Price Bottom Examination : on the market micro structure

---> INTRODUCTION :

In this paper, i'm going to highlight the different criteria that we can use to recognize a qualitative scalping opportunities. I'm going to try to define it correctly, and to classify the different criteria in three main topic.

1) Price Action criteria
2) Volume criteria
3) Liquidity criteria

Then we will have to define a basic scalping strategy which will be based on the market making job.

---> REMEMBER :

1) statiscally, we have the market price which is more than **75% of the time**, in balance (without specific up or downtrend) : just SIDEWAYS ; in balance in a defined price range box.

This statistical fact shows basically the market making activities.

2) here we will try to **think like a market maker,** and we will try to identify in which direction he is accumulating / distributing its inventory.

3) we will stay focused only on the **most profitable scalping opportunities** with a coktail of many different signals which are pointing on the same direction at the same time. More than some signals cluster triggered together ; we will see in which situation, that's a real process to act like a market maker for his own manual trading.

A) Define the market context quickly in few seconds :

- which is the price trend for the day (since the open) : bullish ? Bearish ? Neutral ?
- which is the CDV value (since the open) : Positive ? Negative ? Near zero ?
- which is the CDUDTV value (since the open) : superior than CDV value ? Or inferior than CDV value ?

These three simple information will help me to understand three important stuff :

---> in which direction the market maker is acting ?
---> in which direction the volume orderflow is acting ?
---> in which direction the price is reacting ?

These three information will help me to understand HOW the market making behaviour is.

---> calm and peacefull ? And in domination ? With an high level of price control ?
OR
---> under pressure, stressed, accumulating more or less with difficulties ?

- CALM market making BEHAVIOUR :

for example :

a) PRICE is up
b) CDV is negative
c) CDUDTV is superior than CDV
d) PRICE continue to go up.

- STRESSED market making BEHAVIOUR :

for example :

a) PRICE is up
b) CDV is positive
c) CDUDTV is inferior than CDV
d) PRICE continue to go up,

These two different market making behaviour are normal for the market maker, and he has to deal with these different market interest, every time.

It's like a **cyclicity** of market making behaviour scheme.

Market maker will be stressed first, then he will become calm when the control of the auction is better. 75% of the time CALM, and 25% of the time STRESSED.

It's important to be able to localise and to detect these different market making behaviour phases !

---> when you have successfully defined the **market context,** you will have a key clue :

- you know exactly in which sequence the market maker is deploying.

1) If the market maker behaviour is under pressure (stressed) : GO with the market orderflow.

2) If the market maker behaviour is calm and peacefull : GO with the market maker.

- Maybe you don't really know exactly how is the situation or how to qualify the situation correctly ; in this case ; just do nothing !

---> when you have identifyed a fresh manipulation attempt from the market maker, you can try to benefit from it, with a quick scalp, and that, especially if the short term signal is matching with the market context defined just above.

---> it's extremelly important to be able to identify the main manipulation process at its best ! It's important to define a kind of « manipulation degree » like we already do for the absorption phenomena.

B) By manipulation, i mean :

---> be able to detect some « market micro structure anomalies »

It could be seen as :

- an UP price bar with a strong negative delta volume
- a buy market orders which is a down tick volume...
- a sell market orders which is an up tick volume ….

etc, etc

These main « manipulation » are directly and automatically tracked with the different HFT signals seen as text label on the quant spread tracker tool !

----> these manipulation are important to detect because, they usually symbolize the end of a price moovement and/or the beggining of a new price moovement.

----> it's like « make a BIG effort » at the start of the manipulation process (by paying and providing the liquidity with an initial disadvantage)

---> but it is usually the real begginning of the story and the best point to get a qualitative scalping entry.

C) Which data coktails i want to see to take a buy position ?

PRICE :

----> price trend since the open is UP
----> but price trend in short term is DOWN (pullbacking)

MARKET MAKING :

----> market making since the open is BULLISH
----> market making in short term is becoming BULLISH again
----> CDV line and CDUDTV line are in divergence or crossing.
----> CDUDTV line is crossing up the CDV line

ORDERBOOK STATE :

-----> some significative offer size has been remooved from the offer side of the orderbook
----> some new bid size has been freshly added on the bid side of the orderbook
----> creating a depth distortion (buy depth distortion) and/or a bid wall.

VOLATILITY & TIME :

----> the range of the day (daily range) is enough big to play a fade
----> if possible, bigger than the average daily range, or the average minute range.
----> we are approaching to a key hour (for example 4.30 PM, 5.00, 5.30, etc)
----> each start and each end of half hour is important because of the time sliccing of the algo.

HFT SIGNALS & HFT EVENTS :

----> you have an HFT Buy alert or an HFT Bull alert triggered on the price bottom you expect.
----> you have an Depth Distortion alert which is triggered on this same price bar.
----> you have a BUY CORREL alert which is triggered on this same price bar.

D) Which is the logic behind and the logic i will keep in mind ?

----> it's a market making logic.
----> it's a trapped traders logic.
----> it's a volume trapped logic.
----> it's a stop loss hunting logic
-----> it's a constant stop loss fishing logic.

THAT's just the main basic of this game.