here is short theses presented by Muddy Waters Research. This summary focuses on the specific \*metrics\* and \*areas of concern\* identified by Muddy Waters, the \*details\* of their allegations regarding those metrics/areas, and the \*research methodologies\* employed to uncover the issues for each case.

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\*\*1. Sunrun Inc. (RUN)\*\*

\* \*\*Core Allegation(s):\*\* Materially inflated subscriber numbers and value, potentially leading to inflated Investment Tax Credit (ITC) claims, masked by misleading non-GAAP metrics.

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology:\*\*

\* \*\*Metric/Area:\*\* Subscriber Count vs. EIA Data

\* \*\*Allegation Detail:\*\* Sunrun's reported "Subscribers" metric is consistently ~20% higher than customer counts reported to the U.S. Energy Information Administration (EIA Form 861-M, Sales & Revenue data). The discrepancy (~125k subscribers by Q2 2023) represents nearly five quarters of reported subscriber additions. Company explanations (PTO lag, billing differences) are insufficient to explain the persistent gap.

\* \*\*Discovery Methodology:\*\* Direct comparison of Sunrun's publicly disclosed "Subscriber" numbers (investor materials, models) against publicly available EIA data (specifically differentiating between "Sales & Revenue" and "Net Metering" categories). Analysis of EIA reporting instructions and modeling of plausible lag times (e.g., for PTO) demonstrated company explanations were inadequate.

\* \*\*Metric/Area:\*\* Gross Solar Assets Growth vs. Subscriber Growth

\* \*\*Allegation Detail:\*\* The quarter-over-quarter increase in GAAP Gross Solar Assets on the balance sheet does not align with the growth implied by the \*reported\* subscriber additions (asset increase per reported subscriber was ~18.4% \*lower\* than expected based on system costs). However, the asset growth aligns much more closely with the growth implied by the \*EIA\* customer additions (~7.5% \*higher\* than expected). This suggests the "Subscriber" metric is disconnected from GAAP asset additions.

\* \*\*Discovery Methodology:\*\* Calculated an implied cost per system based on Sunrun's disclosures for \*Purchase\* Customer revenue and gross margins. Used this cost to estimate the \*expected\* increase in Gross Solar Assets based on \*reported\* subscriber additions. Compared this expected increase to the \*actual\* reported increase in Gross Solar Assets on the balance sheet. Repeated the comparison using \*EIA\* customer additions as the driver. Analysis performed over a 10-quarter period for smoothing.

\* \*\*Metric/Area:\*\* Investment Tax Credit (ITC) Claims vs. Customer Data

\* \*\*Allegation Detail:\*\* Sunrun appears to be claiming ITCs based on its inflated "Subscriber" numbers rather than a verifiable customer count like the EIA data. Analysis of 2022 tax equity cash flows ($1.415B at $1.98/watt) and average system size (~7.2 kW) implies ITCs were claimed for ~99,256 subscribers, closely matching the reported 99,497 additions but significantly exceeding likely EIA-based additions. This suggests potentially ~$205 million in improperly claimed ITCs for ~14,390 "phantom" systems in 2022 alone.

\* \*\*Discovery Methodology:\*\* Calculation based on disclosed Tax Equity cash inflows, $/watt figures, and average system kW size from Sunrun's financial reports and investor models to derive the implied number of systems underlying the tax equity transactions. Comparison of this derived number to both the reported "Subscriber" additions and the likely number based on EIA data trends.

\* \*\*Metric/Area:\*\* Subscriber Value / Net Earning Assets (NEA) Assumptions

\* \*\*Allegation Detail:\*\* (From earlier report context, relevant to overall thesis) The non-GAAP models calculating these values rely on overly aggressive assumptions regarding renewal rates (90% for obsolete tech), panel removal costs (zero assumed vs. contractual obligation), O&M costs, degradation rates, and default rates.

\* \*\*Discovery Methodology:\*\* (From earlier report context) Critical analysis of the assumptions embedded in Sunrun's disclosed valuation models; comparison against industry norms, competitor practices, and logical deductions (e.g., roof lifespan vs. renewal term). Recalculation using more conservative assumptions.

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\*\*2. dLocal Ltd. (DLO)\*\*

\* \*\*Core Allegation(s):\*\* Likely a fraud, evidenced by contradictory financial disclosures, potential accounting manipulation to hide problematic transactions, questionable client fund controls, and implausibly high Take Rates/FX gains.

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology:\*\*

\* \*\*Metric/Area:\*\* Total Processing Volume (TPV) by Cohort

\* \*\*Allegation Detail:\*\* Grossly inconsistent TPV figures reported for the \*exact same\* merchant cohorts in different company filings/presentations. E.g., 2019 cohort TPV shown as $471m vs. $56m (-88%); 2020 cohort TPV shown as $343m vs. $260m (-24%). No explanation provided for these massive revisions.

\* \*\*Discovery Methodology:\*\* Direct comparison of cohort TPV charts/data across different official company documents (Draft Registration Statement vs. later Earnings Presentations).

\* \*\*Metric/Area:\*\* Foreign Currency Trade Receivables / Net Monetary Position

\* \*\*Allegation Detail:\*\* Two conflicting sets of numbers for FY 2020 foreign currency receivables and the resulting Net Monetary Position were presented \*within the same F-1 filing\* (pg. 100 vs. F-69). The discrepancy was ~11.4% for receivables. Subsequent filings switched between these numbers without explanation, eventually obscuring the detailed receivable disclosure.

\* \*\*Discovery Methodology:\*\* Comparison of financial statement notes (specifically related to foreign currency exposure and receivables) within the \*same\* SEC filing (F-1) and tracking how these figures were presented in subsequent filings (Secondary Offering Prospectus, 20-F).

\* \*\*Metric/Area:\*\* Intercompany Receivables/Payables (Subsidiary Level)

\* \*\*Allegation Detail:\*\* Key operating subsidiary DLocal LLP (UK) reported owing $15.7m to DLocal Ltd. (Malta) at YE 2020. However, the Malta entity's financials showed total receivables from \*all\* related parties were only $12.4m at the same date, a direct contradiction.

\* \*\*Discovery Methodology:\*\* Examination and comparison of "Related party transactions" notes within the audited financial statements of the respective UK and Malta operating subsidiaries, obtained from public registries.

\* \*\*Metric/Area:\*\* Option Exercise Timing & Funding (Accounting Manipulation)

\* \*\*Allegation Detail:\*\* DLO appears to have falsified accounting records and disclosures regarding a $31.5m pre-IPO loan to founders (CEO, President) for option exercises. Malta registry documents clearly show the loan funded and options exercised/shares allotted in Dec 2020. DLO's SEC filings claim the loan was never funded and options were exercised 4 months later (Mar/Apr 2021) using external funds. The slightly higher amount paid in 2021 matches the 1.5% interest on the original loan, suggesting an attempt to retroactively "fix" the books.

\* \*\*Discovery Methodology:\*\* Comparison of DLO's SEC filing disclosures (F-1, 20-F) regarding the option exercise and loan agreement against official corporate filings from the Malta Business Registry (share allotment forms, wire transfer records obtained via discovery/leaks). Calculation of the implied interest payment.

\* \*\*Metric/Area:\*\* Take Rate & FX Gain Contribution

\* \*\*Allegation Detail:\*\* DLO's Take Rate (esp. Net Take Rate) is an extreme outlier vs. peers (multiples higher). It suspiciously \*increased\* 17.5% in 2020 despite factors suggesting compression (growth of lower-margin 2018/2020 cohorts, shift to low-margin local-to-local processing, onboarding very low-margin/high-volume Google). FX gains/fees (~50% of revenue) appear implausibly high, estimated at ~3% of cross-border TPV vs. ~1.1-1.5% expected based on industry norms and DLO's payout mix.

\* \*\*Discovery Methodology:\*\* Calculation and comparison of Take Rates (Gross and Net) using DLO's reported financials vs. those of publicly listed peers and private comps (Ebanx via Singapore filings). Analysis of cohort TPV growth contribution vs. cohort Take Rates (from DLO presentations). Interviews with former DLO executives and competitor executives regarding pricing, shift to local-to-local, Google account margins, and payout volumes. Analysis of subsidiary financials (Malta, UK LLP, UK Corp) to isolate FX revenue contribution. Comparison with external reports on FX spreads (e.g., Brazil Central Bank study cited by sell-side).

\* \*\*Metric/Area:\*\* Cash Flow Reconciliation & Client Funds

\* \*\*Allegation Detail:\*\* When attempting to reconcile DLO's 2020 consolidated cash flows \*net of\* estimated merchant fund movements (derived from changes in Trade Receivables/Payables disclosed in notes), a ~$3.3m cash deficit emerges, suggesting company cash uses exceeded sources. A similar ~$4.1m deficit found in the Malta operating subsidiary's cash flow reconciliation. Raises concern DLO may have improperly used client funds to cover its own needs (dividend, founder loan).

\* \*\*Discovery Methodology:\*\* Detailed reconciliation of consolidated and subsidiary (Malta) Statements of Cash Flows. Used financial statement footnotes (Trade Receivables, Trade Payables, Related Companies notes) to estimate and subtract the portion of cash flow line items attributable to merchant funds vs. DLO's own funds. Compared the resulting DLO-only cash flow generation to DLO's cash uses (dividends, investing, etc.) and the change in DLO's attributed cash balance.

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\*\*3. Hannon Armstrong Sustainable Infrastructure Capital, Inc. (HASI)\*\*

\* \*\*Core Allegation(s):\*\* Misleading accounting inflates earnings and key metrics (like "Distributable Earnings") through non-cash, unrealizable income. Business model appears value-destructive, reliant on capital raises to fund dividends.

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology:\*\*

\* \*\*Metric/Area:\*\* GAAP Earnings / Income from EMIs (HLBV Method)

\* \*\*Allegation Detail:\*\* HASI improperly uses Hypothetical Liquidation at Book Value (HLBV) accounting to recognize significant non-cash, unrealizable income when its \*partners\* (Tax Equity Investors) in Equity Method Investments (EMIs) realize Investment Tax Credits (ITCs). This income (~$300m estimated for 2021) is not cash to HASI and reverses over the project life. Without this, HASI would have reported a large loss in 2021. Chooses not to use available accounting treatments (impairment, realizable value basis) that would mitigate this distortion.

