

When Scale Outruns Fees

The Scale–Fee-Density Paradox in China’s Trust Industry

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Abstract

China’s trust industry has returned to asset growth while its fee-generating capacity has not expanded at the same pace. This study documents that divergence using a balanced panel of nine trust institutions with scope-consistent public disclosures from 2021 to 2025 (45 firm-years). On a contemporaneous year-end basis, these institutions held RMB4.87 trillion of trust assets in 2021 (23.7% of the industry total) and RMB8.08 trillion in 2024 (27.3%). The primary measure is fee density: annual trust-business or net fee income divided by year-end trust assets under management (AUM), expressed in basis points. Across institutions, median cumulative AUM growth was 117.1%, whereas median fee-income growth was –32.8% and median fee density fell by 62.2%. Fee density declined at all nine institutions, yielding an exact two-sided sign-test p-value of 0.0039. A two-way fixed-effects log specification estimates an elasticity of fee income with respect to AUM of 0.623 (homoskedastic standard error 0.185), below the proportional benchmark of one. Point estimates remain below one across alternative windows, first differences, exclusion of explicitly caveated observations, and leave-one-institution-out checks, although the estimate excluding one influential institution is not distinguishable from proportional scaling. The evidence therefore supports a consistent descriptive pattern of scale–fee dilution, with magnitudes that vary across sample perturbations. It does not identify a causal mechanism and does not equate fee density with accounting profitability. The findings suggest that AUM growth is an incomplete performance signal during a transition toward asset-service and standardized asset-management activities.

Keywords: trust companies; assets under management; fee density; sustainable financial development; institutional disclosure; China

JEL classifications: G21; G23; L25

1. Introduction

Scale is usually treated as a sign of competitive strength in financial intermediation. A larger asset base can spread fixed technology, compliance, distribution, and professional costs; deepen client relationships; and increase bargaining power. Yet scale can also grow faster than monetization. New assets may enter low-fee mandates, standardized products, administrative service arrangements, or activities in which pricing is compressed. In that setting, assets under management rise while fee income per unit of assets falls. This paper calls that divergence the scale–fee-density paradox, while using the term cautiously: the empirical object is fee-generating capacity, not accounting profit.

The sustainability of financial development depends not only on fiduciary scale but also on whether institutions can support that scale with durable revenue capacity, transparent reporting, and adequate service infrastructure.

The issue is especially salient for Chinese trust institutions. Following the 2018 asset-management reforms and the subsequent contraction of channel and financing activities, the sector has been pushed toward standardized asset management, asset services, and charitable trusts. The 2023 business-classification rules formalized three broad categories—asset-service trusts, asset-management trusts, and charitable trusts—and divided them into 25 business types. This reclassification sharpened the distinction between balance-sheet-like financing, active investment management, and fiduciary or administrative service. It also made aggregate AUM harder to interpret as a homogeneous revenue base: identical amounts of assets can carry very different fee schedules, service intensities, and performance-remuneration potential.

Industry-level figures illustrate the tension. Official association data show that trust assets resumed expansion before operating outcomes fully recovered. But aggregate data cannot establish whether the same institutions expanded assets while experiencing thinner fee yields, and cross-sectional comparisons are vulnerable to persistent differences in business mix and disclosure scope. A further measurement break limits recent annual comparisons: the association's comparable full-year trust-business-income series ends in 2022, and its legacy functional classification of trust assets ends in 2023. A comparable annual industry fee-density series is therefore unavailable after 2022, making institution-level disclosures necessary to extend the analysis through 2025. The central question is narrow: within institutions that report reasonably comparable annual series, did fee or trust-business income scale proportionally with AUM during 2021–2025?

The paper contributes in three ways. First, it constructs a disclosure-based balanced panel with explicit scope normalization. The sample is intentionally small: nine institutions and 45 firm-years. It favors comparability over breadth and does not claim to represent the industry's population, although the institutions accounted for 23.7% of industry trust assets at end-2021 and 27.3% at end-2024 on a contemporaneous year-end basis. Second, it combines a directly interpretable fee-density measure with a log-log two-way fixed-effects elasticity. The ratio describes monetization per unit of AUM; the elasticity checks whether changes in the numerator are sub-proportional without relying only on a common-denominator ratio. Third, it emphasizes robustness and inferential restraint. The analysis reports endpoint sign tests, alternative time windows, first differences, observation exclusions, and leave-one-institution-out diagnostics, while declining to present conventional clustered inference with only nine clusters as decisive.

