

MSCI

A Clear View of  
Risk and Return



# Introducing MSCI Select Commodity Producers Indices

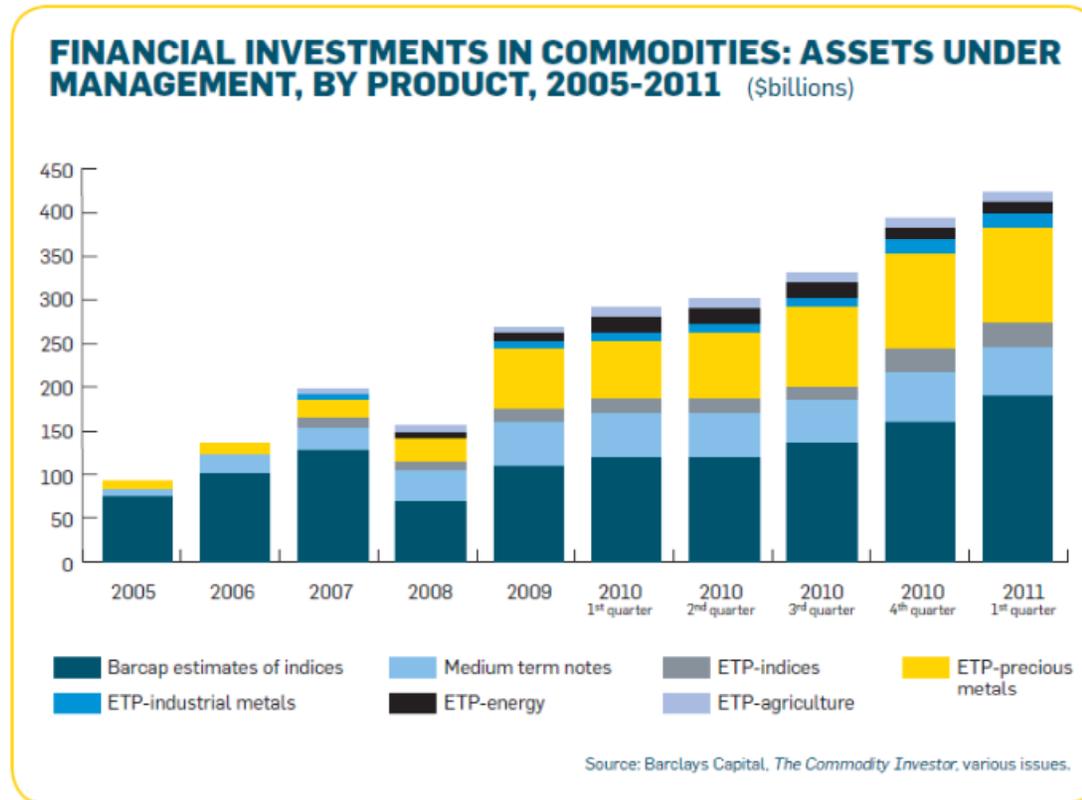
February 2012

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# Commodities in Portfolios

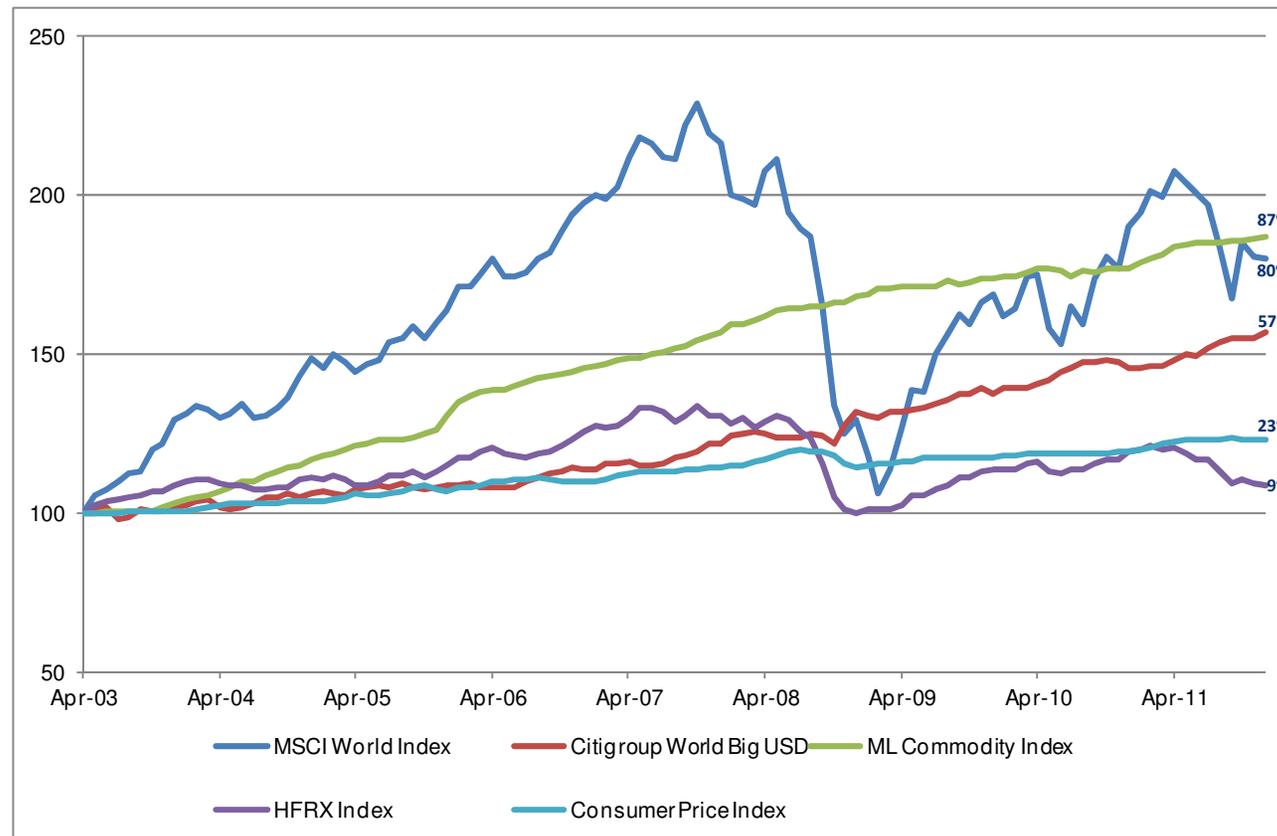
- Commodities investments have grown considerably over the past few years
- According to UNCTAD, over USD 400 billion of institutional and retail money is currently invested in commodities, compared to only USD 6 billion a decade ago