\* \*\*Discovery Methodology:\*\* Analysis of HLBV accounting principles for renewable energy projects; review of HASI's accounting policy disclosures; examination of available EMI financial statements (e.g., SunStrong, Vivint 3, Buckeye, Rosie) obtained via SEC exhibits to identify non-cash components related to tax equity flips (e.g., noncontrolling interest redemptions/contributions); estimation of HLBV impact based on disclosed examples (e.g., EMI-to-loan restructuring) and applying proportions; interviews with HASI IR and renewables accounting experts.

\* \*\*Metric/Area:\*\* Gain on Securitization (Residual Value Discount Rate)

\* \*\*Allegation Detail:\*\* Inflates gains on securitization by valuing retained residual interests using artificially low discount rates (dropped from 8-10% in 2013 to 4.3% in 2021, described as "market-based risk-free" despite increasing proportion of higher-risk commercial receivables).

\* \*\*Discovery Methodology:\*\* Analysis of HASI's securitization disclosures and accounting policies; tracking the disclosed average discount rate used for residuals over time; comparing this rate trend to market interest rate benchmarks (high yield vs investment grade spreads); recalculating residual values and gains using more appropriate, higher discount rates (e.g., historical 8% or based on securitization cost margin).

\* \*\*Metric/Area:\*\* Interest Income (PIK Component)

\* \*\*Allegation Detail:\*\* Inflates interest income by booking undisclosed amounts of non-cash Paid-in-Kind (PIK) interest from loans to stressed EMIs (like SunStrong). Collectibility of this PIK interest is doubtful. Estimated PIK inflated 2020/2021 interest income by ~16%/15%.

\* \*\*Discovery Methodology:\*\* Analysis of HASI's loan receivable disclosures (vintages showing growth suggestive of PIK); detailed review of available EMI financials (SunStrong) which explicitly disclosed PIK interest expense payable predominantly to HASI entities; extrapolation based on SunStrong's PIK ratio applied to HASI's total mezzanine loan portfolio. Cross-referencing lender names in EMI filings with HASI subsidiary lists via UCC filings/Exhibits.

\* \*\*Metric/Area:\*\* Non-GAAP "Distributable Earnings"

\* \*\*Allegation Detail:\*\* Highly misleading metric. Adds back non-cash expenses but fails to subtract non-cash \*income\* (HLBV, securitization gains, PIK). EMI contribution adjustment replaces GAAP income with another potentially inflated non-cash metric based on optimistic "underwritten" rates, not actual cash generation. Muddy Waters adjusts 2021 Distributable Earnings from $158.7m profit to $181.4m loss.

\* \*\*Discovery Methodology:\*\* Deconstruction of HASI's Distributable Earnings reconciliation calculation; identification and removal of non-cash income components identified in prior steps; comparison to how other firms calculate distributable earnings (typically excluding non-cash income). Analysis of dividend composition (Return of Capital vs Ordinary Income).

\* \*\*Metric/Area:\*\* Operating Cash Flow (OCF)

\* \*\*Allegation Detail:\*\* Inflated by classifying cash distributions from EMIs (up to the amount of non-cash HLBV income booked) as OCF, even if distributions represent return \*of\* capital due to underlying EMI losses. Specific examples cited (SunStrong, Buckeye distributions in loss years). Estimated 2019-2020 OCF inflated by ~39%.

\* \*\*Discovery Methodology:\*\* Analysis of HASI's OCF classification policy for EMI distributions; examination of available EMI financial statements (cash flow statements, equity statements) to identify distributions made in periods of net loss or funded by debt/equity raises rather than operating profit. Adjustment of reported OCF.

\* \*\*Metric/Area:\*\* Related Party Transactions & Disclosures (SunStrong)

\* \*\*Allegation Detail:\*\* Extensive, seemingly material transactions with 49%-owned EMI SunStrong (majority of loans to EMIs, significant source of HLBV and PIK income, questionable asset transfers/refinancings) are not adequately disclosed as related party transactions, obscuring the JV's impact and potential manipulation.

\* \*\*Discovery Methodology:\*\* Detailed review of SunStrong's audited financial statements (filed as exhibits); cross-referencing loan details with UCC filings to confirm HASI entities as lenders; analysis of transactions described (HA Helix sale, debt refinancing) for economic substance; applying 'substance over form' principle to argue for related party disclosure based on HASI's significant influence (equal voting rights, primary lender). Calculation of SunStrong's materiality to HASI's financials (loan balances, income contribution).

\* \*\*Metric/Area:\*\* Leverage Ratios (TCE / TMA)

\* \*\*Allegation Detail:\*\* Reported leverage ratios (e.g., Moody's TCE/TMA) appear artificially low due to inflated asset values (EMIs via HLBV, residuals via low discount rates) and potentially overstated equity (via inflated income). Adjustment reduces ratio below potential Investment Grade threshold.

\* \*\*Discovery Methodology:\*\* Recalculation of Tangible Common Equity / Tangible Managed Assets ratio after adjusting asset values (EMI balance, securitization residuals) and equity (cumulative income impact) based on prior findings. Comparison to rating agency methodologies/thresholds.

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\*\*4. CPI Property Group S.A. (CPIPG)\*\*

\* \*\*Core Allegation(s):\*\* Controlling shareholder Radovan Vitek engaged in brazen looting via self-dealing transactions; significant asset overvaluation; potential money laundering facilitated by bondholder funds.

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology:\*\*

\* \*\*Metric/Area:\*\* Related Party Transactions / Asset Stripping

\* \*\*Allegation Detail:\*\* Numerous transactions where Vitek (often via proxies or family members) appears to have extracted value from CPIPG:

\* \*Polygon BC/MQM Czech:\* Round-tripped land banks, buying low from CPIPG (undisclosed RPT) and selling high back to CPIPG (+€30.9m profit) without development.

\* \*CPI Hotels:\* Acquired from secret Vitek proxy (MGI) via debt forgiveness (€44.9m); additional MGI debt to CPI Hotels (€16.3m) assigned to Vitek personally, possibly then sold back to CPIPG.

\* \*WXZ1/Immofinanz:\* Used son Patrick as intermediary to flip Immofinanz shares to CPIPG, retroactively increasing price (+€52.1m) using seemingly manipulated justification.

\* \*BT 2 Vessel/Polma 1:\* Used CPIPG acquisition of Polma 1 to finance personal superyacht purchase, transferring yacht entity (BT 2) out post-acquisition while leaving CPIPG with debt (€8.8m owed by Vitek's entity). Misleading disclosures about BT 2 and Eurocraft.

\* \*Pietroni/Villa Mas du Figuier:\* Sold unsold St. Tropez villa to CPIPG for nominal €1 but extracted €10.1m cash (loan repayment) and saddled CPIPG with €35.5m debt. Property impaired next year. Original purchase involved suspicious seller financing from entity linked to money laundering figures (Zolty, Ulmann).

\* \*Rising Falcon/Dubai Villas:\* "Repaid" €273m loan by transferring luxury properties (mostly under development) with likely cash cost of only ~€154m, saddling CPIPG with >€220m off-balance sheet future payment obligations.

\* \*\*Discovery Methodology:\*\* Forensic analysis of transaction structures detailed in CPIPG and subsidiary (CPI FIM, CPI Hotels, WXZ1, Pietroni, 1BAL, Polma 1, etc.) financial statements (Luxembourg, Cyprus, Czech, UK, French, Italian registries); investigation into counterparty ownership using corporate records, notary documents, news archives, litigation filings (Kingstown vs Vitek) to identify proxies (Nemecek, Rybár, Savic, Janke) and family members (Patrick Vitek); tracing asset movements and consideration flows; identifying undisclosed related party nature of transactions; analysis of acquisition accounting and subsequent impairments. Investigation into Villa seller (Kaloikos) using Swiss/French registries and news searches linking proxies (Zolty, Ulmann) to AML/Mossack Fonseca cases. Analysis of Rising Falcon deal structure, property records (Dubai Land Dept via dxbinteract.com), payment schedules, satellite imagery (Google Earth).

\* \*\*Metric/Area:\*\* Asset Valuation (Germany Offices, Landbanks, UK Hotels)

\* \*\*Allegation Detail:\*\* Property Portfolio values appear significantly inflated vs market reality.

\* \*Germany Offices:\* Reported values diverge sharply from market indices (VDP). Reuchlinstraße 10-11 doubled value despite disrepair. Potsdamer Str. properties valued >10x purchase price despite vacancy/dilapidation.

\* \*Landbanks:\* Bubny (Prague) valued ~100% above comparable market data, relying on cherry-picked appraisal comps. Polygon/MQM Czech booked gains pre-permit/construction using aggressive Future Development Value method instead of comparable method per own policy.

\* \*UK Hotels:\* Inflated via non-economic, above-market rents paid by related-party OpCos (who consistently lose money). Fixed leases with thinly capitalized related parties used to justify lower cap rates/higher valuations.

\* \*\*Discovery Methodology:\*\* Comparison of reported portfolio value growth (e.g., Berlin) vs. external market indices (VDP Property Price Index). Site visits to assess property condition (Reuchlinstraße, Potsdamer Str.). Analysis of land registry records for purchase prices (Potsdamer Str.). Comparison of reported landbank valuations (Bubny) against broad public data sets (Prague Building Land Price Map) and critique of appraisal methodology (small, skewed comp set). Analysis of accounting policies for development land valuation vs. application (Polygon/MQM). Analysis of UK hotel OpCo financials (obtained from UK Companies House) showing losses driven by high related-party rents; comparison of implied cap rates vs. market rates for different lease structures.

\* \*\*Metric/Area:\*\* Occupancy Rates (Germany Offices - Berlin, Prague, Warsaw)

\* \*\*Allegation Detail:\*\* Reported occupancy rates (~90%+) appear grossly inflated. Realtor listings suggest vacancies often double the implied rate (~14% listed vs ~6-7% implied vacant). Key tenant rent24 (likely undisclosed related party) used to boost occupancy.

