

Online Appendix for From Audience to Evaluator: When Visibility into Prior Evaluations Leads to Convergence or Divergence in Subsequent Evaluations Among Professionals

Figures and Tables

Figure A1. Example of a Detailed Justification

Thesis: Strong Operator in Improving End Market with a Competitive Advantage
 My recommendation is that RLGY should be bought. RLGY consists of five leading businesses – the Realty Franchise Group (RFG), the company owned real estate brokerage (NRT), Carus relocation services, TRG settlement services and PHH Home Loans (A joint venture in which RLGY has a 49% stake; PHH does not hold any mortgage loans for investment purposes – NRT has no mortgaging servicing rights asset risk) – that complement and enhance each other's value. While each business is important, RLGY's brokerage businesses, company owned (NRT) and franchised (RFG) drive the share price and are expected to comprise about 85% of total company 2015 revenues and 62% of EBITDA. RLGY has leading brands, dominant market share, a sound business model, and will benefit from an improving housing market.

Management Assessment
 Richard Smith, Chairman, Chief Executive Officer – Smith has been RLGY's chief executive officer since November 2007 and Chairman of board of the directors since March 2012. Previously, Smith served as chairman and chief executive officer of the Real Estate Services Division of Candiant Corporation from 1996 to 2006, when the Division was spun off to create Realty.

Anthony E. Hill, Executive Vice President, Chief Financial Officer and Treasurer – Hill has served as executive vice president since August 2011 and became Chief Financial Officer in August 2011.

Manager investor day stating, "our management"

Senior man Realty's st his annual b The 2014 lot EBITDA met Additionally, Annual incr thereof depe generation, (XtB) index

Total Realty U.S. Footprint

As demand for housing continues to build, I expect inventory in the end of October, vs a 6.4 month 25-year average. The in the U.S. has improved, but is still below its long-run average.

FRED – Monthly Supply of Houses in the United States

Leading share and br significant scale of RLG RLGY is the world's larg businesses more than 2 brands. RLGY's reach omprisent Century 21 No. 1 nationally in reale estate brokerage has a critical and RLGY's size

Debt pay-down and ca that the company will re EBITDA. This will be a low capital expenditure RLGY should be below is heavily incentivized to adjusted EBITDA, and A weighting of 79% of the the CEO and approxims

Proven track record of supplement strong orga economic conditions. A lifetime has completed (synergy) and leverage (current market penetra) acquisitions.

Improving end market RLGY's businesses. A real estate, both of whic healthy real estate mar increase need to reloca March, 2009 the housin believe there is a misco the recovery in the stoc estate. The table below recovered in 2012 thre mortgage rates and ecc recovery.

Investment strengths
 Franchise and corporate incentives are aligned. RFG leverages the strength of the overall enterprise, the agility of each franchisee with the overall business. RFG capitalizes office infrastructure, technology and marketing spend. RLG autonomously. This enables each brand to build local relat maintain a unique position (i.e. Corcoran and Sotheby's are and stay lean by competing against other brands. RFG's fe growth through lower royalty fees as profitability improves, royalty and gives them discounts from the 6% as their perfo performance by the franchisee more than offsets the incremental decline in royalty fees, making it accretive to RFG, which aligns the incentives of the franchisee and RFG. RFG's 96% franchisee retention rate in 2014 highlights franchisee satisfaction. The combination of a small company mentality with a mature large-company infrastructure enabled the RFG segment to profitably outgrow the market. RLGY's 2014 residential transaction volume outgrew the market by 4% while delivering a strong adjusted EBITDA margin of 14.6%.

