



Karen Ko, MBA, CFA,
Vice President and
Director, Client Portfolio
Manager, TDAM

Conducting an Effective Post-Mortem Exercise for Better Investment Results: Lessons from TDAM

At a Glance:

- A Post-mortem exercise could improve the investment process, potentially bringing stronger and more consistent investment returns.
- Several factors are needed for a successful post-mortem exercise, including strong organizational culture and emphasis on record keeping and data.
- The Active Fundamental Core Growth Equity Investments Team at TD Asset Management Inc. (TDAM) has a robust post-mortem process, an inside look at which is provided in this paper.

In the investment context, a post-mortem exercise is an analytical process which dissects investment results to understand how the research, decision making and trading operations contributed to the outcome. Post-mortem exercises can help to improve the investment process, which in turn can bring stronger and more consistent investment returns. The Active Fundamental Core Growth Equity

Investments Team at TDAM has been conducting post-mortem exercises for several years, which has taught us valuable lessons. We believe these lessons are applicable across all asset classes and equally beneficial to any investment decision process. The principles outlined below can be modified for different team sizes, even at the Investment Committee level.

What Are the Objectives of a Post-Mortem Exercise?



Reinforcing and Improving the Investment Process

Generating superior investment returns is a primary objective for any investment manager and we believe a thoughtful investment process can be the most assured way to achieve consistent returns. Hence, the ultimate purpose of the post-mortem exercise is to reinforce the existing investment process and discipline while looking for opportunities to improve them. This can happen only through taking stock of difficult situations when an investment holding departed from our expectations. By analyzing these situations, we understand our discipline better.

The outcome of the exercise may point to a need for additional resources, different communication channels, a new team structure or a revamped decision-making process. The analysis could also highlight missed signs, research gaps and inconsistent execution. The post-mortem process could produce an improved research report template where new macro/industry data are identified as relevant indicators.



Fostering a Culture of Humility and Continuous Learning

The post-mortem exercise requires an honest assessment of the weaker aspects of the process. Since most of the chosen candidates for the post-mortem analysis are detractors, there is the human tendency to blame others, rather than to hold oneself accountable. But even the most experienced investors could occasionally make mistakes, so the exercise is a great way for investment professionals, from the most senior portfolio manager to the junior analyst, to demonstrate vulnerability and an aptitude for growth.

Since the objective of the post-mortem is to improve the investment process, a regular post-mortem exercise could ingrain a mentality of continuous learning in the team.



Sharing Knowledge

The post-mortem is best done as a team event so everyone can benefit from the insights learned. While every asset class, sector, region and investment style has nuances in its approach, many of the principles in the key lessons learned will likely be applicable more widely. In addition, it is a great opportunity for the more senior investment professionals to share their knowledge and experience with the junior members on the team.

Strategy

Success Factors

There are a few conditions and factors to consider for a successful post-mortem.



Firm Culture and Focus on the Process

Since the post-mortem exercise requires an honest assessment of one's decisions, the team must have a strong culture of trust and respectful challenge. The post-mortem exercise is not meant to point fingers or find a scapegoat for investments that have gone wrong. Building a culture of trust should occur well before implementing a post-mortem exercise. Team members need to feel safe to be honest and to own their mistakes. Everyone should have an equal right to provide an opinion without fearing backlash from more senior team members. When senior members park their egos, it fosters a culture where junior analysts feel encouraged and able to respectfully challenge the senior portfolio managers about their decisions.

Also, the post-mortem discussion should focus on aligning the research efforts with the investment philosophy and process and on finding opportunities for improvement. The goal should be to dissect the decision, not to murder the decision maker. Team members need to be assured that this is a collective effort, and no one will be sacrificed for bad outcomes. Any post-mortem exercise should be done independently from remuneration, promotion and performance assessments.



Data and Documentation

A post-mortem analysis should be based on facts and data. For a robust analysis, the team needs to have access to a reliable and comprehensive data source. Much of the analysis will focus on the market conditions, in addition to portfolio holdings. For example, assessing the efficacy of a decision to buy a stock could mean considering its performance relative to its peers as well as alternative investment opportunities. The post-mortem exercise could also benefit from analyzing missed opportunities that were never considered. While some unowned stocks can be quickly dismissed as they do not align with the team's philosophy, there are instances where new effective characteristics and factors can be identified.

