Advanced LEVEL 2

Trading is like any other business; in order to be successful at it, you need to have a distinct advantage over your competitors. Clem Chambers, managing director at ADVFN and regular *TRADERS'* contributor, firmly believes that Level 2 will keep you one step ahead of the game.

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The idea that supply and demand is the sole factor for deter-mining prices is as familiar as Newtonian gravity. If there is more demand than supply, then prices will rise; if there are more sellers than buyers, then prices will fall. However, whilst this law is well established, it is not immutable.

Market laws are tricky things, since they do not exist for long. If there were a law that allowed you to predict the future of a market, then you would back it and watch your capital grow until it became so great it would swamp the market you are trading; thus prompting a swift end to that law. As such, even theories as venerable as supply and demand are not 100% watertight.

The advantage of Level 2

A Level 2 screen shows the heart of the market. It exposes a game in progress, where the orders and rules shift. Generally, you will see a line of sellers and a few apparent buyers, but now and again the market will suddenly rise to take out all the overbearing sellers. The question is, how did this happen? Did the supply create the demand that drove up the price? Was it the demand that drove the price, or the supply that drove the demand that drove the price?

In modern textbooks, simple homilies like supply and demand are replaced by "information theory". This concludes that it is the flow of new information that drives the price, rather than just supply and demand. It is now widely accepted that knowledge is power; it is less understood that it is a flow of information that is the bedrock of this power.

Trading without Level 2 is like trading in the dark – it is impossible to see what is happening in a stock from minute to minute simply by watching the bid and offer. Under the hood of the bid and offer a more complicated machine is grinding away – books of buy and sell orders exposing the explicit supply and demand of a stock. This is the engine-room of the stock market and Level 2 exposes its state in motion, bringing an essential transparency to market moves.

In the market you need an edge and the most concrete edge you can have comes from better information. In a similar way that a trader who relies on the newspaper cannot compete with a trader who has access to real-time prices, a trader who has real-time prices cannot outdo a trader with Level 2 transparency.

However, if everyone had access to real-time prices, the playing field would be too level; and if everyone had Level 2, it would offer no significant advantage. Like most competitions, trading is an arms race and Level 2 is a weapon still used by the minority. As such, it can still provide a trading edge.

In a perfect market it is impossible to outperform a market basket like the FTSE. Only long-term market trends can be captured, and then only using the dreaded "buy and hold" methodology. (Dreaded since most traders would die of boredom if it were true and turn into investors.) However, luckily for us the market is not perfect and we can still make money from its imperfections.

Privileged information

Using privileged information tends to result in a one-way ticket to prison. In effect, insider dealing is the extreme form getting to grips with theory at the heart of the market

of trading on an uneven playing field. Level 2, on the other hand, is legal and considered a fair advantage; and unlike inside tips, anyone can have a Level 2 account these days.

Time limited and liquidity limited events

As any gunfighter will attest, there are only the quick and the dead. In a situation where time is limited, the market will behave differently from its norm. The big cap SETS market has a series of these events, each representing a short timeframe during which trading has to be committed to, and where the resulting prices are always shifting.

In such an environment a profitable trading methodology can be developed, since opportunities are thrown up by the pressure of a short, highly active timeframe, where after the "gong goes" trading is complete. This intensive nature of this period, known as the SETS auction, throws up aberrations that can be captured. SETS auctions tend to happen at the opening and close of the market, and under certain circumstances stocks can have an intra-day auction due to circuit breaking events.

A share has a volume waited average price (VWAP), which is the average price of the stock in the previous 10 minutes, weighted according to the size of the preceding orders. During the auction a share is given a value called the uncrossing price, based on the best price at which orders in the SETS book can be settled. Since special market orders (orders filled at the best possible price) can be entered into the auction, and standard orders can be entered at any price settled at the end of the auction, the uncrossing price fluctuates wildly during the auction period. As such, orders are matched at the end of the auction.

For example, if I put a market order in to buy 1,000,000 shares of Vodafone, the uncrossing price would be determined by the lowest price necessary to buy 1,000,000 shares from the orders on the offer.

If this meant going up the offer from 120p to 130p to get the whole 1,000,000, all the sellers would receive 130p even if some were offering to sell at 120p. A market order to sell 200,000 shares would take the first bite out of my initial buy order. So, as standard orders and market orders are entered into and deleted from the auction, the uncrossing price moves around.