The result is clear in direction. From 2021 to 2025, eight of nine institutions expanded AUM, but all nine recorded lower fee density. Median institution-level AUM growth exceeded 100%, median fee income fell by roughly one-third, and median fee density declined by more than three-fifths. The baseline fixed-effects elasticity is 0.623: a 1% within-institution increase in AUM is associated with only a 0.62% increase in fee income, after common year effects. Every leave-one-out point estimate remains below one, although the estimate excluding one influential institution approaches proportional scaling and is not distinguishable from one. The broader pattern survives plausible sample perturbations, but the small, selected panel and nonuniform income labels preclude causal or population-wide claims.

The interpretation is operational rather than mechanical. The estimates are consistent with a shift toward lower-fee asset services, price competition, declining performance remuneration, or legacy-business runoff. They cannot distinguish among those channels. What they do establish is that asset growth alone overstated the development of the sampled institutions' fee engines during the observation window. For managers, analysts, and regulators, the implication is to pair AUM with fee yield, recurring revenue quality, business mix, and the cost of serving assets.

2. Institutional Background and Conceptual Framework

2.1 Trust institutions and the changing meaning of scale

Chinese trust institutions are licensed nonbank financial institutions that act as trustees and receive remuneration for managing trust affairs. Trust assets are legally separate from proprietary assets, so AUM is not equivalent to the institution's balance sheet. Economically, however, AUM indicates the volume of fiduciary relationships and assets administered or managed. Its revenue relevance depends on mandate type, pricing, duration, and whether remuneration is fixed, performance-linked, transaction-based, or embedded in a broader service arrangement.

The regulatory transition altered this mapping. The 2018 asset-management framework emphasized look-through regulation, reduced implicit guarantees, and constrained multi-layer channel structures. The 2023 classification notice then defined asset-service trusts, asset-management trusts, and charitable trusts as distinct categories. Asset-service trusts may generate stable but relatively thin administrative fees; asset-management trusts can generate management and performance fees but face market competition and cyclical returns; charitable trusts need not maximize commercial fee output. Consequently, an increase in aggregate AUM can reflect a change in mix rather than a proportionate expansion of monetizable, high-fee mandates.

2.2 Scale, capacity, and fee dilution

The asset-management literature documents decreasing returns to scale alongside the cost economies that a larger asset base can provide. In Berk and Green's (2004) equilibrium model, capital flows toward skill until decreasing returns dissipate abnormal performance. Chen et al. (2004) and Yan (2008) find that larger mutual funds can suffer weaker performance, particularly when liquidity and organizational complexity bind. Pástor, Stambaugh, and Taylor (2015) likewise document decreasing returns at the industry level and more nuanced fund-level effects. These studies concern investment performance, not trust-company fee income, but they establish a general point: financial-intermediation capacity need not scale linearly with assets.

For a trust institution, let F_{it} denote annual scope-consistent trust-business or net fee income and A_{it} denote year-end trust AUM. If fee income scaled proportionally, $F_{it} = kA_{it}$ and the fee yield k would remain constant. More generally, suppose $F_{it} = cA_{it}^\beta$. Then $\beta = 1$ implies proportional scaling, $\beta < 1$ implies declining fee density as scale rises, and $\beta > 1$ implies increasing fee density. The empirical analysis treats $\beta < 1$ as the defining signature of scale-fee dilution.

Four mechanisms could generate $\beta < 1$. First, composition may shift toward low-fee service or passive mandates. Second, larger institutional mandates may carry volume discounts. Third, performance remuneration may fall even when administered assets rise. Fourth, legacy high-margin financing activities may run off faster than new businesses monetize. Fixed compliance, technology, and professional costs could still produce cost-side economies, so declining fee density does not necessarily imply declining profit margins. Direct cost and profit data would be required to make that stronger claim.

3. Data and Measurement

3.1 Source hierarchy and sample construction

The dataset is assembled from annual reports of trust institutions, listed-parent annual reports, official company disclosures, and regulatory or exchange filings. A small number of annual values are drawn from authoritative reproductions of official reports when the original document is not machine-accessible. The source hierarchy gives priority to audited parent-company disclosures and trust-asset statements, followed by

official summaries and clearly identified secondary reproductions. Each observation is tied to a source note and a scope decision.

An institution enters the strict sample only if it has five consecutive annual observations from 2021 through 2025 for both year-end trust AUM and a scope-consistent measure of fee or trust-business income. The income series must remain economically comparable within an institution. Consolidated commission income is not used when it includes brokerage, asset-management-subsidiary, or other non-trust activities. When an annual report separately identifies base trust fees, performance remuneration, or other trust remuneration, those components are combined to construct trust-business income. When reports disclose only a consistently defined parent net fee measure, that series is retained as labeled.

