1/L2

5. Most recent quarterly trend

FY ends December 31. Most recent completed quarter: Q2 FY2026, April-June 2026, reported July 15 via the [release](https://www.sec.gov/Archives/edgar/data/80661/000080066126000262/pgr202606ex99earningsrelea.htm); Form

10-Q filed August 3.

Quarter	Personal revenue, $bn	YoY	Margin	Commercial revenue, $bn	YoY	Margin	Source
Q3 2025	18.361	16.2%	10.5%	2.794	0.9%	10.8%	Q325/FMP-P
Q4 2025	18.711	12.5%	11.3%	2.681	(8.3%)	15.3%	AR25 less Q325
Q1 2026	18.660	10.0%	14.0%	2.603	(4.9%)	11.0%	Q126
Q2 2026	19.168	7.6%	12.4%	2.709	(3.4%)	14.7%	Q226

Revenue is underwriting revenue. Q4 is FY2025 less nine-month 2025: Personal profit $2,125 million; Commercial $416 million. Q2 is official, not inferred from stale FMP product data. Largest-segment Q2 NPW growth was 5%, confirmed live in L2.

6. Management commentary

FMP live transcripts exist for Q2 2025 (2025-08-05), Q3 2025 (2025-11-04), Q4 2025 (2026-03-03), Q2 2026 (2026-08-04). Q1 2026 returned empty. Dates match fiscal periods. Progressive uses investor events and signed letters rather than conventional guidance calls.

Personal Lines

- **2025-08-05, Patrick Callahan, Personal Lines President:** "Building on our exceptional underwriting profit performance, we continue to invest to drive continued growth." Supports acquisition spending while below 96 CR.
- **Q3 2025 letter, Tricia Griffith, CEO:** "Across all products we seek to deliver our most competitive rates to consumers, monitor loss trends and continuously evaluate both rate and non-rate actions." Growth/rate are joint levers.
- **Q3 2025 letter, Griffith:** "We continue to prioritize insuring lower-risk properties ... and only accepting new business when bundled with a Progressive personal auto policy." Property growth is risk-constrained.
- **Q1 2026 letter, Griffith:** "We plan to continue to invest across media platforms and our agencies to support ongoing growth and retention as long as our media spend remains efficient." Advertising flexes with economics.
- **Q1 2026 letter, Griffith:** "We are now selectively increasing availability while maintaining disciplined risk selection." Property can accelerate cautiously.
- **Q2 2026 letter, Griffith:** "We continue to invest across all products to drive growth and retain existing customers." Media/agent incentives rose.
- **2026-08-04, Lori Niederst, Chief Personal Lines Officer:** "Despite the increase in spend, though, our cost per sale remains below our TAC." Clear acquisition-efficiency anchor.

Commercial Lines and capital

- **Q3 2025 letter, Griffith:** "We continue to invest in product segmentation and underwriting capabilities to drive future growth and profitability." Weak premium trend did not stop investment.
- **Q1 2026 letter, Griffith:** "As the commercial auto industry rate levels rise, we expect our pricing to become more competitive." Prospective conversion anchor.
- **Q1 2026 letter, Griffith:** "We expect to launch in the first state in the third quarter of this year." Refers to the next core commercial model.
- **Q2 2026 letter, Griffith:** "Our Commercial Lines (CL) business finished the second quarter with NPW growth of 4% YOY at an excellent 85.3 CR." The Q2 earnings release separately reports Commercial Lines PIF growth of 3%; margin supports reinvestment.
- **2026-08-04, Griffith:** "We are really in a good position from a profit perspective, which really allows us to focus more on growth." Do not extrapolate 2025 weakness indefinitely.
- **2026-08-04, Andrew Quigg, CFO:** "But our top priority will be to grow our business and to reinvest in our high-ROE business." Capital return is residual.

- **2026-08-04, Quigg:** "In times when our growth slows, and we have additional capital ... we do plan to return that to shareholders." Use scenario-dependent repurchases/dividends.

7. Capital allocation

Year	Capex, $bn	Capex/revenue	R&D	Buybacks, $bn	Common dividends, $bn	M&A, $bn	Source
2021	0.244	0.5%	Not separately disclosed	0.223	3.747	0.313 Protective	AR22
2022	0.292	0.6%	Not separately disclosed	0.099	0.234	0	AR22
2023	0.252	0.4%	Not separately disclosed	0.141	0.234	0	AR25
2024	0.285	0.4%	Not separately disclosed	0.134	0.674	0	AR25
2025	0.348	0.4%	Not separately disclosed	0.166	2.871	0	AR25

No R&D line is reported; product/software costs are embedded in expenses or capitalized software. H1 2026 common dividends were $8.030 billion and repurchases $1.092 billion. Buybacks reduce common equity and shares at cost. FMP's FY2024 $634 million "common repurchase" incorrectly includes $500 million preferred redemption; official common repurchase was $134 million.

8. Balance-sheet snapshot

Item	Q2 2026, $bn	Source / treatment
Cash/equivalents	0.178	Q226
Short-term investments	1.978	Q226
Total investments	97.221	Fully retained
Total debt	8.387	Q226
Cash-only net debt	8.209	Not insurer valuation metric
Net debt / TTM statutory operating income	0.54x	Calculated
Goodwill/intangibles	Current exact not separately re-disclosed	Last goodwill $0.228bn
Common equity	34.333	Q226
Preferred equity	0	Redeemed
Conservative tangible common equity	34.105 est.	Less last goodwill
Statutory surplus	32.9 est.	Q226

9. Recent corporate actions

- March 23, 2026: $1.5 billion aggregate five- and ten-year senior notes; debt rose to $8.387 billion.
- July 3, 2026: John Sauerland retired; Andrew Quigg succeeded as CFO after the January announcement.
- H1 2026: $1.048 billion open-market common repurchases plus $44 million tax withholding.
- January 2026: $8.0 billion annual variable common dividend was paid.
- FY2025/2026: $1.224 billion Florida personal-auto policyholder-credit accrual, credits beginning early 2026.
- No material acquisition/divestiture closed in the last twelve months in controlling sources.

10. Open data gaps

- **True non-disclosure — numeric RBC:** AR25/Q226 state ratios exceeded minimums but disclose no numeric ratio. Statutory surplus/dividend capacity remain clear.

- **True non-disclosure — current goodwill/intangibles:** AR25/Q226 no longer state them separately. AR24 disclosed $228 million goodwill. TBVPS is estimated; exact BVPS controls PB_ROE.
- **True non-disclosure — current product dollars:** official sources disclose mix/growth/policies/ratios, not exact dollars for products.
- **Not applicable — external investor/NCI:** wholly owned operations and no current NCI; no managed pool.
- **Not applicable — management/performance fees:** no manager-fee business. Underwriting fees/service revenue are counted once.
- **Not applicable — current preferred claim:** Series B fully redeemed February 2024.
- **Estimated — FY2021 current-taxonomy Personal Lines:** exact old Personal and Property lines added; no plug.
- **Not fetched / omitted — full claims triangles:** official tables exist; aggregate reserve development/balance/drivers included.
- **Not fetched / omitted — every quarterly subproduct loss/expense ratio:** segment quarterly margin and five-year companywide components included.
- **Archive limitation — ratings page:** live web fetch succeeded; direct raw download returned HTTP 403 twice. Exact current ratings cite live page.

No segment-profit bridge gap, external-owner adjustment, fee residual, NCI composition gap, preferred/common ambiguity, or distributability omission remains. Remaining gaps concern disclosure granularity and do not block the ownership perimeter.