Kin

Risk Intelligence Brief - APRIL 2026

# THE OIL PRICE SHOCK AND THE POTENTIAL EQUIPMENT FINANCE DEFAULT WAVE

Large, Rapid Shifts Restructure Credit Risk and What Every Equipment Lender Needs to Do Right Now

**Prepared by Kin Analytics**

**KEY FINDING:**
The 2026 Middle East conflict has triggered what the IEA has called the largest oil supply disruption in the recorded history of the global oil market. Crude oil climbed from $61/barrel in January 2026 to over $110 today. Deutsche Bank, JPMorgan, and Bank of America are projecting $150 to $200/barrel if the Strait of Hormuz remains closed. Transportation equipment portfolios carry significant exposure to this risk. Historical patterns suggest defaults typically do not show up in delinquency data for six to eighteen months after the initial price spike. That gap is lead time, not clear sailing.

This brief examines the historical record of oil shocks and the default waves that followed, quantifies the economic stress on owner-operators and small fleets at various diesel price levels, and lays out a practical stress testing framework for equipment lenders. It closes with a recommendation to stress test, segment, and understand your portfolio at a granular level so you can make sharper risk decisions through the cycle. The analysis draws on Kin Analytics' ten years of hands-on work with equipment finance lenders, including 120+ credit model engagements where we have built origination scorecards, behavioral models, LGD frameworks, and stress testing tools, delivering measurable improvements in both approval rates and default performance for our clients.

**What this brief recommends:** Segment your transportation portfolio by fuel exposure. Stress test DSCR at $7 and $9 diesel. Understand which borrowers have fuel surcharge protection and which do not. The goal is not to tighten and choke your pipeline. The goal is to use data to sharpen your risk assessment so you can lend with more confidence through the cycle. The lenders who understand their exposure now will still be writing business when their peers have stopped.

# Part I: The Present Danger

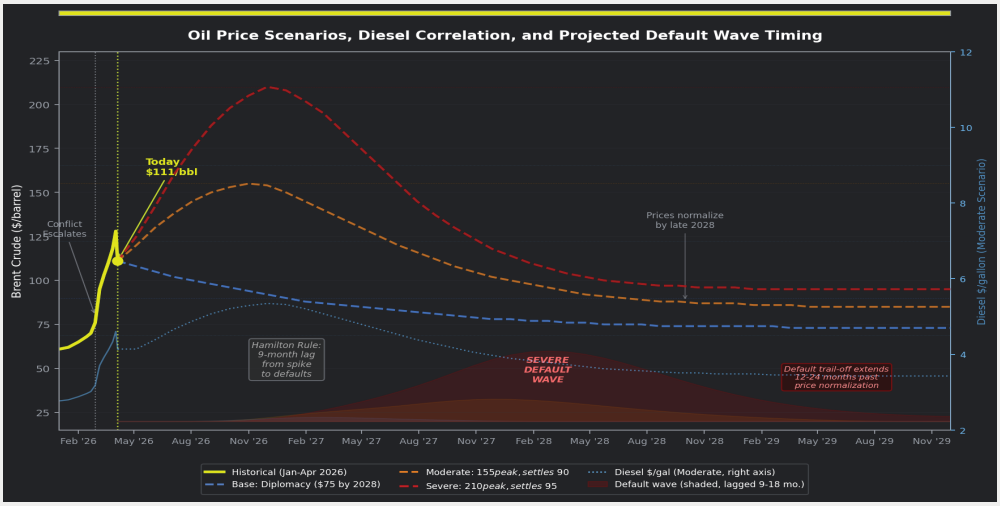
## 1.1 What Is Happening Right Now

As of early April 2026, Brent crude oil is trading above $100 per barrel and trending higher.

At the time of the writing of this article, the Strait of Hormuz, through which roughly 21 million barrels per day flow, representing approximately 20% of all global oil trade, was closed several weeks ago following the escalation of the 2026 Middle East conflict. A peace deal appears to have not materialized as of yet. The strait remains effectively impassable to commercial tanker traffic, whether that holds is what the world is watching and what risk leaders in this industry should be closely monitoring.