These rules produce a balanced panel of nine institutions: BOCOM Trust, CITIC Trust, Jiangsu Trust, Yingda Trust, Hwabao Trust, Shanghai Trust, Shaanxi International Trust, Huaneng Guicheng Trust, and Huaxin Trust. The panel is selected on disclosure completeness and comparability. It is not random, and disclosure quality may correlate with ownership, listing status, size, or governance. The evidence should therefore be read as a documented pattern within the observed institutions, not an estimate of an industry-population parameter.

Although small in count, the panel is economically material. Combined year-end trust assets of the nine institutions were RMB4.869 trillion at end-2021, or 23.7% of the industry total of RMB20.55 trillion (China Trustee Association, 2022). At end-2024, the corresponding figures were RMB8.076 trillion and 27.3% of the industry total of RMB29.56 trillion (China Trustee Association, 2025). These are contemporaneous year-end ratios. The sample institutions held RMB10.546 trillion at end-2025, but the latest published industry total—RMB32.43 trillion—refers to June 2025; the date-mismatched figures are therefore not used to calculate a 2025 coverage ratio. The sample boundary follows the stated five-year completeness and scope-consistency rules. It does not imply that the nine institutions approximate the industry population or constitute a random sample.

3.2 Variables

AUM is the institution's year-end trust-asset balance, expressed in RMB billions. Fee income is annual trust-business income or net fee and commission income, expressed in RMB billions, using the narrowest comparable parent scope available. The primary descriptive outcome is fee density:

$$Fee\ density_{it} = 10,000 \times Fee\ income_{it} / AUM_{it} .$$

The multiplier expresses annual income as basis points of year-end AUM. A fee density of 20 basis points means that recorded annual trust-business or fee income equals 0.20% of the year-end asset base. This is a revenue-yield measure. It is not a contractual fee rate, because the numerator may include performance remuneration and the denominator is an end-of-period stock rather than average AUM. It is also not a profit margin, because operating costs, investment income, impairments, taxes, and proprietary-business results are excluded.

Ratio measures can generate misleading correlations when numerator and denominator are mechanically related or jointly measured with error (Kronmal, 1993). For that reason, the paper does not rely only on fee density. It also estimates the elasticity of fee income with respect to AUM in logs. Endpoint changes, year medians, and exact directional tests provide additional transparent summaries.

Table 1. *Institution-level endpoint changes, 2021–2025*

Institution	AUM growth	Fee-income growth	2021 density (bp)	2025 density (bp)	Density change
BOCOM Trust	23.8%	-48.2%	22.15	9.26	-58.2%
CITIC Trust	287.6%	-58.8%	59.06	6.27	-89.4%
Jiangsu Trust	185.0%	7.8%	21.99	8.32	-62.2%
Yingda Trust	87.9%	33.3%	31.76	22.54	-29.0%
Hwabao Trust	5.3%	-48.2%	32.46	15.96	-50.8%
Shanghai Trust	132.8%	-32.8%	21.63	6.24	-71.1%
Shaanxi International Trust	213.3%	15.0%	60.99	22.38	-63.3%
Huaneng Guicheng Trust	-17.6%	-80.1%	61.20	14.75	-75.9%
Huaxin Trust	117.1%	34.7%	54.10	33.57	-38.0%

Notes: AUM is year-end trust assets. Fee income is a within-institution scope-consistent trust-business or net fee measure. Density change is the percentage change in fee density, that is, in fee income divided by year-end AUM. Percentage changes are computed from unrounded underlying values.

3.3 Descriptive patterns

Table 1 shows that the paradox is not an artifact of a single extreme institution. Eight institutions expanded AUM, and one contracted by 17.6%. Fee income increased at only four institutions and fell at five. Yet fee density declined everywhere. The largest declines occur where rapid AUM expansion coincides with sharply lower fee income, but even institutions with positive fee growth experienced dilution because AUM grew faster.

Across the nine institutions, median cumulative AUM growth was 117.1%, median fee-income growth was -32.8%, and median fee-density change was -62.2%. The finding is directional as well as quantitative: all nine endpoint changes in density are negative. Under a null in which positive and negative changes are equally likely and independent across institutions, the exact two-sided sign-test probability of nine declines is 0.00390625. This diagnostic does not solve sample selection or dependence, but it shows that the common direction is unlikely under a symmetric sign null.