The Zap platform should further increase broker efficiency: The acquisition and integration of Zip Realty and Zip's platform Zap is a competitive advantage for RFG and to a lesser extent NRT. While economic moats in the technology space tend to be short lived, RLGY's ability to purchase Zip Realty, a formerly independent company with world-class stand-alone technology (Zap) is unlikely to be duplicated by their much smaller peers. Zip's Zap platform is perfect for small to medium sized brokers such as RFG's franchisees, but doesn't currently scale to incorporate operating nuances necessary to run a company as large as NRT. That said, NRT still uses Zip to generate and manage leads. For RFG, Zip provides value to three key stakeholders – customers, agents and brokers. For customers, Zap is tied into the MLS and provides a robust experience across desktop and mobile applications and creates a

Valuation & price target
 My price target is \$50 and based on the average of 3 valuation techniques – discounted cash flow, P/E multiple, and EV/EBITDA multiple.

- Discounted cash flow
 - Key assumptions: cost of equity of 9.6% and 3% long-term free cash flow growth rate
 - Price target: \$57.53
- P/E Multiple
 - 2017 diluted EPS: \$2.36
 - Multiple of 22x based on historical figures
 - Price target of \$51.96
- EV/EBITDA Multiple
 - 2017 estimated EBITDA of \$1.029mm
 - Multiple of 11x based on historical figures
 - Price target of \$54.66

Base Roberts Estimate
 Current Share Price: \$41.24
 Annual Share Price Growth: 40%

	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
Beginning Basic Shares Outstanding	45,208	45,208	45,208	45,208	45,208	45,208	45,208	45,208
Assumed Share Price	\$42.89	\$43.89	\$44.89	\$45.89	\$46.89	\$47.89	\$48.89	\$49.89
Assumed Shares Issued w/ Option	-	492	474	433	433	1,753	12,443	14,384
Assumed Shares Repurchased	-	-	-	-	-	-	-	-
End Basic Shares Outstanding	146.6	146.6	146.7	136.9	132.4	128.9	124.4	119.4

Active Scenario: Base
 Target Price: \$50.87
 Upside/Downside: 23.8%

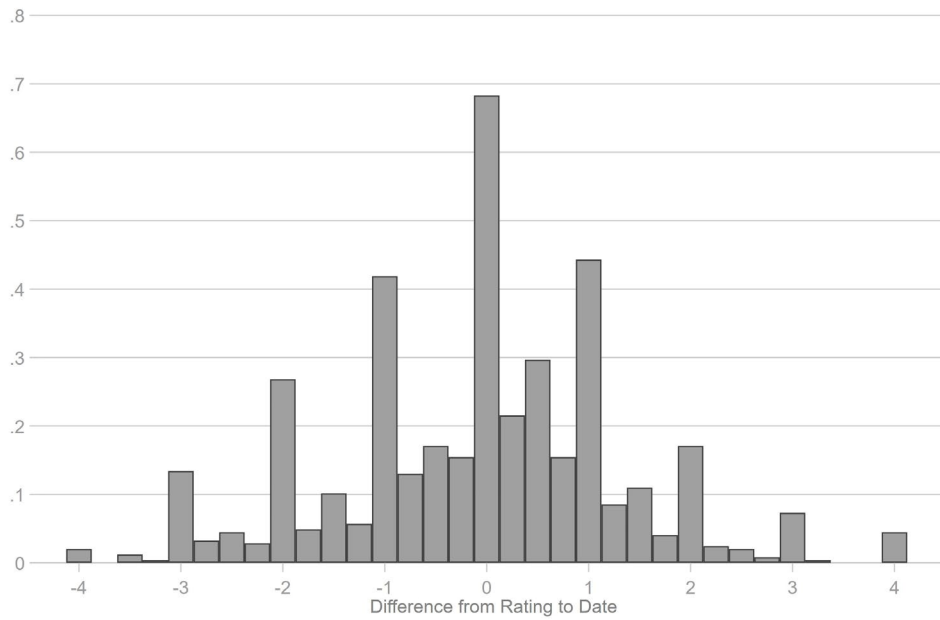
	2013	2014	2015E	2016E	2017E	2018E	2019E	2020E
FCFE	392	466	408	473	503	575	575	593
PV Factor	0.91	0.84	0.77	0.70	0.64	0.58	0.53	0.48
Discount FCFE	2,024	373.23	359.67	385.31	409.24	380.00	380.00	380.00