\* \*\*Discovery Methodology:\*\* Systematic monitoring of online property listings (ImmoScout24 via related manager Lianeo; Colliers, CBRE, JLL, Savills etc. for Prague/Warsaw) for space advertised for lease in CPIPG's key buildings/portfolio. Calculation of implied vacancy rate based on advertised sqm vs. reported total NLA. Site visits to Berlin properties to observe vacancy levels. Investigation into rent24 ownership (German/Cyprus registries identifying Dayan proxy Drastemo/KKPLaw) and its significant tenancy across multiple CPIPG properties. Calculation of rent24's estimated share of NLA vs. non-disclosure as major tenant. Critique of occupancy calculation methodology (e.g., Fürst development denominator).

\* \*\*Metric/Area:\*\* Accounting Consistency & Transparency (Collina Muratella, Pietroni, Buxmead)

\* \*\*Allegation Detail:\*\* Transactions often involve opaque structures, shell companies, and inconsistent reporting, potentially masking underlying issues or facilitating malfeasance. Collina Muratella deal shows large discrepancies in reported consideration paid vs subsidiary filings and debt acquired vs debt outstanding. Pietroni deal structured misleadingly (nominal €1 price). Buxmead acquisition funded by bondholders involved property linked to Kazakh oligarchs/potential money laundering.

\* \*\*Discovery Methodology:\*\* Cross-referencing disclosures between parent (CPIPG) and subsidiary (CPI Italy 130 SPV, Pietroni, 1BAL) filings to identify discrepancies in consideration, asset/liability transfers. Analysis of transaction structures for unnecessary complexity, use of offshore entities (BVI), and timing (quick flips like RWI4, SCP Reflets). Investigation into counterparties and asset histories using public records, news archives, litigation databases for red flags (e.g., Kaloikos proxies, Nazarbayev connection to Buxmead).

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\*\*5. e.l.f. Beauty, Inc. (ELF)\*\*

\* \*\*Core Allegation(s):\*\* Materially overstated revenue and inventory, potentially indicative of financial fraud aimed at maintaining a high-growth narrative.

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology:\*\*

\* \*\*Metric/Area:\*\* Inventory Balance & Growth vs. Import Data

\* \*\*Allegation Detail:\*\* Reported inventory surged (e.g., +50% QoQ in Q2 FY24) and continued to grow despite US import data showing a sharp \*decline\* in physical volume (kgs) starting Feb 2024 (~68% drop). This physical disconnect suggests reported inventory $ value is inflated. Company's explanation (change in FOB point) deemed false based on supplier/ex-manager checks (FOB China was longstanding practice).

\* \*\*Discovery Methodology:\*\* Sourcing and analysis of US Customs import data (bills of lading) from multiple independent providers (cross-referenced for consistency) tracking shipment weight (kgs) consigned to ELF over time. Comparison of physical import volume trends against reported inventory dollar value growth from SEC filings. Interviews with former ELF China manager and 3 major Chinese suppliers (posing as buyer) to verify historical incoterms/FOB point and current shipment trends.

\* \*\*Metric/Area:\*\* Implied Value per Kilogram ($/kg) of Imports

\* \*\*Allegation Detail:\*\* To reconcile the high reported inventory value with low import volumes, the value per kg of imported goods would need to have \*skyrocketed\* ~150% (from historical ~$18-20/kg to ~$52/kg). This is highly implausible given the product mix.

\* \*\*Discovery Methodology:\*\* Calculated the implied $/kg needed to make financials work (using Inventory = Beg Bal + Purchases - COGS, where Purchases derived from import kgs \* implied $/kg). Tested the plausibility of such an increase using three methods:

1. \*SKU GMV Analysis:\* Used third-party consumer analytics data to show new, potentially higher-value SKUs contributed minimally (<5%) to CY24 GMV, insufficient to drive massive $/kg increase.

2. \*Product Basket Sampling:\* Purchased and weighed a basket of top-selling ELF products (representing >70% GMV at major retailer); calculated weighted average cost/kg based on ASP and margins; result ($18.1/kg) confirmed historical levels.

3. \*Supplier Data:\* Obtained product specs (volume/weight) from a top supplier for items likely sold to ELF; calculated implied $/kg using ELF's cost structure; result ($19.5/kg) confirmed historical levels. Also used supplier PRC financials to estimate COGS/kg ($17-23/kg range).

\* \*\*Metric/Area:\*\* Estimated Inventory Overstatement & Revenue Impact

\* \*\*Allegation Detail:\*\* Based on reconciling inventory flows assuming a stable $/kg, estimated a cumulative inventory overstatement (a "hole") of $98m-$133m by Q2 FY25. Assuming this inventory excess is a plug for overstated gross profit, it implies revenue was overstated by $138m-$188m over the preceding three quarters (Q4'24-Q2'25).

\* \*\*Discovery Methodology:\*\* Modeled expected inventory levels based on import volumes (kgs) \* validated historical $/kg. Compared modeled inventory to reported inventory to quantify the discrepancy/overstatement. Calculated the implied revenue overstatement by dividing the inventory discrepancy by the reported gross margin (assuming the overstatement represents fictitious profit).

\* \*\*Metric/Area:\*\* Insider Selling Patterns

\* \*\*Allegation Detail:\*\* Average monthly stock sales by CEO and CFO increased significantly \*after\* the emergence of the accounting red flags (Q2 FY24 inventory surge/explanation), correlating motive with opportunity.

\* \*\*Discovery Methodology:\*\* Tracking and analysis of Form 4 filings and other sources (CapIQ) for insider stock sales volumes and timing, comparing periods before and after the key Q2 FY24 reporting date. Analysis of executive compensation structure linking bonuses to sales growth.

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\*\*6. KE Holdings Inc. (BEKE)\*\*

\* \*\*Core Allegation(s):\*\* Systemic fraud involving massive inflation of GTV, revenue, store count, and agent count.

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology:\*\*

\* \*\*Metric/Area:\*\* Gross Transaction Value (GTV) & Revenue

\* \*\*Allegation Detail:\*\* Estimated New Home GTV inflated by >126%, commission revenue by ~77-96%. Platform data indicated 2Q-3Q 2021 total GTV inflated ~65%. Inflation primarily in high-margin New Home sales. Actual commission rates likely lower than reported due to discounting. Evidence of cash round-tripping via connected brokers (Deyou pilot program) to inflate commissions.

\* \*\*Discovery Methodology:\*\* Automated data scraping from BEKE's \*publicly accessible\* platform (ke.com, Lianjia app) over several months (May-Nov 2021). Collected transaction counts at store level (using unique Store IDs identified via 'Find Agent' function and inspecting app code for 'chengjiaoData'). Calculated GTV by multiplying scraped transaction counts by \*BEKE's own disclosed\* average prices per transaction (from SEC filings, deemed company-favorable). Compared calculated GTV to reported GTV. Fieldwork/agent interviews to ascertain actual commission rates vs. reported rates. Investigation into Deyou broker program via interviews.

\* \*\*Metric/Area:\*\* Store Count

\* \*\*Allegation Detail:\*\* Reported store count significantly inflated. Platform data showed ~23% inflation vs. reported figures (e.g., 43k platform vs 53k reported end Q2'21). Fieldwork revealed widespread "ghost stores" (listed as active but closed/non-existent) and "clone stores" (multiple listings for one physical location). Langfang case study showed 59% inflation vs. SAIC records based on physical verification.

\* \*\*Discovery Methodology:\*\* Scraped store lists and counts from BEKE's platform. Compared scraped count to reported count. Extensive fieldwork: physically visited addresses listed on platform/SAIC certificates for hundreds of stores across multiple cities (incl. Langfang deep dive). Documented discrepancies (closed stores, duplicate locations, wrong brands). Analyzed store naming conventions (A/B/C suffixes) and SAIC certificates provided on platform to identify clones; cross-referenced with Baidu Maps. Compared SAIC registered branch counts to physically verified counts in Langfang.

\* \*\*Metric/Area:\*\* Agent Count

\* \*\*Allegation Detail:\*\* Reported agent count massively inflated. Platform data showed ~26% inflation vs. reported figures. Comparisons with independent sources showed much larger discrepancies: Nanchang real estate registry indicated 50% inflation for Zhonghuan agents vs. platform. SAIC employee data for Beijing/Shanghai suggested >100% inflation (e.g., Shanghai: 21k claimed vs <10k SAIC employees). Inconsistent agent/employee counts in BEKE's own SEC filings over time. Potential inflation via temporary "employee" status for buyers seeking discounts.

\* \*\*Discovery Methodology:\*\* Scraped agent counts from BEKE's platform via 'Find Agent' function. Compared scraped/reported counts to official government sources: Nanchang Real Estate Broker Credit Registry (publicly searchable database). Compared reported agent counts for major cities (Beijing, Shanghai) to employee counts registered with SAIC (State Administration for Industry and Commerce) for BEKE's local subsidiaries (obtained via databases like Qichacha). Analyzed historical fluctuations in employee counts reported in BEKE's SEC filings. Fieldwork included anecdote about buyer posing as agent.

\* \*\*Metric/Area:\*\* Acquisition Accounting (Zhonghuan)

\* \*\*Allegation Detail:\*\* Acquisition of brokerage Zhonghuan appeared structured to inflate price via a straw buyer (Tianjin Yunju) controlled by a BEKE proxy (Liu Xiaojun), established just weeks before flipping the stake to BEKE. Valuation also appeared inflated vs. comparable deals (IFM). Suggests mechanism to potentially absorb fake cash.

\* \*\*Discovery Methodology:\*\* Analysis of transaction structure using SAIC records for Zhonghuan, Tianjin Yunju, and related entities to trace ownership changes and timing. Identification of proxy control based on individual's connections to BEKE/Lianjia. Comparison of acquisition price/valuation multiples to other industry transactions (IFM).

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\*\*7. XL Fleet Corp. (XL)\*\*

\* \*\*Core Allegation(s):\*\* A promotional SPAC deal ("SPAC garbage") based on exaggerations regarding sales pipeline, customer base/retention, product performance/ROI, technology (especially EV capabilities), and financial projections.

