European Capital Markets Institute

ECMI Commentary No. 8
26 July 2006

Spring market volatility: More than just white noise?

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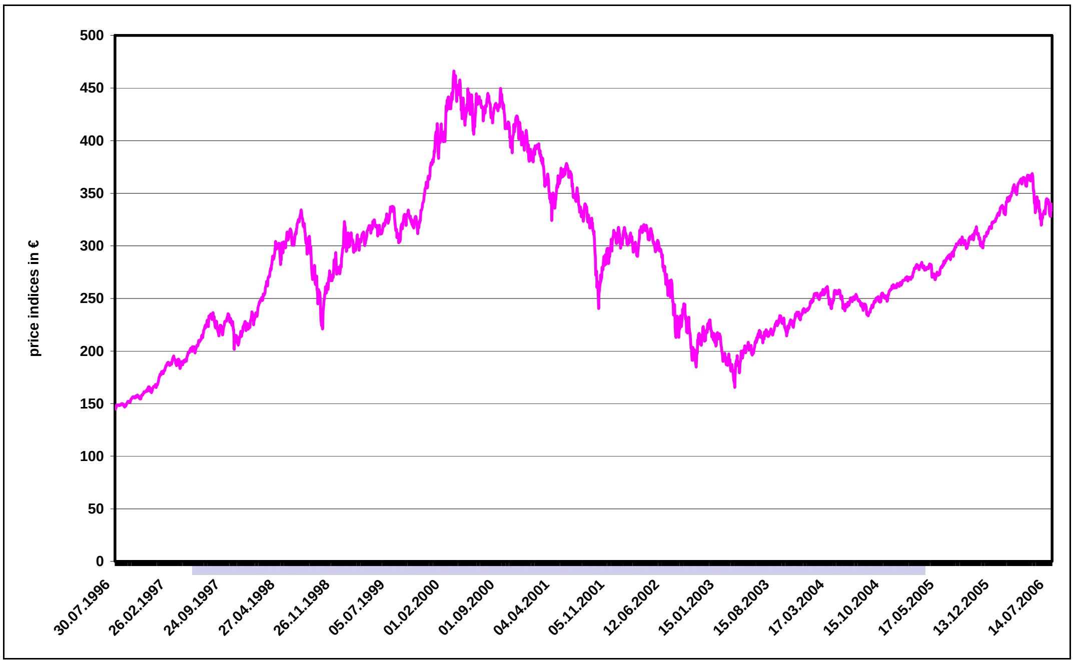
Financial actors have been surprised and hit by the recent jump in overall market volatility. This new environment of uncertainty stands at the nexus of reduced liquidity, increased risk discrimination as investors flock to "safe-haven" investments, and a bull market turning bearish.

Chart 1: DJ Stoxx 600 – Euro-Zone



Source: Dow Jones website

Volatility can be thought of as the amplitude of asset price and yield fluctuations. The more prices fluctuate, the more uncertain investors are about the quality of their asset valuations: evaluating and discovering the equilibrium price (or fundamental value) of an asset through trading becomes very difficult when the price does not settle around a given level. Hence, except for alternative asset managers who can thrive on volatility plays, many market participants tend to dislike volatility. They will be reticent about trading and will likely pull out of the market. A greater generalised risk aversion usually drives investors who stay in the market to offload large positions and to concentrate on shorter-term positioning, since the underlying market risk becomes harder to discriminate. In addition, times of uncertainty in financial markets are characterised by investors actively searching for effective hedging instruments against excess and unpredictable price and yield movements.