Similarly, accurate and reasonably detailed records of the investment thesis and decision are critical because human minds can confuse facts with perceptions, and our memory is not as reliable as we think. That way, the team will be able to focus on the facts. The exercise is futile if team members argue about what transpired. The investment thesis and risks for every research idea should be documented. The rationales for all trading decisions should be recorded with the specific trade dates to facilitate analysis of trading execution and efficacy.



Commitment and Implementation

A post-mortem exercise is an investment. Team members must devote time and resources to ensure a successful outcome. Full participation is important as everyone needs to demonstrate commitment and buy-in to the process as well as to the recommendations for improvement coming out from the exercise. The post-mortem should be a routine part of the investment process and the exercise should happen at the same time every year.

The team may come up with many ideas during the post-mortem discussion. It could be useful to have a small committee that records all the proposals and makes recommendations for implementation. Regardless of the extent of the proposals, change will be required, and human beings often resist that. Thus, the committee should have a senior member who can sponsor the implementation of changes across the entire team. The team also needs to be realistic about the scope of implementation and prioritize its efforts if there are many proposals. If new resources or drastic changes to team structure are required, the senior member would have better access for executive and organizational support. A thoughtful implementation process with a sense of urgency is critical to ensure the post-mortem efforts are not wasted.

How TDAM Does it

The Active Fundamental Core Growth Equity Investments Team started doing a post-mortem exercise in 2014 in an informal manner. After adopting an investment research recording system in 2016, the process was significantly improved in 2017, allowing us to precisely reconstruct the life cycle of an investment and helping to expand the scope of the post-mortem analysis. Thanks to these iterations and investments in data bases and a documentary depository platform, we have been able to create the robust post-mortem framework we have today.

Everyone on the team – portfolio managers, fundamental research analysts and in-house quantitative and risk management professionals - participates in the post-mortem exercise. During the exercise, we scrutinize every step in our investment process: quantitative screening, fundamental analysis and portfolio construction.

Idea Generation & Screening

Fundamental Analysis

Portfolio Construction &
Risk Management

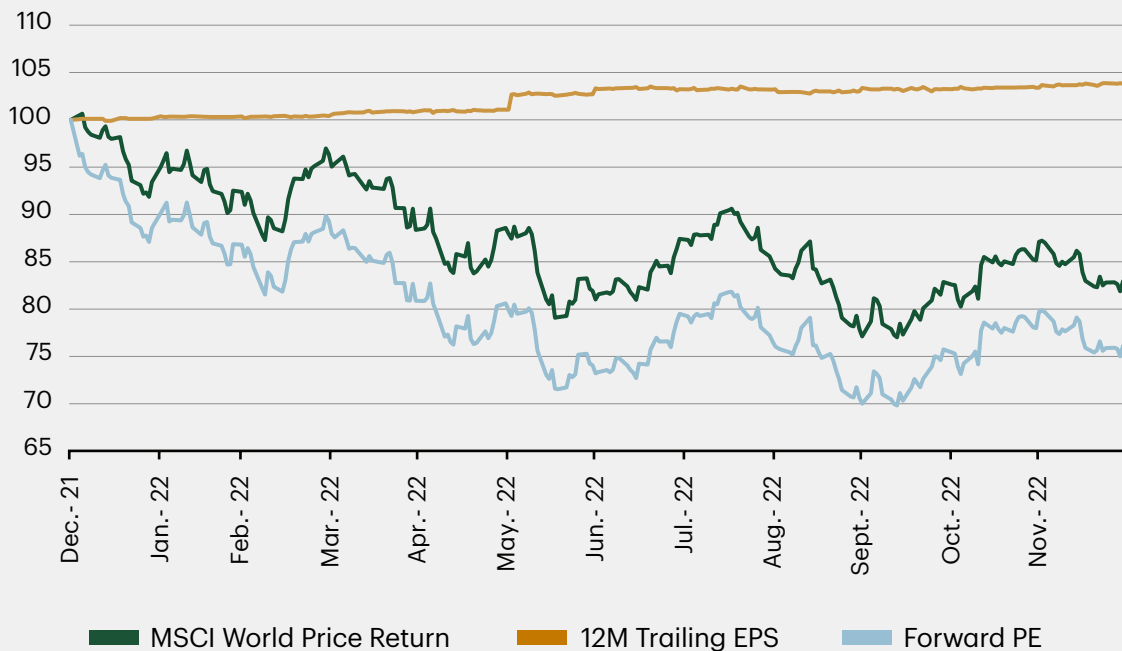
We carry out a post-mortem exercise semi-annually, in June and December. Each exercise involves a week of preparation work, followed by a week of team meetings where team members from different offices travel to meet in person.



