Detailed Reference Card (DRC)

Stock Recommendation Checklist Using the TIER™ System

Step	Question to ask yourself
1. STEP 1 of TIER™: TARGET REALISTIC PRICES	
1.1. Create an accurate financial forecast(s)	• Have you followed the principles of the ENTER™ quality framework (expectational, novel, thorough, examinable and revealing) in deriving a base-case financial forecast more accurate than consensus? • Have you created plausible upside and downside forecasts to stress test the base-case scenario?
1.2.	•
1.3. Select optimal valuation method(s) (this step begins the SHARE™ framework)	• Have you identified the valuation method(s) currently being used for the stock and sector as well as any other methods used in the past? • If there was more than one, have you identified: o The catalyst(s) that caused it to change? o Similar catalysts that could cause investors to look at a new valuation method over your investment time horizon? • Have you considered other valuation methods that will better measure the company's free cash flow growth (good or bad)? (Use alternative methods only if they help identify mis-priced stocks)
1.4. Historical and current data review	• Have you reviewed the stock's current valuation to ensure it is: o On trend compared to its past?; and o In-line with stocks that have similar characteristics? • If the valuation does not meet the criteria above, do you understand why the current market psychology is causing this anomaly?
1.5. Adjust multiple for the future price target	Have you forecast a future valuation multiple by making adjustments to the current multiple, specifically assessing: • The future direction of strongly-correlated company-specific and macro variables • Comparisons with other stocks that have similar prospects
1.6. Range of multiples and price targets	• Have you applied the appropriate valuation multiple(s) to your financial forecast scenarios to derive a range of price targets (upside, downside and base-case), to illustrate an objective risk/return profile? • Are the differences among the financial forecast scenarios based primarily on changes to the 1-4 critical factors? • Have you set exit thresholds, which may or may not be the same as your upside and downside scenarios?
1.7. Evaluate as circumstances change	Do you update your price target when: • There is a new financial forecast, including as time passes, leading to new forward forecast period (e.g. "next 12 months" changes each month) • There is a justifiable cause to revise the multiple (not just reverse engineering) • There is a justifiable cause to revise the method (use this sparingly
1.8. Philosophical considerations for "Target Realistic Prices" step	• Are you wasting time developing precision where it's not required: such as forecasting immaterial factors not likely to move the stock, or computing a risk-free rate or discount rate to the tenth decimal point? • Are you avoiding unproven or overly simplistic valuation methods? • Are you avoiding raising price targets in small increments in favor of one or two substantial changes (avoiding "incrementalism")?
2. STEP 2 of TIER™: IDENTIFY AND FORECAST CATALYSTS	
2.1. Identify potential catalyst	For stocks you are recommending, have you identified and forecast potential catalysts that would need to occur in order for the market to accept your out-of-consensus thesis? Have you specifically identified where it will appear in the financial statements such as from changes in pricing, volume, cost, margins, free cash flow, returns, EPS growth rate, etc.?