Financial investments in commodities (from UNCTAD: "Price Formation in Financialized Commodity Markets", June 2011)

## Commodities vs. Other Asset Class Returns

- Over the last eight years, cumulative returns on commodities are close to stock returns and have exceeded bond returns



Note: The IMF commodity indices are weighted averages of individual commodity price indices, with respective commodity weights derived from their relative trade values compared to the total world trade as reported in the UN Comtrade database

Source: Reuters, Factset, MSCI

# Commodities: Potential For Portfolio Diversification and Inflation Hedge

- Low or negative correlation of commodity returns with other asset classes
- Commodities returns are positively correlated with inflation

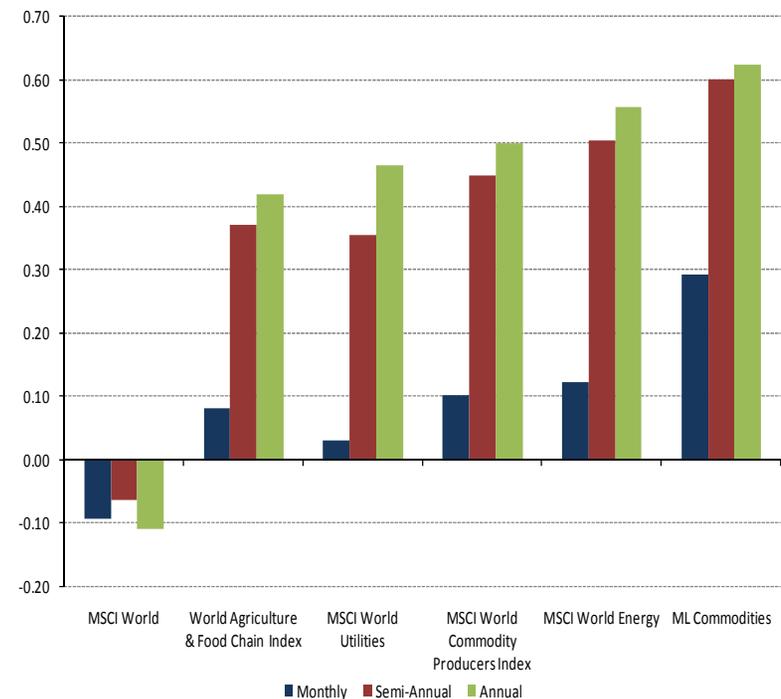
**Correlation of Commodities with Other Asset Classes (May 2003 to December 2011)**

	Equities	Bonds	Commodities	Alternative Asset Class
Equities (MSCI World Index)	1.000	-0.002	-0.049	0.796
Bonds (Citigroup World Big USD)		1.000	0.025	-0.039
Commodities (ML Commodity Index)			1.000	0.009
Alternative Asset Class (HFRX Index)				1.000

\*Correlation based on monthly returns from April 2003. The Merrill Lynch Commodity index eXtra (MLCX), launched in June 2006, comprises 18 commodity futures contracts, selected by liquidity. These commodities are then weighted using global production weights.