One thing that separates this moment from prior oil shocks is the starting position. The trucking industry entered 2026 already in the worst financial condition in the 17-year history of ATRI's Operational Costs of Trucking research. Three consecutive years of freight recession drove truckload operating margins to negative 2.3% in 2024. Non-fuel operational costs hit a record $1.779 per mile. Trucking firm bankruptcies mounted through 2024 and 2025, with carrier exits outpacing new entrants. Insurance premiums rose 12.5% in 2024 and another 10% in the first half of 2025 per ATRI's data. The industry's reserves are already appearing stressed. When the fuel shock hits carriers that are already operating at or below breakeven, the timeline from stress to default compresses. There is no cushion to burn through.

The risk to transportation portfolios is elevated and real right now, but delinquency data will not show it yet. Based on Hamilton's research and the historical pattern of prior oil shocks, defaults have typically lagged the oil price spike by six to eighteen months, something we can track for our clients. **That means portfolios may look fine today but may not be as healthy in early 2027.** Lenders who work with Kin to use this window to build strategy around risk insights will still be writing business to creditworthy borrowers when peers have gone quiet. Those who wait for delinquency data to confirm what the macro picture is already showing will face what every prior cycle delivered: losses climbing on the existing book with no new originations coming in to absorb them.




Goldman Sachs ($100-$125), JPMorgan ($110-$120+), Bank of America ($100-$180), and Deutsche Bank ($120-$200) have all published 2026 forecasts reflecting sustained disruption. Kin stress tests at $250 as a tail risk scenario.

Figure 1: Oil Price Scenarios, Diesel Correlation, and Projected Default Wave Timing. Dashed lines show three oil price scenarios through 2029. Shaded areas at bottom show the projected equipment finance default wave for each scenario, lagged 9 to 18 months per the Hamilton Rule and Federal Reserve research. Blue dotted line shows correlated diesel price (right axis). Prices normalize by late 2028; default trail-off extends 12 to 24 months further. Sources: EIA, Bloomberg, Hamilton (2011), CNBC (April 2026).

## 1.2 The Diesel–Transportation Link

Diesel tracks global crude price with a one to three week lag and a premium of $0.50 to $1.20 per gallon for refining, distribution, and taxes. At $110/barrel, national diesel averages roughly $4.50 to $5.50 and even higher in many areas like the west coast. Based on the EIA's historical crude-to-diesel relationship, we estimate that $150 crude would push diesel toward $6.50 to $7.50, and $200 crude could push diesel above $9.00 per gallon, a level never sustained in the modern trucking era. The higher end of those estimates assumes refining margins and distribution spreads widen under supply stress, which is what happened in 2022 when diesel premiums over crude hit record levels.

| Fuel cost: 110,000-mile owner-operator – 18,333 gal/year at 6 mpg | | |
|---|---|---|
| AT $4.50/GAL (TODAY) | AT $6.50/GAL (~$150 CRUDE) | AT $9.00/GAL (~$200 CRUDE) |
| **$82,500 / year** | **$119,167 / year** | **$165,000 / year** |
| baseline | +$36,667 per truck | +$82,500 per truck |

- **ATBS reported average owner-operator net income of $64,524 in 2024.** For many operators, a $37,000 to $82,500 annual fuel increase is the difference between surviving and shutting down. Diesel price estimates at $150 and $200 crude are based on the EIA crude-to-diesel relationship described above.

# Part II: History as a Guide

## 2.1 The Hamilton Rule and the Default Lag

James D. Hamilton, an economist at UC San Diego, spent decades studying the link between oil prices and recessions. His finding has become one of the most replicated results in energy economics: **nine out of ten U.S. recessions since World War II were preceded by a sharp rise in oil prices, typically with a lag of about nine months.**

> *"All but one of the U.S. recessions since World War II have been preceded, typically with a lag of around three-fourths of a year, by a dramatic increase in the price of crude petroleum. The correlation is too consistent to dismiss as coincidence."*[1]

[1] James D. Hamilton, "Historical Oil Shocks," NBER Working Paper 16790 (2011). Quote: "All but one of the U.S. recessions since World War II have been preceded, typically with a lag of around three-fourths of a year, by a dramatic increase in the price of crude petroleum."