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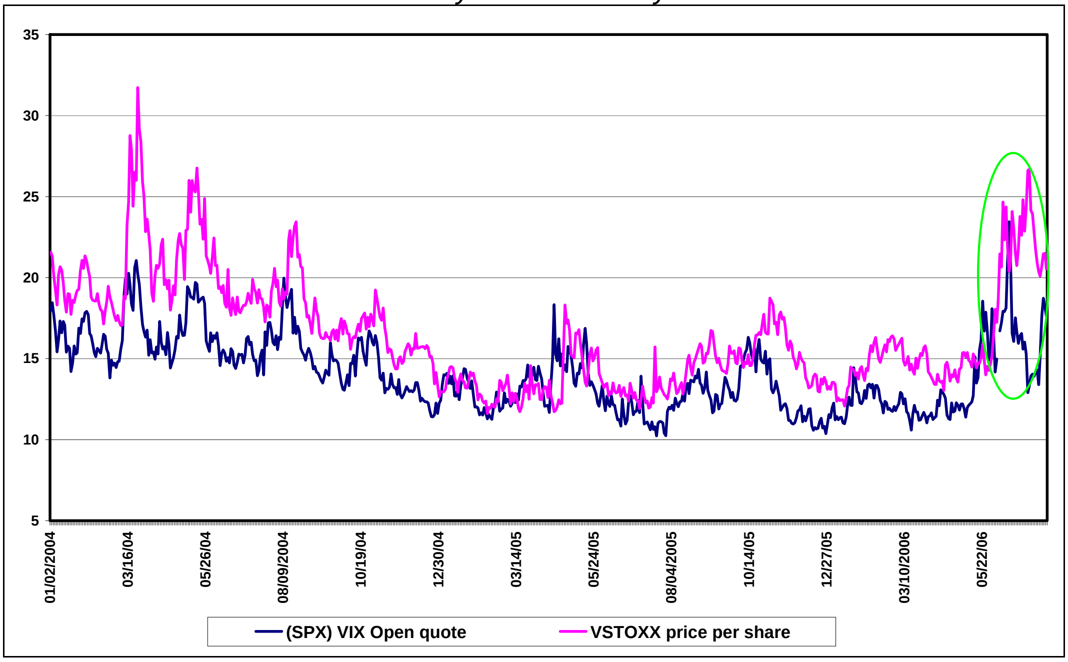
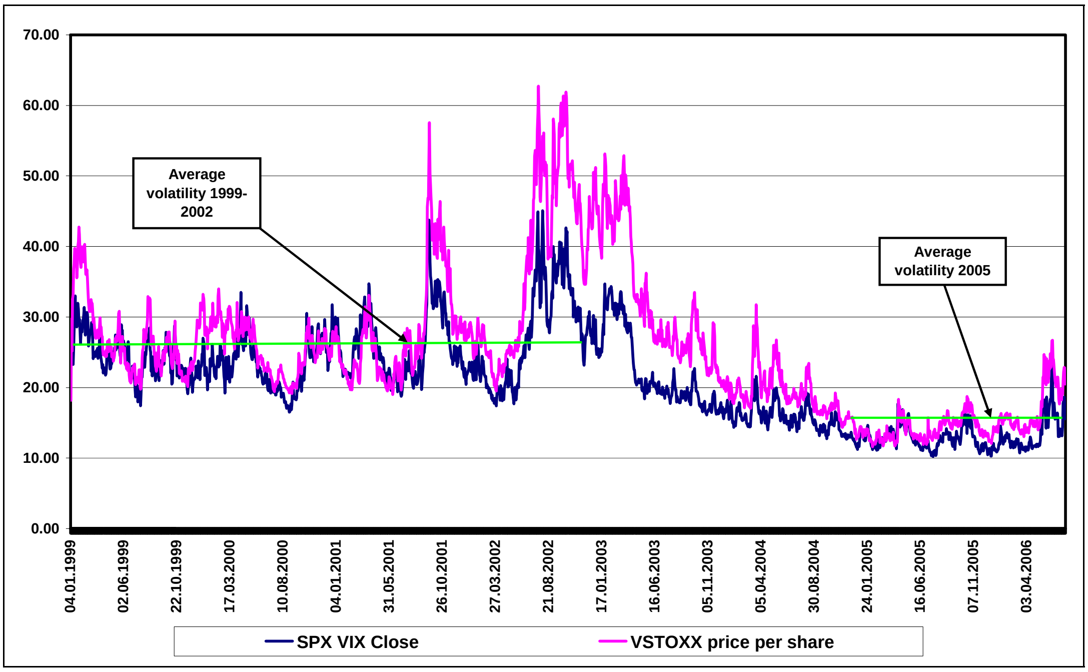
Chart 2: Increased volatility: the volatility index traded on CBOE