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology:\*\*

\* \*\*Metric/Area:\*\* Sales Pipeline / Backlog

\* \*\*Allegation Detail:\*\* Claimed $220m+ pipeline systematically and materially inflated under management pressure. Examples: arbitrarily increasing closing probabilities (25%->75%) before board meetings, creating large fake opportunities in Salesforce for uninterested prospects.

\* \*\*Discovery Methodology:\*\* Interviews with multiple former XL salespeople detailing internal practices and management directives regarding pipeline reporting in Salesforce CRM.

\* \*\*Metric/Area:\*\* Customer Base & Reorder Rate

\* \*\*Allegation Detail:\*\* Touting logos of 33 major customers is misleading; at least 18 (~55%) were inactive (no reorders for extended period) according to former employees. Customer reorder rate is extremely low, estimated at only ~10%, due to poor performance vs. promises.

\* \*\*Discovery Methodology:\*\* Interviews with former XL employees identifying specific inactive customers from XL's presentation slide. Qualitative assessment of reorder rates based on former employee estimates and anecdotal evidence of customer dissatisfaction.

\* \*\*Metric/Area:\*\* Product Performance (MPG Gains)

\* \*\*Allegation Detail:\*\* Advertised MPG gains (25%+ hybrid, 50%+ plug-in) are unrealistic and consistently unmet in real-world fleet operations. Actual savings typically only 5-10%, sometimes negative (especially highway driving, heavy loads). Plug-in hybrid also significantly underperforms claims (25-35% actual vs 50% claimed).

\* \*\*Discovery Methodology:\*\* Interviews with former XL employees (sales, engineering) detailing typical real-world performance versus advertised claims based on internal data (XL Link) and customer feedback. Comparison of claimed savings vs. specific customer experiences (e.g., PGE, Seattle). Analysis of limitations of dynamometer testing vs. real-world drive cycles.

\* \*\*Metric/Area:\*\* Return on Investment (ROI) for Customers

\* \*\*Allegation Detail:\*\* Claimed positive fleet ROI (55.7%) relies on disingenuous, overly optimistic assumptions: inflated fuel prices, unrealistic vehicle service life (10 years), and understated kit cost ($13k claimed vs ~$17k actual). Adjusted calculation shows significantly \*negative\* ROI (-53.1%).

\* \*\*Discovery Methodology:\*\* Deconstruction of XL's sample ROI calculation (from investor presentation). Interviews with former employees and a former customer regarding typical inputs and results. Recalculation of ROI using more realistic inputs for fuel price (EIA forecasts), service life (industry norms), and actual kit/installation costs (per sources). Used XL's own (likely inflated) MPG saving figure (27%) in adjusted calculation to be conservative.

\* \*\*Metric/Area:\*\* Financial Projections (Revenue)

\* \*\*Allegation Detail:\*\* Hockey-stick revenue projections ($1.4B by 2024E) are unsupported by the (inflated) pipeline and rely heavily on non-existent EV/heavy-duty products. Projections met with laughter/disbelief by former employees.

\* \*\*Discovery Methodology:\*\* Qualitative assessment based on interviews with former employees regarding feasibility. Comparison of projection scale vs. current business reality, pipeline issues, and lack of EV capability.

\* \*\*Metric/Area:\*\* Technology / EV Capability

\* \*\*Allegation Detail:\*\* Lacks engineering talent (used undergrad interns for hardware), proprietary tech, and supply chain to compete in full EVs or electrify heavy-duty trucks as projected. Current hybrid tech seen as obsolete. XL Grid charging product appears non-proprietary; partnership announcement conflicted.

\* \*\*Discovery Methodology:\*\* Interviews with former XL employees (engineering, sales) assessing technical capabilities, R&D processes, staffing (intern use), and supply chain issues. Analysis of competitive landscape (OEM EV offerings). Investigation into XL Grid tech and partnership (Islanders arena/Ledecky conflict).

\* \*\*Metric/Area:\*\* Company Valuation / Financial Health

\* \*\*Allegation Detail:\*\* Pre-SPAC Series D valuation reportedly ~$73m, tiny fraction of SPAC deal. Went from receiving $1.1m PPP loan in Apr 2020 to billion-dollar SPAC valuation 6 months later. Lost CARB certification hindering California sales.

\* \*\*Discovery Methodology:\*\* Information on prior valuation from former employee interview. Public data search for PPP loan records. Research into CARB certification status and regulations impacting hybrid eligibility. Interviews regarding supply chain problems.

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\*\*8. NMC Health PLC (NMC)\*\* (Follow-up Report)

\* \*\*Core Allegation(s):\*\* Undisclosed insider share pledges raise further concerns about true debt levels, off-balance sheet financing, and related party transactions potentially subsidizing margins.

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology:\*\*

\* \*\*Metric/Area:\*\* Insider Share Pledges (Undisclosed)

\* \*\*Allegation Detail:\*\* Significant, previously undisclosed share pledges by controlling shareholders (BR Shetty, Butti family members) revealed. The exact amount and purpose are unclear but raise flags.

\* \*\*Discovery Methodology:\*\* Analysis of new company announcements and regulatory filings disclosing the existence and scale of previously unknown share pledges.

\* \*\*Metric/Area:\*\* Potential Off-Balance Sheet Debt

\* \*\*Allegation Detail:\*\* The undisclosed pledges could be collateral for debt hidden off NMC's balance sheet, consistent with prior MW concerns about understated debt and an FT report on NMC attempting such financing. Structure could mirror Enron SPEs.

\* \*\*Discovery Methodology:\*\* Connecting the new pledge information with prior research on debt levels and the FT report. Analysis of potential financing structures where pledges could support off-balance sheet borrowing.

\* \*\*Metric/Area:\*\* Related Party Transactions (RPTs) & Margin Subsidy

\* \*\*Allegation Detail:\*\* Pledges might secure loans \*to\* related parties (disclosed or undisclosed) who then provide services to NMC below cost, artificially inflating NMC's "too good to be true" margins. Identifies new potential undisclosed RPTs serving NMC (BRS Catering, Royal Catering, Shetty Lighting).

\* \*\*Discovery Methodology:\*\* Identification of new service providers to NMC with ownership links to controlling shareholder BR Shetty or his family (using corporate records, websites, credit reports). Analysis of how loans secured by pledges could fund these RPTs to enable margin subsidization.

\* \*\*Metric/Area:\*\* Governance & Transparency

\* \*\*Allegation Detail:\*\* Events reinforce concerns about governance failures, lack of transparency regarding insider dealings (pledges, share movements), and potentially misleading RPT disclosures.

\* \*\*Discovery Methodology:\*\* Evaluating the implications of the new disclosures on overall corporate governance and the reliability of past financial reporting.

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\*\*9. Luckin Coffee Inc. (LK)\*\*

\* \*\*Core Allegation(s):\*\* Massive, systemic fraud involving fabrication of key operating and financial metrics (sales volume, ASP, costs, revenue). Business model fundamentally flawed.

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology:\*\*

\* \*\*Metric/Area:\*\* Items Sold Per Store Per Day

\* \*\*Allegation Detail:\*\* Inflated by 69% (Q3'19) and 88% (Q4'19) vs. reality.

\* \*\*Discovery Methodology:\*\* Extensive physical surveillance: mobilized ~1,500 staff (92 full-time, 1,418 part-time) to record 11,260 hours of continuous video covering 981 store-days across 620 stores in 38 cities (representing 96% of store base). Manually counted customer pick-ups and delivery bags from video footage to estimate actual order volume. Compared count to implied volume from reported revenue/ASP. Also tracked online order number jumps vs. physical counts, finding ~72% inflation in online numbers.

\* \*\*Metric/Area:\*\* Average Selling Price (ASP) & Items Per Order

\* \*\*Allegation Detail:\*\* Net selling price per item inflated by 12.3% (RMB 11.2 reported vs. RMB 9.97 actual in Q4'19). Items per order declined to 1.14 (Q4'19) vs. 1.38 (Q2'19), contradicting growth narrative. Actual discount levels much higher than implied (only ~29% items >50% list price). Masked significant store-level losses (-25% to -28% margin).

\* \*\*Discovery Methodology:\*\* Collected and analyzed 25,843 unique customer receipts from >10,000 customers across 45 cities/2,213 stores. Calculated actual ASP (net of VAT/coupons, consistent with LK definition) and items per order directly from receipt data. Compared actuals to reported figures. Analyzed distribution of effective discount levels.

\* \*\*Metric/Area:\*\* Advertising Expenses

\* \*\*Allegation Detail:\*\* Q3 2019 advertising expenses overstated by >150%, particularly spending on Focus Media. Suspected recycling of these funds to inflate revenue/store profit.

\* \*\*Discovery Methodology:\*\* Used third-party media tracking data (CTR Market Research) which monitors actual ad broadcasts across channels (including Focus Media's). Compared CTR's implied actual spending (after applying estimated discount from list price based on Focus Media's own revenue vs CTR data) to Luckin's reported advertising expense.

\* \*\*Metric/Area:\*\* "Other Product" Revenue Contribution

\* \*\*Allegation Detail:\*\* Reported contribution from non-coffee items inflated nearly 400% (23% reported vs. ~6% actual in Q3'19).

\* \*\*Discovery Methodology:\*\* Analysis of product mix directly from 25,843 customer receipts. Corroborated by calculating the blended VAT rate implied by reported revenue mix vs. the actual blended VAT rate derivable from reported VAT expense (since goods like snacks have higher VAT rate (13%) than services like coffee (6%)).

\* \*\*Metric/Area:\*\* Insider Stock Pledges

\* \*\*Allegation Detail:\*\* Management pledged 49% of holdings (24% of O/S) for loans, a significant hidden cash-out and risk factor.

\* \*\*Discovery Methodology:\*\* Analysis of disclosures in IPO/secondary offering prospectuses regarding shares pledged by Chairman Lu, CEO Qian, and Lu's sister.