A trader will hope to enter into an auction where time restrictions will make the price spike, so that the uncrossing price will be a long way from the VWAP prior to the start of the auction. Once the auction is over and normal trade resumes, it is hoped that prices will return to or near the VWAP, thereby capturing a quick profit.

This is clearly a skilful pursuit and one that requires direct market access. Since there is no time to call a broker, access is limited to those with a SETS book and, of course, Level 2. Any gain generated by

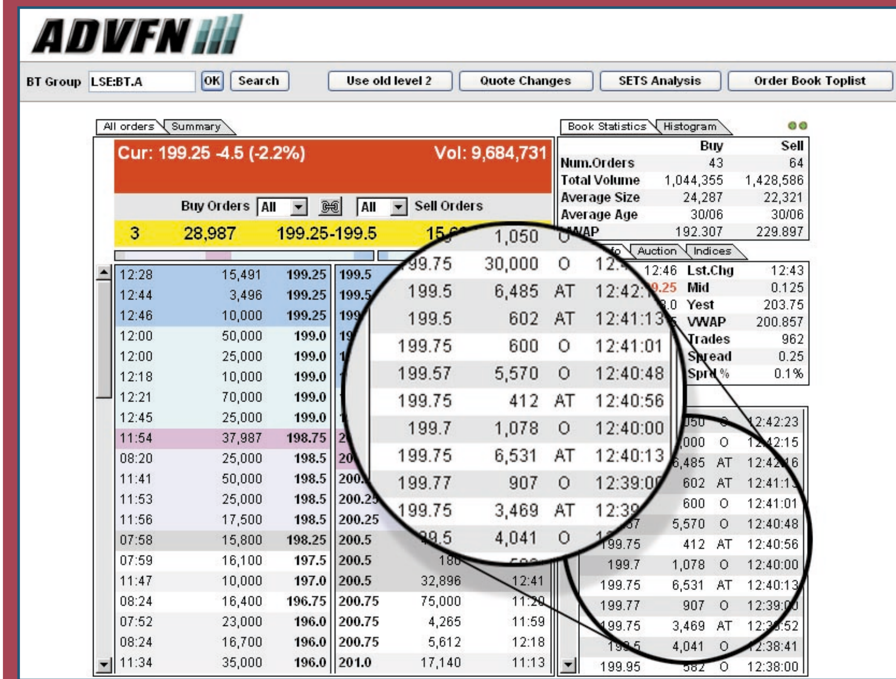
F1) SGE

The time during a witching period derivate options expire, that accompained by furious share trading as stock derivate positions are balanced and closed out with actual stock buys and sells.

Source: www.advfn.com

F2) Level 2 screen

RSP gateways are portals to market makers, who hoover up small orders and then sell them out on the offer. You can see this activity by the level of O trades being executed along side the AT trades in the SETS book.



Source: www.advfn.com

this type of opportunity is limited to a smallish field; the rewards are not spread too wide, so as to make them unworthy of capture.

Level 2 is also useful during a witching period, the time during which derivative options expire. This expiry is accompanied by furious share trading as stock derivative positions are balanced and closed out with actual stock buys and sells. This can create spectacular price movements as on the September 20, 2002 when trading broke all records (figure 1.)

When time or liquidity is limited, volatility is increased. In an auction or option expiry situation there can simply be not enough time or liquidity, resulting in an aberrational price move. Of course, many people think they know the direction of the market in so much as they are predicting the future trend, rather than identifying a deviation from the norm. Experience and theory suggests that success in the latter is more practical, though few of us give up trying to be a seer. Under the aberrational situation the price spikes because a drop of liquidity causes an increase in volatility. Volatility is about the only friend a trader has, as it is a trader's job to remove volatility by adding liquidity with their short-term positions.

A trader is, in effect, acting as a long market maker whose implied bid and offer is outside the ongoing market's spread. The market's spread is tighter than the trader's and can be traded without delay. The trader's spread is wider and reflects the increased risk of its illiquidity. Technically, the trader's return should bear a resemblance to the capital at risk and current rates of risk free return, but of course this has little relevance to the individual trader when they are long and the price is diving.