FCF Equity Valuation
 1.05 Beta
 3.0% Risk free rate
 9.0% Return mkt
 6.0% Risk premium
 9.3% Cost of equity
 3.0% LT FCF growth rate
 3.667 PV of Term Value 3% LT FCF growth
 3.511 PV incremental years
 7,447.82
 148.10 Diluted shares
 \$50.29

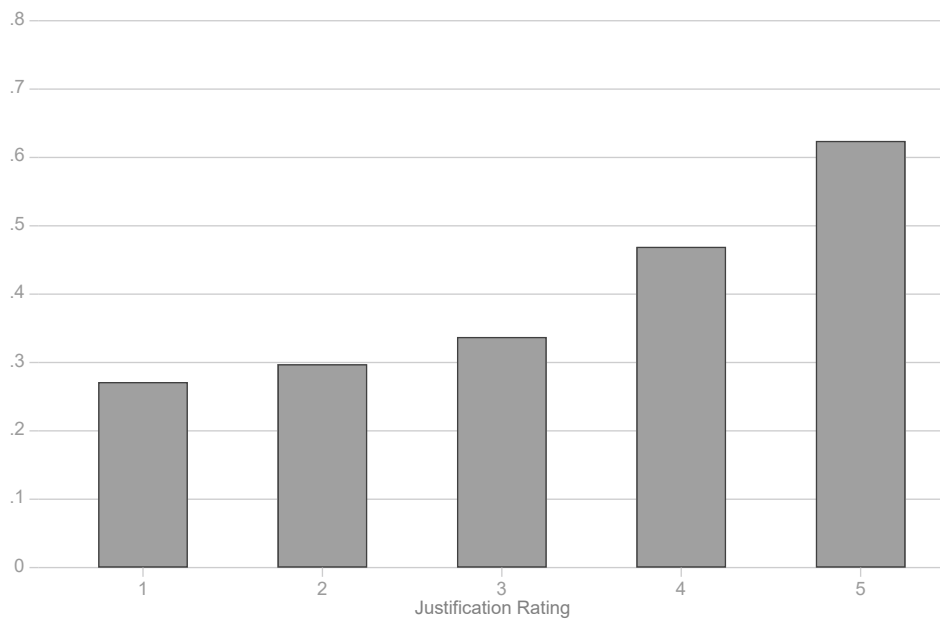
Note: This is representative example of a detailed justification on RIC. The author obtained this example from a buy-side investment professional and is not from the RIC database and it comes from Botelho 2018.

Figure A2. Distribution of Difference from Rating to Date and Raw Rating

a. Difference from Rating to Date



b. Raw Rating



Note: (a) Is a histogram of *Difference from Rating to Date*, an evaluator's rating minus the recommendation's average rating to date at the time of evaluation. (b) Is a histogram of the raw justification ratings given to recommendations. Ratings are submitted as integers from 1 to 5 stars.

Table A1. Comparison of Means Between Recommendations With and Without a Visible Rating

	Visible Rating = 0	Visible Rating = 1	Difference	p
Recommender Elite Education	0.519	0.512	0.006	0.889
Recommender Female	0.164	0.116	0.048	0.112
Recommendation Performance	0.023	0.015	0.008	0.690
Expected Performance	0.607	0.961	-0.354	0.144
Short Position	0.150	0.200	-0.050	0.137
Short Investment Horizon	0.425	0.428	-0.003	0.947
Event Investment Style	0.196	0.203	-0.007	0.846
Growth Investment Style	0.243	0.212	0.030	0.409
Other Investment Style	0.107	0.138	-0.030	0.306
Firm Size (B)	6.357	7.129	-0.773	0.674
Observations	214	320		

Note: Each variable is time-invariant besides *Recommendation Performance* and *Firm Size (B)*. For both of these variables, the last observation was used. Using earlier periods does not affect the balance of these variables.

