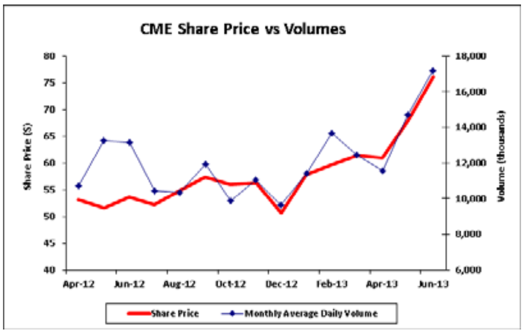
CME: Pricing Power + Cyclical Growth + Economies of Scale = Outperformance

Chicago Mercantile Exchange (CME) has been one of the stocks in the APF that has significantly outperformed the market over the past 3 months, with CME returning ~25% vs. S&P500 returning 2%. CME is the largest interest rates, equity, commodity, energy and currency futures exchange in the US. Exchanges are attractive, scale businesses which have low capex needs and provide a high return on capital invested. Among exchanges, we believe futures exchanges are better businesses because they provide high return on equity without the competition risk that equities exchanges face. They do not face competition because they have trading exclusivity in futures where as equities can be traded anywhere. This means that futures exchanges do not experience market share risk and have pricing power over customers. CME being the largest futures exchange in the US has a near monopoly position in all its product and faces no viable competition in the medium to long term. This lack of competition, along with an intrinsically high return business model, makes CME an attractive long term investment.

We invested in CME in April 2012 when the stock was trading on ~13x forward PE, inline with cash equity exchanges (historically CME has traded close to 30x forward earnings and at a significant premium to cash equity exchange). In our view the market had become overly bearish on the stock and was viewing a cyclical downturn in volumes (post GFC) as a structural issue. In our view, CME's business model remained robust and we took advantage of relative mispricing of the stock vs its true underlying valuation to initiate a position. We believe that volume activity, which is a key driver of revenues for CME, was lower because of a prolonged low interest rate environment. We believe that as the Federal Reserve (Fed) reverses Quantitative Easing (QE) actions, rates in the US will rise and with it trading volumes. Subsequently revenues and earnings will rebound. Over the month of May after the Fed announced that it would start contemplating an end to its QE operations, volumes reacted quickly and rose up ~20%. With it the CME share price rose ~20%.This gives us conviction that catalysts for further outperformance from the CME share price are in place.



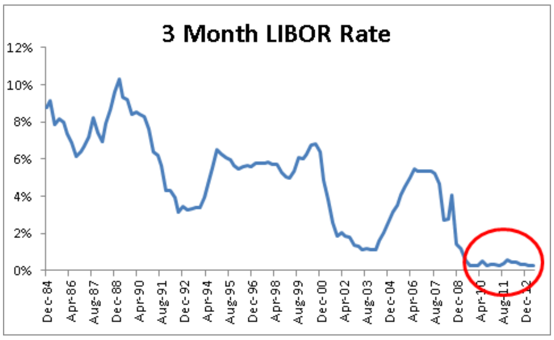
CME has a near monopoly position and has shown ability to exercise pricing power

CME began as a soft commodity exchange in 1898 and following its demutualisation and IPO in 2002 it began acquiring other derivatives exchanges. Traditionally, we have a reserved view about acquisition led businesses. CME has been an exception to this view because by 2008 following the acquisition of Chicago Board of Trade (CBOT), CME became the largest futures and derivatives exchange in the US and the only exchange for trading futures in a number of commodities such as wheat, corn, natural gas, WTI crude oil and certain S&P index products.

CME's monopoly position is derived from the fact that it operates a vertically integrated business – it provides both the trading platform and clearinghouse. A trading platform matches buyers and sellers so they can execute their orders. The clearinghouse acts as an intermediary and provides contract certainty to buyers and sellers and also removes credit risk. Without this function, the market would not operate efficiently and as a result the clearinghouse is a crucial part of the value chain.

Equities can be traded on any exchange irrespective of where they were originally listed, but futures contracts can only traded on the exchange that is associated with the clearinghouse. As a result, traders are locked in with CME when they begin trading with CME. In order to use another exchange, traders would have to close all their positions on CME and reinitiate a whole new set of contracts on that exchange. The mechanics theoretically is simple but the cost associated with closing and opening positions is significantly higher than any benefit gained from lower transaction fees. Therefore, traders almost exclusively trade using the products listed on the CME. Given this dynamic, competitive threats for CME are minimal and it has maintained 90%+ market share even while exercising pricing power. This market share has remained stable even after repeated attempts by large competitor exchanges such as NYSE Liffe to take market share.

Interest rates are at historic lows and with it volumes down at cyclical lows



Futures, options and other derivatives are used by three types of parties:

Hedgers: End users who want to lock in a future price. E.g. a corporate who wants to lock in an interest rate for their upcoming debt issue (to be sold in 1 month) will buy a 1 month interest rate futures. Hedgers are solely interested in price certainty. Products traded on CME provide price certainty to hedgers.

