

# **An Evaluation of the Different Approaches and Methodologies for Evaluating Investment Holding Companies' Credit Ratings**

Efraim Benmelech

The Kellogg School of Management, Northwestern University

## **Summary**

This paper evaluates and discusses methodologies for evaluating credit ratings of Investment Holding Companies. I analyze Standard & Poor's and Moody's rating approaches, evaluate their soundness based on theoretical grounding and empirical evidence, and suggest improvements.

## **1. Background**

In November 2014, Standard & Poor's (S&P) proposed a new framework to evaluate the creditworthiness of Investment Holding Companies (IHCs) with the objective of enhancing the comparability, consistency, and transparency of its ratings. In December 2015, S&P issued revised ratings criteria in response to feedback received following its request for comments on the original ratings proposal.

Investment Holding Companies typically are large, diversified companies that make long-term investments mainly in equities and derive investment income from their investees. According to S&P, IHCs are “companies that have – or that we expect have – operations in at least three industry sectors, over time, via equity participations. IHCs have a medium- to long-term goal of generating capital appreciation by investing in assets that they believe will appreciate in value, and through the management and eventual sale of assets and reinvestment in new ventures.”<sup>1</sup> Moody's has a similar definition: “An investment holding company is either a public or [a] private group holding entity that acts as a financial investor, holding a portfolio mainly consisting of majority and/or minority equity stakes in private or publicly traded companies.”

In this white paper I analyze S&P's proposed revisions to its framework and methodology and evaluate the soundness of these proposals based on both theoretical grounding and empirical evidence. I also discuss S&P's and Moody's final ratings methodology for IHCs.

## **2. S&P's Proposed Framework**

In a request for comments on a proposed new methodology, S&P suggests new criteria for rating IHCs.<sup>2</sup> According to S&P, the recommended criteria are designed to “help market participants better understand the key risk drivers for IHCs, enhance the comparability and

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<sup>1</sup> RatingsDirect: Methodology: Investment Holding Companies, December 1, 2015 p. 5.

<sup>2</sup> RatingsDirect: Request for Comment: Methodology: Investment Holding Companies, November 26, 2014.

consistency of ratings, and improve transparency.”<sup>3</sup> S&P defines an IHC as a company that makes equity investments in operating companies in at least three industry sectors. The proposal states that S&P will determine the *business risk* profile, considering such unique risks as industry risk, country risk, and the firm’s investment position. Next, S&P will assess the *financial risk* profile, considering the firm’s leverage and funding and capital structure decisions. The *business risk* and the *financial risk* profiles will then be combined to determine the *anchor*. The *anchor* is used, along with such other assessments as management, governance, liquidity, and comparable firms, to determine the Stand-Alone Credit Profile (SACP). Last, S&P combines the SACP with an assessment of any government or group influence on the IHC to determine the ultimate Issuer Credit Rating (ICR).

## **2.1 S&P’s Proposed Methodology for Assessing Business Risk**

### *2.1.1 Industry Risk*

Industry risk is an integral part of S&P’s IHC credit analysis, and each industry is assigned to one of six risk categories: 1, very low risk; 2, low risk; 3, intermediate risk; 4, moderately high risk; 5, high risk; and 6, very high risk. S&P classifies the IHC universe as a “moderately high risk” industry (category 4).

The S&P classification of the IHC industry as one of “moderately high risk” seems to contradict the agency’s own rating guidelines. The proposal refers to S&P’s criteria for assessing industry risk (“Methodology: Industry Risk,” November 19, 2013) and argues that the IHC industry risk should not reflect the weighted average industry risk of the IHC. S&P’s industry risk classification states two criteria: (1) cyclicity, and (2) competitive risk and growth.<sup>4</sup> Yet the proposal does not mention these two determinants of industry risk and their measurement for the IHC industry. The IHC industry is not cited in the S&P document describing the methodology for industry risk, and although different metrics for the industry cyclicity are calculated in Tables 5 and 6 of the document, the IHC industry is not mentioned. Given that the IHC industry is not included in S&P’s methodological document

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<sup>3</sup> RatingsDirect: Request for Comment: Methodology: Investment Holding Companies, November 26, 2014, p. 3.

<sup>4</sup> RatingsDirect, “General Criteria: Methodology: Industry Risk,” November 19, 2013, p. 2.

and that data on the cyclical nature of IHCs are lacking, it is unclear whether S&P has sufficient information to classify the IHC industry as “moderately high risk.”