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<table>
<tr><th>Step</th><th>Question to ask yourself</th></tr>
<tr><td>2.2. Focus on catalysts meeting optimal criteria</td><td>Have you narrowed down the list of potential catalysts to focus on just a few that meet this criteria:
Pertains to a critical factor that is material enough to move the stock?
Likely to occur during the investment time horizon?
Not currently appreciated by the market?
Can be forecast with some level of certainty?
Do you avoid being distracted by catalysts that fall short of the criteria above?</td></tr>
<tr><td>2.3. Proactively prepare for next catalyst</td><td>For those stocks you are recommending, have you proactively put dates in a calendar for the following types of events, with the expectation that information pertaining to a catalyst will emerge and move the stock?
Company-sponsored analyst meetings and calls
Earnings releases
The company’s annual pricing, volume, or earnings guidance or projection
Deadlines for new legislation, regulations, or court case outcomes
Prescheduled announcements by the company’s customers, competitors, or suppliers (sometimes announced at major industry conferences)
New product releases or significant product extensions
Interim sales data for the company or the sector
Non-deal investor roadshows</td></tr>
<tr><td colspan="2">3. STEP 3 of TIER™: ENSURE IDEAL ENTRY POINT</td></tr>
<tr><td>3.1. Avoid costly psychological shortcuts</td><td>Have you reviewed the “Costly psychological shortcuts” mind traps found in the QRC “Best Practices for Eliminating Psychological Biases?”</td></tr>
<tr><td>3.2. Ensure call is differentiated (FaVeS)</td><td>Is your stock recommendation differentiated from the consensus thinking in at least one of the areas below:
Forecast of financial results, such as EPS or cash flow
Valuation multiple or methodology
Sentiment of the market toward the stock (void of an impending change to the forecast or valuation multiple/method)</td></tr>
<tr><td>3.3. Avoid Pollyannaish or hopeful thinking</td><td>Have you reviewed the “Pollyannaish or hopeful thinking” mind traps found in the QRC “Best Practices for Eliminating Psychological Biases?”</td></tr>
<tr><td>3.4. Weigh risk as well a return</td><td>When evaluating which stock(s) to recommend within your assigned universe, do you evaluate risk as well as return? Do you consider the following:
Predictability of earnings or cash flow forecasts that drive thesis?
Conviction in the catalyst occurring and moving the stock to the price target?
Reliability that management will deliver on its goals?
Timing for when the catalyst will occur (e.g. next month or 2 years from now?)?</td></tr>
<tr><td>3.5. Ensure no imminent danger</td><td>Have you checked to ensure there are no clear near-term risks that will offer a better execution point, such as the company falling short of current quarter expectations? Examples include:
Current quarter’s consensus expectations are opposite your long-term view
A large class of investors are still exiting (growth investors selling after a stock appears to be moving into the maturity phase)
The current economic cycle appears to be reaching its peak
A large management lock-up is about to expire</td></tr>
</table>

Explore these concepts in our workshop: *Master the Stock Call Techniques of Highly Experienced Analysts*

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Step	Question to ask yourself
3.6. Document thesis	• Have you documented your thesis and the price target specifics before making the recommendation (such as in a report, presentation or simply in a few lines in your model)? • Have you also established a stop-loss price to reduce the downside risk and as a place to re-evaluate if the unique insight isn't playing out as expected?
3.7. Sleep on it	Are you avoiding making a rash ratings change, potentially based on emotions, which would be more objective if you waited overnight? (What will happen in the next 24 hours if you waited?)
3.8. Monitor trading data	Do you monitor trading data to understand the motivations of the current stock holders? These could include: • Changes in the types of investors who own the stock (e.g. value, GARP, growth, momentum) • Short interest • Company insider buying and selling • Movement of stock compared to company's debt yield or CDS spreads
3.9. Know consensus	Have you analyzed the quality of the “consensus” estimate? • How many analysts comprise "consensus" (more than 1 or 2 in outer years)? • Are their estimates disparate or similar? • Are any estimates stale? • Does the consensus of the most accurate analysts differ from the overall consensus? • Is there a “whisper” number, and if so, do you know when it differs from the published consensus estimate and why?
3.10. Survey market sentiment	Have you assessed market sentiment about the stock and sector by surveying experienced buy-side and sell-side analysts, sell-side salespeople, traders, and investor relations contacts to ask about: • Biggest investor concerns? (May or may not be a critical factor) • Expectations that are above or below the published consensus? • The names and types of stocks receiving the most/least attention? (Where is everyone spending their time and what’s being ignored?) • General view toward the market (bullish or bearish) and risk (risk-on or risk-off)?
3.11. Avoid following the herd	Have you reviewed the “Following the herd” mind traps found in the QRC “*Best Practices for Eliminating Psychological Biases*?”
3.12. Monitor technical indicators	To the extent, it’s not prohibited by your firm or boss, do you monitor technical indicators to the extent they provide a better understanding of a stock’s momentum? (Beware they will not predict inflection points.)
3.13. Influence the market	In order to get the consensus' thinking to come around to your out-of-consensus view: • For sell-side analysts, do you proactively reach out to influence key market participants? • For buy-side analysts, if allowed by your firm, do you inform the most influential sell-side analysts of your thesis, after your firm has built a position in the stock?