**Correlation between Inflation and Asset Class Returns**

as of Nov 30 2011

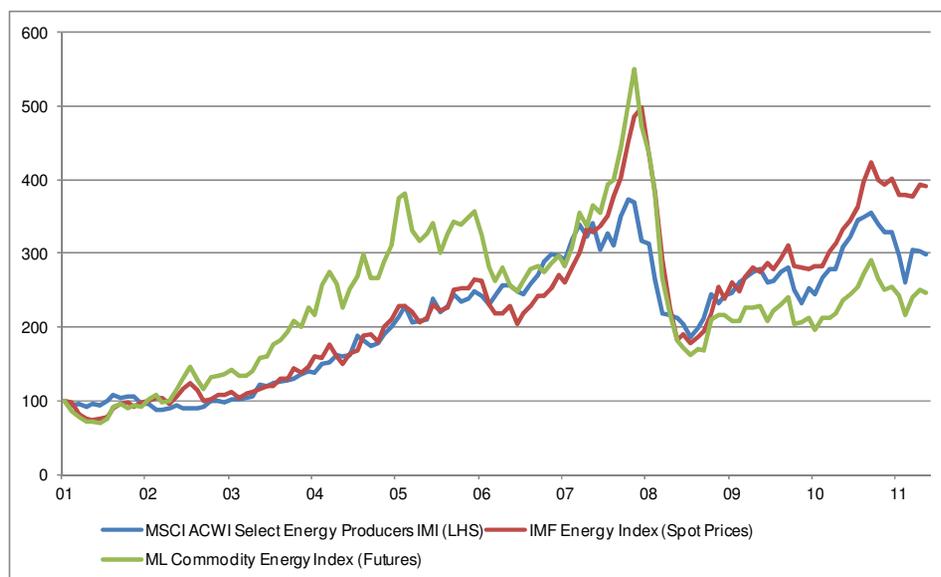


Note: Inflation as measured by CPI, Consumer Price Index

# Gaining Exposure to Commodities

Primary Methods	Benefits	Shortcomings
<b>Direct Physical Investment</b>	<ul style="list-style-type: none"> <li>Purest form of exposure</li> <li>Diversification benefits, inflation hedge</li> </ul>	<ul style="list-style-type: none"> <li>High storage costs</li> </ul>
<b>Commodity Futures</b>	<ul style="list-style-type: none"> <li>Exposure without holding physical (no storage costs)</li> <li>Diversification benefits, inflation hedge</li> </ul>	<ul style="list-style-type: none"> <li>Possible contango or backwardation</li> </ul>
<b>Commodity-related Stocks</b>	<ul style="list-style-type: none"> <li>Exposure (without shortcomings already mentioned)</li> <li>Diversification benefits, inflation hedge</li> <li>Dividend yield</li> </ul>	<ul style="list-style-type: none"> <li>Exposure to broader equity market beta</li> </ul>

- These three methods results in different exposures that can result in significantly different risk and return characteristics



August 2001 to December 2011	IMF Energy Index	ACWI SELECT ENERGY PRODUCERS IMI	ML Commodity Energy Index (Futures)
Annualized Return	14.1%	11.2%	9.1%
Annualized Volatility	25.4%	21.9%	31.4%
Sharpe Ratio	0.30	0.15	0.09

Note: The IMF commodity indices are weighted averages of individual commodity price indices, with respective commodity weights derived from their relative trade values compared to the total world trade as reported in the UN Comtrade database

## Challenges to Gaining Exposure to Commodities

- Holding the physical commodity provides the purest form of exposure to commodities but is often impractical because of the high storage costs
- Using commodity futures is complicated by the so-called contango trap; the losses suffered by commodity future portfolios in their monthly rolling period because of unfavorable price spreads between the expiring future contracts and the new contracts they try to buy

### Commodity related stocks can:

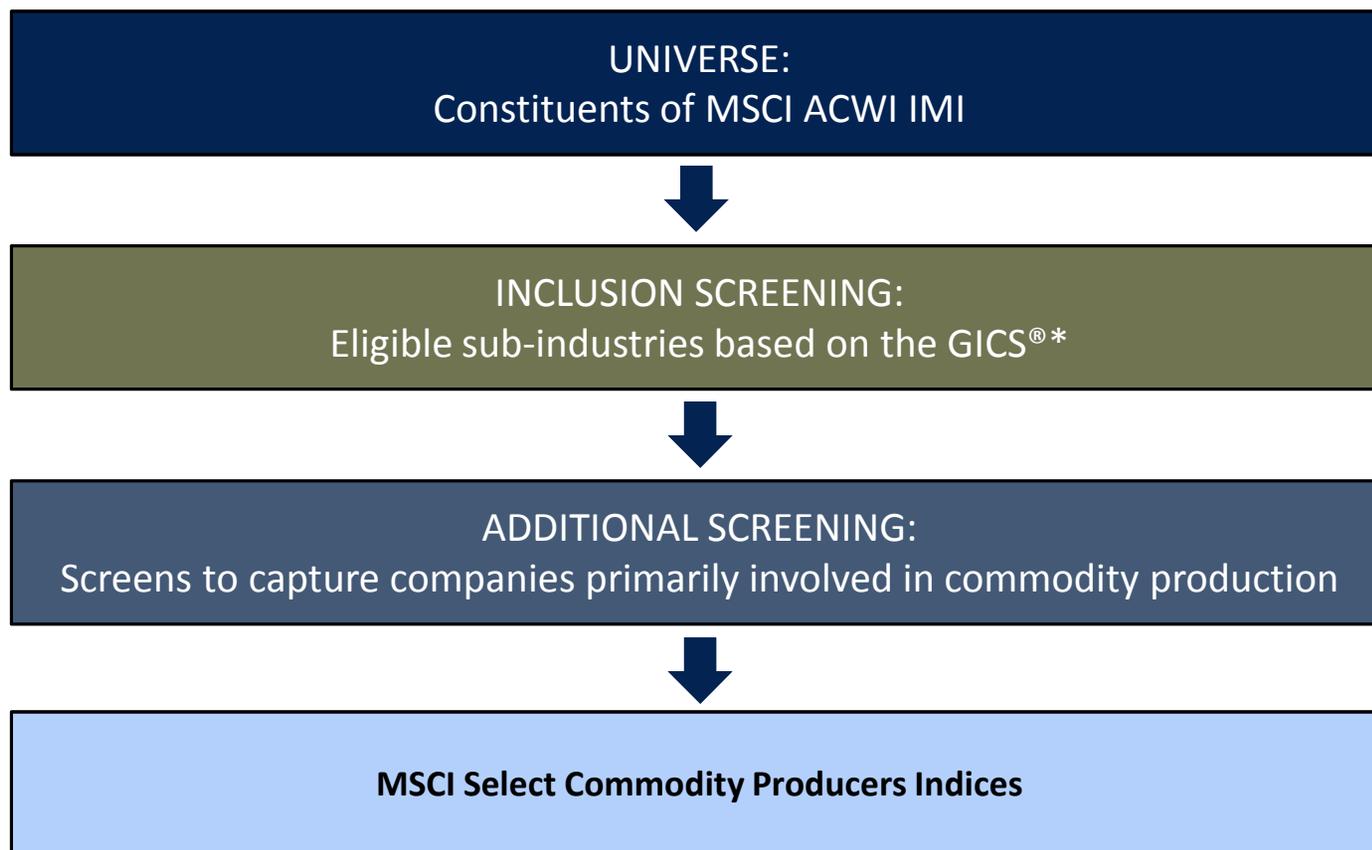
- Provide an alternative to commodity physicals and futures – since they are not directly affected by contango or backwardation, and there are no storage costs
- Provide the added benefit of a dividend yield