In the proposed changes, S&P argues that an IHC’s industry risk does not reflect the weighted average of its investee firms’ industry risk because those risks are reflected in the assessment of the IHC’s asset risk. This criterion, however, is overly harsh, and it penalizes IHCs unnecessarily. S&P seems to contend that an IHC is merely a portfolio of firms that uses its dividends stream to service its own debt and management cost. If IHCs are merely management companies that increase their portfolio value, then why not just use the weighted average risk of their investment portfolios? Moreover, defining IHCs as a “moderately high risk” industry and then looking into the riskiness of IHCs’ assets seems to be “double counting” of the same risks.

Most important, the S&P proposal neither justifies the choice of the industry risk criteria nor refers to its own classification of industry risk—that is, the cyclical nature and competitive risk and growth of the IHC industry. Instead, the proposal justifies its industry classification by indicating a concern over IHCs’ financial structure and their inherent asset/liability mismatch—that is, the risk that lower dividends or cash flows from their investee companies will expose IHCs to refinancing risks. Although rollover and refinancing risks might expose firms to risk, that risk is purely *financial* rather than economic. S&P should evaluate the riskiness of the IHC industry based on its fundamental economic risks, and although financial risk should be considered, it should not be counted twice. Unfortunately, according to the proposal, IHCs are penalized in the classification of both their *industry risk* and their *financial risk*, as discussed below.

### 2.1.2 Country Risk

S&P proposes to identify an IHC’s domicile using three criteria: (1) the location of its head office or executive management; (2) the market in which its shares are traded (for listed IHCs); and (3) the location of its key hub of treasury operations. In the case of multiple locations with differing risk assessments, S&P proposes to select the country with the weakest assessment. This penalizes without cause all IHCs with global operations. The country risk determination, I argue, should be based only on the country in which the IHC’s head office or executive management is located.

This classification leads to unnecessary “double counting” and penalizes IHCs that invest in several countries. As I show below, S&P also classifies asset risk and asset liquidity based on the country or region in which the assets are operated.<sup>5</sup> Consider an IHC based in a “low risk” country but possessing considerable investments in a “moderately high risk” country. The IHC may decide for operational efficiency to locate its treasury operation in the country where the bulk of its investments are based. The proposed changes penalize this IHC twice: in the assessment of its country risk and in the assessment of its assets risk. I argue that the new criteria are unwarranted and that S&P should consider the location of the head office or executive management and the underlying financial and economic institutions in that location as the sole criterion in determining country risk.

### *2.1.3 Investment Position*

S&P assesses an IHC’s investment position by assigning it one of six ratings: 1, excellent; 2, strong; 3, satisfactory; 4, fair; 5, weak; or 6, vulnerable. The investment position has two components: (1) asset risk, which itself comprises an assessment of asset liquidity, asset diversity, and asset credit quality; and (2) the Strategic Investment Capability (SIC).

### *2.1.4 Asset Risk: Asset Liquidity*

S&P bases its ranking of asset liquidity on its notion of “how quickly we expect the entity can liquidate assets at a reasonable price.”<sup>6</sup> The two criteria under consideration are whether the investments are listed (as opposed to being private) and whether the IHC owns a majority or controlling stake in the investments. S&P measures asset liquidity on a five-point scale, with 1 for most liquid, or “most favorable,” and 5 for least liquid, or “weak.”

S&P expects an IHC to have a long-term objective of holding at least 40% of its portfolio in listed assets and states that IHCs that do not meet this condition will have their assessment of asset liquidity capped automatically as “weak,” or 5, the lowest category for asset liquidity. This assessment seems unnecessarily crude and ad hoc. Listed companies do indeed have

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<sup>5</sup> RatingsDirect, “Methodology: Investment Holding Companies,” December 1, 2011, pp. 7–8.

<sup>6</sup> RatingsDirect, “Request for Comment: Methodology: Investment Holding Companies,” November 26, 2014, p. 9.

quoted prices, but this does not imply that they are more liquid assets. Consider, for example, the case of a privately owned prime real estate asset such as a major office building: although the building may not be publicly traded, there are potentially many likely buyers who would be happy to acquire such an asset. Instead of relying merely on whether an asset is publicly traded, S&P should use a different metric to assess asset marketability or liquidity. Both economic theory and empirical studies suggest that the main determinants of asset liquidity are the number of potential buyers for the assets in addition to the financial health of both the seller and the potential buyers.<sup>7</sup> For example, according to Shleifer and Vishny (1992):

*The principal reason for asset illiquidity...is the general equilibrium aspect of asset sales. When firms have trouble meeting debt payments and sell assets or are liquidated, the highest valuation potential buyers of these assets are likely to be other firms in the industry.<sup>8</sup>*