For equipment finance lenders, this matters because the default wave that has historically followed a major oil shock has landed hardest in transportation, construction, and agriculture, typically 6 to 12 months later. But it is important to be clear about the limits: not every oil spike has caused a recession. The 1990 Gulf War spike was sharp but short, and the economic damage was relatively contained. Oil prices ran up significantly in 2011 and 2012 without triggering a downturn at all. Alternatively, the strait may be opened tomorrow and oil prices ease.

That is the juggle act every risk leader must master. If you tighten too early on a spike that resolves in 90 days, you choked your pipeline for nothing. If you wait too long on a spike that does not resolve, you are inside the default wave before you act. The job is not to predict which one this will be. The job is to stress test your portfolio so you know exactly where the vulnerability sits and at what price levels it becomes real.

**The timing of defaults is what catches lenders off guard.** Operators will not default the day diesel hits $6. They burn through cash reserves first, then draw down lines of credit, defer maintenance, skip payments on secondary equipment, and eventually miss their primary obligation. That sequence plays out over 9 to 18 months. Federal Reserve research confirms this: pass-through from oil price increases to broader economic contraction builds over roughly 2 years. In 2025, the Federal Reserve Bank of San Francisco found that interest rates have become significantly more **responsive to oil supply** surprises since the Fed's 2022 rate liftoff, with two-year yields reacting more than three times stronger than in the pre-2021 period. The current crisis began escalating in March 2026. If the disruption persists, the historical pattern suggests the first material wave of transportation equipment defaults could appear between December 2026 and June 2027.

Whether the downturn materializes or not, the lenders who stress test their portfolios, segment their exposure, and understand their risk at a granular level make better decisions. They originate with more confidence through the cycle. The point is not to predict the future.

**The point is to use data to create insights that lead to solid, safe risk decisions as an organization, regardless of what the market does next.**

## 2.2 Historical Oil Shock Chronicle

| Year | Trigger | Price Move | Economic Aftermath | Default / Credit Impact |
|---|---|---|---|---|
| 1973–74 | OPEC Embargo | $3 to $12/bbl (+300%) | Recession 1973 to 1975; stagflation | Trucking bankruptcies surge; equipment repos rise sharply in 1974 to 1975 |
| 1979–80 | Iran Oil Export Disruption | $15 to $40/bbl (+167%) | Recession 1980 to 1982; Volcker rate hikes to 20% | Carrier liquidations; Fed Volcker squeeze compounds transport stress |
| 1990 | Iraq invades Kuwait | $15 to $42/bbl (+180%) | Mild recession 1990 to 1991 | Shorter shock; limited default cycle; faster fuel surcharge adoption |
| 2007–08 | Russia/Ukraine + post-COVID demand | $80 to $125/bbl (+56%) | Inflation to 9.1%; Fed hikes 525 bps | Carrier liquidations; Fed Volcker squeeze compounds transport stress |
| 1973–74 | OPEC Embargo | $3 to $12/bbl (+300%) | Recession 1973 to 1975; stagflation | Trucking cost per mile +23.1%; 2024 softest year for owner-operators since 2019 |
| 2026 | Middle East / Hormuz | $60 to $110+/bbl (to date); $200 to $250 projected | Stagflation risk; prolonged supply disruption | Default wave projected 9 to 18 months out. ACT NOW BEFORE DELINQUENCIES RISE |

Table 2: Historical Oil Price Shocks and Credit / Default Impact. Sources: Federal Reserve History, NBER, Hamilton (2011), ATRI.

# Part III: Commercial Carriers Under Pressure

Oil price shocks reach equipment lenders through a specific chain, not through abstract GDP numbers. Fuel costs hit carrier margins first and directly. Then if consumer spending contracts, freight volumes fall, and spot rates are likely to follow. Higher costs and lower revenue typically converge within six to twelve months of the initial price spike. That is the squeeze that converts an oil shock into a transportation equipment default wave. The carrier profiles below show how differently it plays out depending on fleet size, contract structure, equipment type, and whether a carrier has meaningful fuel surcharge coverage.