## MSCI Select Commodity Producers Indices

- The MSCI Select Commodity Producers Indices are custom market capitalization weighted indices based on the MSCI ACWI Investable Market Index (IMI). ACWI IMI is a global equity index consisting of developed and emerging market countries across the large, mid and small cap size segments
- The indices aim to focus on companies that are highly sensitive to underlying prices of commodities
- MSCI currently calculates the following MSCI Select Commodity Producers Indices:
  - MSCI ACWI Select Agriculture Producers Investable Market Index
  - MSCI ACWI Select Energy Producers Investable Market Index
  - MSCI ACWI Select Metals & Mining Producers Ex Gold and Silver Investable Market Index
  - MSCI ACWI Select Gold Miners Investable Market Index
  - MSCI ACWI Select Silver Miners Investable Market Index

# MSCI Select Commodity Producers Indices Construction Process

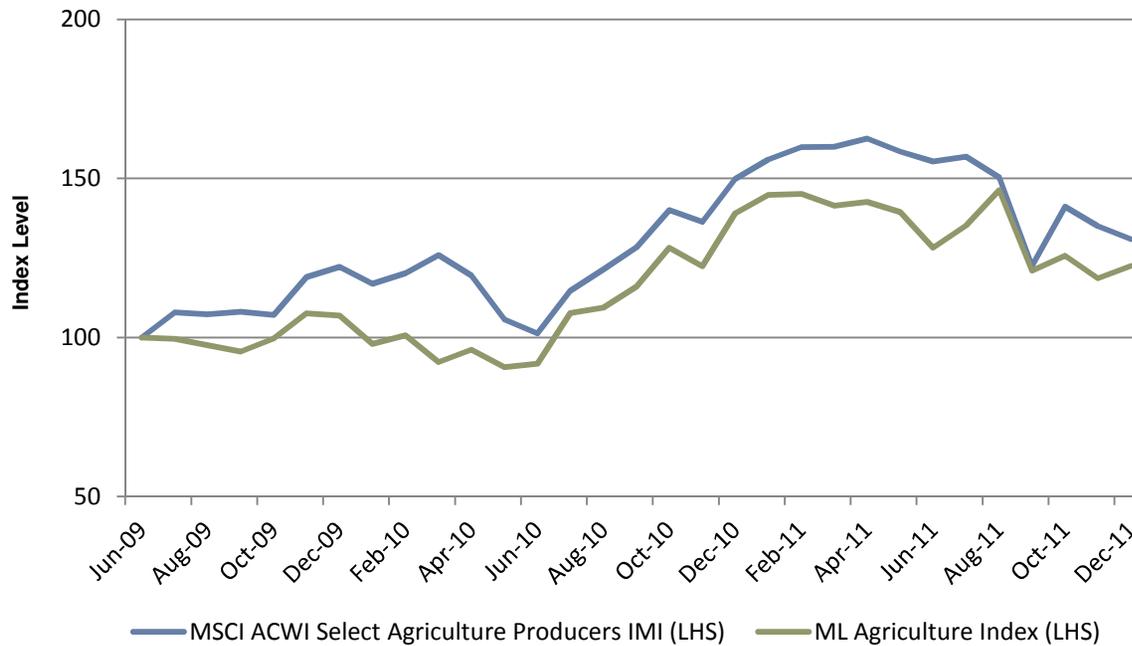
- Broad commodity producers coverage derived from MSCI ACWI IMI with embedded investability screen



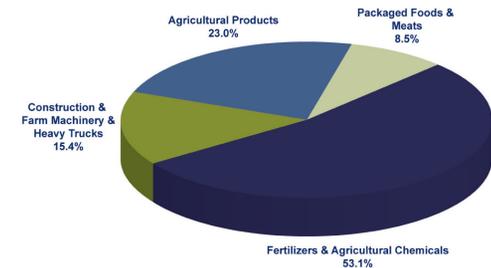
\* The global industry classification standard jointly developed by MSCI and Standard & Poor's

# MSCI ACWI Select Agriculture Producers IMI

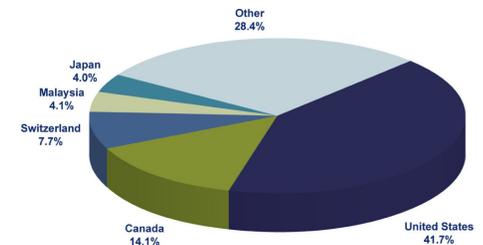
This index aims to focus on companies in the agriculture industries that are highly sensitive to underlying prices of agriculture commodities



