PART ONE

An Overview of Global Macro

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CHAPTER 1

Surveying the Global Macro Landscape

Global macro, short for global macroeconomics, is the strategy of using economic theory, educated guesses about the macroeconomic environment, and geopolitical events to make large-scale investments around the world. It's one of the most important strategies for any global investor, no matter if they are retail or institutional, because global events have a substantial influence on the performance of any type of investment.

Global macro is often considered the most flexible and opportunistic hedge fund strategy, due to the scope of traded products and the number of markets it covers. Its aim is to preserve capital, using stringent risk management to limit drawdowns. Profits are made through trades in equities, currency, fixed income, and commodities. These trades can occur anywhere in the world, hence the term "global macro."

This chapter introduces the basic types of global macro strategies, historical returns of the strategy, and the various reasons why institutions choose to allocate to global macro.

Types of Global Macro Strategies

Like any hedge fund strategy, global macro can be categorized into substrategies. The four basic approaches of global macro are discretionary, systematic, high frequency, and commodity trading advisors (CTAs).

Discretionary and systematic macro strategies both have the potential to be extremely profitable and are powerful methods of analyzing markets and determining investments. These are the two most often used global macro

strategies but, because the four are often used together, it's important to understand how all of them work.

Discretionary

Discretionary macro trading, as the name implies, relies on a trader's experience, intelligence, and knowledge to take subjective and often risky bets on various global markets in order to capture alpha and the best possible risk-adjusted return. With knowledge gleaned from studying global data, releases, economic data, and central bank action, among countless other factors, an investor can frame a top-down approach. This allows for a unique analysis of the risks and opportunities offered by industries, sectors, countries, and the macroeconomic situation at large.

Discretionary strategy requires serious organization and processing skills, since it involves such a large amount of data. The ability to analyze data across many different markets aids the trader in assessing whether or not a particular market is fully incorporating all factors into global asset prices.

The discretionary macro strategy is nimble and can also produce alpha in significant risk off markets. One example of a trader using historical patterns to capture alpha this way is Paul Tudor Jones's prediction of the Black Monday crash on October 19, 1987. Jones observed that the market behavior during that period could potentially experience a catastrophic crash. He expressed this view by going short and made an enormous return on Black Monday.

Global macro managers have the luxury of being able to trade a vast amount of markets and also to go against the trend, shorting the stock market while other hedge fund strategies and mutual funds remain long. Thus, discretionary traders have the potential to make a tremendous profit in a selloff, while equity managers tend to lose significant amounts of capital.

Discretionary macro traders may also determine trades based on direction and relative value. Directional trades are made in hopes of an asset moving in a particular direction. For example, if a manager is bullish he or she could go long copper and hope to capture returns on the move up.

Relative value trades aim to pair or group assets together to capture the relative value differential between those assets, and profit from a divergence or change in the price difference. Looking at the European crisis, if a discretionary macro trader believes that German yields will be less affected than Italian yields, the trader can short Italian five years and go long German Bobls. If matters worsen in Europe and Italy acquires more credit risk, it could see yields rise in relative terms.

Systematic

The second main type of global macro strategy is systematic macro. Systematic managers employ a top-down model that takes various economic indicators into account. By using large sets of quantitative data, systematic macro strategies seek to earn alpha by capturing these dislocations. Systematic macro funds typically employ many PhDs to "systemize" all these quantitative factors in order to produce a model of trading positions that removes the variable of human emotion. Systematic macro prides itself on its stringent process, strong back-tests, and the ability to operate solely on quantitative analysis, hence ensuring maximum returns (assuming that past risk-adjusted returns are predictive). Over long periods of time—several years or more—systematic funds can produce more consistent returns than discretionary strategies; however, in periods of high volatility, they tend to underperform discretionary macro, as they did in 2008. Holding periods for systematic macro can range from days to months, or longer.

