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Market Structure

Beware, Transaction Costs are Trending Up

Market Commentary 20 February 2014

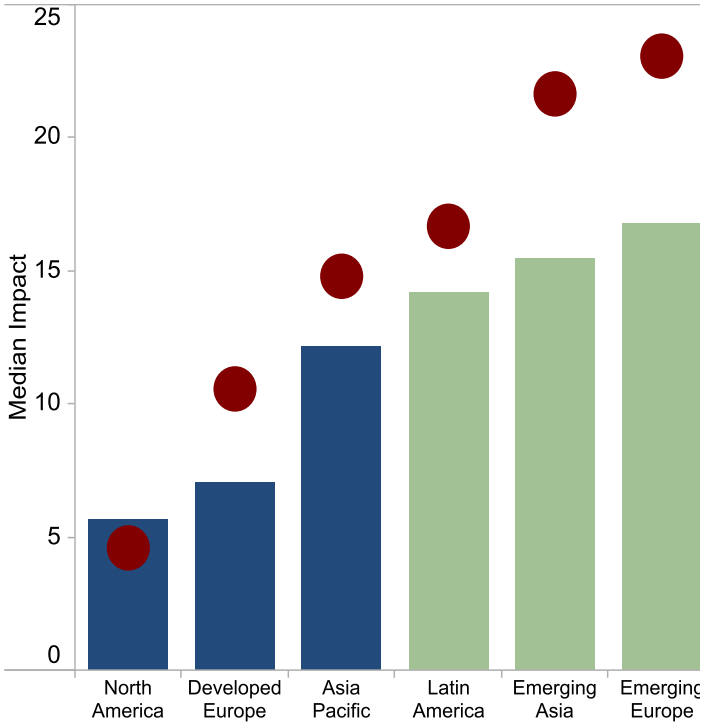
Key Points
Although trading levels were mostly depressed in 2013, transaction costs and market structure remained a key area of focus.

Our transaction cost index shows that globally:

- Costs fell the most in the US and the least in Asia in the 6 years before 2012.
- Costs seem to be trending up over the last 2 years.

Aligning these results with changes to market structure in each region seems to indicate that competition in the market, between investor types and across venues, is good for investors as it reduces costs.

Exhibit 1: Asia is more than twice as expensive to trade as US



- Costs estimated by our pretrade model (see A New EDGE in Impact Cost)

Source: Credit Suisse: Trading Strategy

Trends in Global Transaction Costs

Last year we introduced our Transaction Cost Index, which was designed to show how efficiently markets were absorbing trade flows by measuring investors transaction costs adjusted for different volatility regimes.

In this report we compare our Transaction Cost Indexes across the globe – looking at changes to costs in Asia, Europe and the US since 2006.

Asia is the most expensive to trade

Our Transaction cost index compares costs across time – it does not show relative costs between regions.

However, we studied relative costs between regions in a separate report: Trading Less Competitive Markets is Costly. Not surprisingly, we found that it is typically more expensive to trade in Asia – and even more expensive to trade emerging markets (Exhibit 1).

Asia has improved the least

Using our transaction cost index, we can see the progress that each region has made reducing costs over time (Exhibit 2, black line). This shows that the US and Europe both improved, reducing costs by more than 30% between 2006 and 2011. Asia, in contrast, made very little progress in reducing transaction costs for investors.

All regions are trending up the past 2 years

Interestingly, the gains made by Europe and the US all occurred in the 6 years before 2012. In the past 2 years, all regions have seen a general increase in transaction costs as volumes have declined.