Sub-Industry Weights



Top 5 Countries

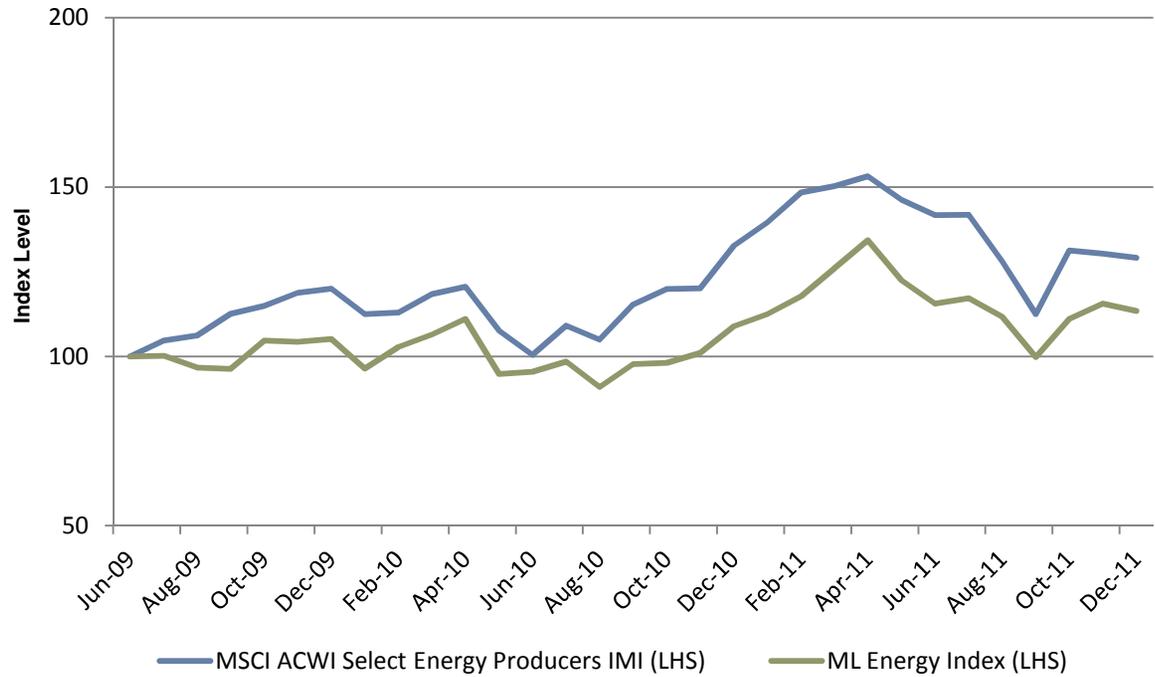


June 2009 to December 2011	MSCI ACWI Select Agriculture Producers IMI	ML Agriculture Index
Annualized Return	11.4%	8.5%
Annualized Volatility	24.6%	24.7%
Sharpe Ratio	0.15	0.12
Correlation		0.69

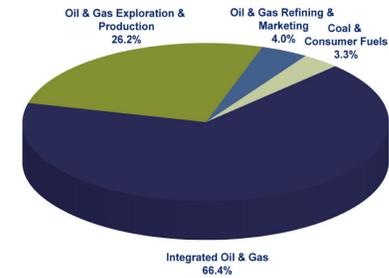
Note: The Merrill Lynch Commodity index eXtra (MLCX), launched in June 2006, comprises 18 commodity futures contracts, selected by liquidity. These commodities are then weighted using global production weights.

# MSCI ACWI Select Energy Producers IMI

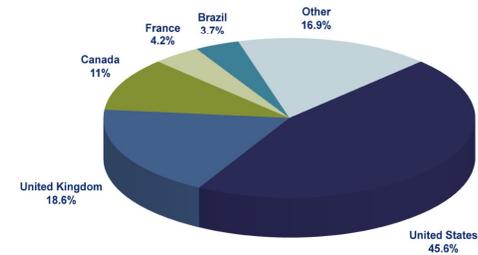
This index aims to focus on companies in the energy industries that are highly sensitive to underlying prices of energy commodities



