Due Diligence-Financial & Operations Risk Analysis & Assessment

National Business Institute Seminar

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IronHorse is a K.C. based special situation professional services firm with practice specialties in business valuation & appraisal, forensic services & litigation support, CFO services, due diligence, and complex financial & operations restructuring/turnaround consulting.

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IronHorse has performed numerous due diligence, valuation, litigation support and restructuring engagements for clients in a variety of industries. Tony has extensive M & A experience on dozens of transactions, especially with financially distressed enterprises.
Risk-Volatility & Uncertainty Are The Enemy of Value

• Three over-reaching questions needing answers:
  ➢ Should we do the deal?
  ➢ At what price?
  ➢ Structure?- Reps, warranties, conditions, exceptions, protections

• Dimensions of risk:
  ➢ Ownership control-decision authority
  ➢ Macroeconomic
  ➢ Industry & Market
  ➢ Technological
  ➢ Operational
  ➢ Trailing & historical
  ➢ Future
  ➢ Avoidable risks, mitigation tools and strategies
Risk-Volatility & Uncertainty Are The Enemy of Value

• The critical relationships............................

• Volatility and predictability

• Uncertainty

• Risk and required rate of return/multiple

• Multiple and value
<table>
<thead>
<tr>
<th>Risk Category</th>
<th>HI</th>
<th>Med Hi</th>
<th>Med</th>
<th>Med Lo</th>
<th>Lo</th>
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<tbody>
<tr>
<td>Risk Score</td>
<td>10</td>
<td>7.7</td>
<td>5</td>
<td>2.5</td>
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- **Risk-Free Investment Rate (20 year T-Bill Rates)**: 0.04200
- **Equity Risk Premium**: 0.06620
- **Small Company Risk Premium**: 0.05000
- **Specific Risk Premium**

### Competition:
- Proprietary Content: 3
- Relative Size of Company: 4
- Relative Product or Service Quality: 2
- Product/Service Differentiation: 4
- Non-Compete: 0
- Market Strength-Competition: 6
- Market Size & Share: 6
- Pricing Competition: 8
- Ease of Market Entry: 5

**Total Competitive Risk Factors**: 38

### Financial Strength:
- Business Concentration: 3
- Current Ratio: 1
- Quick Ratio: 4
- Total Asset Turns: 7
- Net Fixed Assets to Net Worth: 4
- Leverage Ratio: 1
- Int. Coverage: 0
- Mgt. Depth: 2
- Key Man Risk: 8
- Facilities Condition: 4
- ACGT & Operating Controls: 1
- Operating Margin: 1
- Years in Business: 1
- Industry Life Cycle: 7
- Earnings Volatility: 2
- Earnings vs Competition: 1
- Operating Earnings Growth Rate: 1
- Union Risk: 1

**Total Financial Factors**: 49

**Total Risk Factors**: 86

### Initial Build-up Discounted Future Earnings Discount Rate
- **Initial Build-up Discounted Future Earnings Discount Rate**: 0.02722

### Add: Additional High-Risk Premium:
- **Less: Sustainable LT EBITDA Growth Rate**: 3%
- Discount Rate: 20.26%
- Divided by: 1 + TG EBITDA Growth Rate: 98%
- Historical Cap Rate - EBITDA Stream: 20.78%
- Multiple: 4.811
- WTD Average Projected EBITDA: $3,500

**Value Indication**: $3,500
Primary Risk Categories

• Macroeconomic risk

• Industry and market risk

• Operational risk

• Financial Risk
Macroeconomic Risk

- Capital markets
- Commodity & resource markets
- Political stability
- Regulatory climate
- Tax policy
- Inflation
- General economic: growth prospects, consumer demand, household income, investment
Industry & Market Risk

• Life cycle-market & product
• Availability of product & service alternatives/substitutes
• Competitive position & relative share
• Proprietary protection (if any)
• Barriers to entry
• Exit strategy alternatives-barriers to exit
• Financial size/strength relative to competition
• Customer acquisition challenges & costs
Operational Risk

- Cost structure-fixed vs variable costs
- Degree of operating leverage, break-even point, margin of safety
- Customer concentrations & dependencies
- Supplier concentrations & dependencies
- Cost management capabilities
- ERP capabilities
- Customer relationship “ownership”
- Key associate risk
Operational Risk

• Systems quality & capability
• Capital expenditure requirements
• Condition of facilities & equipment
• Litigation exposure
• Product obsolescence
• Process and product quality control
• Technology requirements & capabilities
• Human capital; union influence, HR processes & policies, on-going training & development capabilities, performance management processes/capabilities
Overvalued, Undervalued and Unrecorded Assets/Liabilities

• Importance of going concern enterprise asset valuation

• Recent appraisals-real estate, accounts receivable and inventory, equipment

• Intangible asset valuations:
  ➢ Proprietary interests
  ➢ Brands, tradenames, trademarks
  ➢ Customer knowledge & relationships
  ➢ Exclusivity
  ➢ Employee knowhow & capability

• Recent collateral examinations & review reports

• Importance of plant tours, physical inventory, fixed assets inventory

• Legal due diligence
Overvalued, Undervalued and Unrecorded Assets/Liabilities

• Detailed audit of all balance sheet accruals.