June Post-Mortem

The June post-mortem typically focuses on market trends and themes and on business and market cycles. Each member is assigned to a smaller team of three or four people and tasked with studying a topic.

Valuation Compression Driving MSCI World Returns



Index is Price Return. Metrics are rebased to 100 as of 2022/01/01. MSCI World is calculated in USD.
Source: Bloomberg Finance L.P. As of Dec 31, 2022.

For example, we have studied the relationship between business, macro factors, earnings and stock cycles. As a long-term investor with a quality growth style tilt, we invest in many secular growth stocks that are well positioned to capture higher growth rate for longer. However, these companies still face the challenges of business cycles that will impact their revenue and margins. The share price cycle also reflects expectations of earning momentum. In 2022, when we witnessed one of the most aggressive inflation and interest rate cycles since the 1980s, some of our growth-oriented Information Technology and Health Care holdings were detractors from performance. The rapid rise in the Federal Reserve's fund rate caused the equity market to repricing equity valuations quickly. The equity market was trading at lofty multiples at the commencement of the rate cycle and implicitly required negative real interest to be sustainable. Rising real interest rates caused equity multiples

to compress violently, even though earnings were holding up initially.

Our honest assessment leads us to incorporate industry-leading indicators in our routine weekly investment discussion to help us better anticipate inflection points in the cycles.

For example, the global Purchasing Managers Index (U.S., Euro, China and Japan) and the Institute for Supply Management's orders for new components are important leading indicators for industrial cycles. When our industrial analysts identify a new investment opportunity, they would overlay a relevant indicator on the stock valuation and assess peaks and troughs. We believe that helps with better risk/reward analysis and allows the portfolio manager to risk-manage the initiation position size. The same exercise on an existing holding has also allowed us to historically trim from and add to our position with improved timing.

December Post-Mortem

The December post-mortem exercise focuses on our own research process and decision making. Each portfolio manager and analyst analyze their research and decisions and reflect on what has and hasn't gone well. Each person comes up with opportunities for improvement. It is important to critique one's own work so any proposed solution is organic and owned by the person who makes it. It also reduces the risk of sabotage among team members, which would destroy our collaborative culture.

For instance, a regular review and assessment of our proprietary quant screening to determine efficacy is a routine component of our December post-mortem.