Systematic macro hedge funds have significantly changed the landscape in Macro with the amount of capital they have attracted. AQR Capital Management, founded by Cliff Asness, and Bridgewater, founded by Ray Dalio, manage over $80 billion and $100 billion, respectively, and have revolutionized systematic trading. The ability to trade multiple liquid asset classes in systematic macro means that asset managers can oversee large amounts of assets at once. Since equities, fixed income, commodities, and foreign exchange are the most liquid markets, it allows these funds to grow assets to previously unseen levels. Additionally, since strategies are constantly back-tested and improved, large asset allocators such as pensions, sovereign wealth funds, and endowments that have large amounts of capital to allocate, find comfort in using a computer-driven process with predictable drawdowns. Many of these institutions have minimum allocations of greater than several hundred million dollars, so, in a way, size also attracts more capital.

It is worth noting that, while systematic macro is scalable and can take large allocations, it is wise to allocate to both discretionary and systematic macro in a fairly even manner. This will allow an asset allocator to gain the advantages of both strategies and hedge the disadvantages. Discretionary macro is negatively correlated during periods of stress and, since discretionary traders can get short in a nimble way, it can produce profit in economic situations where most people are losing money. Systematic macro, on the other hand, lets traders allocate safely and predictably with more assurance.

A good book on this topic is *Expected Returns* (John Wiley & Sons, 2011) by Antti Ilmanen of AQR Capital Management (formerly of Brevan Howard).

High Frequency Trading

A third type of global macro trading is high frequency trading. This is the process of using highly sophisticated computers and technology to trade very short-term (millisecond) dislocations that may exist in the market. High frequency trading in macro is not as large or scalable as discretionary and systematic macro. Holding periods can range from milliseconds up to a few hours depending on the strategy. In high frequency trading, processing speed is of the utmost importance to ensure that certain dislocations are captured.

Commodity Trading Advisors (CTAs)

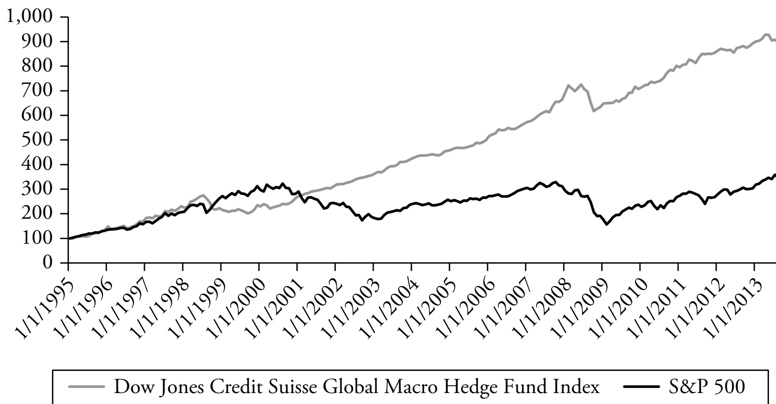
According to the National Futures Association, a Commodity Trading Advisor (CTA) is an individual or organization that advises others as to the value or advisability of buying or selling futures contracts, options on futures, or retail off-exchange foreign exchange contracts. Since futures are traded on most global macro markets, CTAs are considered a global macro strategy. Many larger CTAs employ a model-driven approach that can be technical or fundamental. However, most CTAs utilize a highly automated trend-following strategy that is in some ways similar to systematic macro. The methodology on position sizing used by most CTAs, which we'll also be using in this book, originated with the Turtle Traders.

As with other trend-following strategies, CTAs perform very well over longer periods of time—as long as several years. They are, however, subject to large drawdowns (peak-to-trough) as a result. Man AHL and Winton Capital Management, both based in London, are widely regarded as the premier CTAs, each managing approximately $20 billion.

Return Profile and Allocations

Global macro as a strategy is very attractive because of its return profile. The Barclays Global Macro Index has achieved annualized returns of 10 percent from 2002 to 2012 compared to the S&P 500, which has been 2 percent over the same period. Additionally, the Barclays Global Macro Index has experienced lower volatility on an annualized basis compared to the S&P 500 over the same time period. As a result, global macro as a strategy has a higher Sharpe ratio, with the attractive investment characteristics of higher returns and lower volatility relative to other hedge fund strategies. Figure 1.1 demonstrates the outperformance of the Dow Jones Credit Suisse Global Macro Hedge Fund Index versus the S&P 500.