Speculators: Hedge funds and trading houses who take positions in futures and derivatives with a view of making profits from market movements.

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Intermediaries: Investment banks and commercial banks who act as market makers for hedgers and speculators. Hedgers may wish to pay intermediaries to buy structured products like interest rate swaps. Futures traded on CME provide the ability to create structured products like swaps for clients.

The level of hedging requirements (determined by market volatility and macro growth) and speculative positions (determined by fund flows and market volatility) in interest rate contracts traded in CME declined significantly following the GFC as short term interest rates fell from ~3% to ~0%. The fall in rates to historical low levels meant that speculators could not make much profit from market movements. In addition, the Fed stating that they would keep interest rates low for a prolonged period meant that hedgers had no need to hedge interest rate risk. As a result, both hedging and speculative positioning, which drive volumes in interest rate markets fell away over the last 3 years. This resulted in near 50% drop in interest rate contract trading volumes from ~8m contracts per day in 2008 to a trough of ~3.8m contracts per day in late 2012. Interest rate contracts represent ~50% of trading on the CME and this fall led to ~30% decline in overall volumes.

Revenues cyclically down along with volumes but economies of scale are underappreciated

CME makes money in 3 ways:

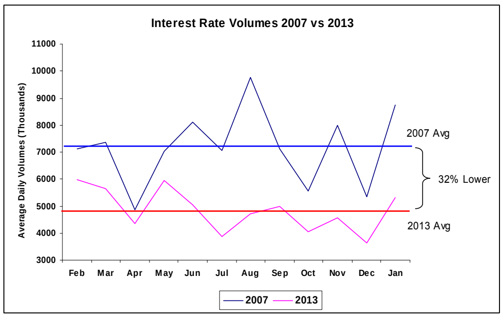
Trading Fees: Fees charged as % of value traded or fee per contract/product traded. As a result, value and volume of trades are key drivers of exchange revenues. Majority of trading is done via electronic platforms which involve large fixed operating costs but minimal variable costs for additional volume. As a result, there are significant economies of scale in trading revenues.

Clearing: A clearinghouse acts as a counterparty for both buyers and sellers in a transaction and charges a fee per transaction. CME owns CME Clearport, which is the only clearinghouse where products traded on the CME can be cleared. Clearing also requires a large infrastructure build out which results in high fixed costs. Once operational, these services have low on going variable fees.

Market Date / Access Fees: Buyers and sellers require the ability to connect to an exchange in order to trade. In addition, they require live data feeds and information regarding order depth, volumes and other services. Exchanges provide this data and connectivity to customers in exchange for a fee per customer. The key driver of this revenue segment is the number of customers (traders) who connect to the exchange. This segment of an exchange also shows economies of scale as there are minimal costs in relation to connecting a new customer to the IT platform. Volumes are the biggest factor affecting revenues for CME and, due to economies of scale, as volumes increase – profitability and ROIC increases.

Interest rate products and equity index products account for nearly 70% of volume traded on the CME and 50% of revenues. Over the last 5 years revenues from these two businesses have declined ~29% while EPS has only declined 10%. Interest rates are at historically low levels and this cannot last forever. Recent announcements by the Fed have already caused a spike in long term rates. Given the operational leverage in the business, we believe increased revenues when interest rates rise and trading activity increases will drop straight through to the bottom line. We believe activity can go up by 30% just by getting back to levels seen in 2007 when short term rates were ~3%.

CME is one of the few businesses that may benefit from central banks stopping QE measures – providing a unique way to benefit from market reaction to central bank action without taking directional risk



We believe CME has a robust business model. Due to its integrated business model, management have significant pricing power. Owing to the economies of scale and technology oriented nature of operations, an increase in trading activity increases both EPS and ROE. The largest potential risk to its business model is if US regulators seek to break up its business and make its clearinghouse accessible to other exchanges in order to increase competition. We do not believe this is a significant risk as regulators in both US and Europe have conducted a number of studies and concluded that it is legally unmanageable to allow open access to CME's clearinghouse. As a result, we expect CME to be able to maintain its business model for the medium to long term.

Our analysis indicates to us that as US interest rates and yield curve returns to normal levels (i.e. higher than current); trading activity on the CME will increase significantly. We believe that with the Fed and other central banks indicating that they are looking to reduce QE measures, there will be greater volatility in financial markets. We believe that hedgers and speculators will increase their activity in this changing financial environment. This increased activity will underpin revenue growth and subsequently result in a 10%+ normalised EPS growth for CME over the medium term. We believe that at current consensus FY14 multiple of ~20x still does not reflect the full potential for long term volumes rebound. We believe as CME's earnings begin to show 10%+ growth, along with growth in volumes, the returns for the business will increase and reflect in CME's share price.

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