

Citi OpenInvestorSM

Synthetic ETFs

Growing Demand for Collateral Management



Synthetic ETFs

Exchange Traded Funds (ETFs) have become an increasingly popular asset class in the global financial marketplace. Volumes are booming in terms of new listings, and assets under management (AUM) continue to increase despite difficult market conditions.

U.S. ETF assets rose to \$1.06 trillion at the end of 2011, up 5% from the previous year, according to the ETF Industry Association. All told, there were 1,166 ETFs listed in the United States at year-end, an increase of 20.6% from the 967 funds at the end of December 2010. Globally, BlackRock reported that the ETF industry (which includes Exchange Traded Notes and similar vehicles) ended 2011 with \$1.525 trillion in AUM, up 2.9% from \$1.482 trillion at year-end 2010 – and more than three times the total in 2005.

This remarkable growth rate is expected to continue. A recent McKinsey & Co. report forecast that assets under management in global ETFs could double or even triple by the end of 2015.

Further, according to the report, the reason for their accelerating popularity is that ETF products meet investors' growing appetite for portfolio diversification and yields by allowing easy entry to new asset classes and investment sectors such as emerging markets and commodities. For investors, ease of access, liquidity and low cost are key benefits of ETFs.

ETF Structures

In brief, ETFs represent shares of ownership in either funds or unit investment trusts that hold portfolios of common stocks or bonds. They are designed to generally correspond to the price and yield performance of their underlying indexes (e.g., broad stock market, stock industry sectors, international stocks, U.S. or international bonds, etc.). ETFs enable investors to buy or sell an entire portfolio of stocks or bonds in a single security, as easily as buying or selling a share of stock.

In a physical ETF structure, the underlying assets are bought and held by the ETF manager. Synthetic ETFs, on the other hand, allow replication of the index using derivatives as opposed to owning the physical assets. The fund manager does not hold the underlying assets but enters into derivative contracts in order to replicate the return of the targeted basket of assets. Derivatives allow access to asset classes that might be restricted or difficult to deal with on a physical basis; for example, emerging markets securities that require foreign investor's licensing or registration. From a costs perspective, synthetic ETFs may demonstrate lower Total Expenses Ratios (TER) in comparison to physical structures as they minimize the operational and administrative costs of holding the physical basket.

Synthetic ETFs are generally based on swap contracts between the ETF manager and a number of brokers. Those swaps are generally implemented under ISDA and credit support annex (CSA) stipulations and require proper margining and collateral management.



Mitigating Risk

From an investor's perspective, the main risks in ETFs lie in investment risk and the operational risk of the fund manager. For synthetic ETFs specifically, derivative counterparty risk can be added to those. Synthetic replication schemes transfer the risk of any deviation in the ETF's return from its benchmark to the swap provider, which is effected by entering into a derivatives contract to receive the total return of the benchmark. This process protects investors from the tracking error risk that physical replication schemes would otherwise expose them to. However, there is a trade-off: The lower tracking error risk comes at the cost of increased counterparty risk to the swap provider.

Managers may be able to mitigate the counterparty risk in a synthetic ETF through margining and collateral management, which adds demands to the manager's operational capacity and costs.

Regulatory Scrutiny

Recently, synthetic ETFs have come under growing scrutiny amid concerns from regulators that investors may not be fully aware of the products' risks. Earlier this year, the European Securities Markets Authority (ESMA) announced new guidelines to improve the transparency of the market. Regulations have also been outlined by the Bank of International Settlements, the International Monetary Fund and the Financial Stability Board in the UK.

UCITS rules have been set to define the type of collateral that can be eligible and Hong Kong's Securities and Futures Commission to make synthetic ETFs more transparent and impose 100% collateralization of the structure.

In this environment, ETF managers may seek more independence in setting up transparent and safe margining collateral management structures to protect investors. Citi's OpenCollateralSM is the premier solution that helps them do so on an automated, scalable and cost-efficient basis. ■

Fergus Pery

Global Head of OpenCollateralSM
Citi Transaction Services, Citi

For additional information:

Americas:

Daniel Ulrich
dan.ulrich@citi.com

Europe, Middle East and Africa:

Fergus Pery
fergus.pery@citi.com

Asia Pacific:

Pierre Mengal
pierre.mengal@citi.com

ETFs enable investors to buy or sell an entire portfolio of stocks or bonds in a single security, as easily as buying or selling a share of stock.

About Citi OpenInvestorSM

Citi OpenInvestorSM is the investment services solution for today's diversified investor, combining specialized expertise, comprehensive capabilities and the power of Citi's global network to help clients meet performance objectives across asset classes, strategies, and geographies. With a network that spans more than 95 countries and over \$13 trillion in assets under custody, Citi offers award-winning service and unmatched scale. Citi provides complete investment services for institutional, alternative, and wealth managers delivering middle-office, fund services, custody, investing and financing solutions focused on clients' specific challenges, customized to their individual needs.

openinvestor.transactionservices.citi.com

Citi Transaction Services
www.transactionservices.citi.com

© 2012 Citibank, N.A. All rights reserved. Citi and Arc Design is a registered service mark of Citigroup Inc. OpenCollateral and OpenInvestor are registered service marks of Citigroup Inc.

951155 GTS25925 06/12