Although you may see near record low shortfall

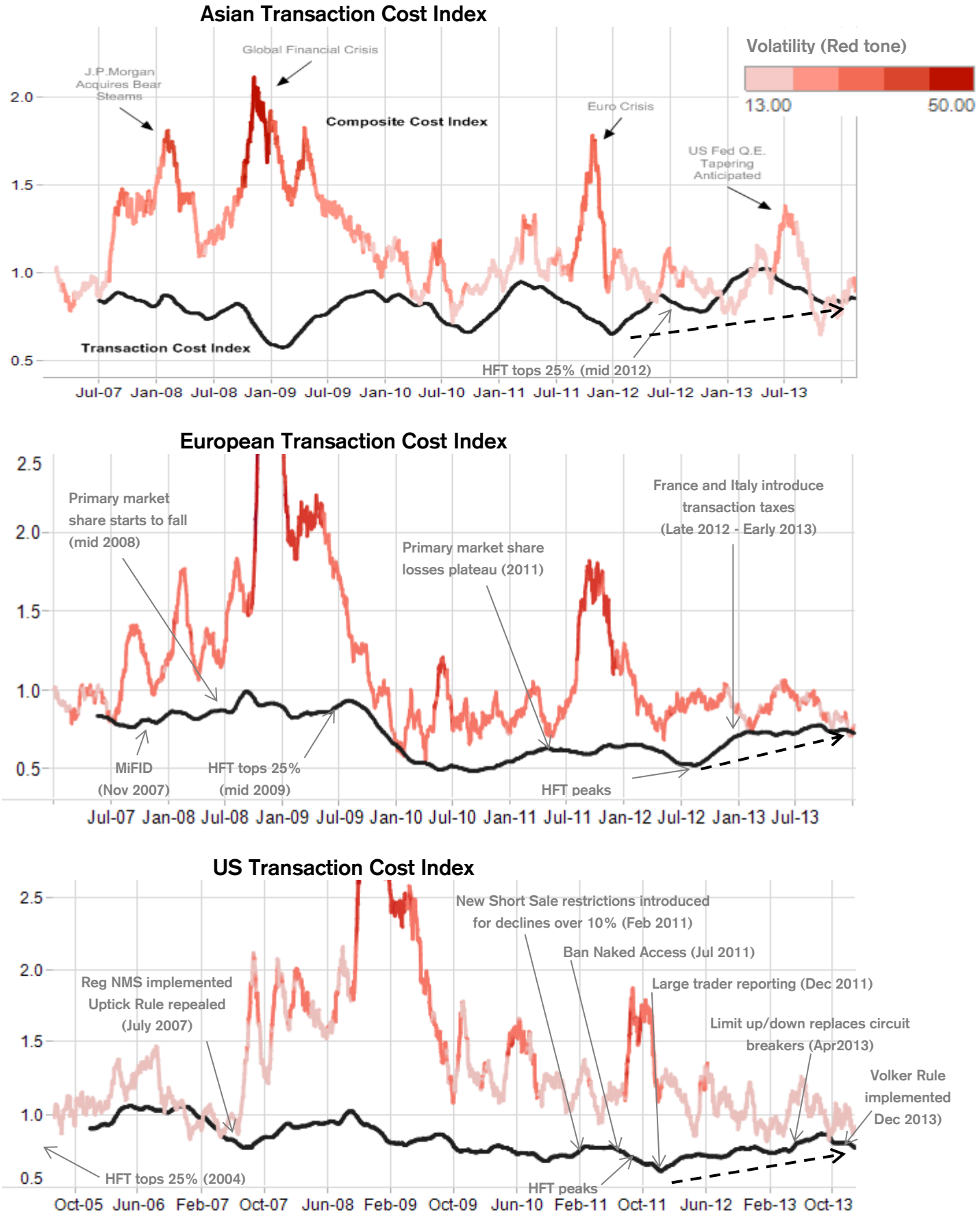
Our Composite Cost Index (Exhibit 2, red line) more closely represents what is happening to the shortfall you see in your transaction cost analysis (TCA) reports.

This index shows the average "raw" transaction costs near record lows in 2013. However, the lighter tone of the red line in shows low costs are mostly due to low volatility in 2013.

So far this year, we have seen elevated levels of volatility and macro fear. According to our Derivative Strategy team's 2014 US Equity Volatility Outlook this is likely to be a persistent theme in 2014.

Consequently, we forecast shortfall may increase in 2014.

Exhibit 2: **Transaction Cost Indexes for Asia, Europe and US**



Source: Credit Suisse: Trading Strategy

Competition Critical to Control Costs

Given these contrasting results – it's clear that trading costs have not reduced at the same rate (or times) in the different regions around the world. This raises the question "what makes each region different?"

The answer may be in the market structure and the timing and type of new rules across regions.

We highlight important differences below. Overall, they point to the fact that more competition (between venues and between investors) seems to be a good thing.