Step	Question to ask yourself
3.14. Philosophical considerations for “Ensure Ideal Entry Point” step	• Do you avoid forcing a rating among your universe of stocks, where one may not exist? (Within an assigned universe of stocks, there’s not always a stock ready to substantially outperform the market and its peers.) • Do you avoiding ratings changes based solely on a major change in the stock’s valuation method or multiple? (These are rare.) • Do you avoid making overly complex stock recommendations? • Do you avoid being contrarian just to be a contrarian? • Are you continually aware of the market’s appetite for risk? • Are you willing to reverse your rating if your thesis fails to play out or catalyst fails to move the stock? • Do you avoid making recommendations when the stimulus is primarily based on a recent meeting or call with the company management (especially if the contact was initiated by the company)? • Do you avoid the “familiarity” and “availability” biases by not recommending one stock over another, simply because it’s the one most researched? • Do you increase the urge to sell when everyone loves a sector or stock, and buy when no one wants to own it? • Do you observe when bad news no longer makes stocks go down, or when good news no longer makes them go up? (It’s a sign that market psychology may be shifting) • When you are long a stock, do you resist panicking when other investors who are short the stock attempt to over-blow the impact of negative news flow? • When a stock appears to have dropped too much due to new concerns, do you avoid waiting for the market to get “greater clarity” about the risk, knowing the lack of clarity creates an opportunity to exploit? • If you miss a substantial move in a stock, do you avoid chasing it by jumping on the bandwagon? • Do you avoid making impulsive stock calls? • Do you avoid downplaying a “minor” issue with a company, which could foretell of bigger problems? • Are you leery of companies that ridicule sell recommendations or short-sellers? • Do you research to see if company management has enough skin in the game? • Are you leery of management teams that spend more time talking about their stock price or stock performance than running their business?
4. STEP 4 of TIER™: REVIEW PERFORMANCE	

4.1. Dynamically rank and review	• Do you review your comparison ("comp") table regularly (i.e. daily or a few times each week)?
	• Is your comp table built in a manner so that it:
	  o Updates stock prices automatically (via a feed to third-party service)
	  o Updates your forecast estimates (e.g. EPS, CFPS, BV, etc.) automatically from your models
	  o Includes consensus estimates which are automatically updated (via a feed to third-party service)
	  o Highlights when your financial forecasts differ materially from consensus
	  o For stocks you’re recommending
	    ▪ Shows how much future valuation multiple differs from the current multiple
	    ▪ Includes upside/downside returns to your target prices
	    ▪ Includes a column for you to adjust upside/downside for risk/probability
	  o Includes the current and historical ranges of forward relative valuation (e.g. relative P/E) for each stock
	  o Includes how your recommendations have performed since the last rating change relative to your universe of stocks and the overall market

4.2. Avoid “Fear of failure”	Have you reviewed the “Fear of failure” mind traps found in the QRC “*Best Practices for Eliminating Psychological Biases*?”
4.3. Review original documentation	Do you periodically review your original thesis (as documented at the time of the original recommendation, such as in your model, report or presentation) for these reasons: • When a stock call is going well, do you avoid the over-confidence and self-attribution biases by reviewing if the thesis is truly playing out or if it is more luck? • When a stock goes poorly, are you disciplined about using the stop-loss thresholds created at the time of the original recommendation?
4.4. Review unbiased comparisons	Do you avoid sunk-cost, loss-aversion and other biases by periodically (once a month or quarter): • Masking the company names/tickers within your comp table, looking only at the numbers to see if the ratings appear correct relative to potential risk-adjusted returns? • Asking, “If I switched firms tomorrow, would my stock recommendations at the new firm match my current ones?”

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4.5. Re-think recommendation if thesis wanes	If new information comes to light that derails the key catalyst of your stock call, and it's likely to hold the stock back, do you reverse your rating as quickly as possible?
4.6. Re-think recommendation if catalyst is ineffective	If the key catalyst for the stock recommendation occurs and the stock doesn't move to the price target, do you re-think your recommendation and avoid the temptation to find another catalyst to justify the recommendation?
4.7. Avoid placing blame or denying responsibility	• When a stock call goes poorly, do you avoid placing blame on others for a bad stock call, or saying, "The surprise couldn't have been foreseen?" • Do you ask yourself these questions: o What could have been done to know about this surprise earlier? o Did anyone else see this coming (sell-side or buy-side)?
4.8. Philosophical considerations for "Review Performance and Thesis" step	• Do you evaluate your performance relative to a similar basket of stocks or benchmark, rather than just absolute performance? • Do you reflect on your bad stock calls to avoid a similar call in the future?