## 3.1 How Fuel Flows Through a Trucking P&L

Diesel is the single largest variable cost in any trucking operation, roughly 21% of total operating costs at current prices per ATRI's 2025 data. At $7 or $9 diesel, we estimate fuel could climb to 35 to 45% of total costs based on the cost structure benchmarks in that same data. How much of a fuel increase actually destroys margin depends on fleet size, contract structure, and whether the carrier has a fuel surcharge (FSC) provision. Carriers with contracted freight that includes an FSC tied to the DOE diesel price recover a meaningful portion of the increase. Carriers on flat-rate contracts without FSC, common in construction, agriculture, and specialized hauling, absorb the full increase with no recovery. Spot market operators face a similar problem: rates theoretically adjust over time, but in an environment with freight overcapacity, they may not adjust at all. An operator running 100% contracted freight with solid FSC provisions is a fundamentally different credit than a spot-market operator, even with the same credit score and the same truck.

## 3.2 Profile A: The Single-Truck Owner-Operator

This is the most fuel-sensitive borrower in any equipment finance portfolio. One driver, one truck, no buffer. The owner drives the truck, books the loads, handles the paperwork, and absorbs every cost swing personally. Based on ATBS and ATRI data, most single-truck operators gross between $180,000 and $250,000 per year running roughly 110,000 miles on the spot market or short-term broker contracts. There is no second truck generating revenue to cover a bad month. There is no dispatcher optimizing loads. When diesel spikes, this operator feels it immediately and has no way to spread the cost.

- **What makes this profile especially dangerous for lenders:** a single-truck owner-operator who looked like a solid credit at $4.50 diesel can become insolvent at $7.00 diesel without changing anything else about the business. The fixed costs do not move. The truck payment, insurance, and permits are the same whether fuel is $4 or $9. Every dollar of fuel increase comes directly out of the owner's take-home pay. And because these operators are overwhelmingly on spot-market or non-FSC loads, there is no fuel surcharge recovery to offset the hit. Another problem with this scenario is that by the time the defaults show up in your delinquency data, the damage to the borrower's business has likely already been done and recovery options may be limited.

| SINGLE-TRUCK OWNER-OPERATOR (Per Year) | CURRENT (~$110/bbl) | @$7 DIESEL (~$150/bbl) | @$9 DIESEL (~$200/bbl) |
|---|---|---|---|
| Gross Revenue (110K mi x $2.60/mi spot avg) | $286,000 | $286,000 | $286,000 |
| Fuel (18,333 gal @ 6 MPG) | $82,500 | $128,333 | $165,000 |
| Insurance (1 truck, primary liability + cargo) | $18,000 | $18,000 | $18,000 |
| Maintenance, Tires, Misc. | $26,000 | $26,000 | $26,000 |
| Permits, Tolls, ELD, Admin | $12,000 | $12,000 | $12,000 |
| Self-Employment + Income Tax | $18,000 | $12,000 | $8,000 |
| CASH FLOW AVAILABLE FOR DEBT SERVICE (before equipment payment) | ~$129,500 | ~$89,667 | ~$57,000 |
| Less: Equipment Payment ($2,800/mo) | $33,600 | $33,600 | $33,600 |
| OWNER TAKE-HOME (Pre-Tax Net) | $95,900 | $56,067 | $23,400 |
| DSCR (Cash Flow / $33,600 equip. payment) | 3.85x | 2.67x | 1.70x |

The DSCR numbers look manageable on paper because the equipment payment on a single truck is relatively small. But look at the take-home: at $7 diesel, this owner is living on $56,000 a year with no benefits, no employer match, no paid time off. At $9, it drops to $23,400. That is below the poverty line for a family of two. ATBS reported average owner-operator net income of just $64,524 in 2024, a year they described as one of the most difficult for trucking in recent memory. ATRI's contracted owner-operator rate was $2.09 per mile in 2024, barely keeping pace with the industry average operating cost of $2.26. These operators are already stretched thin before the fuel shock begins.

- **The bigger risk may not be the DSCR ratio. It is the owner walking away.** When take-home pay drops below what the operator could earn as a company driver ($65,000 to $80,000 with benefits), the economic incentive to keep the truck flips. They stop making the payment, return the truck, and go drive for someone else. The lender gets a voluntary surrender on an asset that may have depreciated 15 to 20% by then. This is the most common default pattern for single-truck operators: not a sudden financial collapse, but a rational exit when the economics stop making sense.