Market access

Clearly it is impossible to trade if you cannot reach your broker or gain access to the market. You may be able to place your orders, but still not be able to trade because you do not have the tools necessary to make a fine judgement. We have all spent time waiting for someone to answer the telephone, or have tried to trade when the market is moving only to find that the online trading platform has crashed. Level 2 is, in itself, market access to market information. Without it, it can be impossible to trade sensibly. If you read a good report on a SEAQ stock in the morning papers, your broker should tell you the position of the stock's market makers via Level 2. Their relative positions will tell you if the price is firming up or not. Trying to trade without Level 2 can be just as frustrating as receiving an engaged tone when calling your broker.

Most traders do not have direct market access; those that trade online do so through what are known as retail service provider (RSP) gateways. An RSP is an automated market maker that links into brokers, either as a connection from an online broker's computer or via a terminal on a broker's desk. The broker or the online service inputs your order, which is then automatically executed by the RSP.

RSP gateways are portals to market makers, who hoover up small orders and then sell them out on the offer. You can see this activity by the level of O trades being executed along side the AT trades in the SETS book (figure 2.)

Market makers will buy at the bid, or thereabouts, and sell again at the offer. As such, they capture the spread. By bundling up all the small orders and selling them out as large orders on the offer, the spread is the market maker's reward for adding liquidity to the market. With Level 2 you can watch the flow of retail orders and gauge the order flow and sentiment of private investors. Clearly this is not a luxury afforded to anyone without Level 2.

With Level 2 you are in a position to place orders away from the bid and offer in the belief that your order will be filled outside the spread when the market moves randomly around its ongoing level.

Prices are volatile. While the price may not move over the next few days (in so much as the trend will be sideways), the volatility of the share price may let you buy at a few percent below the normal bid and sell at a few percent above the normal offer.

Capturing market volatility in this way is called scalping and is a kind of market making. With Level 2 you can judge the level at which you want to place your orders and then monitor the swings in prices as the levels on the bid and offer in the market making book fluctuate. Ideally, you would have direct market access and be able to place these orders directly into the book; otherwise a good broker would be able to do this for you. Once again traders without this facility operate at a disadvantage, as they cannot share in the profit potential of this technique. Scalping reduces the volatility of a share and makes it harder for other traders to catch swings in the market.

Error capture

We all make mistakes. At some point in our careers we have all accidentally bought instead of sold, or doubled our position instead of taking a profit. Luckily, however, we often have less capital than is needed to make a really huge error. Buying £10,000,000 of Vodafone, for example, is not a mistake our account would allow us to make – our broker would inform us that we just don't have the available funds for that kind of trade. Big trading firms, however, do have access to that kind of capital and are just as able to screw up as we are; and when they do, they can blow millions in seconds. It is bad news for them, but good news for us, since we can look to be on the receiving end.

Below is a probable example from June 1, 2003. I say probable because I have no actual evidence this was a mistake. However, it very much looks like one to me.

A huge order was placed for Shell, which took out all the orders in the book on the offer side until the price had spiked by five percent (figure 3.) At this stage, the SETS auction kicked in, suspending trading and prompting an intra-day auction. This gives participants time to evaluate the situation, screech obscenities and cancel further large rogue orders. Of course, the price post auction returns to normal, but the profit of this goes to the sellers all the way up to the triggering of the auction.

So if you were a seller at xx, you would have captured a 4.9% gain in a few moments just by circling Shell like a vulture waiting for an error to occur. Circling costs you nothing except your Level 2 information and the ability to place orders 4.9% above the offer or below the bid. If you had the patience and the determination, you could stake out the whole SETS market waiting to profit from someone else's misfortune.

In 1998, Saloman Brothers sold $1.2 billion dollars in bonds by mistake, apparently leaning on the keyboard was the cause. In May 2001, 206 points were knocked off the FTSE by a rogue trade when Lehman Brothers planned to execute a £30m set of trades but instead ran £300m pounds worth. The London Stock Exchange refused to unwind the position. Rogue trades, in particular stocks, are not at all uncommon as the above examples show. Perhaps, therefore, it is important to guard against our own, after all there is no point giving back our gains.

Superior execution

However you see the market, time and price are an essential part of trading. They are, however, not merely restricted to the active aspect of a stock price, but also a passive aspect of your trading speed and costs.

If you can identify an opportunity first, you have a considerable edge. This is particularly true of Level 2, where a shift in the balance of the book itself can presage a price move.