Table A2. OLS Regressions of Rating Occurred on Visible Rating and Average Rating to Date

	Model 1	Model 2	Model 3
Visible Rating		-0.064*** (0.015)	-0.044** (0.013)
Average Rating to Date	0.001 (0.002)	0.000 (0.004)	-0.001 (0.003)
VR × ARD		0.002 (0.004)	0.002 (0.004)
Recommendation Performance	-0.019+ (0.011)	-0.014 (0.010)	-0.015 (0.010)
Expected Return	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Short Position	0.003 (0.006)	0.004 (0.005)	0.003 (0.005)
Short Investment Horizon	0.000 (0.004)	0.001 (0.004)	-0.000 (0.004)
Event Investment Style	0.000 (0.004)	0.003 (0.005)	-0.001 (0.004)
Growth Investment Style	0.002 (0.005)	0.001 (0.004)	-0.000 (0.004)
Other Investment Style	0.004 (0.006)	0.003 (0.006)	-0.001 (0.006)
Firm Size (B)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Recommender Female	-0.011* (0.005)	-0.012* (0.005)	-0.009+ (0.005)
Recommender Elite Education	0.000 (0.004)	0.001 (0.004)	0.003 (0.004)
Recommendation Count	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
Evaluator Elite Education	0.026* (0.013)	0.025* (0.013)	
Evaluator Female	-0.007 (0.013)	-0.010 (0.013)	
Constant	0.031 (0.032)	0.042 (0.035)	0.068* (0.030)
Evaluator FE	N	N	Y
Observations	19,442	19,442	19,169
R-Squared Adj.	0.00	0.01	0.18

Note: Unit of analysis is the professional viewing (or clicking on) a recommendation. All models include industry fixed effects and viewing-month fixed effects, and robust standard errors clustered at the evaluator level, are in parentheses. Significance levels: +p < 0.10, *p < 0.05, **p < 0.01, ***p < 0.001.

Table A3. OLS Regressions of Convergence: Competitive Threat

	Rating Occurred		
	Model 1	Difference from Rating to Date	
		Junior	Senior
	Model 1	Model 2	Model 3
Visible Rating	-0.047*** (0.012)	-1.282*** (0.342)	-2.418*** (0.443)
Evaluator Senior Position	0.051+ (0.030)		
Visible Rating × Evaluator Senior Position	-0.027 (0.022)		
Average Rating to Date		-0.729*** (0.072)	-0.946*** (0.091)
Visible Rating × Average Rating to Date		0.387*** (0.089)	0.672*** (0.122)
Recommendation Performance	-0.015 (0.010)	1.146+ (0.631)	-2.363+ (1.268)
Expected Return	0.000 (0.000)	-0.029* (0.012)	0.007 (0.013)
Short Position	0.007 (0.006)	0.079 (0.171)	0.444* (0.219)
Short Investment Horizon	-0.000 (0.004)	-0.004 (0.131)	-0.099 (0.167)
Event Investment Style	0.004 (0.004)	-0.082 (0.172)	0.145 (0.207)
Growth Investment Style	0.002 (0.005)	-0.349+ (0.178)	-0.125 (0.205)
Other Investment Style	0.004 (0.006)	0.105 (0.200)	-0.545+ (0.280)
Firm Size (B)	0.000 (0.000)	-0.001 (0.002)	0.004 (0.003)
Recommender Female	-0.013** (0.005)	-0.171 (0.208)	0.417+ (0.219)
Recommender Elite Education	0.002 (0.004)	0.164 (0.120)	0.008 (0.162)
Recommendation Count	0.000 (0.000)	0.003 (0.009)	-0.002 (0.011)
Evaluator Elite Education	0.029* (0.015)	-0.039 (0.111)	0.108 (0.136)
Evaluator Female	-0.018 (0.014)	-0.042 (0.277)	0.766*** (0.190)
Constant	0.025 (0.030)	3.529*** (0.440)	3.250*** (0.526)
Observations	22,848	609	375
R-Squared Adj.	0.021	0.177	0.275