\* \*\*Metric/Area:\*\* Unit Economics / Business Model Viability

\* \*\*Allegation Detail:\*\* Business model fundamentally broken. Targets niche functional coffee market in tea-dominant China. Customers highly price-sensitive, retention dependent on unsustainable discounts (proven by cohort analysis vs. discount levels). Unit economics deeply negative based on real ASP/volume and costs. Expansion plan accelerates cash burn. Lacks competence in non-coffee (e.g., tea product inferior). Franchise model non-compliant.

\* \*\*Discovery Methodology:\*\* Analysis of market data (coffee vs. tea consumption, caffeine sources via FAO/USDA/ICO); analysis of customer behavior using cohort data from prospectuses (retention rates, transaction value vs. calendar month/discount levels); calculation of store-level unit economics using reported costs and \*actual\* (receipt-derived) ASP/volume; comparison with competitor models (Starbucks, convenience stores, tea chains); analysis of Luckin Tea product vs. competitors (HEYTEA etc.) based on ingredients/process; review of PRC franchise regulations vs. Luckin Tea's structure/timing. Investigation into management backgrounds/related parties (Lu/CAR/UCAR/Borgward/Wang Baiyin; Yang Fei/iWOM/QWOM) using public records, news, filings.

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\*\*10. Nano-X Imaging Ltd. (NNOX)\*\*

\* \*\*Core Allegation(s):\*\* Likely a stock promotion based on a potentially non-existent or non-functional product (Nanox.ARC). Technology claims lack credibility; partnerships appear flimsy or misrepresented.

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology:\*\*

\* \*\*Metric/Area:\*\* Product Demonstration / Image Validity

\* \*\*Allegation Detail:\*\* "Live demo" video scanning a phantom appears faked. Resulting chest images do not match the phantom being scanned (arm position differs, inconsistent anatomy like lung masses). Image quality poor. Experts suspect images were borrowed.

\* \*\*Discovery Methodology:\*\* Critical analysis of the NNOX demo video by multiple (5) radiologists. Identification of inconsistencies between the phantom setup and the resulting images. Assessment of image quality and diagnostic utility. Comparison of phantom model features (Kyoto Kagaku PBU-60) with presented images.

\* \*\*Metric/Area:\*\* Scientific Evidence & Industry Presence

\* \*\*Allegation Detail:\*\* Lack of credible, scientifically validated images produced by the ARC. No peer-reviewed publications. No presence at major industry conferences (RSNA). Advisory board members reportedly silent or evasive. Widespread skepticism among radiologists ("another Theranos").

\* \*\*Discovery Methodology:\*\* Interviews with multiple radiologists assessing the available evidence (or lack thereof). Searches for NNOX publications/presentations in scientific databases and conference proceedings. Checking radiology forums (Aunt Minnie) for discussions. Inquiries with advisory board members (where possible, noting lack of response).

\* \*\*Metric/Area:\*\* Technology Claims (Multi-modality, Performance)

\* \*\*Allegation Detail:\*\* Claims of performing multiple modalities (CT, mammo w/o compression, angio, fluoro) from one low-cost ($10k) device are technologically implausible ("fantasy", "joke"). Claims of superior image quality, low radiation, speed improvements lack substantiation and contradict expert understanding of physics/requirements (e.g., mammo needs compression). "5D" term is hype.

\* \*\*Discovery Methodology:\*\* Expert interviews with radiologists evaluating the feasibility of NNOX's technical claims based on physics principles and existing technology limitations. Analysis of company statements vs. established medical imaging practices (e.g., MQSA for mammography).

\* \*\*Metric/Area:\*\* Partnership Substance & Validity

\* \*\*Allegation Detail:\*\* Partnerships appear exaggerated or misrepresented:

\* \*Hadassah:\* Collaboration timing contradicts FDA submission timeline. Hospital staff unaware of device. Audit chair conflict of interest (cheap options).

\* \*SK Telecom:\* Investment linked to cheap options for convicted felon president.

\* \*Curemetrix (AI):\* No images provided for testing over 6+ months; relationship is a "misnomer".

\* \*Distributors:\* Commitments ($180m+) vastly exceed distributors' apparent capacity/expertise (e.g., Gold Rush SA = individual at home; Promedica IT / APR ES = too small financially; Roel Group RU = irrelevant industrial holding w/ fraud history; Golden Vine TW/SG = hotelier). Agreements have easy outs. USARAD partnership illogical.

\* \*\*Discovery Methodology:\*\* Investigation into partners: Corporate registry searches (SA, Italy, Spain, Russia, Taiwan) for financials, ownership, addresses. Site visits/checks (Gold Rush address). Interviews with partner personnel (Curemetrix). Analysis of partnership agreement terms disclosed in prospectus. Research into backgrounds of partners/principals (Roel/Dorokhin, Golden Vine/Liao). Analysis of conflicts of interest (Hadassah chair, SKT pres options).

\* \*\*Metric/Area:\*\* Management Background & Promoter Influence

\* \*\*Allegation Detail:\*\* CEO Poliakine lacks relevant technical background, previously sued for mismanagement/fraud at Powermat. Company heavily promoted by A-Labs, linked to convicted felon Eli Reifman (ex-Emblaze). Numerous NNOX/A-Labs execs are ex-Emblaze.

\* \*\*Discovery Methodology:\*\* Research into CEO Poliakine's background (education, prior business litigation via court records, news archives). Investigation into A-Labs/Reifman connection using Israeli corporate records, news reports (Globes), LinkedIn, former employee interviews. Analysis of promoter compensation (A-Labs warrants/fees).

\* \*\*Metric/Area:\*\* Regulatory Status & Commercialization Plan

\* \*\*Allegation Detail:\*\* FDA 510(k) submission received major deficiency letter. Plan to deploy 1,000 units in 2021 deemed impossible given lack of working/approved product.

\* \*\*Discovery Methodology:\*\* Tracking FDA submission status and outcomes. Expert interviews assessing feasibility of rollout timeline.

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\*\*11. Burford Capital Ltd. (BUR)\*\*

\* \*\*Core Allegation(s):\*\* Uses aggressive fair value accounting and misleading reporting to mask poor cash generation and inflate returns.

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology:\*\*

\* \*\*Metric/Area:\*\* Cash Generation vs. Reported "Cash Receipts"

\* \*\*Allegation Detail:\*\* Company focuses on misleading metric "cash receipts" which ignores costs. Actual cash generation is negative (adjusted 2019 OCF burn -$123m). Cash balance depleted significantly in H2 2019 despite management claims of strength. 2019 cash receipts figure inflated by changing definition to include hedging cash flows and refinancing proceeds (not done in 2018); adjusted receipts fell -11.8% YoY.

\* \*\*Discovery Methodology:\*\* Reconciliation of reported "cash receipts" by removing newly included items (hedging cash, refinancing) to compare YoY on consistent basis. Analysis of consolidated cash flow statement, adjusting for non-routine items to determine underlying operating cash burn. Tracking reported cash balances period-over-period.

\* \*\*Metric/Area:\*\* Net Realized Gains (IFRS)

\* \*\*Allegation Detail:\*\* H2 2019 net realized gains (IFRS profit on concluded cases vs cash cost) were minimal ($1.9m - $11.9m), an ~85% YoY decline despite significantly larger asset base. Shows poor monetization ability. Note: This metric itself doesn't measure gain over \*carrying value\*.

\* \*\*Discovery Methodology:\*\* Calculation derived from Burford's 2019 profit warning disclosure (stating 2019 consolidated net realized gains were $20m-$30m lower than 2018's $162.5m) by subtracting H1 2019 reported net realized gains ($19.8m).

\* \*\*Metric/Area:\*\* Fair Value Accounting & Petersen Mark

\* \*\*Allegation Detail:\*\* Petersen claim (largest asset) marked at dubious June 2019 sale price (~$773m implied carrying value). Sale likely involved Burford-managed fund as buyer (30%), suggesting "painting the tape" / non-arms-length valuation. Mark ignores significant sovereign/currency risk (Argentina default history, potential peso settlement worth ~6c/$). Refusal to disclose mark using weak excuses hinders assessment of risk/upside depletion.

\* \*\*Discovery Methodology:\*\* Analysis of Petersen sale disclosure (identifying related fund participation risk). Research into Argentine sovereign debt situation and YPF bylaws regarding currency of potential judgment. Persistent questioning of management's refusal to disclose the mark. Calculation of Petersen's contribution to 2019 net realized gains.

\* \*\*Metric/Area:\*\* Complex Strategies / Indirect Investment Accounting

\* \*\*Allegation Detail:\*\* $20.6m of 2019 operating income from "Indirect" segment appears unexplained by cash realizations from concluded cases. Likely includes dubious fair value gains, potentially from asymmetric hedge accounting (booking hedge gains while underlying long marked separately).

\* \*\*Discovery Methodology:\*\* Reconciliation of reported segment income against disclosed cash proceeds from concluded investments within that segment (from annual report tables) to identify the unexplained portion. Analysis of accounting policy for hedging/Level 3 assets in complex strategies.

\* \*\*Metric/Area:\*\* Reclassification & Metric Definition Changes

\* \*\*Allegation Detail:\*\* Reclassified complex strategy recovery ($11.9m) into Direct vintage \*post\* year-end to inflate 2019 vintage recovery metric by 13x. Changed definitions of "Deployments" and "Realizations" in 2019 to include hedging assets, artificially boosting reported growth/activity figures (masking underlying declines of -9% to -35.5% on adjusted basis).

\* \*\*Discovery Methodology:\*\* Tracking investment classifications and recovery data by vintage across annual reports to identify post-period reclassifications. Recalculating Deployment and Realization metrics using consistent (pre-2019) definitions excluding hedging assets and comparing YoY growth.

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\*\*12. Danimer Scientific, Inc. (DNMR)\*\*

\* \*\*Core Allegation(s):\*\* SPAC promotion misleading investors about customer commitments, product readiness, production capability/plans, and market size (TAM). Business appears technologically challenged and strategically haphazard.

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology:\*\*

\* \*\*Metric/Area:\*\* Customer Agreements ("Take or Pay") & Demand

\* \*\*Allegation Detail:\*\* Claimed >$200m "take or pay" agreements (PepsiCo, Mars, Nestlé) are highly misleading. Products for these deals (e.g., flexible packaging) are likely years away from technical feasibility/commercialization. Agreements reportedly contain outs if specs aren't met. Real demand for \*currently producible\* PHA (mostly for straws) appears weak. PepsiCo bag touted is PLA, not PHA.