3.4 Industry context and the disclosure gap

Aggregate association data provide a limited benchmark for the years in which comparable series exist; they do not validate the panel's representativeness. Table 2 assembles the available annual industry series. Industry-wide trust-business income divided by year-end trust assets—an industry analogue of fee density—declined from 42.2 basis points in 2020 and 42.3 basis points in 2021 to 34.2 basis points in 2022, the last year for which the association published a full-year trust-business-income figure (China Trustee Association, 2021, 2022, 2023). The legacy functional composition of trust assets also shifted before that series ended: from end-2021 to end-2023, the financing-trust share fell from 17.43% to 14.5%, while the investment-trust share rose from 41.38% to 48.34% (China Trustee Association, 2022, 2024). Newer association releases discuss the

three-category framework, but those measures are not directly continuous with the legacy functional classification.

Two implications follow. First, the early-period aggregate fee yield moved in the same direction as the panel's fee-density measure, which provides contextual consistency but does not establish that the 2021–2025 panel result is representative of the industry. Second, no comparable full-year industry fee-density observation is available after 2022, and the legacy functional classification ends in 2023. Institution-level disclosures are therefore required to extend a scope-consistent annual fee-yield analysis through 2025; that extension is the specific value of the panel.

Table 2. *Industry aggregates from China Trustee Association releases*

Year-end	Trust assets (RMB trn)	Trust-business income (RMB bn)	Fee density (bp)	Fin. share (%)	Inv. share (%)	Svc./adm. share (%)
2020	20.49	86.45	42.2	23.71	31.46	44.84
2021	20.55	86.87	42.3	17.43	41.38	41.20
2022	21.14	72.27	34.2	14.55	43.92	41.53
2023	23.92	n.a.	n.a.	14.5	48.34	37.12
2024	29.56	n.a.	n.a.	n.a.	n.a.	n.a.

Notes: All figures are from China Trustee Association releases. Trust assets are industry year-end balances. Trust-business income is the association's annual industry figure; the comparable full-year series ends in 2022. The association subsequently reported cumulative trust-business income of RMB38.738 billion through 2023Q3, but no comparable 2023 full-year value. Industry fee density is trust-business income divided by year-end trust assets, in basis points. Shares refer to the legacy functional classification of trust assets into financing, investment, and service/administrative categories, which ends with the 2023 year-end release. The 2020 financing and investment shares are computed from reported amounts. At the time of writing, the latest official 2025 industry AUM observation was RMB32.43 trillion at June 2025 (China Trustee Association, 2025); it is not combined with end-2025 sample AUM to calculate coverage.

Table 3. *Cross-sectional medians by year*

Year	Median AUM (RMB bn)	Median fee income (RMB bn)	Median fee density (bp)
2021	590.4	1.326	32.46
2022	495.2	1.383	31.28
2023	531.8	1.100	21.57
2024	635.7	1.327	20.87
2025	730.6	0.981	14.75

Notes: Medians are calculated variable by variable across the same nine institutions in each year, so the median fee density is not the ratio of the median fee income to the median AUM. Because institution ranks change, the median of institution-level cumulative growth rates (117.1%) is not equal to the percentage change between the annual cross-sectional medians shown here. The balanced composition avoids entry and exit effects but does not make the sample representative of the industry.

4. Empirical Design

4.1 Endpoint and median diagnostics

The first design is deliberately nonparametric. It compares 2021 and 2025 AUM, fee income, and fee density for each institution; reports medians across institutions; and applies an exact sign test to the direction of density changes. This design is transparent and robust to the magnitude of outliers, but it ignores intermediate-year dynamics and common shocks.

4.2 Two-way fixed-effects elasticity

The main panel specification is:

$$\ln(F_{it}) = \alpha_i + \gamma_t + \beta \ln(A_{it}) + \varepsilon_{it},$$

where α_i are institution fixed effects and γ_t are year fixed effects. Institution effects absorb time-invariant differences in business model, ownership, reporting practice, and average pricing. Year effects absorb common macroeconomic, market, and regulatory conditions. The coefficient β is estimated from within-institution deviations in AUM and fee income after removing common year movements. The benchmark is $H_0: \beta = 1$, not $H_0: \beta = 0$. A coefficient below one means that fee income changes sub-proportionally with AUM.

The regression is descriptive. AUM is endogenous to strategy, client demand, business mix, performance, and risk capacity. Fee income and AUM can also be jointly affected by classification changes or market conditions. Fixed effects remove persistent level differences and common annual shocks, but they do not supply an instrument, treatment, or quasi-experimental source of variation. Accordingly, β is referred to as a within-panel elasticity association rather than a causal return-to-scale parameter.