• Audit trailing 36-48 month warranty history, warrant policies.

• Internal control compliance audit of purchasing, receiving, accounts payable & disbursement processing.

• Examine bank reconciliations for trailing 36 months (watch out for released, but unissued checks.

• Public records searches-liens, commercial credit filings, litigation, attachments, refinancings, related party & affiliated entities, guarantees, tax lien indications.

• Review revenue cycle control environment-customer master file access/maintenance, cash receipts, accounts receivable posting, account adjustments.

• Study customer returns & credit memo history, customer return policies,
Property Assets

• Fixed assets physical inventory

• Examine general ledger to fixed asset system reconciliations

• Plant tours

• Study & analyze trailing 36-48 month maintenance & repair history

• Examine commercial property & casualty insurance coverages & claims history trailing 48-60 months

• Assess predicative, preventive maintenance systems, processes & capability

• Review capital budgeting capabilities

• Trailing 48 months capital expenditure investments/history
Property Assets

- Review capital expenditure authorization processes & policies
- Review post-audit of capital expenditures
- Review IT security & controls
- Recent real estate & equipment appraisals
- Audit all major fixed asset additions & dispositions trailing 48 months
Tax Considerations

- Obviously, consider engaging qualified, competent professional to coordinate the tax due diligence.
- Tax considerations of the deal structure can be substantial from perspective of buyer and seller.
- Stock vs asset sale.
- Availability of NOL carry-forwards.
- Legacy exposure-can carry forward to successor entity in some instances-sales & use tax, ad valorem taxes, some employment taxes.
- Other carry-forward potential-ITC, capital losses, etc.
- Flow-through vs C-corporation considerations
- Most transactions are asset purchases by a NewCo-Should be extremely persuasive rationale for buying the stock and all the legacy claims exposure that comes with it.
- Use of tax professional in drafting the APA, structuring the deal
- Do NOT let the tax tail wag the dog!!!!!
Financial Analysis

• Critical importance of a comprehensive, detailed financial value model & supporting analysis.

• Importance of industry benchmarking comparatives for context-will impact required rate of return, estimated range of value build-up.

• Range of value estimation

• Four building block foundational perspective:
  ➢ Liquidity & efficiency
  ➢ Profitability
  ➢ Solvency
  ➢ Value

• Vertical analysis-common size financials

• Horizontal analysis of common size financials, critical building block financial & operating metrics
Liquidity & Efficiency

• Net working capital turnover-velocity
• Simulated borrowing base
• Current & acid test ratio
• Days cost of goods sold (COGS) in trade accounts payable
• Accounts receivable turnover, days sales in AR
• Inventory turnover, days COGS in inventory-NOTE> ALWAYS analyze in terms of customer service level performance.
• Aged accounts receivable analysis
• Aged inventory analysis
• Inventory quality ratio
• ROI to inventory analysis by SKU
Profitability

- EBITDA % to revenue
- Gross profit % to revenue
- SGA (operating expenses) % to revenue
- Return on average assets
- Return on equity
- Customer profitability
- Product profitability
- Detailed expense trends by key category-% to revenue
- VOLATILITY is the # 1 enemy of VALUE!!
- Focus on trends, variances, unusual amounts, inconsistencies, exceptions
Profitability

- Operating risk analysis
  - Degree of operating leverage
  - Break-even analysis
  - Margin of safety analysis
  - Contribution margin after variable costs analysis
  - CVPA analysis necessary for financial projections
  - Critical model mistakes by omitting operating risk analysis
Solvency

- Leverage (debt to equity) ratio
- Total & secured debt turnover
- Debt service coverage ratio
- Sustainable sales growth rate
- Altman 4-variable Z-factor trend analysis
Value

• Beware “romance of the deal” momentum & pressures.
• There may be “agendas” at play, so proceed with extreme caution.
• The need for independent buy or sell-side due diligence.
• Know with confidence the founding owner of his/her “first born” attaches tremendous intrinsic emotional value he/she will never be compensated for.
• The acquirer is buying an expected future stream of cash, in the face of uncertainty & risk.
• The “auction” vs exclusivity tension.
• Financial vs. strategic buyers-strategic premiums.
Range of Value Model

- Challenge in finding/applying comparable transactions.
- Methodologies:
  - Net present value of projected cash flows using risk-adjusted cost of capital (required rate of return).
  - Trailing, normalized capitalized EBITDA using firm cap rate.
  - Trailing, normalized EBITDA using industry multiple.
  - Excess assets/Treasury method
  - Reasonable rate of return using industry ROI
  - Maximum leveraged purchase price using expected debt service coverage & simulated borrowing base
Normalization Adjustments

• Owner/officer compensation

• Ownership distributions

• Related party & affiliated due to/from impacts

• Impact of anticipated strategic actions:
  ➢ Consolidation
  ➢ Reduction in Force
  ➢ Asset dispositions-business units, locations, equipment, etc.
  ➢ Product line rationalization
  ➢ Synergies

• One-time start-up impacts, inefficiencies
Due Diligence Checklist & Worksheets