\* \*\*Discovery Methodology:\*\* Interviews with sources familiar with DNMR customer programs (PepsiCo, Mars Wrigley) regarding development timelines and contract nature. Searching for commercially available end-products using DNMR PHA. Analysis of company statements vs. reality of product development stage. Investigation into the awarded PepsiCo bag material (confirming PLA).

\* \*\*Metric/Area:\*\* Production Volume & Capacity Utilization

\* \*\*Allegation Detail:\*\* Despite claiming 50%+ utilization of Kentucky plant (20m PPY neat PHA capacity) and being "sold out", Muddy Waters estimates actual neat PHA production in H1 2021 was only ~2.8m lbs (~28% utilization, using favorable assumptions), ~40% below target. Suggests weak demand or production issues. "Debottlenecking" shutdown insufficient to explain shortfall.

\* \*\*Discovery Methodology:\*\* Calculation based on reported quarterly product revenue, changes in finished goods inventory (from SEC filings), and disclosed average blended ASP ($/lb). Applied an estimated PHA content percentage (70%, based partly on lab analysis of WinCup straw at 62% +/- 5%) to derive neat PHA produced. Compared result to stated nameplate capacity and utilization claims. Analyzed impact of short debottlenecking shutdown.

\* \*\*Metric/Area:\*\* Inventory Composition & Turnover

\* \*\*Allegation Detail:\*\* Inventory consistently shows low/zero Work-in-Progress alongside material Raw Material and Finished Goods balances. Combined with low turnover (~3x annualized), this pattern suggests production runs infrequently and/or outstrips weak demand, or potential issues with unsalable finished product.

\* \*\*Discovery Methodology:\*\* Analysis of the breakdown of inventory components (Raw Materials, WIP, Finished Goods) disclosed in quarterly SEC filings over multiple periods. Calculation of annualized inventory turnover. Interpretation of the pattern in the context of production processes and demand.

\* \*\*Metric/Area:\*\* Production Expansion Plans & Costs

\* \*\*Allegation Detail:\*\* Plans constantly changing (4 iterations in 8 months post-SPAC), indicating lack of clear strategy/realism ("amateurish"). Cost/capacity figures shift illogically (e.g., latest plan claims more capacity for less money but components don't add up). History of overstating capacity (Bainbridge 60m PPY claimed in 2015 vs. "demo plant" now). Likely unprepared for PHA scaling challenges (potentially 5-7+ year timeline).

\* \*\*Discovery Methodology:\*\* Tracking and comparing different versions of announced capacity expansion plans (Kentucky Phase II, Greenfield/Bainbridge, Novomer Rinnovo) across investor presentations and earnings calls. Checking arithmetic consistency of claimed total capacity vs. individual plant capacities. Researching historical claims (Bainbridge 2015 video featuring current execs). Interviews with bioplastics production experts regarding scaling timelines and challenges (PLA vs PHA).

\* \*\*Metric/Area:\*\* Novomer Acquisition & Technology Viability

\* \*\*Allegation Detail:\*\* Acquisition ($152m cash) seems a desperate "Hail Mary", potentially signaling lack of faith in own tech scaling. Novomer tech appears unproven at scale (pilot plant kg/day), faced fundamental issues, key talent departed, IP expiring, reliant on costly/dangerous feedstocks (EO/CO from petrochemicals, expensive organic catalysts). Novomer likely near bankruptcy pre-acquisition (passed over by buyers). DNMR diligence appears rushed. Claimed cost/speed benefits likely exaggerated.

\* \*\*Discovery Methodology:\*\* Interviews with two former senior Novomer managers regarding the state of the technology, plant designs, staffing, funding, IP status, feedstock/catalyst issues, and economics prior to acquisition. Research into Novomer's history, patents, funding rounds, and prior M&A attempts (e.g., Aramco polyol deal diligence time). Analysis of technical feasibility and economics of using Novomer tech/feedstocks.

\* \*\*Metric/Area:\*\* Total Addressable Market (TAM)

\* \*\*Allegation Detail:\*\* Claim of 500 billion lb ($1 Trillion) TAM based on replacing conventional plastics is hyper-exaggerated ("ludicrous", "delusional"). Realistic bioplastics market much smaller ($7-47B by 2027-31), with PHA only a fraction (behind PLA, PBAT, starch). Bioplastics face major hurdles (cost, recycling contamination, policy focus on reduce/reuse, littering concerns).

\* \*\*Discovery Methodology:\*\* Comparison of DNMR's TAM claim against independent market research reports on bioplastics market size and forecasts. Interviews with industry experts (bioplastics, CPG packaging) regarding market potential, limitations, and competitive landscape (vs PLA, recycling). Analysis of policy trends (Ellen MacArthur Foundation) and regulatory issues (biodegradability labeling restrictions).

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\*\*14. eHealth, Inc. (EHTH)\*\*

\* \*\*Core Allegation(s):\*\* Uses aggressive LTV accounting (ASC 606) to mask an unprofitable business model reliant on acquiring high-churn customers, leading to value destruction and cash burn.

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology:\*\*

\* \*\*Metric/Area:\*\* Revenue Recognition & LTV Assumptions (Persistence/Churn)

\* \*\*Allegation Detail:\*\* Books multiple years (avg. 3 for MA) of commission revenue upfront based on Lifetime Value (LTV) models. The key persistence assumption (~3 yr MA life) is based on older, stickier customer cohorts, but recent growth comes from high-churn DRTV-acquired customers. MA churn rate rose from ~37% (2017) to ~47% (2019), implying real average life closer to ~2.1-2.3 years. Using outdated assumptions grossly overstates LTV and revenue.

\* \*\*Discovery Methodology:\*\* Analysis of EHTH's ASC 606 revenue recognition policy and LTV modeling approach (from 10-Ks). Calculation of implied historical churn rates using disclosed beginning/ending estimated membership numbers. Comparison of churn trends with changes in customer acquisition strategy (shift to DRTV). Recalculation of LTV using adjusted, shorter life assumptions based on recent churn.

\* \*\*Metric/Area:\*\* Churn Rate Calculation & Disclosure

\* \*\*Allegation Detail:\*\* EHTH manipulates its reported churn metric to appear lower than reality. Uses an aggressively small numerator (potentially double-counting constraint for non-paying members already factored into LTV) and a misleadingly large denominator (adding new members to average members, ignoring intra-period attrition).

\* \*\*Discovery Methodology:\*\* Deconstruction of EHTH's disclosed churn calculation methodology (from earnings presentations/calls). Critique of the methodology's inputs (numerator/denominator choices) based on accounting principles and logical consistency. Comparison with standard churn calculation methods.

\* \*\*Metric/Area:\*\* Ongoing Service/Retention Costs

\* \*\*Allegation Detail:\*\* Management falsely claims near-zero ongoing costs associated with collecting future commissions, which is fundamental to justifying multi-year revenue recognition. In reality, EHTH incurs significant costs (~$75-96 per MA member/year estimated by MW) for customer service, retention efforts (outreach calls, agent bonuses), and revenue sharing with partners, which are necessary to realize the booked LTV. Ignoring these costs violates matching principle and inflates profitability.

\* \*\*Discovery Methodology:\*\* Analysis of management statements regarding ongoing costs vs. reality of insurance brokerage business. Interviews with former EHTH executives detailing retention activities and estimating associated costs ($50-100/member/year). Allocation of reported operating expenses (Customer Care, Marketing, Tech) to estimate ongoing service/retention component. Calculation of estimated costs from revenue sharing partnerships based on typical structures/rates (from interviews).

\* \*\*Metric/Area:\*\* Unit Economics (Medicare Advantage)

\* \*\*Allegation Detail:\*\* MA business is fundamentally unprofitable on a per-member basis when using realistic LTV (adjusted for shorter life) and including ongoing costs. MW estimates loss of -$135/member (variable costs) or -$402/member (fully loaded) for 2019 cohort. Growth driven by acquiring these unprofitable customers destroys value.

\* \*\*Discovery Methodology:\*\* Calculation of MA unit economics by starting with adjusted LTV, subtracting estimated acquisition costs (Marketing, Enrollment expenses not allocated to retention), and subtracting estimated ongoing service/retention costs over the adjusted member lifetime.

\* \*\*Metric/Area:\*\* Cash Collection Timeline & Tail Revenue

\* \*\*Allegation Detail:\*\* High early churn means cash collection period for initially booked revenue is much longer than the ~3-year assumed life (estimated ~9 years). "Tail revenue" booked after 3 years (based on small cohort surviving longer + commission rate increases) extends this even further and is highly speculative. After deducting ongoing costs, cash collections likely \*never\* recover the initially booked receivable, let alone the tail revenue. Booking tail revenue early (policy change in Q4'19) seen as aggressive accounting maneuver.

\* \*\*Discovery Methodology:\*\* Modeling cumulative cash collections per cohort over time based on estimated cash per member per year ($435 Yr1, $327 thereafter) and the calculated churn curve. Determined time required to collect initial LTV amount. Estimated cash collected during the "tail" period (Year 10+) and compared to initial receivable and booked tail revenue adjustments. Analysis of timing and rationale for change in tail revenue recognition policy.

\* \*\*Metric/Area:\*\* Operating Cash Flow (OCF) & Guidance

\* \*\*Allegation Detail:\*\* Consistently negative OCF burn demonstrates value destruction. Management repeatedly missed guidance/targets for achieving positive OCF, moving the goalposts.

\* \*\*Discovery Methodology:\*\* Tracking historical OCF performance and management guidance/commentary from earnings calls and presentations.

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\*\*15. JOYY Inc. (YY)\*\*

\* \*\*Core Allegation(s):\*\* Massive, multi-billion dollar fraud with ~84% of consolidated revenue fabricated. Core businesses YY Live (~90% fake) and Bigo (~80% fake) built on bots and round-tripping.