US is the most fragmented market

There has been a lot written about US market complexity – including by us in Too Much Complexity? You Asked For It!. However, what our cost indexes seem to show is that fragmentation and competition are good for transaction costs:

- Asia is fragmented on a geographic and currency basis rather than being competitive within each country. Some markets have introduced competition recently, but it is still at low levels. In Australia Chi-X started to take market share in late 2012, but remains less than 15% of the market. In Japan Chi-Ex and SBI JapanNext remain below 8% market share (See Asia Chartbook).
- Europe has a number of stock markets, but they're still run along fairly nationalized lines as discussed in this news article. Primary markets are under more pressure from alternative venues - as we show in our Europe Chartbook. However, the LSE still has 60% market share and the Primary markets in Europe represent closer to 65% share of all trading.
- In contrast, the primary exchanges in the US trade less than 30% of all volume. Reg ATS and RegNMS are often criticized for the fragmentation that they enable – but they have resulted in the most competitive environment for venues (see US chartbook).

US has the most HFT

During the period of our Cost Indexes, both Europe and the US HFT breached 25% market share. Around the same time this happened for each region, our cost index also started to fall.

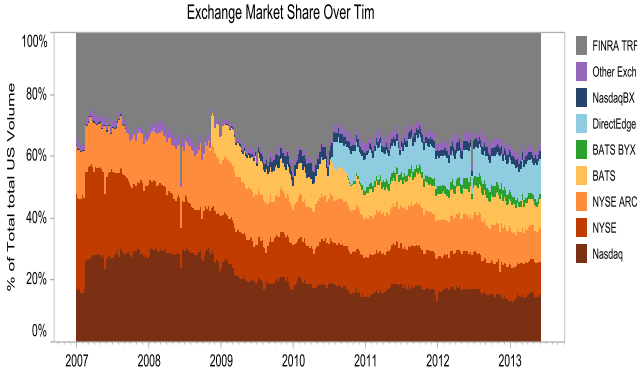
Interestingly, both Europe and the US have since seen a reversal of some gains in their transaction cost indexes over the past 2 years. Coincidentally or not, the reversal in cost indexes occurs at around the same time that HFT is reported to have peaked in each region (Exhibit 4).

Asia has less Stat-Arb

In contrast, Asia's HFT levels remain relatively low, having only just passed the 25% mark. However, it's likely not just the wider spreads and lack of fragmentation that hold Asia back from HFT. The different market hours and FX, combined with concentration within sectors (see here *page 5*) also limits the effectiveness of stat-arb strategies in Asia.

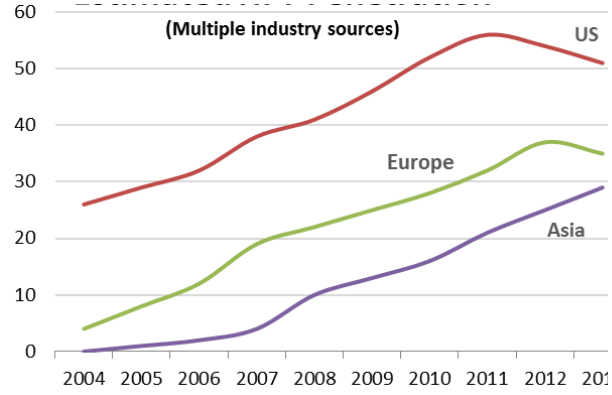
Stat arb is important to dispersing risk across the market, thereby helping to absorb impact. We also see this helping US ETF markets as shown in this report.

Exhibit 3: Fragmentation is highest in the US



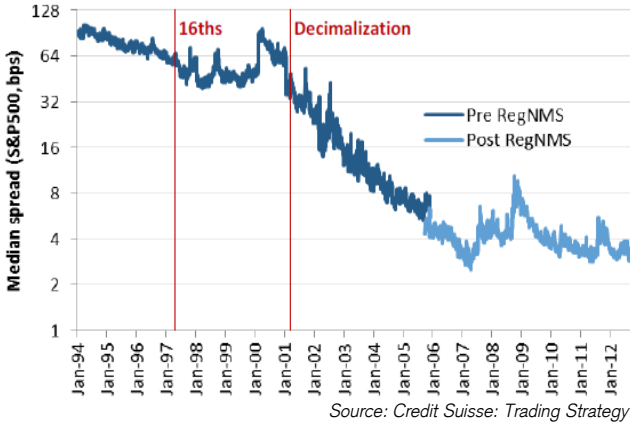
Source: Credit Suisse: Trading Strategy

Exhibit 4: Estimated HFT Market Share



Source: Credit Suisse: Trading Strategy

Exhibit 5: HFT gets too much credit for spread compression – most of the spread compression in the US happened after decimalization. Recent gains have been minimal



