Screening: Saga Communications (SGA) meets the value investing screening and appears potentially undervalued at first glance. The company can be classified as obscure due to its small size, low analyst coverage, high management ownership and low trading volume. SGA's market cap of \$220M is well below the VI criteria of \$1.2B. Although SGA is covered by one analyst, the equity research company is small and its reports are not available to the public. Furthermore, through his 100% ownership of class B common shares, CEO Edward K. Christian owns approximately 15% of shares outstanding. This equates to 64% of voting rights as a result of the 10:1 voting rights per class B share. Institutional ownership is relatively high at 78%, however trading volume is low at 3,500 shares per day. This can be explained by the fact that the top three institutional investors comprise 41.5% of ownership and have maintained steady positions since 2013. SGA can also be considered undesirable, as its 9.92x P/E ratio and 1.23x P/B ratio meet the value investing criteria of 13x and 1.2x, respectively. Furthermore, flat revenues, pressure on operating margins, and recent restructuring (selling off television assets) could deter shareholders. This opinion is substantiated by the fact that the stock is trading at its 52-week low. Other criteria portraying the company in a favourable manner are the simplicity of the business model, low exposure to commodities, and recent share repurchases. As SGA fulfills multiple undesirability and obscurity requirements, the business is potentially undervalued.

Industry Analysis: The US radio broadcasting industry consists of radio stations and networks that transmit audio through AM, FM, and satellite channels. Revenues in the industry are driven by advertising revenue. As the dollar values of advertising budgets for companies are tied to the economic cycle, revenues in the radio broadcasting industry are cyclical. Radio advertising contracts are typically short (often weeks in length), leading to some unpredictability in revenues. Costs in the industry are stable and secular, driven by executive compensation, wages, licensing and royalty fees, and purchases for hosting events such as concerts or festivals. Due to the lack of volatility in costs, industry operating margins are generally stable. Players in the radio broadcasting industry enjoy high barriers to entry. Licenses are required to broadcast, and space on the broadcasting spectrum is limited. Secular risk is a concern in this industry, because the internet and television have taken a growing share of companies' advertising budgets. Nonetheless, smaller market operators can expect more stable demand because local services and businesses have difficulty finding sufficient alternatives to target the population of a smaller town on the internet. Listenership in smaller markets is expected to remain steady, and therefore ad revenues should be relatively consistent despite new substitutes entering the market. Advertising budgets have also been trending higher. Therefore, even if radio broadcasters lose some of their ad spend share to substitutes, the amount they receive in dollar terms is unlikely to fall. Considering all factors, the radio broadcasting industry was determined to have medium risk.

Company Analysis: Like the industry, SGA faces medium business risk. SGA is able to mitigate some of the typical industry cyclicality of revenues by focusing on local advertisers and operating in recession-resistant markets. Furthermore, SGA's operating margins have remained relatively stable. However, due to its small size relative to other players, SGA lacks economies of scale with its operations, which is apparent in its below industry average operating margin. Similar to the industry, SGA's advertising contracts are short term, implying a level of revenue unpredictability. SGA also faces the risk that its broadcast licenses expiring over the period of 2019-2022 will not be renewed. However, SGA has never been denied the renewal of an FCC broadcast license and management believes that there will be no challenges in obtaining future renewals, which limits the significance of this risk. Since SGA's business risk is medium, its optimal capital structure is between 30-49% debt to capital. The company's target B/V is 15% (Exhibit 1&2), and sits below the optimal range. Therefore, SGA faces low financial risk and deserves a bond rating between A-AA (Exhibit 3). A rating of A was selected based on ratio analysis (Exhibit 4), and this assumption led to an after tax Kd of 2.89%. SGA has an implied equity risk premium of 4%, producing a Ks of 7.82%. Combined with their respective weights, these values generated a WACC of 7.07% (Exhibit 5). A first pass ROIC of 8.64% implies EPV may be greater than NAV (Exhibit 6). However, first pass ROIC is typically overstated so second pass may yield alternative results.

Valuation: We arrived at a NAV of \$47.82 per share (Exhibit 7), a figure largely driven by PP&E and intangible assets (Exhibit 8). Key assumptions for PP&E include using a 0.9x multiplier for towers and antennae, as they have a useful life of 50-60 years and do not require technological improvements. With regard to hidden assets, SGA's customer relations are worth \$8.42M (Exhibit 9). A multiple of 1.75x was used to reflect the importance of the business' strong relationships with advertisers, and the significant time and costs that would be required for a new entrant to replicate these relationships.

Our EPV calculation produced a valuation of \$43.74 per share (Exhibit 10). EPV was calculated after normalizing EBIT and adjusting for operating leases, OTAs, and stock based compensation (Exhibit 11). Our operating margin of 16.95% was the result of a three-year average, and we assumed a factor of 5/10 on the write-down of intangible assets and 4/10 on debt issuance costs because they have occurred five and four times, respectively, over the past 10 years. The 2008 write-down was not included as it was an irregular event that impacted the entire industry and the overall economy, and management had no control over it. We assumed all assets were operating except deferred charges because they do not produce operating cash flows. Second pass ROIC produced a rate of 5.58%, below WACC as expected (Exhibit 12). The fact that NAV is higher than EPV is consistent with the the fact that WACC is greater than Strategic Valuation: When SGA's ROIC is broken down (Exhibit 13), it becomes evident that low operating margins are the root of the company's low returns. Operating margins are traditionally the most difficult component of ROIC to improve because it stems from a competitive disadvantage. In SGA's case, most of its disadvantage stems from its small size relative to competitors (and resulting lack of economies of scale), as well as excessive executive compensation. The compensation issue is mostly caused by a CEO who insists on a salary 3x larger than his competitors. We have determined that the catalyst is the replacement of management. This could take place through the retirement of the 73 year old CEO or the acquisition of SGA by a larger competitor. Once acquired, higher margins will be realized by reducing management compensation and benefiting from the acquiror's economies of scale. Although the industry is consolidating and SGA is an attractive acquisition target due to its local market niche and low leverage levels, we have determined the catalyst probability to be 30% due to the fact that the CEO controls 64% of the company's voting rights, and has not announced plans to leave or sell the company.

Recommendation

Our entry price of \$29.97 per share is less than the current price of \$37.15 (Exhibit 14). We therefore recommend not buying SGA at this time, and waiting until the share price falls to \$29.97.