- **How a profitable single-truck operation erodes:** At $4.50 diesel, this operator clears $95,900 a year and looks like a healthy credit. A $2.00/gallon diesel increase ($4.50 to $6.50) costs $36,667 annually. That wipes out 38% of net income in one move. At $9.00 diesel, fuel alone has consumed $82,500 more than the baseline, turning a solidly profitable business into one that barely covers the truck payment. The erosion is fast, it is math-driven, and it does not show up in credit scores until months after the damage is done. If a borrower is not cushioned by fuel surcharges, survival becomes difficult, fast.

Table 3A: Single-Truck Owner-Operator P&L Stress. Revenue uses $2.60/mi spot average, which is realistic for a single-truck operator in the current market. Fixed costs stay flat. Only fuel changes. ATBS reported average owner-operator net income of $64,524 in 2024. Sources: ATBS 2024, ATRI 2023.

# 3.3 Profile B: The 20-Truck Regional Fleet

A 20-truck fleet is a different animal. This is a small to mid-size regional carrier, typically structured as an LLC or S-Corp with a dispatcher, a compliance manager, and direct relationships with shippers. Of the 20 trucks, roughly 15 run contracted freight with fuel surcharge provisions and the remaining 5 fill spot loads. That contract mix is the structural difference that separates this profile from the smaller operators above. ATRI's 2025 data confirms the scale advantage is real and measurable: small truckload fleets with fewer than 5 trucks pay $0.565 per mile in fuel costs, while fleets over 1,000 trucks pay $0.436 per mile. Insurance shows an even wider gap, with small fleets paying $0.174 per mile versus $0.090 for the largest carriers. Larger fleets also pay less per gallon through fleet card programs and volume discounts at truck stops, typically saving 5 to 15 cents per gallon versus a single-truck operator. They keep trucks moving more consistently by running team operations or swapping drivers mid-route, squeezing more revenue miles per truck per year. These are scale advantages that directly reduce fuel cost as a percentage of revenue.

| 20-TRUCK FLEET (Per Year) | CURRENT (~$110/bbl) | @$7 DIESEL (~$150/bbl) | @$9 DIESEL (~$200/bbl) |
|---|---|---|---|
| Gross Revenue (20 x 110K mi x $3.15/mi) | $6,930,000 | $6,930,000 | $6,930,000 |
| Fuel (20 trucks x 18,333 gal @ current ~$4.50/gal) | $1,650,000 | $2,567,000 | $3,300,000 |
| FSC Recovery (75% of contract loads, ~60% of increase) | baseline | +$413,000 | +$743,000 |
| Driver Payroll (19 drivers + benefits) | $1,520,000 | $1,520,000 | $1,520,000 |
| Insurance (20 trucks, unchanged by fuel) | $320,000 | $320,000 | $320,000 |
| Maintenance, Tires, Overhead, Admin | $680,000 | $680,000 | $680,000 |
| CASH FLOW AVAILABLE FOR DEBT SERVICE (before equipment payments) | ~$2,760,000 | ~$2,256,000 | ~$1,853,000 |
| Less: Equipment Payments (20 x $2,600/mo) | ($624,000) | ($624,000) | ($624,000) |
| PRE-TAX NET INCOME | ~$2,136,000 | ~$1,632,000 | ~$1,229,000 |
| DSCR (Cash Flow / $624K equip. payments) | 4.42x | 3.62x | 2.97x |

The 20-truck fleet survives all three scenarios. Even at $9 diesel, DSCR sits at 2.97x, comfortably above covenant minimums. Compare that to the single-truck operator at 1.70x. The difference is the FSC recovery line. Contracted freight with fuel surcharge provisions claws back roughly 45% of the fuel cost increase on 75% of loads, worth $413,000 in margin protection at $7 diesel and $743,000 at $9. This is a contract structure and scale advantage your underwriters can ask about and verify before approving a loan.

Table 3B: 20-Truck Regional Fleet P&L Stress. Same per-truck assumptions (110K miles, 6 MPG, $4.50/gal current diesel). The FSC recovery line and higher per-mile revenue are the structural differences. Sources: ATBS 2024, ATRI 2023.