4.3 Inference and robustness

The baseline calculations report homoskedastic standard errors as a diagnostic because conventional cluster-robust asymptotics are unreliable with only nine institution clusters. Cameron, Gelbach, and Miller (2008) show that standard clustered tests can over-reject with few clusters, and MacKinnon, Nielsen, and Webb (2023) emphasize cluster leverage and influence diagnostics. Rather than attaching strong significance claims to a fragile variance estimator, this paper focuses on coefficient stability, sign consistency, and leave-one-institution-out influence.

Five perturbations are pre-specified. First, the sample is truncated to 2021–2024, removing all 2025 observations. Second, it is shifted to 2022–2025, checking dependence on the 2021 endpoint. Third, three 2025 observations with explicit rounding or scope caveats are excluded. Fourth, the equation is estimated in first differences with year effects, so permanent institution heterogeneity is removed algebraically. Finally, each institution is omitted in turn.

5. Results

5.1 Scale expansion without proportional fee growth

The cross-sectional medians in Table 3 trace the divergence over time. Median AUM rose from RMB590.4 billion in 2021 to RMB730.6 billion in 2025, although the median path was uneven over time, falling to RMB495.2 billion in 2022 before recovering. Median fee density, by contrast, declined from 32.46 basis points to 14.75 basis points. The median annual fee-income level fell from RMB1.326 billion to RMB0.981 billion. These annual cross-sectional medians should be distinguished from the median of

institution-specific cumulative growth rates because institution ranks change across years. Even so, the endpoint medians show that the pattern is not driven solely by a denominator expansion: the numerator also weakened.

The institution-level results add important heterogeneity. CITIC Trust recorded the largest cumulative AUM expansion in the sample and one of the sharpest density declines. Jiangsu Trust and Shaanxi International Trust increased fee income over the window, but not nearly as quickly as AUM. Yingda Trust and Huaxin Trust also posted positive fee growth, yet density still declined. Hwabao Trust's AUM was nearly flat while fee income fell, showing that dilution can arise from numerator contraction even without major scale growth. Huaneng Guicheng Trust contracted in both AUM and fee income, with the latter falling faster.

5.2 Fixed-effects elasticity

The baseline two-way fixed-effects estimate of β is 0.623. Thus, after institution and year effects, a 1% increase in AUM is associated with a 0.62% increase in fee income. The estimate lies 0.377 below the proportional benchmark of one, an economically meaningful gap. Using the reported homoskedastic standard error of 0.185, the t-statistic against one is -2.04 . Given the small number of institutions and the absence of a causal design, that statistic is best read as a scale diagnostic rather than a definitive hypothesis test.

The elasticity result complements the ratio evidence. Fee density necessarily falls when fee income grows more slowly than AUM, but the log specification asks whether the same sub-proportional relation appears after removing institution averages and common year effects. It does. The result therefore cannot be explained solely by permanently lower fee yields at larger institutions or by an industry-wide annual decline common to every institution.

Table 4. *Elasticity robustness checks*

Specification	N	Elasticity	Homoskedastic SE	t vs. 1
Baseline institution + year FE	45	0.623	0.185	-2.04
Window 2021–2024	36	0.678	0.236	-1.37
Window 2022–2025	36	0.507	0.209	-2.36
Exclude three explicit 2025 scope/rounding caveats	42	0.653	0.194	-1.79
First differences + year FE	36	0.541	0.170	-2.70

Notes: Dependent variable is log fee income; the scale variable is log year-end AUM. Level specifications include institution and year fixed effects. The first-difference specification includes year effects. Standard errors are homoskedastic diagnostics, not small-cluster-robust inference.

6. Robustness and Interpretation

6.1 Time windows, measurement caveats, and first differences

Table 4 shows that sub-proportional scaling is stable across alternative designs. The 2021–2024 window produces an elasticity of 0.678; the 2022–2025 window produces 0.507. Excluding three 2025 observations with explicit scope or rounding caveats yields 0.653, close to the baseline. The first-difference estimate is 0.541. Across these specifications, the elasticity ranges from 0.507 to 0.678. Every point estimate lies below one, although in the 2021–2024 window ($t = -1.37$) and the caveat-exclusion sample ($t = -1.79$) the difference from one is not statistically significant at conventional levels.

The window comparison matters because 2021 captures a different phase of the sector's regulatory transition, while 2025 incorporates rapid growth in newer service and securities-investment activities. Both overlapping four-year windows remain below one, though the magnitudes differ (0.678 versus 0.507), which reduces concern that one endpoint mechanically generates the result. The caveat exclusion addresses a separate problem: annual reports use heterogeneous labels and sometimes rounded values. Removing the most explicit 2025 ambiguities does not reverse the finding.