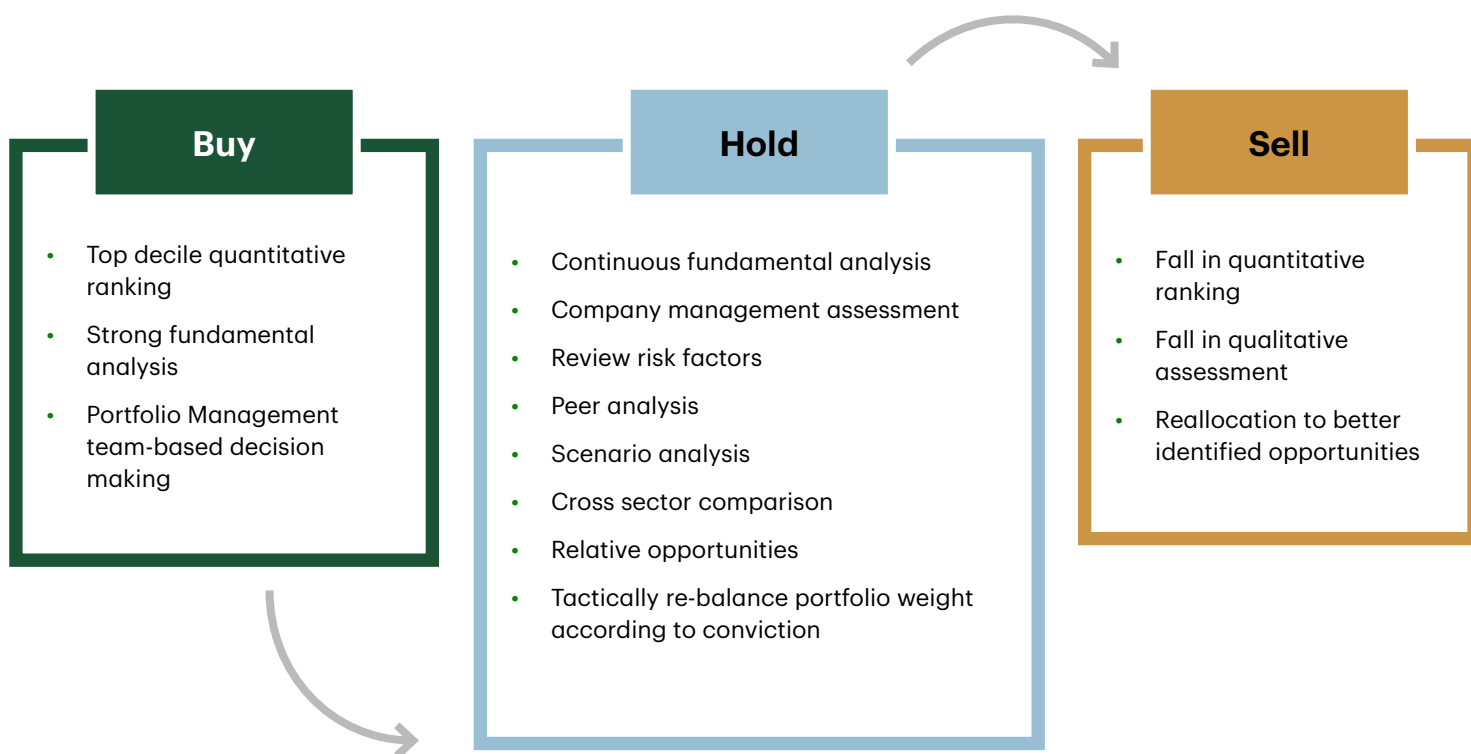
Over time, we have heavily scrutinized our quant screening and recognize that some of the factors are less effective in the Japanese market due to its unique characteristics. That market is highly cyclical and displays much more mean reversion. It has a much higher proportion of value stocks that are hostile to our quality growth style. In order to better screen for investment ideas, we are investigating a supplementary screening tool for Japan, where we will look at identifying quality companies through an improving ROE trend. To better capture the cyclicity of the Japanese market, we are also studying the efficacy of price momentum signals that adjust for cyclicity and the impact of macro factors on stock-specific returns.

Key Attributes We Look For



We use the quant screening not just to derive a buy list our fundamental analysts can rely on for their research priorities, but also to give signals for review when a stock drops in its quant rank. In another post-mortem meeting, we analyzed how a company's fundamentals and share price performed after a drop

in the quant ranking. We split the companies into two groups: for the first group, the drop in the quant ranks gave the correct sell signal; in the other group, the share price continued to hold up or bounced back after an initial dip. We looked for commonalities within those groups.



The insights allowed the team to better identify long-term winners over short-term fads. Since we buy top-ranking stocks in quant screening, the portfolio holdings do drop in their rankings once seasoned as the starting point is high. Based on our research, we have become more comfortable holding a company with certain characteristics that temporarily goes through a slow patch but will eventually return to a growth path. We have reduced churn in the portfolio and have become better stewards of the holdings.

In Summary

The investment process is a continuum and new lessons will always be there to be learned. A thoughtful post-mortem exercise is the most systemic and disciplined way to harvest our collective investment experience to improve investment outcomes. ■

Wealth



The information contained herein is for information purposes only. The information has been drawn from sources believed to be reliable. Graphs and charts are used for illustrative purposes only and do not reflect future values or future performance of any investment. The information does not provide financial, legal, tax or investment advice. Particular investment, tax or trading strategies should be evaluated relative to each individual's objectives and risk tolerance. Bloomberg and Bloomberg.com are trademarks and service marks of Bloomberg Finance L.P., a Delaware limited partnership, or its subsidiaries. TD Global Investment Solutions represents TD Asset Management Inc. ("TDAM") and Epoch Investment Partners, Inc. ("TD Epoch"). TDAM and TD Epoch are affiliates and wholly-owned subsidiaries of The Toronto-Dominion Bank. ©The TD logo and other TD trademarks are the property of The Toronto-Dominion Bank or its subsidiaries.