## 3.4 Local and Medium-Duty Operations

Long-haul carriers are not the only fuel-sensitive borrowers. Concrete mixers, tow trucks, utility contractors, and local delivery fleets burn significant fuel through city driving and idle time, often at MPG equivalents well below 5. These businesses have no fuel surcharge provisions, cannot pass through cost increases quickly, and are often overlooked in portfolio fuel risk assessments because they are coded as construction, waste management, or utility services rather than "trucking." Their fuel exposure per dollar of revenue can be as high or higher than a long-haul carrier. Lenders with significant Class 6-7 equipment portfolios should include these segments in stress testing.

# Part IV: Stress Testing Your Portfolio

## 4.1 Why Current Models Miss This Risk

Most equipment finance credit models rely on variables that have been consistent and measurable over time: credit score, DSCR, loan-to-value, time in business, payment history, and fleet size. Diesel price is not usually included in origination or behavioral models especially in cases where the portfolio does not go back far enough. From roughly 2015 through 2021, diesel prices traded in a narrow enough band that fuel cost did not drive meaningful differences in default outcomes between carriers.

So a model comparing a spot-market single-truck owner-operator and a 20-truck regional fleet with full fuel surcharge coverage will score them similarly on risk, because fuel was never a differentiator when those models were built. Look at the P&L tables in Part III: at $9 diesel, the single-truck operator takes home $23,400 a year on a 1.70x DSCR. The 20-truck fleet with FSC coverage holds at 2.97x. Same per-truck fuel math, very different credit risk. You can, if you fully understand your portfolio's risk, soften any industry wide stressors.

## 4.2 What a Fuel Price Stress Test Looks Like

The goal of a fuel stress test is straightforward: segment your book by exposure weighted risk so that monitoring, covenants, and new origination decisions reflect statistical insights. The challenge is that many lenders have never needed to do this before so they may lack any data or knowledge of how it would work. Kin has worked very closely with transportation lenders, and what we have learned is that proactive credit management requires deep insights to minimize risk while reducing impact to the bottom line as much as possible.

How deep the analysis goes depends on your data maturity. With loan files and industry codes, Kin can deliver a priority watchlist in 30 to 45 days. With borrower financials and contract data, we build account-level DSCR stress profiles and portfolio heat maps in 45 to 90 days. For the complete picture, we combine your internal data with third-party sources (Equifax/PayNet, EIA diesel, ATRI benchmarks, DAT spot rates) to build comprehensive risk models with LGD analysis and a prioritized monitoring dashboard.
Over ten years and 120+ credit model engagements, we have worked with every level of data maturity and built the benchmarks to fill the gaps regardless of where a lender starts.

## 4.3 Scenario Matrix: $110, $150, $200, $250 Oil

| Variable | $110/Bbl (Now) | $150/Bbl (Baseline Risk) | $200/Bbl (Severe) | $250/Bbl (Tail Risk) |
|---|---|---|---|---|
| Est. Diesel ($/gal) | ~$4.50–$5.50 | ~$6.00–$7.50 | ~$8.00–$9.50 | ~$10.50–$12.00 |
| Annual Fuel Cost (110K mi, 6 MPG) | $83,000–$101,000 | $110,000–$138,000 | $147,000–$174,000 | $193,000–$220,000 |
| Typical Owner-Op Net Income | $120,000–$180,000 | $60,000–$110,000 | $0–$40,000 | Negative |
| Equipment Loan Default Risk | LOW: manageable with surcharges | ELEVATED: spot operators at risk | HIGH: small fleets systemically stressed | SEVERE: portfolio-wide event |
| Recommended Model Action | Monitor; flag spot-heavy borrowers | Tighten new originations; stress test existing book | Suspend spot market single-truck originations; revalue collateral | Activate crisis protocols; accelerate collection on high risk segment |

# Part V: What to Do Now

Most credit committees want to see delinquency data move before they change course. The problem is timing. Those borrowers are not delinquent today. They will be in nine to twelve months. By the time delinquency data confirms what the macro picture is already showing, you are inside the wave. The proactive path is to use the information already available: fleet size, contract structure, FSC coverage, operating ratio, and 2022 payment behavior. A portfolio segmented by those factors gives a credit team a meaningful picture of fuel exposure in 30 to 90 days.