Source: CBOE website and DJ EuroStoxx website

Chart 1 above graphs the VIX and VStoxx indices, which are benchmarks for stock market volatility and are also referred to as gauges of investor jitters. The volatility surge is exemplified by the explosion of the indices since May 2006 weeks. U.S. market volatility has again increased after a small dip earlier in the summer, but the VStoxx index peaked around the end of June.

Chart 3: The VStoxx and VIX indices since 1999



Source: CBOE website and DJ Eurostoxx website.

Despite the recent upsurge in stock market volatility in the EU, volatility is certainly not high by historical standards, as Chart 2 shows. Whereas volatility has suddenly picked up in the past weeks compared to the general trend of the past two years, it still remains below the 1999-2003 average (even excluding the brief upsurges in

2001 and in late 2002/early 2003). This historical comparison suggests that there may have been a fundamental structural shift in the nature of market volatility in recent years. A number of different reasons could explain the structural shift, if indeed it represents a permanent shift to a lower level of "fundamental" market volatility. These include: a period characterised by very little inflation volatility and historically low rates of inflation, both of which were conducive to a steady and predictable course of monetary policy, which in turn facilitates asset valuation by perpetuating constant discount rates; the far greater variety of derivatives and other hedging instruments, as well as the discovery of new hedging strategies that have resulted from the rapid pace of financial innovation in recent years and which have facilitated risk management; the wider opportunities for risk diversification that have arisen as a result of financial globalisation.

Despite the trend of lower overall market volatility over the past two years (disregarding the recent upsurge, which anyways is low by historical standards), it is too early to tell whether this trend represents a permanent (or fundamental) shift. Although the explanations above attempt to offer an answer as to why volatility has *generally* been decreasing over time, there is little reason to expect that the low levels observed recently will persist ad infinitum. In many ways, market volatility remains shrouded in mystery, as the driving forces behind sudden market movements have not yet all been properly identified or fully understood by economists. For example, nobody has thus far been able to give a plausible answer to why the Dow Jones Industrial Average lost 22% on Black Monday in 1987.

Thus, despite our attempt to offer an explanation as to why volatility has been low by historical standards, it is not readily understandable what has triggered the volatility surge.

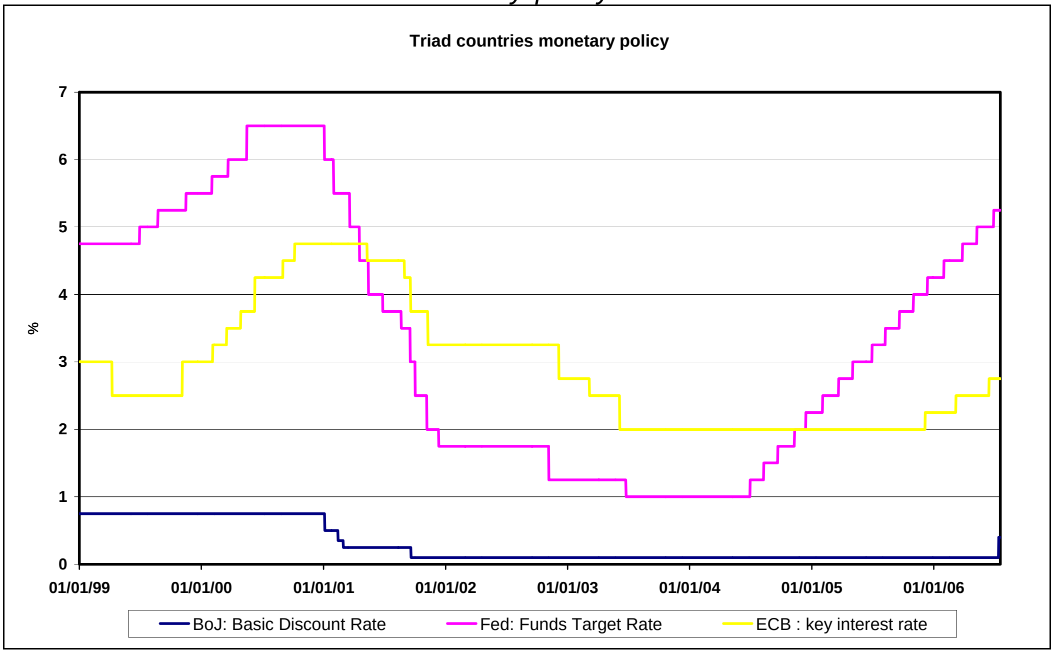
From excess liquidity and low volatility to tighter liquidity and higher volatility