FIGURE 1.1 Global Macro versus S&P 500 from January 1995 to September 2013



Source: Dow Jones, Credit Suisse, and Bloomberg.

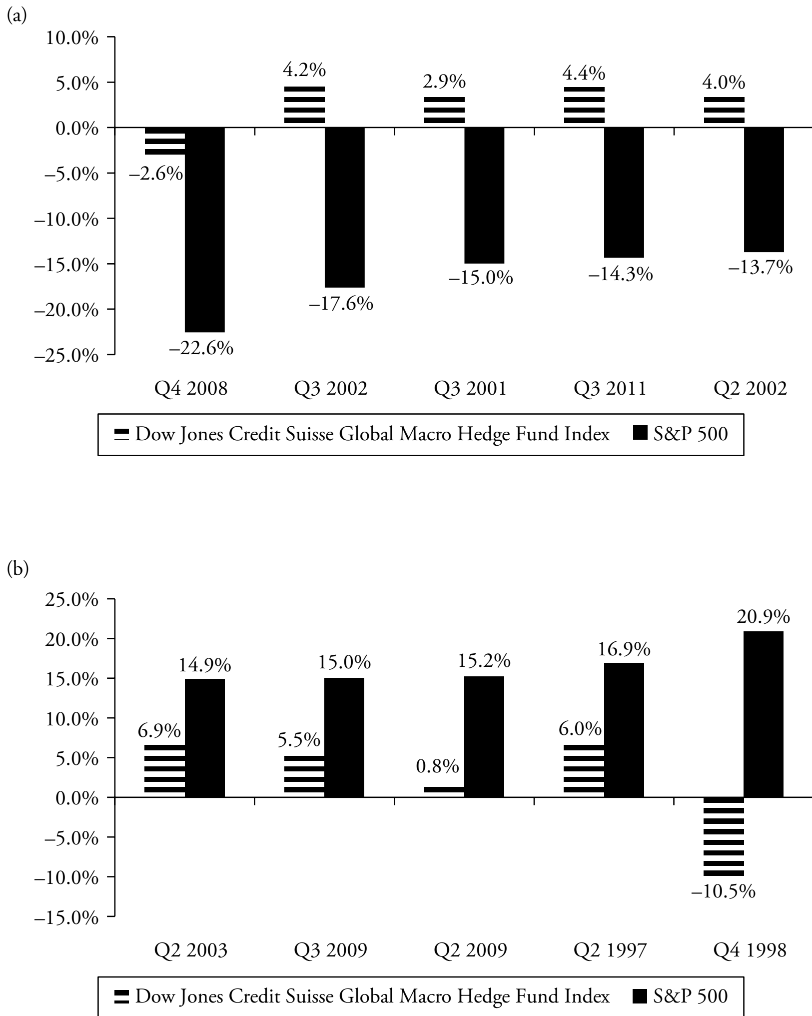
Global macro has shown a low correlation to S&P 500 returns, particularly in periods of market stress. Since many macro traders short during bear markets, this allows global macro funds to make money even when the market drops precipitously (Figure 1.2). Having a low correlation to the S&P 500 and a negative correlation during market collapses is also a very attractive return profile, and one of the reasons money managers tend to like global macro. While global macro returns have come down from the 1980s, 1990s, and 2000s with fixed income yields at historical lows and an atmosphere of economic uncertainty, global macro has still seen profit in all markets, which is why it remains a popular hedge fund strategy.

As a result of the attractive uncorrelated return profile of global macro, investors have allocated to the strategy. Another attractive aspect of global macro is that it is one of the most, if not *the* most, liquid strategies in the hedge fund universe, considering that the assets traded are the most liquid to begin with. As a result of the very desirable return profiles and liquidity, global macro is the most popular hedge fund allocation by pension funds, as shown in Figure 1.3.