The instinct when risk rises is to raise cutoff scores and tighten DSCR minimums. That is the classic choke. You raise the bar, deal flow slows, and defaults on your existing book keep rising. You are shrinking from both ends. The better approach is not to approve fewer borrowers. It is

Table 5: Oil Price Scenario Matrix for Equipment Finance Portfolios. Fuel estimates based on EIA diesel/crude correlations. Net income projections based on ATBS/ATRI benchmarks with fuel sensitivity adjustments.

borrowers. It is to get better at separating the low-risk borrowers from the high-risk ones. A 20-truck fleet with strong FSC coverage is actually a better credit than it was six months ago. If your model cannot tell the difference between that borrower and a spot-market single-truck operator, you either turn both down or approve both. The goal is sharper risk assessment, not a tightening that chokes your pipeline.

# Three Diagnostic Questions

Before engaging any outside resource, lenders should be able to answer these questions about their own portfolio. If the answers are unclear, it may be time to bring in analytical support:

- Concentration exposure: How much of your transportation portfolio is concentrated in spot-market owner-operators with fewer than 5 trucks and no documented fuel surcharge provisions?
- DSCR sensitivity: What does your DSCR distribution look like if you stress fuel costs to $7 diesel? How many accounts drop below your covenant minimum?
- Model coverage: Does your credit scoring model include a fuel-price sensitivity variable, or was it built entirely on a period of stable diesel prices?

# What You Can Act On Now

- Flag your highest-risk segment immediately: spot-market single-truck owner-operators with no documented fuel surcharge provisions. Enhanced monitoring (90-day check-ins on payment behavior and credit utilization) costs very little and gives you early warning.
- Request FSC documentation on all new transportation originations. Whether those contracts include a fuel surcharge, what the base rate is, and what percentage of loads are covered. This is the single most important underwriting variable in the current environment.
- Stress test DSCR at $7 and $9 diesel before approving new deals. If a borrower's DSCR falls below 1.25x at $7 diesel, that is a conversation worth having before closing.
- Pull 2022 payment behavior on existing accounts. How a borrower performed during the last fuel spike is possibly the most predictive data point you have.

**Do not stop lending. Lend better. When peers shut the door, the freight companies still running strong have nowhere to go. The lender who shows up for them in a difficult market earns a relationship that survives the cycle. That is both a credit management decision and a business development opportunity.**

# 5.2 What Kin Analytics Builds With You

Kin does not hand off a model and walk away. We work alongside your credit, analytics, and risk teams, sometimes in-seat for weeks at a time, to build frameworks that fit how your business actually operates. Over ten years and 120+ credit model engagements, lenders who deployed Kin-built models have seen approval rates increase by up to 30% while default rates dropped by up to 20%. That is what happens when the model is actually separating risk effectively.

| Kin Deliverable | What You Get | Timeline |
|---|---|---|
| **Portfolio Fuel Risk Audit** | Fuel-risk heat map showing concentration by risk tier, DSCR sensitivity at $6/$7/$8/$9 diesel, and estimated default probability. Flagged watchlist of accounts breaching 1.25x. | 30–60 days |
| **Model Sensitivity Analysis** | Run your current credit model against stressed scenarios to quantify model drift and show where risk is underpriced. | 45–90 days |
| **Annual Fuel Cost (110K mi, 6 MPG)** | Residual value stress at 15%, 20%, 25% compression by equipment type and vintage. Actual loss exposure by account. | 45–90 days |
| **Early Warning System** | Automated risk monitoring tied to EIA diesel data. Accounts escalate to enhanced review at pre-set thresholds. | 60 days/ongoing |
| **Build New Credit Models** | If you do not have a custom credit model, or if your current model was built on a different economic environment, we will build one with you. 120+ credit scoring models delivered across equipment finance. | 90–120 days |
| **Insights Dashboard** | Interactive dashboard for portfolio monitoring, risk tier visualization, and scenario analysis. Gives your credit and risk teams a single view of fuel exposure across the book. | 60–90 days |
| **Ongoing Model Review** | As 2026–2027 outcomes emerge, we assess model rank-ordering and recalibrate where warranted. | 12–18 months |

If anything in this paper resonates with what you are seeing in your own book, we would welcome the conversation. Our goal is the same as yours: help you profit more, lend smarter, and come through this cycle stronger than you went in.

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Kin Analytics Let knowledge in

These activities may run concurrently. Items 1-4 can be delivered in under 4 months given data assessment.

# Appendix: Key Sources and Further Reading

## Academic and Federal Reserve Research


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