6.2 Leave-one-institution-out influence

Leave-one-institution-out point estimates range from 0.321 to 0.888, and all nine lie below one. The highest estimate arises when CITIC Trust is omitted (0.888, $t = -0.68$ against one): its rapid AUM growth and fee contraction contribute meaningfully to the baseline result, and without it the remaining panel cannot be statistically distinguished from proportional scaling. Omitting Huaneng Guicheng Trust produces the lowest estimate, 0.321. The direction of every estimate is consistent with dilution, but the strength of the statistical evidence depends materially on one influential institution.

This exercise is especially useful in a small panel. With nine clusters, formal asymptotics are fragile, while influence can be inspected directly. The result should not be summarized as a precise universal elasticity of 0.623. A more defensible statement is that every reasonable sample perturbation examined yields subproportional fee scaling, with the estimated magnitude varying across institutions and windows.

6.3 What the evidence can and cannot explain

The most plausible interpretation is business-model dilution: new AUM carried a lower average revenue yield than legacy assets. The industry context in Table 2 is consistent with this interpretation but does not identify it: the financing-trust share fell while the investment-trust share rose between 2021 and 2023, and the industry-wide revenue yield declined from roughly 42 to 34 basis points before the comparable full-year income series ended. Yet the dataset does not observe mandate-level fee schedules or AUM by the 25 regulatory business types. A lower fee yield may reflect deliberate entry into scalable, capital-light services rather than deteriorating economics. If low-fee assets require little marginal cost and generate cross-selling or client-retention benefits, they can create value despite compressing fee density.

Performance remuneration is another possible channel. Where disclosed, it can fluctuate sharply with market outcomes and product realization cycles. AUM may grow continuously while performance fees are episodic. Price competition and institutional-client bargaining could also lower realized fee rates. Finally, runoff of legacy financing trusts can remove high-fee income faster than assets decline if replacement assets are standardized or administrative. Distinguishing these mechanisms requires mandate-level composition, average-AUM denominators, recurring versus performance income, and cost allocation.

7. Implications

7.1 Management implications

Trust institutions should not use AUM growth as a sufficient operating target. A more informative scorecard would decompose AUM by business category, client type, pricing model, duration, and service intensity; separate recurring base fees from performance remuneration and one-off compensation; and track both gross and contribution-margin yield. This would reveal whether new assets are entering strategically attractive low-cost mandates or merely diluting revenue without lowering unit cost.

The elasticity benchmark also provides a practical diagnostic. If an institution's multi-year fee-income elasticity remains below one, management should ask whether the gap reflects intentional mix, temporary

ramp-up, price concessions, or weak monetization. The answer changes the appropriate response. Intentional low-fee service growth may require automation and shared infrastructure; price compression may require differentiation; weak performance fees may require product and investment-capability changes; legacy runoff may require a transition plan rather than indiscriminate asset targets.

7.2 Investor and analyst implications

External analysis should pair trust AUM with fee density, recurring fee growth, and disclosure scope. Consolidated fee and commission income can include non-trust subsidiaries or activities, while parent-company totals can contain non-trust commissions. Comparisons based on unadjusted headline figures may therefore rank institutions by reporting perimeter rather than operating economics. A source-by-source normalization protocol is essential.

The evidence also cautions against interpreting a return to industry AUM growth as a return to prior earnings economics. A sector can expand in socially useful service trusts and standardized products while average fee yields decline. That outcome may be consistent with regulatory objectives and lower systemic risk, but it changes valuation, staffing, technology, and capital-allocation assumptions.

7.3 Regulatory and disclosure implications

The three-category framework improves conceptual clarity, but public quantitative disclosure remains uneven. More standardized reporting of year-end and average AUM by category, recurring base fees, performance remuneration, other trust remuneration, and parent versus consolidated scope would materially improve market discipline. A reconciliation from trust-business income to the income statement would reduce ambiguity without disclosing client-sensitive information. Aggregate disclosure has also become less continuous: the association's comparable full-year trust-business-income series ends in 2022 and the legacy functional classification ends in 2023, leaving no public full-year aggregate fee-yield series on a continuous basis thereafter. Restoring an annual income series under the new three-category definitions would allow the dilution documented here to be monitored at the industry level.