Sub-Industry Weights



Top 5 Countries

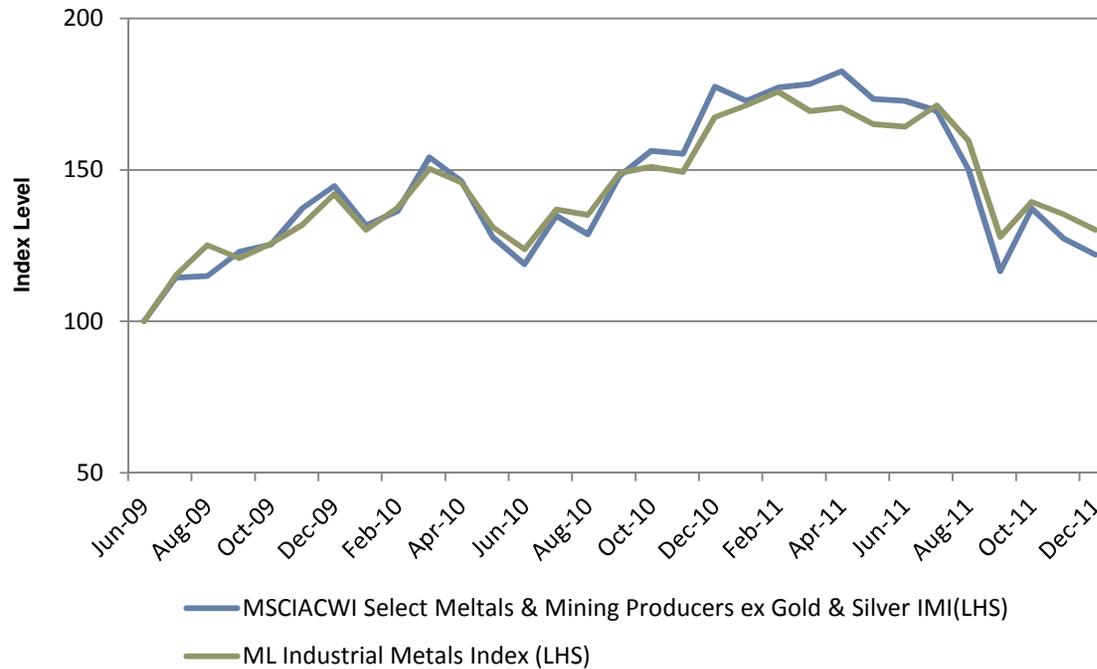


June 2009 to December 2011	MSCI ACWI Select Energy Producers IMI	ML Energy Index
Annualized Return	10.8%	5.2%
Annualized Volatility	22.3%	21.8%
Sharpe Ratio	0.15	0.09
Correlation		0.79

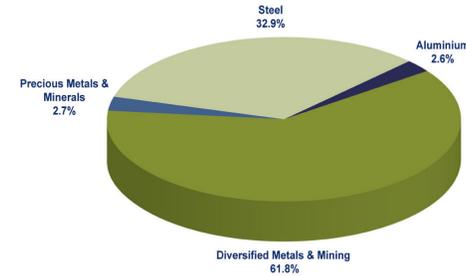
Note: The Merrill Lynch Commodity index eXtra (MLCX), launched in June 2006, comprises 18 commodity futures contracts, selected by liquidity. These commodities are then weighted using global production weights.

# MSCI ACWI Select Metals & Mining Producers Ex Gold and Silver IMI

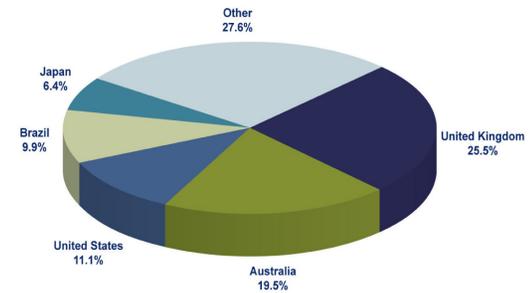
This index aims to focus on companies in the industrial and rare earth metals (excluding gold and silver) that are highly sensitive to underlying prices of industrial and rare earth metals



Sub-Industry Weights



Top 5 Countries

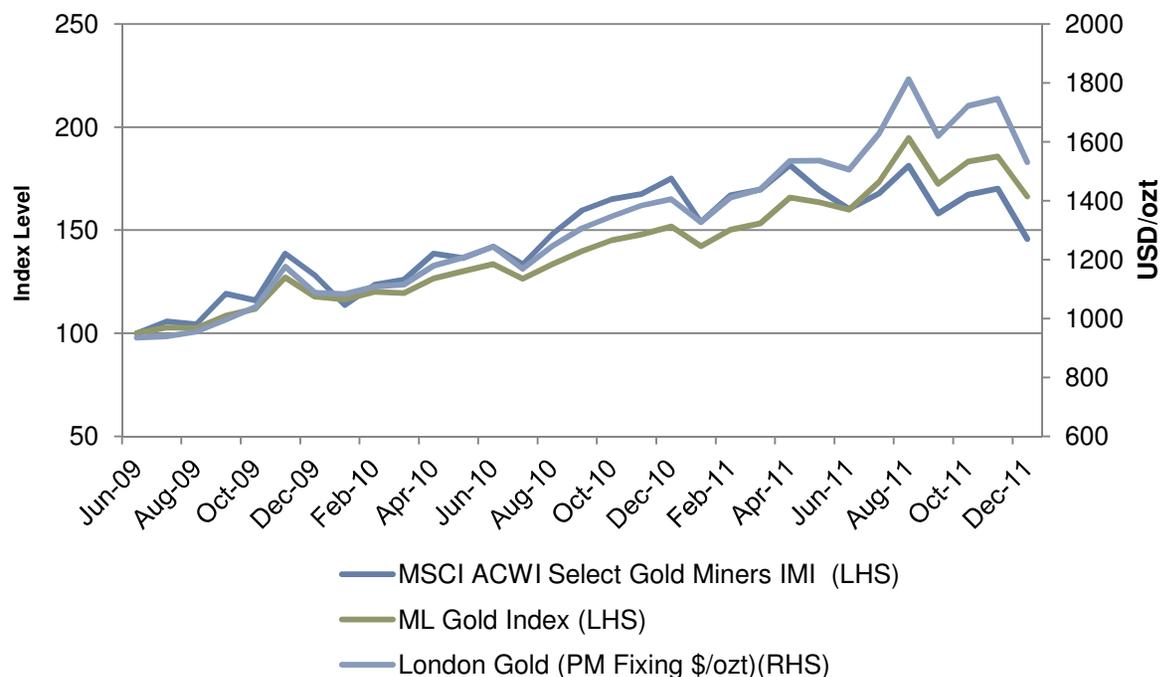


June 2009 to December 2011	MSCI ACWI Select Metals & Mining Producers ex Gold & Silver IMI	ML Industrial Metals Index
Annualized Return	8.3%	11.1%
Annualized Volatility	32.6%	26.3%
Sharpe Ratio	0.11	0.14
Correlation		0.90