Recent empirical studies develop methodologies to estimate asset liquidity in several industries, including airlines and commercial real estate, and find support for Shleifer and Vishny's (1992) conjecture about the relation between liquidation values and the number of financially unconstrained potential buyers. For example, in his study of used airplanes, Pulvino (1998) finds that used planes sold by distressed airlines fetch prices that are 10–20% lower than planes sold by other airlines. In a related paper, Benmelech and Bergman (2009) find that airlines borrow on more attractive terms when airplanes used as collateral have less financially encumbered buyers. Using a broad sample of industries, Ortiz-Molina and Phillips (2014) also find that firms in industries with more liquid assets (meaning more potential buyers), and during periods of high asset liquidity, face a lower cost of capital.

S&P's proposed assessment of asset liquidity also penalizes IHCs with large majority or controlling stakes in their listed investments. Although I agree that the market for controlling stakes may be less liquid than the market for smaller quantities of shares, it is also the case that controlling stakes in firms are sold for substantial premia relative to the value of

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<sup>7</sup> See, e.g., Shleifer and Vishny (1992), Benmelech (2009), and Benmelech and Bergman (2009).

<sup>8</sup> Shleifer and Vishny (1992), p. 1344.

noncontrolling stakes.<sup>9</sup> It is a common practice to add on a control premium of about 20% in the evaluation of controlling stakes in firms.<sup>10</sup> Given that the objective of asset liquidity is to measure not only how quickly assets can be sold off but also the price that can be obtained at such a sale, it seems that S&P's proposed weights on asset ownership are also unwarranted.<sup>11</sup> Since liquidity refers to "the ability to buy or sell large amounts of [a liquid security] at low cost," the modern academic literature on market liquidity generally focuses on the price impact of a transaction rather than the proposed measure, which focuses on the mere speed or volume of asset exchange.<sup>12</sup> For example, a widely used measure of illiquidity in the stock market uses information about the absolute value of change in price relative to the transaction size.<sup>13</sup> Likewise, Bao, Pan, and Wang (2011) develop a new measure of bond liquidity based on the negative covariance of log-price changes in two consecutive periods.

S&P also proposes to classify listed assets based on the stock exchanges in which they are listed. The sorting of countries into bins in Table 3 of the proposal is based on the observed volatility in a country's main stock market index.<sup>14</sup> S&P's classification places such countries as Hong Kong, South Korea, Taiwan, and Singapore in the second to last category, with a score of 3, together with such countries as Trinidad and Tobago, Turkey, and the United Arab Emirates. There are several problems with a measure that is based only on volatility, but a chief difficulty is that the index fails to account for market improvements. For example, many East Asian countries have implemented sound trading rules and regulations on disclosure following the East Asian crisis of 1997–1998. Instead of relying on the volatility of stock markets over the past 30 years, S&P should employ statistical methods that will consider the improvements in the volatility of these indices over time to ensure that they are not driven by one crisis. Academic research, moreover, finds that stock market development, corporate valuation, and dividend policy are driven largely by the legal protection that is

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<sup>9</sup> See, e.g., Dyck and Zingales (2004).

<sup>10</sup> See, e.g., Higgins (2011).

<sup>11</sup> RatingsDirect, "Request for Comment: Methodology: Investment Holding Companies," November 26, 2014, Table 2, p. 10.

<sup>12</sup> Amihud, Mendelson and Pedersen (2013), p. ix.

<sup>13</sup> See, e.g., Amihud (2002).

<sup>14</sup> RatingsDirect, "Request for Comment: Methodology: Investment Holding Companies," November 26, 2014, Table 3, pp. 10–11.

available for minority shareholders.<sup>15</sup> According to the metrics developed in this influential academic literature, Singapore has a shareholders' protection score of 4, similar to Australia and higher than Switzerland and many other European countries listed in category 2 in the proposal. Likewise, Hong Kong scores even higher, with a score of 5 on shareholders' protection, similar to the United Kingdom and the United States. In light of the developments in stock markets around the world and the existing academic literature, S&P should place Singapore and Hong Kong no lower than the second highest category of its equity market rankings.

#### *2.1.5 Asset Risk: Asset Diversity*

S&P suggests assessing asset diversity based on the size of the invested portfolio, the operation of the IHC across several sectors and regions, and the concentration of the investee firms in the overall portfolio. The proposed ranking of asset diversity as it is summarized in Table 4 of the proposal seems reasonable.

#### *2.1.6 Asset Risk: Asset Credit Quality*

S&P measures asset credit quality by evaluating the standalone creditworthiness of the individual investee companies. The proposed classification of three categories of asset credit quality in Table 5 of the proposal, however, considers only assessments of companies rated by S&P and ignores ratings by other agencies. S&P should use other agencies' ratings when its own rating is not available.