After the extended period of high predictability and low risk that has prevailed in markets, it remains to be seen what the consequences of the recent upsurge in volatility might be for the future course of volatility in financial markets. Just as explaining why volatility was low in recent months was not an easy exercise, so also is it not readily understandable what has been the primary cause of the sudden volatility spike.

A delicate geo-political situation, surging energy prices, increasingly widening global imbalances (such as the US twin fiscal and current account deficits and the massive reserves being accumulated by Asian central banks, not to mention economic turmoil in important emerging markets, e.g. Turkey), the continued uncertainty as to whether ongoing housing bubbles in several markets will lead to "hard" or "soft landings", combined with continued uncertainty about how Japan will manage its sudden reintroduction into an inflationary environment have all flooded global financial markets with uncertainty, which in turn has caused volatility to pick up. Up until very recently, these various factors were of lesser concern to investors than they normally would have been, since they were compensated for by an overabundance of liquidity in global markets due to the very lax monetary policy stances in the Triad between 2002 and 2005 (See Chart 3).[2] In fact, global investors are concerned about who or what will replace the cushion of excess liquidity that was generously provided primarily by the Bank of Japan over recent years, but also by the Fed (some observers arguing that the Fed's monetary policy stance was too lax for too long).

[2] The Triad is a commonly used term which refers to the United States, Japan and the European Union.

Chart 4: Monetary policy in the Triad



Source: FredII database, Bank of Japan, European Central Bank

Indeed, Chart 3 only shows too well how the Triad countries' monetary policy stances are co-jointly heading upwards. In fact, the Fed has now conducted 14 consecutive rate increases at its last Federal Open Markets Committee (FOMC) meetings. As a consequence of liquidity conditions tightening, investors consequently have had to review their investment positions for the medium run, and lack reference points to do so in a straightforward and coordinated manner, as the macroeconomic outlook still remains uncertain. Since the valuation of equities depends greatly on the discount factor that will be used to calculate the present value of expected future profits and capital gains, movements in interest rates can greatly influence analysts' valuation decisions. A small part of recent volatility may thus be attributed to financial markets' needing to get adjusted to the new tone of monetary policy announcements by the Fed in the post-Greenspan world. If the Fed can successfully communicate its medium-term strategy, this element of "the level of central bank transparency"- related volatility should diminish.