Source: Credit Suisse: Trading Strategy

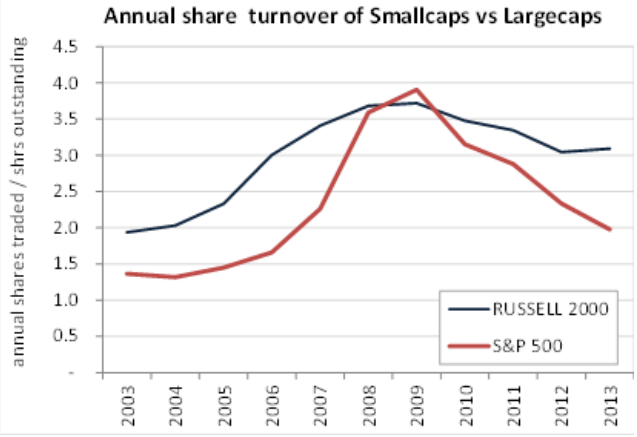
US is planning to increase spreads

Ironically the reduction in spreads in Japan has occurred just as the US is considering widening spreads on some of its stocks. In fact, there are two separate pieces of US legislation on this:

1. The JOBS act requires the SEC to conduct a study on spreads. Recently the SEC advisory panel said the regulator should drop plans to test incentives for trading in small-companies, citing higher costs of trading. However, this recommendation is considered unlikely to stop the pilot.
2. Separately, the U.S. House Committee on Financial Services has proposed legislation that would bypass the SEC's approach (see here and here), highlighting growing impatience by some members of Congress to get the tick pilot started.

Our report on this is here.

Exhibit 6: Turnover has declined in the US, most notably in large cap stocks



Source: Credit Suisse: Trading Strategy

Asia is just starting to target reduced spreads

Much of Asia has high spreads because their average stock prices are relatively low (so the value of 1-tick is higher in bps, see Europe Chartbook page 3). This impacts the market structure significantly – increasing book depth (in %ADV), but also time to execute as well as costs (see report).

Japan is a special case – where regulators maintain unusually wide spreads – especially for a large and developed market. As we discussed here and here this has led to relatively high trading costs. Importantly, Japan has recently moved to reduce their spreads, as we discuss here.

What Changed in the Past 2 Years?

A concerning trend is that costs in all regions are trending up over the past 2 years. Can we identify what has changed?

New regulations

As we've seen in prior reports, regulators have been quite active in the past 5 years. Many of those changes come into effect in the past 2 years – including:

- Transaction taxes in Europe were introduced in France in 2012 and Italy in early 2013.
- Globally, bank capital requirements have been raised and prop-trading has decreased – via new central bank requirements in Europe and the US, and also Dodd-Frank and Volker rule changes.
- Rules to improve the robustness of the US market were also introduced between 2010 and 2013, including eliminating stub quotes, defining clearly erroneous trades, market and single stock circuit breakers (replaced by limit-up/down) - as we discuss here. But it's hard to see how they would increase costs.
- However, some new US rules might impact the willingness of short term traders to participate in the market. This in turn may decrease risk absorption and increase costs for institutional investors. These rules include: large trader reporting, restricting naked market access and new short-sell restrictions (that trigger after a 10% fall).

Volumes, turnover and HFT profits down

In addition to regulatory changes, volumes (is shares traded) and turnover are down significantly in Europe and the US (Exhibit 5). According to our estimates real investors reduced their turnover as early as 2010 (see exhibit 1 here).

Reported HFT profits are also down, and some notable closures support estimates of HFT activity falling. This also points to an over-allocation to HFT strategies back in 2010, artificially depressing the cost of liquidity. Ultimately, that may have resulted super-optimal trading conditions for real investors.

Overall, these results seem to indicate that higher liquidity is good for investors – regardless of who is providing it (HFT or real investors).

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