#### *2.1.7 Strategic Investment Capability*

S&P also assesses an IHC Strategic Investment Capability (SIC) based on an IHC's record in five criteria described in Table 6 of the proposal. The proposal provides no objective measurement for determining the SIC and lacks transparency about the assessment process.

## **2.2 The Proposed Methodology for Assessing Financial Risk**

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<sup>15</sup> La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997).

S&P's measurement of financial risk relies on balance sheet-based leverage. The assessment for an IHC's leverage is divided into six categories: 1, minimal; 2, modest; 3, intermediate; 4, significant; 5, aggressive; and 6, highly leveraged. The preliminary leverage assessment can be modified by cash flow and funding and capital structure assessment.

The core ratio used by S&P is defined as gross financial debt minus surplus or "excess" cash divided by the estimated investment portfolio value. It is unclear, however, why S&P omits short-term marketable fixed-income securities from its calculation of surplus cash.<sup>16</sup> Such investments, if held for a short term and invested in highly rated short-term bonds, are equivalent for cash and should be subtracted from gross debt in calculating leverage ratios. The determination of loan-to-value thresholds in Table 9 of the proposal seems reasonable. The proposed changes to the adjustments of preliminary leverage assessment for cash flow adequacy and the assessment for funding and capital structure seem reasonable.

### **3. S&P's New Methodology for Rating IHCs**

On December 1, 2015, S&P published its revised criteria for rating IHCs.<sup>17</sup> The revised criteria respond to feedback received following S&P's request for comments on its ratings proposal dated November 26, 2014. Several issues remain outstanding in the new methodology, and I comment on these below.

#### *3.1. Industry Risk*

In the new methodology S&P classifies the IHC industry as "intermediate risk" without reasonable justification. As I argue in Section 2, the new methodology does not reference S&P's two determinants of industry risk and their measurement for the IHC industry. Similar to the document of November 26, 2014, S&P neither justifies the choice of the industry risk criteria nor refers to its own classification of industry risk—that is, the cyclicity of the industry and the competitive risk and growth of the IHC industry. Instead, S&P raises

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<sup>16</sup> RatingsDirect, "Request for Comment: Methodology: Investment Holding Companies," November 26, 2014, p. 15.

<sup>17</sup> RatingsDirect: Methodology: Investment Holding Companies, December 1, 2015.

concerns over IHCs' financial structure, a risk, as I argue earlier, that is purely *financial* rather than economic and should not be mixed with industry classification.

### *3.2 Country Risk*

S&P's new guidelines identify an IHC's domicile using three criteria: (1) the location of its head office or executive management; (2) the market in which its shares are traded (for listed IHCs); and (3) the location of its key hub of treasury operations. When multiple locations would result in a different risk assessment, S&P proposes to select the country with the weakest assessment. As I argue in Section 2, this change penalizes without cause all IHCs that have global operations. The country risk determination, I argue, should be based only on the country in which the IHC's head office or executive management is located.

### *3.3 Asset Risk: Asset Liquidity*

Similar to the proposal of November 26, 2014, S&P expects an IHC to have a long-term objective of holding at least 40% of its portfolio in listed assets, and it states that IHCs not meeting this condition will have their assessment of asset liquidity capped automatically as "weak," or 5, the lowest category. As I write in Section 2, this assessment seems unnecessarily crude and unjustified. Instead of relying merely on whether an asset is publicly traded, S&P should use a different metric to assess asset marketability or liquidity, since listed companies are not necessarily more liquid than private firms.

Unfortunately, S&P's revised assessment of asset liquidity still penalizes IHCs that have large majority or controlling stakes in their listed investments. However, controlling stakes in firms are sold for substantial premia relative to the value of noncontrolling stakes, and thus it is not clear that IHCs' ratings should be adversely affected by their holding of controlling stakes in listed firms.

Moreover, in its proposed framework S&P also suggests classifying listed assets based on the stock exchanges in which they are listed. In particular, S&P sorts countries into bins and places such countries as Hong Kong, South Korea, Taiwan, and Singapore in the second lowest category, together with such countries as Trinidad and Tobago, Turkey, and the

United Arab Emirates. Fortunately, after receiving feedback from the industry, S&P has since backed down its classification of stock exchanges based on their volatility from its revised methodology dated December 1, 2015.