Note: Model 1 unit of analysis is the professional viewing (or clicking on) a recommendation and Models 2 and 3 unit of analysis is an evaluator's rating after a recommendation received its first rating. *Rating Occurred* takes the value of 1 if the professional rates the recommendation and 0 otherwise. *Difference from Rating to Date* is measured as an evaluator's rating minus the recommendation's average rating to date at the time of evaluation. *Evaluator Senior Position* takes the value of 1 if the professional occupies a senior position and 0 if they occupy a junior position. Model 2 is the subsample of observations for professionals in junior positions and Model 3 is the subsample of observations for professionals in senior positions. All models include industry fixed effects and viewing-month fixed effects, and robust standard errors clustered at evaluator level, are in parentheses. Significance levels: +p < 0.10, *p < 0.05, **p < 0.01, ***p < 0.001.

Table A4. OLS Regressions of Convergence (Difference from Evaluator Rating to Date): Peer Deference

	Model 1	No Demonstrated Expertise	Demonstrated Expertise
		Model 2	Model 3
Visible Rating	-1.594*** (0.331)	-2.134*** (0.390)	-0.655 (0.628)
Average Rating to Date	0.138* (0.066)	0.068 (0.085)	0.220* (0.110)
Visible Rating × Average Rating to Date	0.493*** (0.089)	0.647*** (0.108)	0.254 (0.164)
Recommendation Performance	0.661 (0.671)	0.585 (0.812)	1.253 (1.651)
Expected Return	0.003 (0.020)	-0.031+ (0.017)	0.039 (0.025)
Short Position	0.179 (0.168)	0.213 (0.222)	0.112 (0.285)
Short Investment Horizon	-0.030 (0.124)	0.023 (0.155)	-0.219 (0.227)
Event Investment Style	0.047 (0.164)	0.166 (0.189)	-0.197 (0.332)
Growth Investment Style	-0.142 (0.169)	0.042 (0.213)	-0.410 (0.288)
Other Investment Style	-0.197 (0.200)	-0.103 (0.253)	-0.495 (0.363)
Firm Size (B)	0.000 (0.002)	0.001 (0.003)	-0.002 (0.004)
Recommender Female	0.063 (0.183)	0.231 (0.229)	-0.242 (0.345)
Recommender Elite Education	0.064 (0.120)	0.093 (0.144)	-0.160 (0.227)
Recommendation Count	-0.001 (0.009)	-0.004 (0.011)	0.006 (0.017)
Evaluator Elite Education	-0.120 (0.106)	-0.119 (0.131)	-0.254 (0.191)
Evaluator Female	0.719*** (0.208)	0.718* (0.288)	0.721* (0.314)
Constant	1.209 (0.981)	1.886+ (1.048)	-0.478 (1.305)
Observations	884	597	287
R-Squared Adj.	0.181	0.224	0.114

Note: Unit of analysis is an evaluator's rating after a recommendation received its first rating. *Difference from Evaluator Rating to Date* is measured as an evaluator's rating minus the evaluator's average rating to date at the time of evaluation. *Demonstrated Expertise* indicates whether the evaluator had previously submitted a recommendation for a stock in the same industry as the focal recommendation they evaluated. Model 1 provides estimates for the full sample, Model 2 is the subsample of observations for professionals without demonstrated expertise for the focal recommendation, and Model 3 is the subsample of professionals with demonstrated expertise for the focal recommendation. All models include industry fixed effects and viewing-month fixed effects, and robust standard errors are in parentheses. Significance levels: +p < 0.10, *p < 0.05, **p < 0.01, ***p < 0.001.