Regulators should also distinguish low fee density from weak fiduciary value. Asset services may be intentionally low-margin and high-volume. The relevant supervisory question is whether pricing covers the operational, technology, legal, and conduct risks of the service, not whether every business type matches historical financing-trust yields. Better cost and incident reporting would make that assessment possible.

For emerging financial systems, this reporting discipline supports both sustainable economic growth and stronger, more accountable financial institutions.

8. Limitations

The first limitation is selection. Nine institutions qualify because they disclose five years of comparable AUM and fee information. They may differ systematically from institutions with incomplete disclosure. Results cannot be extrapolated mechanically to the full sector. Industry-level corroboration is likewise bounded: the aggregate income series ends in 2022 and the functional classification in 2023. Second, annual-report terminology and accounting scope are not perfectly uniform. The construction prioritizes within-institution consistency, so the absolute level of fee density is more comparable over time within an institution than across institutions.

Third, the denominator is year-end AUM, whereas fee income accumulates over the year. Large intra-year flows can distort the yield. Average AUM would be preferable, but it is not disclosed on a consistent basis; where opening and closing trust-asset balances are reported, only a two-point average can be constructed. Fourth, fee density mixes base fees and, where scope requires, performance or other trust

remuneration. It is a realized revenue yield, not a posted schedule. Fifth, only five annual observations per institution are available, which limits dynamic modeling and makes serial dependence difficult to estimate.

Sixth, the fixed-effects elasticity is associational. Unobserved time-varying business mix, client composition, pricing, and risk can drive both AUM and fees. Seventh, the paper does not model costs. Scale–fee dilution can coexist with cost economies, so the results cannot establish declining operating margins, return on equity, or social welfare. Finally, small-cluster inference is intrinsically fragile. The analysis therefore emphasizes exact signs and coefficient stability rather than conventional significance thresholds.

9. Conclusion

Between 2021 and 2025, the nine trust institutions in this balanced disclosure sample expanded assets without proportionate growth in fee or trust-business income. The median institution-level change was +117.1% for AUM, –32.8% for fee income, and –62.2% for fee density. All nine institutions recorded lower fee density. The baseline within-panel elasticity of fee income to AUM is 0.623, and every alternative-window, caveat-exclusion, first-difference, and leave-one-out point estimate remains below the proportional benchmark of one, although one leave-one-out estimate is not distinguishable from one.

The scale–fee-density paradox is therefore real as a descriptive fee-yield pattern in this sample, but its label should not be overread. The analysis does not show that larger trust institutions are less profitable, that asset-service trusts destroy value, or that regulation caused the decline. It shows something narrower and operationally important: during a period of structural transition, AUM growth substantially outpaced the sampled institutions’ ability to convert assets into recorded fee income. Future research should connect mandate-level business mix, recurring and performance fees, average AUM, operating costs, and risk outcomes. Until then, scale should be treated as an input to economic performance, not a substitute for it.

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Ethics statement: The study uses publicly available institution-level information and involved no human participants, personal data, or animal subjects; ethics approval was not required.

Data availability: The constructed institution-year dataset is available from the author upon reasonable request. The underlying annual reports, regulatory or exchange filings, company disclosures, and association releases are publicly available from the sources cited in the manuscript.

Generative AI disclosure: OpenAI Codex (GPT-5) was used for language editing, formatting, and coding assistance; the author verified all content and takes full responsibility.

References

- Berk, J. B., & Green, R. C. (2004). Mutual fund flows and performance in rational markets. *Journal of Political Economy*, 112(6), 1269–1295. <https://doi.org/10.1086/424739>
- Cameron, A. C., Gelbach, J. B., & Miller, D. L. (2008). Bootstrap-based improvements for inference with clustered errors. *Review of Economics and Statistics*, 90(3), 414–427. <https://doi.org/10.1162/rest.90.3.414>
- Chen, J., Hong, H., Huang, M., & Kubik, J. D. (2004). Does fund size erode mutual fund performance? The role of liquidity and organization. *American Economic Review*, 94(5), 1276–1302. <https://doi.org/10.1257/0002828043052277>