### *3.4 Asset Risk: Asset Credit Quality*

Similar to the proposal of November 26, 2014, S&P's new methodology measures asset credit quality by evaluating the standalone creditworthiness of the individual investee companies. The proposed classification of three categories of asset credit quality in Table 4 of the methodology, however, still considers only assessments of companies rated by S&P and ignores ratings by other agencies. This issue remains outstanding in the revised criteria and should be fixed – S&P should use other agencies' ratings when its own rating is not available.

## **4. Moody's Methodology for Rating IHCs**

Moody's methodology for evaluating the creditworthiness of IHCs is described in "Investment Holding Companies and Conglomerates," dated December 21, 2015. According to Moody's, five broad factors affect an IHC's credit rating: (1) investment strategy; (2) asset quality; (3) financial policy; (4) estimated market value-based leverage; and (5) debt coverage and liquidity. I analyze each factor below.

### *4.1. Investment Strategy*

Moody's uses a qualitative approach to evaluate investment strategy. The IHC's investment policies and guidelines, as well as management track record, are evaluated in the assessment of the investment strategy. Similar to S&P, Moody's emphasizes the importance of holdings of liquid assets that can be sold in a timely manner without affecting prices. Although Moody's does not provide details on specific countries, it considers high-volatility markets and, in particular, emerging markets to be less liquid. Unlike S&P's proposed guidelines, Moody's methodology does not assign a specific score to countries. It would be useful if Moody's would be more transparent and provide details on how it determines stock markets'

volatility. It would also be helpful if Moody's clarified its definition of "stable industries," which is used as part of its assessment of investment strategy.<sup>18</sup>

#### *4.2. Asset Quality*

Asset quality is determined along three dimensions: (1) investment concentration; (2) geographic and business diversity; and (3) transparency. Moody's assessment of asset concentration is based on the value of the three largest investments relative to the total portfolio market value. This approach seems reasonable, and Moody's inclusion of cash balances in calculating total market value but exclusion of them from the value of the three largest investments is sensible. Moody's treatment of geographical and business diversity, which is based on diversity and correlations across these two dimensions seems reasonable.

In assessing investment portfolio transparency, Moody's approach attaches great importance to the listing status of firms and assigns a higher score on its transparency grid to investments that are publicly listed.<sup>19</sup> This approach penalizes IHCs twice for holding private companies, since Moody's also uses this consideration in determining asset liquidity as part of its evaluation of the IHC's investment strategy.

#### *4.3 Financial Policy*

Moody's factors into its assessment both the actual financial policy of an IHC as well as its management's commitment to prudent fiscal policy. Although the guidelines suggest that reliance on market-based leverage is preferred, Moody's provides insufficient details on the characteristics of financial policies and their mapping to rating categories, and its information on financial policy is somewhat vague.

#### *4.4 Estimated Market Value-based Leverage*

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<sup>18</sup> Moody's Investors Service: Investment Holding Companies and Conglomerates, December, 31, 2015.

<sup>19</sup> Moody's Investors Service: Investment Holding Companies and Conglomerates, December, 31, 2015 p. 14.

Moody's measurement of leverage is based on the ratio of net debt (excluding cash) and the estimated market value of the portfolio assets. The assessment for an IHC's leverage ratios and their mapping into credit rating categories, provided on page 16 of "Investment Holding Companies and Conglomerates," seems reasonable.

#### *4.5 Debt Coverage and Liquidity*

Moody's uses two main financial ratios to assess debt coverage and liquidity risk: (1) FFO interest coverage, defined as  $(\text{FFO} + \text{Interest Expense}) / \text{Interest Expense}$ ; and (2) Liquidity, or the number of years that cash balances and committed credit facilities will cover upcoming debt maturities. Although both metrics are reasonable, Moody's requirement that the benefit of credit facility be limited to the maturity date of the facility is overly rigid. It is reasonable to assume that undrawn lines of credit will be rolled over and renewed when they become due. Limiting the liquidity ratio to the maturity of the facility unnecessarily penalizes IHCs with long-term debt because these debts are likely to have a longer date of maturity than the credit lines themselves. Having longer-term debt, on the contrary, may be desirable for an IHC that is trying to avoid a rollover risk on its short-term obligations.

### **5. Conclusion**

In this paper I discuss S&P and Moody's approaches and methodologies for rating Investment Holding Companies. The S&P original proposed methodology for rating IHCs suffers from several flaws. Although the S&P revised methodology is improved, following the implementation of industry suggestions, some issues remain, especially those that pertain to the assessment of asset liquidity, industry risk, and country risk. Moody's methodology for rating IHCs seems more sensible than the S&P approach, yet Moody's guidelines also tend to be less transparent and somewhat opaque.

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