SETS books are a queue. If you are at the back of a queue on the bid, you are less likely to be able to buy at that price before a move. This is why many traders would hit the offer to buy; but then again the offer can also spring up in fractions of a second. This is why it is key to be able to spot opportunities fast, in addition to placing a trade quickly.

Traders often achieve this by using a multi-head PC set-up, where different screens of information can be watched simultaneously. Even with condensed Level 2 views showing indices and micro tick charts, it is hard to feel there is too much information to allow for a fast decision. However, superior execution is not always about speed, price is also a key dimension. A profit is a profit however small. If you can profit from smaller opportunities than other traders can, you will capture market inefficiency ahead of them. It is not a

F3) Shell

A huge order was placed for Shell, which took out all the orders in the book on the offer side until the price had spiked by five percent.

Source: www.advfn.com

coincidence that bid/offer spreads often equate to the cost of trading, if the bid/offer spread were more, it would be traded away.

Without doubt, the professional trader enjoys superior execution. BOTS or program traders in particular typify this ability and are becoming ubiquitous in the SETS books.

While there are many fanciful theories about program trading systems, their main use is to break up big orders and fill them in the market. If you are a pension fund, you will be buying and selling a stock like Vodafone in large amounts. However, it simply would not be sensible to sell 20,000,000 shares in one block. In itself, such an indigestible amount would knock the price down. If the block of stock were broken down into an amount relative to the liquidity of the market on the other hand, it could be passed through the system over time with little impact. This so-called block trading chews up a big buy or sell order into digestible pieces so that it can pass easily through the market without causing perturbation.

These systems make a calculation about the liquidity of the market then set about filling their order in blocks of that size. If you see a stock whose size reappears time and time again in new orders, block trading is probably at work. These trading programs operate on a simple set of rules and will churn through orders until they have completed them. They execute over preset price ranges and will move prices up and down with market moves within their own defined boundaries.

A Level 2 watcher can identify these systems and decide how they will affect the market. Many traders attempt to devise strategies to move the price around so they can scalp the bid and offer against the BOTS program.

Some traders use BOT watching as a key element of their trading strategy. On balance, it can be supposed that a share with a program trading system on one side of the book will tend to provide a floor or ceiling to the price during its activity.

However, like all good things, a size order must come to an end at some point, but that is not to say that tracking program trading systems is not a fruitful business. What is definite, however, is that without Level 2 this increasingly important aspect of short-term trading is a hidden hazard for the unprepared.

Limited oversight

In a perfect market no stock is incorrectly priced at any given time. Everyone is apprised of all the information concerning the stock and the "invisible hand" makes sure that the pricing is completely appropriate. However, the market is not perfect and as traders we try and make it less imperfect by pre-empting, re-pricing and profiting from it. There are around 2,000 stocks on the UK market and many are simply ignored. This lack of attention means that a trader who is fast enough off the mark can make a tidy profit from reacting to news first. Whereas it might be near impossible to get ahead of the market with a Vodafone or BP RNS (official stock exchange announcement), a second or third tier company is a very different matter. Quite often these stocks are not being watched at all, and it may take minutes for an RNS to have an effect on the price.

In fact, it is quite galling to casually look at an RNS for a stock and dilatorily check its price only to find no move. After lazily dismissing it, the price races away five minutes later once the market has digested the new facts.

Using a combination of news, trade reports and Level 2 you can build up a picture of how long certain stocks take to respond to statements and stake them out accordingly. Often these lags are surprisingly long. In the SEAQ book, it is the last market maker to move that counts; if you can react fast enough, you can catch them napping.

Level 2 and the illusive edge

On a level playing field no one could capture a profit beyond the systemic returns of the market, or in other words the rise or fall in a share's price reflecting the underlying fundamentals of the overall market. This unhappy fact is apparently obscured from us by the random lurches of the market, giving us all runs of good luck that we put down to skill and runs of bad luck we put down to the connivance of others, breaches of discipline or just simply bad luck itself. However, the whole edifice of this argument leans on the idea of a fully level playing field; all investors must be equal for them to all suffer the yoke of the random walk equally.

There is a converse argument, however, which states that you make your money from the clueless sap on the other side of the trade. While it is a brave fellow that plans to be naturally on the winning side of this theory, it is easy to see that if you have better tools, you have that illusive edge that every trader needs to succeed. Throughout history superior tools have separated the winners from the losers. As such, you can never be too prepared. Level 2 is an essential.

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