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology:\*\*

\* \*\*Metric/Area:\*\* YY Live Livestreaming Revenue & Paying Users (PUs)

\* \*\*Allegation Detail:\*\* ~90% of gift revenue is fraudulent. Achieved via:

1. \*YY Server/Internal Bots:\* Bots originating from YY's own IPs (internal network 100.64.0.0/10 range, localhost 127.0.0.1) contribute ~50% of gift value. Detected via IP analysis, often revealed during VPN/masking glitches.

2. \*Performer Round-tripping:\* Top performers use networks of alter-ego PU accounts (linked via shared mobile device IMEIs) to gift themselves/each other. Analysis of top 3 performers (Big Li, Xiaozhou, Ruitiantian) showed their linked accounts generated net \*outflows\* while YY booked revenue.

3. \*Complicit Guilds:\* Top channel owners (often ex-YY employees) facilitate fraud. Top 5 guilds' SAIC revenue 85.9% lower than YY claims for them.

\* \*\*Discovery Methodology:\*\* Extensive data collection (~1 year) from YY Live platform using Chrome developer tools (capturing 115.6m transactions, 88 data points incl. PU ID, To ID, gift details, timestamp, \*IP address\*, \*IMEI\*). Analysis of IP addresses to identify internal/server origins. Analysis of shared IMEIs to map networks linking PUs and performers. Use of third-party data service Xiaohulu (XHL - linked to YY founder) for aggregate gift revenue/rankings, cross-referenced with own data. Comparison of claimed guild revenues vs. financials from PRC credit reports/SAIC filings. In-depth case studies of top performers/PUs tracking gifting patterns, IP/IMEI links, off-air gifting (bot indicator). Wuhan lockdown PU sample analysis (n=96) identifying bot behavior (impossible IP jumps, IMEI links). "Platform Angels" promo analysis suggesting true bot count ~3x higher than detected via IMEI. Interviews with channel owners, ex-employees.

\* \*\*Metric/Area:\*\* YY Live Online Dating Revenue

\* \*\*Allegation Detail:\*\* Appears ~80% fraudulent. Platform shows low activity, high "sit-in bot" presence, high PU/performer overlap (circular gifting), contrary to being a major revenue source (~20% implied).

\* \*\*Discovery Methodology:\*\* Monitoring of dating livestream rooms (user counts, interactions, gifting activity). Analysis of PU lists showing high overlap and performer self-gifting. Comparison of observed activity/revenue potential vs. revenue implied by third-party data provider (BigOne) trying to reconcile YY's total revenue.

\* \*\*Metric/Area:\*\* Bigo Revenue & Users

\* \*\*Allegation Detail:\*\* Estimated ~80% fraudulent (conservative 60%). Similar patterns to YY Live: widespread bot usage (~60-70%+ per ex-country heads), performers recycling "beans" (virtual currency) via gifting. Top earner (RCT\_KHAN) streams nonsensical content, gifts himself via alter ego (later profile details altered by Bigo to hide this). Fabricated PRC revenue stream (Hello app) used to inflate acquisition price.

\* \*\*Discovery Methodology:\*\* Analysis of app store revenue data (Sensor Tower etc.) adjusted generously for fees/channels/geos, compared to reported Bigo revenue. Interviews with former Bigo country managers confirming bot usage. Monitoring of top performer channels (RCT\_KHAN) and analysis of contributor lists/profiles, documenting circular gifting and profile manipulation by Bigo. Investigation into PRC business (Hello app via VIE Baiguoyuan) using primary diligence (app usage, low activity observed) and interviews (channel owners unfamiliar), comparison of reported PRC revenue vs. likely negligible real revenue.

\* \*\*Metric/Area:\*\* Bigo Acquisition & Valuation

\* \*\*Allegation Detail:\*\* YY lied about Bigo's origin (founded by YY, not David Li). Acquisition structure ($1.45B deal) allowed Chairman Li to personally extract significant value (~$156m+ stock/cash). Inclusion of fake PRC revenue inflated Bigo's value for Li's benefit. Deal generated huge paper remeasurement gains for YY. Bigo's messy audit history (3 auditors in 4 yrs, going concern warnings, restatement) ignored.

\* \*\*Discovery Methodology:\*\* Analysis of Bigo's Singapore incorporation documents revealing YY as initial sole shareholder vs. David Li. Review of acquisition terms (YY SEC filings) detailing consideration paid to Li. Analysis of Bigo's historical Singapore financial statements (auditor changes, going concern opinions, restatement). Calculation of remeasurement gains booked by YY. Analysis connecting PRC revenue stream to inflated valuation.

\* \*\*Metric/Area:\*\* Consolidated Financials & Cash Balance (YY)

\* \*\*Allegation Detail:\*\* Significant discrepancies between consolidated SEC filings and underlying China VIE financials (from credit reports), including missing long-term deposits and lower cash balances in VIEs. Implies ~RMB 1.3B cash transferred from VIEs to WFOEs (mostly offshore) in 2018 without proper disclosure, raising concerns about fake cash or illegal capital outflows.

\* \*\*Discovery Methodology:\*\* Comparison of consolidated balance sheet items (cash, deposits) reported in SEC filings vs. aggregated data from China credit reports/SAIC filings for major VIEs (Guangzhou Huaduo, Beijing Tuda). Reconciliation of VIE cash flows and balance sheet changes to estimate intercompany transfers to WFOEs. Analysis of onshore vs. offshore WFOE cash balances (using SAIC for onshore) to determine likely destination of transferred cash. Review of SEC filings for disclosures of offshore dividends/loans.

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\*\*16. MultiPlan Corp. (MPLN)\*\*

\* \*\*Core Allegation(s):\*\* Facing existential threat from largest customer (UHC) launching a superior competitor (Naviguard), while financials were already engineered to mask deterioration. SPAC deal likely H&F's distressed exit.

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology:\*\*

\* \*\*Metric/Area:\*\* Revenue & EBITDA Concentration / Customer Risk

\* \*\*Allegation Detail:\*\* Over-reliant on largest customer UHC (35% of 2019 revenue). UHC launched competitor Naviguard offering lower/no fees and solving MPLN's balance billing issue. UHC aggressively converting clients to Naviguard (targeting all key accounts by YE 2022). Expect ~75% loss of UHC business by 2022E. Other major clients also contracting with Naviguard or demanding price cuts. Projects 35% overall revenue decline by 2022E.

\* \*\*Discovery Methodology:\*\* Interviews with current Naviguard executive, former MPLN executives, executives at top-5 national health plans (MPLN customers). Analysis of UHC presentations/videos about Naviguard. Tracking Naviguard rollout plans and customer wins. Modeling revenue impact based on UHC concentration (from SEC filings) and projected loss rates, plus estimated impact on non-UHC business. Comparison with S&P forecasts.

\* \*\*Metric/Area:\*\* Take Rate / Pricing Power

\* \*\*Allegation Detail:\*\* Facing significant pricing pressure from large insurers, cutting take rates (e.g., ~12% -> ~6% for some). Claims of being "preferred partner" contradicted by price concessions and lack of enforceable exclusivity. Business model incentivizing high initial bills is flawed and disliked by employers/members.

\* \*\*Discovery Methodology:\*\* Interviews with former MPLN executives and insurance industry executives regarding pricing negotiations, contract terms (exclusivity), and customer satisfaction issues (balance billing). Comparison of MPLN's model vs. Naviguard's value proposition.

\* \*\*Metric/Area:\*\* Financial Engineering / Accounting

\* \*\*Allegation Detail:\*\* 2018 EBITDA growth likely manufactured by reducing revenue reserves (~30% -> 10%). Blaming revenue decline (post-2017 peak) on "idiosyncratic customer behavior" is misleading. Recent change to LFCF guidance disclaimer signals lack of confidence. HST acquisition seems like expensive attempt to buy growth/cover story.

\* \*\*Discovery Methodology:\*\* Information on reserve release from former MPLN executive interview. Analysis of historical revenue trends vs. management explanations. Tracking changes in guidance/disclosures over time (LFCF footnote). Analysis of HST acquisition rationale and valuation ($/life).

\* \*\*Metric/Area:\*\* Leverage & Cash Flow

\* \*\*Allegation Detail:\*\* High net leverage (~5.9x pro forma post-SPAC) will worsen dramatically (>8.0x by 2022E) with revenue/EBITDA decline. Projected 2022E Levered FCF only $74m (vs ~$370m implied by original guidance), an 80% drop. Raises liquidity concerns.

\* \*\*Discovery Methodology:\*\* Calculation of pro forma leverage post-SPAC. Modeling future leverage based on projected EBITDA declines. Calculation of projected LFCF based on adjusted EBITDA and estimated cash conversion.

\* \*\*Metric/Area:\*\* PE Ownership & SPAC Context

\* \*\*Allegation Detail:\*\* MPLN cycled through 4 PE firms ("necrophilia"). H&F likely pursued SPAC as last resort after failed sale/merger attempts. H&F already extracted value via dividends. SPAC sponsor (Churchill) likely missed Naviguard threat. H&F equity rollover potentially influenced by lack of exit options.

\* \*\*Discovery Methodology:\*\* Research into MPLN's ownership history. Information on failed M&A attempts from former executive interviews. Analysis of H&F's dividend recap history (implied). Review of SPAC merger proxy for deal negotiation timeline and rationale.

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\*\*17. FTAI Aviation Ltd. (FTAI)\*\*

\* \*\*Core Allegation(s):\*\* Misleading financial reporting exaggerating MRO business (Aerospace Products - AP) size and profitability through misclassification of whole engine sales and accounting manipulation between Leasing and AP segments. Potential US sanctions violation.

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology:\*\*

\* \*\*Metric/Area:\*\* Module Sales vs. Whole Engine Sales

\* \*\*Allegation Detail:\*\* Reports sales in "modules" but likely ~70-80% represent \*whole engine\* sales (1 engine = 3 modules). Inflates apparent MRO activity. GAAP revenue per reported module (~$2m) far exceeds market price for actual individual modules ($0.7m-$1.5m). FY24 YTD sales suggest ~70 whole engines sold (counted as ~210 modules), ~1/3 of AP revenue.

