Much ado about nothing – Maker Taker Pricing

Christian Voigt

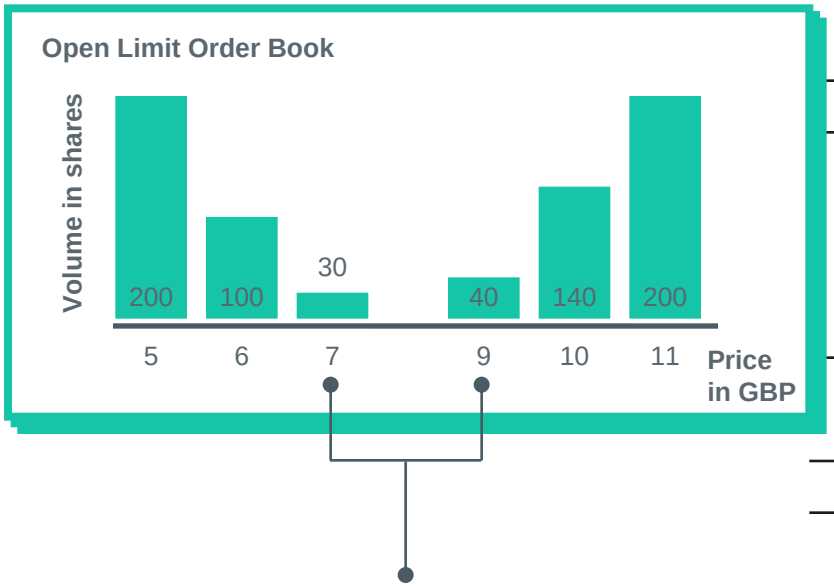
February 2012

Fidessa

Trade / Invest / Inform

Some Basic Definitions:

Liquidity Maker earns half the spread and pays the fees, while Liquidity Taker pays half the spread and the fees per trade



P&L Liquidity Maker	
+1.0 GBP	½ Spread
-0.1 GBP	Exchange Fees
+0.9 GBP	**Total Profit**

P&L Liquidity Taker	
-1.0 GBP	½ Spread
-0.1 GBP	Exchange Fees
-1.1 GBP	**Total Costs**

The **spread** is an implicit cost paid by the liquidity taker to the liquidity maker for providing liquidity. The size of the spread is determined by competition in the market. The liquidity maker earns on average **half the spread per trade**. In the example above, the spread is 2.00 GBP

Symmetric exchange fees means that liquidity taker and maker are charged the same fee. They represent a cost to each trading participant.

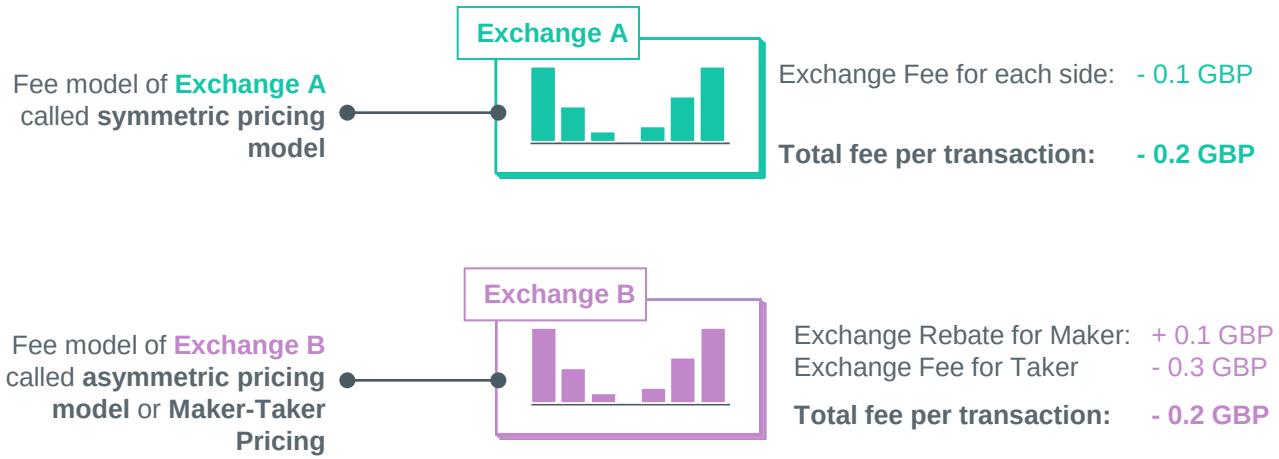
Let's have a small thought experiment in three steps