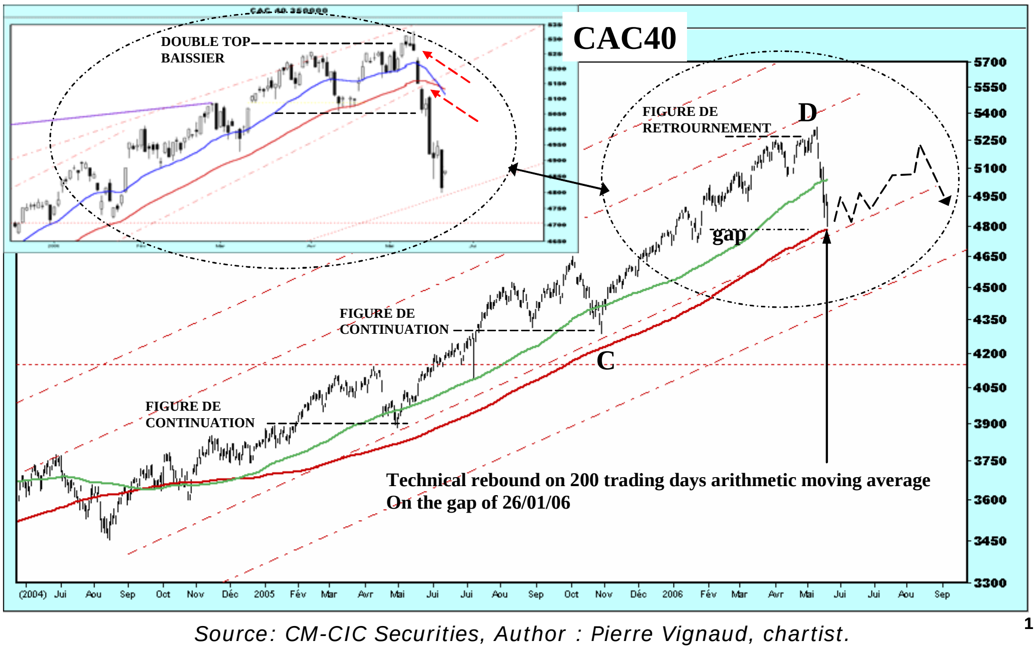
Volatility at the crossroad of the bear and the bull

A final explanation for the spike in volatility might be that markets stand at the crossroads of the bear and the bull, and market participants cannot quite make up their mind as to which way the markets are headed. Increased volatility might simply reflect a period of hesitation as investors attempt to gauge the medium-term outlook.

If one takes a "glass half-full" or optimistic outlook on recent volatility, then one could posit that it reflects temporary valuation difficulties. For example, the Black and Scholes formula, which underlies most market valuations of derivatives (options) by investors, works well is times of calm waters, but it can often fail to yield accurate valuations when markets gyrate. Hence, looking for valuations guidance, market participants tend to move away from attempting fundamental valuation for complex instruments based on modelling. Rather, they place more emphasis on technical valuation tools. Relying on "charting" in times of uncertainty can often result in a so-called "pullback figure" in the technical analyst's jargon, or, in more readily understandable terms, a technical (indeed downward) correction to the last level where investors were confident they were trading at a price that reflected the asset's fundamental value (See chart 4).

On the other hand, a "glass half-empty" outlook might indicate that the recent upturn in market volatility may be that the good times are coming to an end and that the bull market is progressively turning into a bear market (see Chart 1). Recent massive short selling by hedge funds[3] justifies this explanation by highlighting perceptions of an imminent downturn.

Chart 3: Technical adjustment on the CAC40 after spring volatility



Source: CM-CIC Securities, Author : Pierre Vignaud, chartist.

Rougher times ahead in financial markets? Or a return to normalcy?

The tighter liquidity conditions and increased volatility in the past four weeks have triggered a sell off of high yield bonds (both emerging market and low-rated corporates) as well as hit equity markets. Once market participants are more confident of the medium term outlook and of the accuracy of their asset valuations, volatility should subside somewhat. Nevertheless, the future movements of the Federal Funds rate, the momentum of the Japanese economy (which still awaits confirmation), as well as the unwinding of the major existing imbalances in the global economy will all be crucial determinants of a return to still waters in global markets. As long as global macroeconomic imbalances spiral out of control, the geo-political situation in the Middle East does not explode or commodity prices continue spiral in a relentless upward drive, one should expect a return to low levels of volatility. Today, all three can be tagged with question marks. As a result, surmising whether the spring volatility surge will prove to be a structural upward shift towards greater fundamental volatility remains a matter of speculation.

[3] Hedge funds fail to live up to their name, FT, 13 July 2006