

Screening: Argan Inc. (AI) passes the screening criteria for a potentially undervalued stock. The company is obscure, as AI has a low analyst coverage of three, and a market cap of \$596M - under the \$1.2B US small cap threshold. Although AI's P/B is 1.7, above the 1.2 threshold, AI is trading at a P/E ratio of 7, significantly below the benchmark of 13. AI undesirability stems from its variable revenue growth in the last 10 years, ranging from -22% in FY 2012 to as much as 200% in FY 2008, and more recently 63% in FY 2017. Furthermore, AI's undesirability is evidenced by a significant sell-off after its most recent quarterly report for FY 2018 Q3 (Exhibit 1). Despite showing solid revenue and earnings figures, investors were worried by the company's weak project backlog, a key indicator of future revenues (Exhibit 2). The current stock price is at \$37.90, representing a 48% loss compared to its 52-week high of \$72.70. Overall, the company's satisfaction of outlined criteria present a potentially undervalued stock for further analysis.

Business Risk: AI operates in the natural gas power plant construction industry, offering engineering, construction, and procurement (EPC) services. From a five forces analysis, we found that the industry exhibits fierce competition in attempts to win bids, as the high number of firms will usually bid the lowest possible price to secure contracts. Additionally, buyer power is high, as the concentrated nature of customers, as well as the incentive for future projects places pressure on operators to extend favorable terms. Both of these factors decrease profitability of the industry and increase their risk of operation. Industry drivers that affect demand for natural gas plant construction were also analyzed, such as the demand for electricity, legislative factors, the price of natural gas and substitutes. Firstly, the demand for electricity is correlated to both the economic cycle and climate, acting as a key determinant for natural gas plant demand. Secondly, legislative factors such as the Clean Air Act can significantly impact demand for natural gas plants, as a movement away from coal would increase demand for the industry. Lastly, the price of natural gas is also a strong driver, as lower prices incentivize power producers to invest in more economical natural gas plants. These factors are all largely uncontrollable for industry operators, leading to a high business risk. KSFs such as strong customer relations and insider knowledge help operators to secure contracts and offer customized services no other firm can. Additionally, reputation for quality, timeliness, and being on-budget is important in gaining new contracts and limiting lawsuits. Although AI exhibits strong management and a strong reputation, it is unable to mitigate core industry risks affecting demand, such as electricity usage, policy, and natural gas prices. Additionally, they are not diversified to weather a natural gas downturn in the US. Their niche focus in natural gas exposes them to energy substitutes and policy risk. Paired with fluctuating project-based revenues leads to AI's business risk to be high, resulting in an optimal B/V range of 10-29%.

Kd, Ks, and WACC: AI's high business risk indicates an optimal capital structure range of 10-29% B/V, which yields a low financial risk compared to AI's target debt to capital ratio of 0.5% (Exhibit 3). The combination of a high business risk and low financial risk leads to an implied credit rating range of AA-BBB. Based on the convergence of the implied credit range and credit ratios calculated (Exhibit 4), AI's credit rating was determined to be AA. This rating corresponds to a 3.52% pre-tax cost of debt. A tax rate of 26% to account for changes in the US corporate tax rate going forward. High business risk and low financial risk translates to a 6% ERP, resulting in the cost of equity being 9.52%. Finally, using the inputs above, WACC was calculated to be 9.5% (Exhibit 5). After adjusting for ECMS to account for operating cash (Exhibit 6), the average first pass ROIC was determined to 31.3% for 2011 to the current period (Exhibit 7).

NAV: NAV yielded a price of \$22.15/share (Exhibit 8). All current asset line items were kept at book value except for accounts receivable, which was increased to BV. A 0.7x factor was applied to equipment to reflect moderate technology changes as natural gas power generation technology becomes more efficient. 5.5 million was deducted from the book value of goodwill to reflect an anticipated impairment to its subsidiary TRC. The customer relations hidden asset was calculated using a 2.0x multiple to reflect the importance of strong relations with project owners to secure contracts, as well as the substantial commitment of resources AI deploys in the form of full-time staff to develop strong bid proposals and grow the project backlog (Exhibit 9).

EPV: AI's EPV was determined to be \$67.97 per share (Exhibit 10). The normalized operating margin was taken as the average margin from 2011 to the current period to reflect sustained improvement in operational efficiency and changes in the business cycle (**Exhibit 11**). One-time adjustments (OTAs) were subtracted from the normalized operating profit and were calculated by taking the average OTA to sales from the previous 10 years and multiplying by current sales (Exhibit 12). Zero growth CAPEX was set to equal D&A as our calculation resulted in an unreasonable value (Exhibit 13). ECMS was added to the enterprise value using the same methodology from the first pass ROIC calculation. The EPV price is greater than the NAV price, with second pass ROIC, 31.3%, exceeding WACC (Exhibit 14), consistent with 1st-pass ROIC expectations.

Strategic Analysis: The primary factors contributing to franchise sustainability are the short-term natural gas opportunities, the quality of AI's management, and the company's attractiveness as an acquisition target. Exhibit 15 shows that while natural gas has significant growth opportunities in the medium/long-term, the 2020-2024 period projects negative growth and the 2024-2026 period will see no growth. AI has very strong management as evidenced by four factors: capacity for project execution, recognition of retirement risk, strategic acquisitions, and divesting from low-margin segments. Their capacity for project execution is exhibited through their pattern of consistently completing projects on-time and under-budget, when compared to industry averages. They recognized the risk of retiring personnel which alludes to them being aware of the need for succession planning. AI's management also acquired APC in 2015 which is an indication of strategic acquisition capabilities - APC offers geographic diversification without dilution of focus. Finally, management has demonstrated discipline and awareness of company capabilities by moving away from low-margin solar and wind construction opportunities. AI is also an attractive company for acquisition. They have zero balance sheet debt on a significant cash position which means value could be created by raising their capital structure to optimal debt levels. Furthermore, AI has dropped to its 52-week low (Exhibit 1). If a prospective acquirer is interested in AI, the low share price may reveal an optimal time for acquisition. Through this analysis, franchise sustainability was determined to be medium, thereby yielding a sustainability factor of 50%.

Intrinsic Value: $\$22.15 + (\$67.97 - \$22.15) * 50\% = \$45.06/\text{share}$

Entry Price: $\$27.74 * \frac{2}{3} = \$30.19/\text{share}$

Recommendation: as current share price (**\$37.90/share**) exceeds entry price, it is recommended to wait.