Step I assumes that we have two identical exchanges, trading the same instrument, but compete with slightly different fee tables

I

Step I: Basic Assumptions

- Assumption: Two perfectly identical exchanges with the same post-trade infrastructure that compete in trading the same instrument. **Exchange A** and **Exchange B** compete only on their price model.
- However, they must earn the same amount per transaction. It means that the fees from matching a liquidity taker with a liquidity maker must earn **Exchange A** und **Exchange B** the same revenue. In this example the exchanges earn 0.2 GBP per transaction.



Let's have a small thought experiment in three steps

Step II shows that liquidity provider and liquidity taker prefer different exchanges

II

Step II: Liquidity Taker and Maker prefer different Exchanges

- In the example on the first slide, the spread is 2.00 GBP. Let's assume that this is a usual spread for that instrument.
- If liquidity maker offer on **Exchange B** the same spread as on **Exchange A**, then they will earn more money on **Exchange B** (1.1 GBP instead of 0.9 GBP). But, for the liquidity taker it will be the opposite. They will pay more on **Exchange B**. (1.3 GBP instead of 1.1)

- Thus, liquidity taker will prefer to go to **Exchange A** and liquidity maker will prefer to go **Exchange B**.
- This result is not a sustainable solution, because no trades will occur if liquidity taker and maker prefer different exchanges.
- To solve that problem, liquidity makers on **Exchange B** can start to improve the spread and induce liquidity takers to switch from **Exchange A** to **Exchange B**.
- But how much do liquidity makers have to improve their quotes on **Exchange B**?....

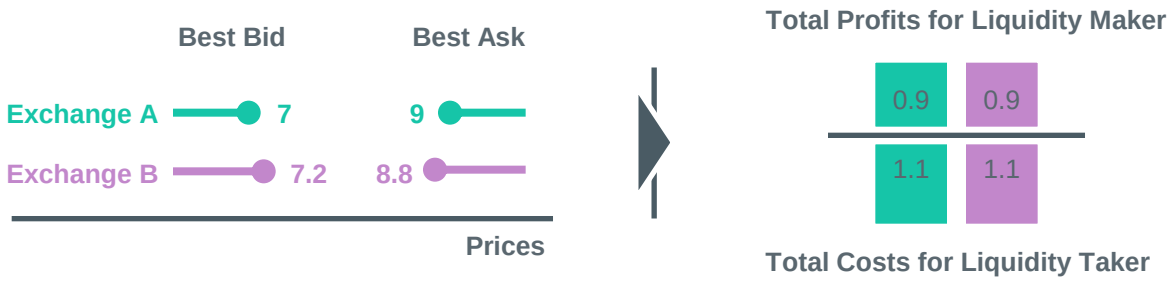
Let's have a small thought experiment in three steps

Step III illustrates how the spread compensates any benefit from the Maker/Taker pricing completely

III

Step III: The Maker – Taker Pricing Model is fully compensated by changes in the spread

- … In order to induce liquidity takers to trade on **Exchange B** , the posted quotes must compensate the additional costs for liquidity taker on **Exchange B**.



- However, if liquidity makers reduce the spread to a level that liquidity takers have the same costs, then the liquidity maker makes the same profit on **Exchange A** and **Exchange B**.
- Thus after adjusting quotes, both exchanges offer the same total trading costs and profits to liquidity takers and makers, despite a different fee schedule.
- Therefore, Maker-Taker pricing should not make a difference when exchanges compete with each other. What is important is the total revenues charged per trade. But it does not matter, between Maker and Taker.

So, why does Maker / Taker Pricing still seem to matter in reality?

- In the US, the Trade-Through Rule requires best execution based on price only. The regulator mandates that the total cost of trading (including exchange fees) do not matter. Therefore, Maker / Taker pricing makes sense in the US.
- Most of the time when a new Maker / Taker pricing fee is introduced, it is considerably cheaper compared to competitor pricings. (i.e. revenues per trade are significantly lower) Thus, Maker / Taker pricings appear to be successful because they are in general cheaper and not because they offer an asymmetric pricing.
- If brokers do not have to pass on maker rebates to their end clients, maker rebates might be an attractive source of income.