Hedge Funds and Global Macro

Some of the most famous hedge fund managers have emerged from global macro. In 1992, George Soros earned his fame on Black Wednesday, where

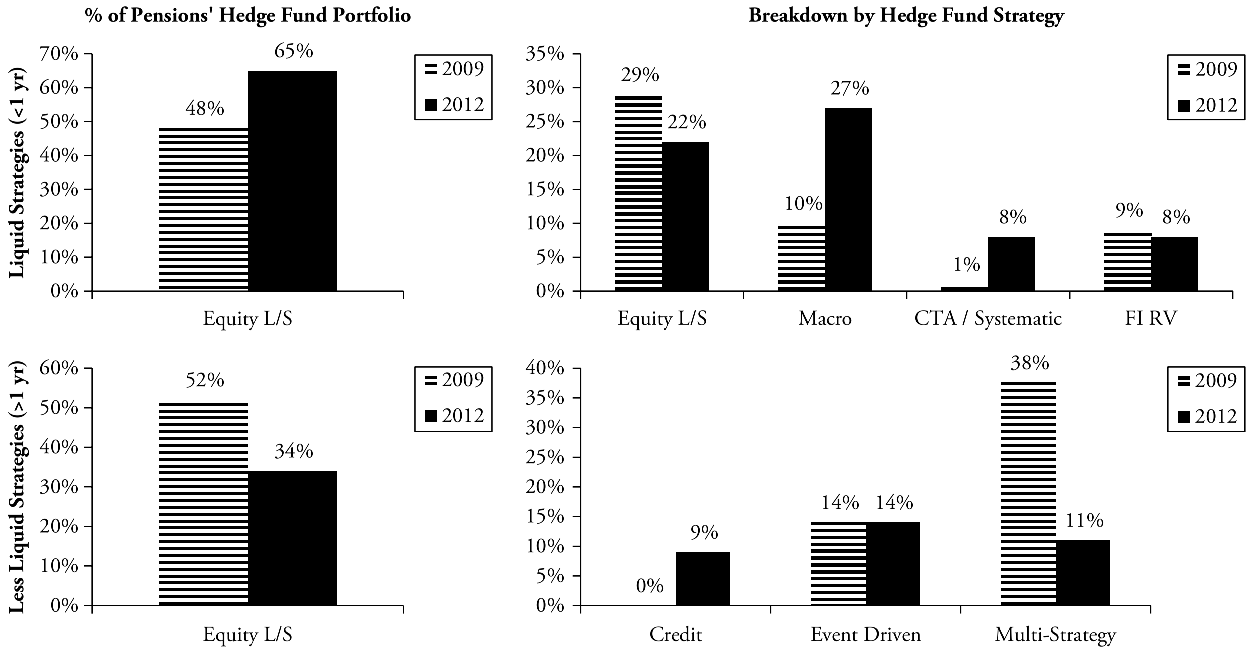
FIGURE 1.2 (a) Performance of Global Macro during the Top Five Losing Quarters in SPX since January 1995 and (b) Performance of Global Macro during the Top Five Best Quarters in SPX since January 1995



Source: Dow Jones, Credit Suisse, and Bloomberg.

he accurately predicted the devaluation of the British pound, making over $1 billion dollars in one day and earning himself the title of "The man who broke the Bank of England." As mentioned previously, Paul Tudor Jones also successfully shorted the stock market prior to the October 19, 1987, crash, characterizing the week preceding the crash as one of the most exciting weeks of his life.

FIGURE 1.3 Changes in Pension Funds' Allocations to Different Hedge Fund Strategies from 2009 to 2012



Source: Barclays Prime Services.

Louis Bacon, Stanley Druckenmiller, Bruce Kovner, Colm O'Shea, and Julian Robertson all earned their fame as discretionary macro traders able to profit in both bull and bear markets using the disciplined approach, stringent process, and analytic insight that are characteristic of global macro trading.

Summary

The goal of this chapter is to provide the reader with a brief introduction to the concept of global macro, the four basic strategies it encompasses, and why global macro is important to the macroeconomic situation at large.