- China Banking and Insurance Regulatory Commission. (2023). Notice on standardizing the classification of trust-company trust business (CBIRC Regulation No. 1 of 2023).
<https://app.www.gov.cn/govdata/gov/202303/26/498271/article.html>
- China Banking Regulatory Commission. (2007). Measures for the administration of trust companies (CBRC Order No. 2 of 2007; first amended by the National Financial Regulatory Administration on 15 May 2025). <https://www.nfra.gov.cn/cn/view/pages/rulesDetail.html?docId=1209888>
- China Trustee Association. (2021). Analysis of trust company main business data at year-end 2020.
<http://www.xtxh.net/xtxh/statistics/46670.htm> (archived at
<https://web.archive.org/web/20240523083310/http://www.xtxh.net/xtxh/statistics/46670.htm>)
- China Trustee Association. (2022). Analysis of trust company main business data at year-end 2021.
<http://www.xtxh.net/xtxh/statistics/47592.htm> (archived at
<https://web.archive.org/web/20250212043150/http://www.xtxh.net/xtxh/statistics/47592.htm>)
- China Trustee Association. (2023). Analysis of trust company main business data at year-end 2022.
<http://www.xtxh.net/xtxh/statistics/48366.htm> (archived at
<https://web.archive.org/web/20241115035845/http://www.xtxh.net/xtxh/statistics/48366.htm>)
- China Trustee Association. (2024). Main business data of trust companies at year-end 2023.
<http://www.xtxh.net/xtxh/statistics/48366.htm>
- China Trustee Association. (2025). Review of trust-industry development in the first half of 2025.
<http://www.xtxh.net/xtxh/statistics/48366.htm>
- Kronmal, R. A. (1993). Spurious correlation and the fallacy of the ratio standard revisited. *Journal of the Royal Statistical Society: Series A*, 156(3), 379–392. <https://doi.org/10.2307/2983064>
- MacKinnon, J. G., Nielsen, M. Ø., & Webb, M. D. (2023). Fast and reliable jackknife and bootstrap methods for cluster-robust inference. *Journal of Applied Econometrics*, 38(5), 671–694.
<https://doi.org/10.1002/jae.2969>
- National Financial Regulatory Administration. (2025). Measures for the administration of trust companies (NFRA Order No. 8 of 2025; issued 11 September 2025, effective 1 January 2026).
<https://www.nfra.gov.cn/cn/view/pages/rulesDetail.html?docId=1225642>
- Pástor, L., Stambaugh, R. F., & Taylor, L. A. (2015). Scale and skill in active management. *Journal of Financial Economics*, 116(1), 23–45. <https://doi.org/10.1016/j.jfineco.2014.11.008>
- People's Bank of China, China Banking and Insurance Regulatory Commission, China Securities Regulatory Commission, & State Administration of Foreign Exchange. (2018). Guiding opinions on regulating the asset-management business of financial institutions (PBC Document No. 106 of 2018).
<https://www.pbc.gov.cn/jinrongwendingju/146766/146770/c2e228ad641d4a85acdc9142da4f955d/index.html>
- Yan, X. (S.). (2008). Liquidity, investment style, and the relation between fund size and fund performance. *Journal of Financial and Quantitative Analysis*, 43(3), 741–767.
<https://doi.org/10.1017/S0022109000004270>

Appendix A. Leave-One-Institution-Out Diagnostics

Table A1. *Influence of individual institutions on the elasticity estimate*

Institution omitted	Elasticity	Homoskedastic SE	t vs. 1
BOCOM Trust	0.619	0.202	-1.88
CITIC Trust	0.888	0.165	-0.68
Jiangsu Trust	0.644	0.203	-1.76
Yingda Trust	0.634	0.180	-2.04
Hwabao Trust	0.650	0.208	-1.68
Shanghai Trust	0.635	0.202	-1.81
Shaanxi International Trust	0.572	0.218	-1.96
Huaneng Guicheng Trust	0.321	0.191	-3.55
Huaxin Trust	0.605	0.197	-2.01

Notes: Each row re-estimates the institution- and year-fixed-effects model after omitting one institution. All point estimates remain below one; the estimate excluding CITIC Trust is 0.888 ($t = -0.68$ against one) and is not distinguishable from proportional scaling. Standard errors are diagnostic.

Appendix B. Comparability Protocol

Item	Rule
Unit of analysis	Institution-year, 2021–2025.
AUM	Year-end trust assets, not consolidated managed assets or proprietary assets.
Income	Narrowest scope-consistent parent trust-business or net fee measure available.
Components	Base fees, performance remuneration, and other trust remuneration are combined only when the report identifies them as trust-business income.
Subsidiaries	Brokerage, asset-management-subsidary, and other non-trust commissions are excluded when separable.
Missing values	No AUM or fee-income value is imputed in the strict sample.
One-offs	Material one-off remuneration prevents entry into the strict sample unless it can be isolated consistently.
Rounding	Explicitly rounded observations are retained only with a caveat and tested through exclusion.
Interpretation	Fee density is a revenue yield; it is neither a contractual rate nor an accounting profit margin.