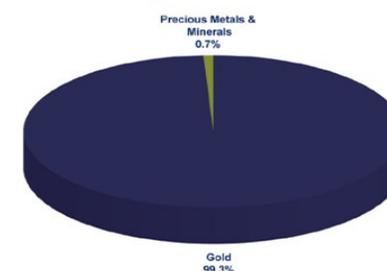
Note: The Merrill Lynch Commodity index eXtra (MLCX), launched in June 2006, comprises 18 commodity futures contracts, selected by liquidity. These commodities are then weighted using global production weights.

# MSCI ACWI Select Gold Miners IMI

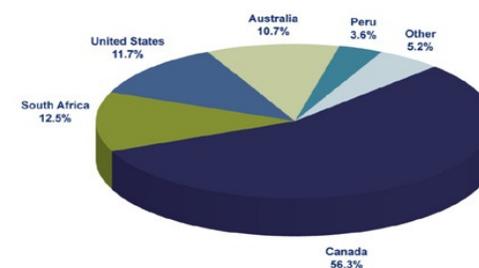
This index aims to focus on companies in the gold mining industry that are highly sensitive to underlying prices of gold



Sub-Industry Weights



Top 5 Countries

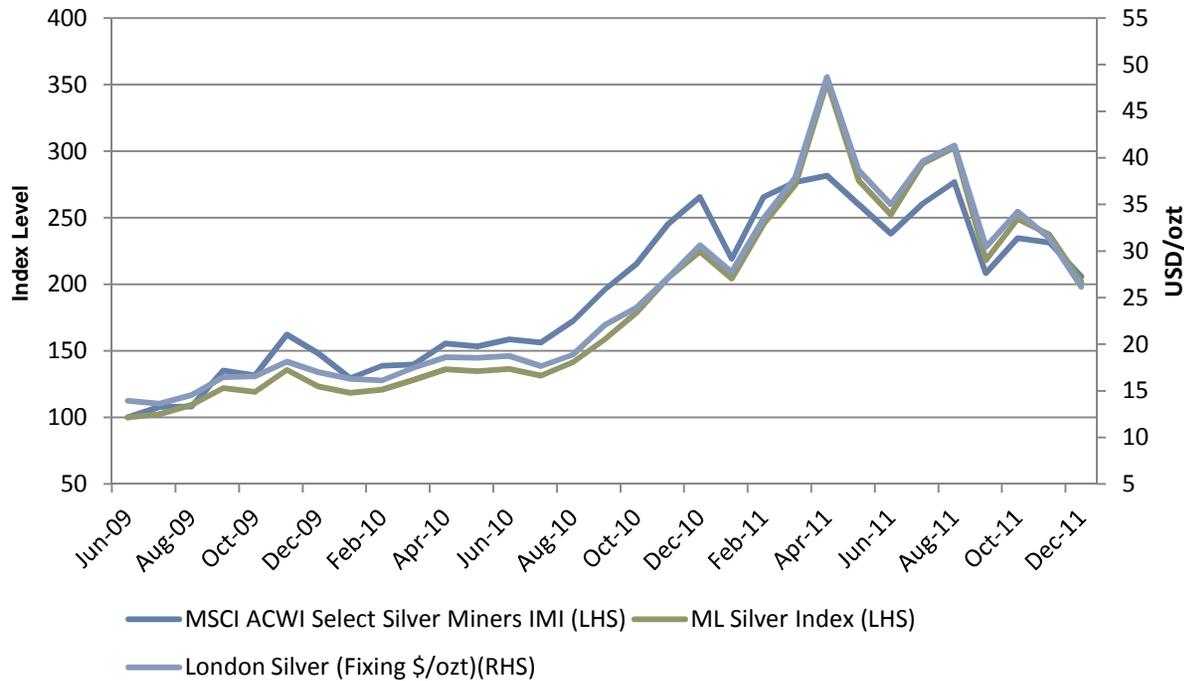


June 2009 to December 2011	MSCI ACWI Select Gold Miners IMI	London Gold (PM Fixing \$/ozt)	ML Gold Index
Annualized Return	16.3%	21.8%	22.6%
Annualized Volatility	29.0%	20.1%	20.4%
Sharpe Ratio	0.18	0.30	0.31
Correlation		0.85	0.89

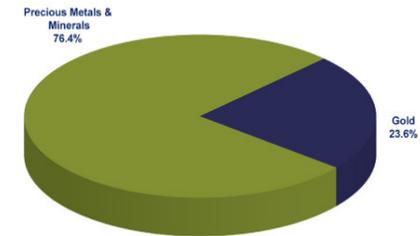
Note: The IMF Group indices are weighted averages of individual commodity price indices, with respective commodity weights derived from their relative trade values compared to the total world trade as reported in the UN Comtrade database. The Merrill Lynch Commodity index eXtra (MLCX), launched in June 2006, comprises 18 commodity futures contracts, selected by liquidity. These commodities are then weighted using global production weights.