\* \*\*Discovery Methodology:\*\* Comparison of reported revenue per module against known market pricing for individual Fan, Core, LPT modules (from investor day slides, expert input). Interviews with former senior FTAI executives confirming practice of counting whole engines as 3 modules. Commissioned industry expert (ex-FTAI exec) to canvass major engine traders to estimate FTAI's 2024 whole engine sales volume. Analysis of change in Inventory definition in Q3'24 10-Q (added "aircraft engines"). Noted management stopped disclosing module sales count in Q3'24.

\* \*\*Metric/Area:\*\* Aerospace Products (AP) EBITDA Margin

\* \*\*Allegation Detail:\*\* Reported Adj. EBITDA margins (~36% YTD'24) are artificially inflated and significantly higher than peers (~20% avg) due to accounting scheme: engines depreciated aggressively (2-6 yr life, even off-lease) in \*Leasing\* segment, then transferred to AP \*Inventory\* at low carrying value. AP sells this inventory, recognizing low COGS and thus inflated margins. Leasing bears the true economic cost. Subjectivity in residual values offers more room for manipulation.

\* \*\*Discovery Methodology:\*\* Comparison of FTAI AP Adj. EBITDA margins vs. relevant peers (Heico, MTU MRO, GE Engines, Boeing Global Services, SARO, VSEC). Analysis of FTAI's accounting policies for depreciation (Leasing vs AP), inventory transfers (non-cash balance sheet movements between segments), and residual value estimation (noting subjectivity vs peers like WLFC). Calculation showing ~70% of AP COGS originated as Leasing Equipment. Interviews with former FTAI executives explaining the mechanism and intent ("robbing Peter to pay Paul").

\* \*\*Metric/Area:\*\* Cash Flow Classification & Gain on Sale

\* \*\*Allegation Detail:\*\* New Q3'24 cash flow disclosure implies minimal value is added to assets within AP before sale (costs to manufacture < transferred value). ~80% of AP Adj. EBITDA YTD'24 is Gain on Sale, which is largely reclassified from Operating to Investing cash flow under this new rule, confirming AP is primarily asset trading, not MRO service.

\* \*\*Discovery Methodology:\*\* Analysis of the new cash flow statement footnote added in Q3'24 10-Q regarding classification of cash receipts from asset sales based on cost basis composition (transferred value vs. manufacturing cost). Calculation linking the adjustment amount for "Gain on sale of assets" (moved from Operating to Investing) to the reported AP Adj. EBITDA (after netting out Leasing segment gains).

\* \*\*Metric/Area:\*\* Channel Stuffing / Revenue Recognition Timing

\* \*\*Allegation Detail:\*\* Evidence suggests FTAI may have improperly recognized revenue in Q4 2023 for two aircraft "sold" to an intermediary (Aerolease) for a promissory note, without cash payment or lease novation. Real sale to bonafide buyer (Setna iO) occurred ~7 months later in June 2024, when cash was likely collected.

\* \*\*Discovery Methodology:\*\* Information from consultant (ex-FTAI exec) based on reported discussions with intermediary. Cross-referencing with public aircraft transaction databases (Cirium) and FAA title conveyance records (identifying aircraft MSN/Tail numbers, buyer Setna, seller trustee UMB Bank linked to FTAI financing). Analysis of FTAI's 2024 asset sale schedule in SEC filings (showing these sales were \*not\* recorded in 2024, implying they were booked in 2023). Checking YE2023 promissory note balance.

\* \*\*Metric/Area:\*\* Capital Intensity & Business Model

\* \*\*Allegation Detail:\*\* AP business, especially Perpetual Power Program (engine management requiring spare engines), is capital intensive, contrary to "capital lite" MRO narrative. It's fundamentally a leasing business model.

\* \*\*Discovery Methodology:\*\* Analysis of Perpetual Power Program description in revenue recognition policy. Tracking Leasing Equipment capex in cash flow statement. Interviews with former execs describing the business evolution and capital needs.

\* \*\*Metric/Area:\*\* Potential Iran Sanctions Violation (OFAC)

\* \*\*Allegation Detail:\*\* Photographic/video evidence from Jan/Feb 2025 posted on LinkedIn by executive of Sorena Turbine (Iranian MRO in Tehran) shows CFM56 engines next to packaging clearly bearing FTAI Aviation and Module Factory logos/markings identical to those seen at FTAI facilities/promos. Suggests FTAI product reached sanctioned entity.

\* \*\*Discovery Methodology:\*\* Analysis of publicly available LinkedIn posts (photos, videos). Comparison of packaging details (logos, QR codes) in Iranian photos vs. photos from analyst visits to FTAI and FTAI promotional videos. Geolocation of the Iranian MRO facility using landmarks in videos/photos compared to Google Maps/Earth based on Sorena Turbine's listed address. Consultation with OFAC legal expert regarding potential violations and penalties (strict liability noted).

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\*\*18. Fairfax Financial Holdings Ltd. (FFH)\*\*

\* \*\*Core Allegation(s):\*\* Manipulates asset values and income through complex, often value-destructive transactions to produce accounting gains, resembling GE more than Berkshire Hathaway. Conservative book value adjustment: -$4.5B (-18%).

\* \*\*Key Metrics/Areas of Concern & Detailed Findings/Methodology (Focus on Accounting Levers):\*\*

\* \*\*Metric/Area:\*\* Associate/Investment Valuation & Impairment

\* \*\*Allegation Detail:\*\* Consistently mis-marks investments, avoids impairments. \*Recipe:\* Carried above market, took private at premium to avoid loss. \*Quess:\* Used questionable de-consolidation for $890m gain, changed accounting method (FVTPL->Equity) to avoid markdown, insufficient impairments despite market collapse. \*EXCO:\* Carried far above OTC market price, used inflated \*fair value\* vs carrying value to avoid impairment test. \*Farmers Edge:\* Grossly under-impaired (-$66m miss vs market cap), then loaned more undisclosed funds. \*GoDigit:\* Aggressively marked up unlisted Indian insurer during bubble, manipulated timing of gain recognition to boost TRS gains, failed to mark down post-bubble collapse (~$1.1B overvaluation est.).

\* \*\*Discovery Methodology:\*\* Comparison of Fairfax's carrying values and reported fair values (from Annual/Interim Reports, Notes) for publicly traded associates (Recipe, Quess, EXCO, Farmers Edge) against their actual market prices (stock quotes, OTC broker quotes). Analysis of accounting policy changes (Quess) and impairment testing disclosures (or lack thereof, e.g., post-2020 for associates). Analysis of private investment valuations (GoDigit) vs market trends (InsureTech comps, Indian unicorns) and reported financials (Digit losses vs Fairfax claim of profitability). Calculation of impairment shortfalls. Investigation into related loans/funding (Farmers Edge).

\* \*\*Metric/Area:\*\* Gains on Disposal / Remeasurement Gains

\* \*\*Allegation Detail:\*\* Manufactures gains through complex JVs, related-party sales, or accounting changes. \*Quess:\* $890m gain on dubious de-consolidation. \*Grivalia:\* $171m gain from share swaps with Eurobank. \*RiverStone:\* $117m net gain on JV formation/disposal involving OMERS overpayment & off-balance sheet guarantee (AVLN). \*Fairfax Africa:\* Avoided loss on de-consolidation via mis-marking. \*Eurolife:\* $262m gain on OMERS buyout using questionable option/share FV gains. \*Odyssey/Brit:\* $544.5m immediate gains on "sales" of minority stakes w/ call options (likely disguised financing) to OMERS/CPPIB. \*Gulf Insurance:\* ~$300m gain expected Q4'23 from buying remaining stake at huge premium (~2.4x P/B vs ~1.4x market).

\* \*\*Discovery Methodology:\*\* Deconstruction of transaction structures disclosed in Fairfax financials (Annual Reports, Interim Reports, Notes, subsidiary filings where available e.g., Gatland for RiverStone). Analysis of consideration received vs. assets given up/liabilities assumed. Identification of non-cash components, related parties (OMERS, CPPIB), off-balance sheet elements (AVLN). Critique of valuation methods used to derive gains (e.g., Eurolife option/share FV). Comparison of acquisition multiples vs market (Gulf Insurance).

\* \*\*Metric/Area:\*\* IFRS 17 Adoption Impact

\* \*\*Allegation Detail:\*\* +15.5% book value uplift from IFRS 17 adoption is a significant outlier vs P&C peers (-2% to +4%). "Too good to be true". Suggests potential manipulation.

\* \*\*Discovery Methodology:\*\* Comparison of Fairfax's disclosed equity impact percentage from IFRS 17 adoption against benchmarks from peer P&C insurers (cited in EY market update and direct comparison group). Calculation of implied overstatement based on peer range or % of Contract Liabilities. (Adjusted -$1.2B).

\* \*\*Metric/Area:\*\* Loans to/from Associates & Related Parties

\* \*\*Allegation Detail:\*\* Uses loans to prop up failing associates (EXCO, Farmers Edge), potentially booking fictitious interest/dividend income (return OF capital). Transactions with OMERS/CPPIB (Eurolife, Odyssey, Brit) appear to be disguised debt.

\* \*\*Discovery Methodology:\*\* Tracking loan balances and disclosures in Fairfax and associate filings. Analysis of interest/dividend income vs cash flow received (where possible). Analysis of NCI share terms (preferred dividends, buyback options) suggesting debt-like characteristics. Request for detailed disclosure on cash flows/terms for associate investments and NCI issuances.

\* \*\*Metric/Area:\*\* Consideration Paid/Received in Transactions

\* \*\*Allegation Detail:\*\* Discrepancies between what Fairfax reports and what counterparties/subsidiaries report. E.g., RiverStone disposal consideration ($101.7m total / $335.4m cash discrepancy vs pro rata CVC payment).

\* \*\*Discovery Methodology:\*\* Comparison of transaction consideration details disclosed in Fairfax filings vs. filings of counterparties or acquisition vehicles (e.g., Gatland accounts for RiverStone deal).

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This detailed breakdown should provide the level of granularity you requested on the metrics, findings, and methodologies used by Muddy Waters in these specific short theses based on the documents provided.