

**Nicolo G. Torre, PhD CFA**  
**Professional Biography**

Nicolo G. Torre is the founder and CEO of Lloyd Tevis Investments, LLC. He is a quantitative investment manager. He studied pure mathematics and history as an undergraduate at Harvard and went on to a PhD in pure mathematics at the University of California at Berkeley. On completing his studies he joined the firm Barra, now part of MSCI.

At Barra Torre made fundamental improvements to the multi-factor risk model and developed key algorithms of quantitative trading. In risk modeling he, in joint work with Ron Kahn, incorporated GARCH volatility modeling to the multifactor risk approach pioneered by Barra. He clarified how industry factors should be defined and showed how assumptions of normal distributions could be relaxed to accurately model large return events. He also showed how risk models of single asset classes could be combined to provide multi-asset class analyses. This innovation was to majorly improve portfolio management of international equity and mixed equity/fixed income portfolios. In trading he introduced the first structural risk model tuned to the trading time frame, and developed analytics for limit order management, optimization of trading inventories and simulation of trading strategies. His most important contribution, however, was in the area of market impact modeling. Previous academic work in this area had emphasized information flow models which were intellectually engaging but proved a dead end in terms of practical decision support. Torre, in joint work with Mark Ferrari, introduced a money flow modeling approach which has become foundational to further work in this field.

Torre was promoted over a ten year period to Managing Director of Research, the senior investment position at Barra. As such he carried responsibility for the firm's risk model which is fundamental to the management of about half of world capital – or approximately \$100 trillion dollars at current valuations. That figure is ten times the assets of the Federal Reserve System and five times the GDP of the US economy.

During Torre's tenure at Barra the US Treasury first issued bonds linked to the Consumer Price Index – the Treasury Inflation Protected Securities (so called TIPS.) This was one of only two blue chip asset classes to be introduced in the past fifty years and it was the largest innovation in Treasury financing operations in living memory. Torre was the invited expert chosen to present the investment case for the new instrument to the global investment community. This role led naturally to work done in conjunction with Brown Brothers Harriman to incorporate TIPS into portfolio strategies for the Treasury's major creditors.

Torre left Barra to join the firm of Greenwich Capital (now known as RBS Securities) in 2000. At Greenwich Capital he ran a proprietary trading desk which implemented algorithmic trading strategies in US equities and currencies. Here he observed first hand the reliability of the high frequency risk control techniques he had developed during the harsh out of sample test provided by the 9-11 attacks.

In 2002, Torre partnered with Andrew Rudd, former CEO of Barra, at the firm of ASI. Here he developed the first ETF strategies for Ishares and State Street Global Advisors. These strategies were instrumental in repositioning ETFs from a day trading tool into fundamental building blocks of long term investment strategies. This work led naturally to developing the first RoboAdvisor (known as Sharebuilder) for ING Bank. This product was both cloned by all subsequent RoboAdvisors as well as inspiring many small dollar savings programs. Torre and Rudd's next contribution was to develop the concept of goal based investing. This concept was operationalized in a TAMP developed for Citicorp.

The service it supported met with strong customer adoption but the effort was abandoned by the bank in the refocusing of its operations forced by the unrelated 2008 mortgage crisis. The enduring legacy of goal based investing, however, is that financial firms switched their public messaging from emphasizing balance sheet robustness to a more clientcentric message of helping customers achieve their goals.

Torre founded the firm of Lloyd Tevis Investments, LLC to carry forward the development of goal based investing. After a long R&D process, this firm launched its Precision Investing™ service in 2023. Precision Investing™ reformulates goal based investing to succeed as an investment service offered direct to the end investor. It thus combines the the distribution methods pioneered with RoboAdvisors to the sophisticated strategy work and strong risk control techniques which have been enduring elements of Torre's career. Finally its robust automation builds on the experience gained from algorithmic trading. It is thus fair to say that it draws on experience and specialized knowledge gained in every part of Torre's career.

Surveying the totality of Torre's work from risk management and algorithmic trading through strategy development, introduction of TIPs and ETFs, the invention of RoboAdvisors and finally the development of goal based and Precision Investing™ it is clear that his contributions have majorly shaped the investment art as it is practiced in our day.