# MSCI ACWI Select Silver Miners IMI

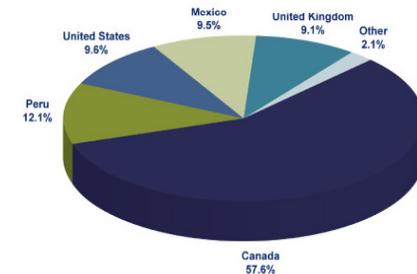
This index aims to focus on companies in the silver mining industry that are highly sensitive to underlying prices of silver



Sub-Industry Weights



Top 5 Countries



June 2009 to December 2011	MSCI ACWI Select Silver Miners IMI	London Silver (Fixing \$/ozt)	ML Silver Index
Annualized Return	33.5%	28.6%	28.6%
Annualized Volatility	40.5%	42.8%	42.8%
Sharpe Ratio	0.26	0.23	0.25
Correlation		0.77	0.81

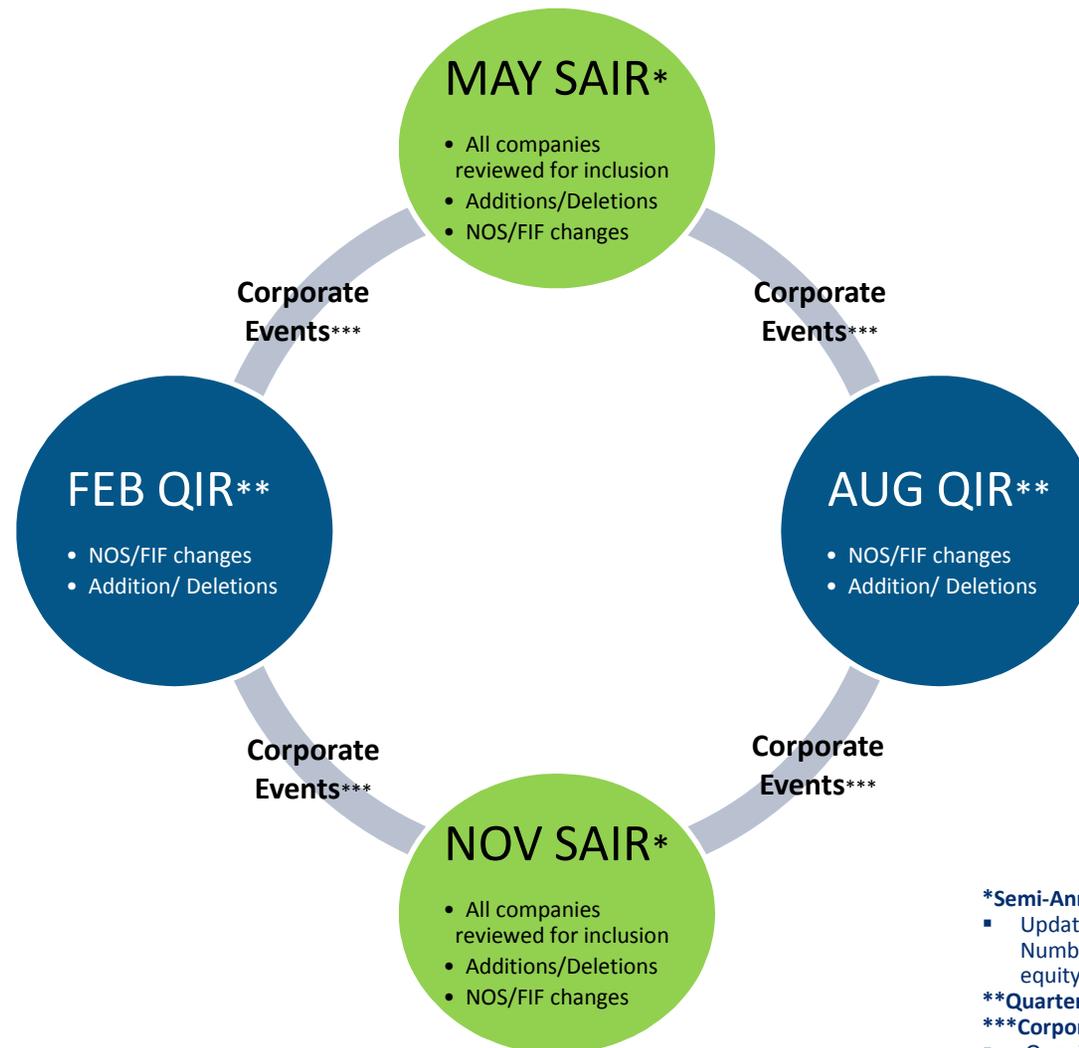
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## MSCI Select Commodity Producers Indices: Key Benefits

- Index Expertise — As a leading index provider, MSCI has used its longstanding index design expertise, gained in part through the existing MSCI Commodity Producers Indices, to create this new index methodology
- Benchmarking Tool — Asset owners and consultants can use the MSCI indices as a benchmark for tracking the performance characteristics of certain listed commodity producers
- Index Licensing — The MSCI Select Commodity Producers Indices may be licensed for portfolio management and benchmarking purposes, as well as to serve as the basis of index-linked investment vehicles such as OTC derivatives, exchange traded products, and institutional and retail funds

# Appendix

# Rebalancing Cycles for the MSCI Select Commodity Producers Index



**\*Semi-Annual Index Review (SAIR)**

- Update Foreign Inclusion Factors (FIFs) and Number of Shares (NOS) for the whole equity universe in May

**\*\*Quarterly Index Review (QIR)**

**\*\*\*Corporate Events:**

- Ongoing on a daily basis
- Implemented at the time of the event

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