


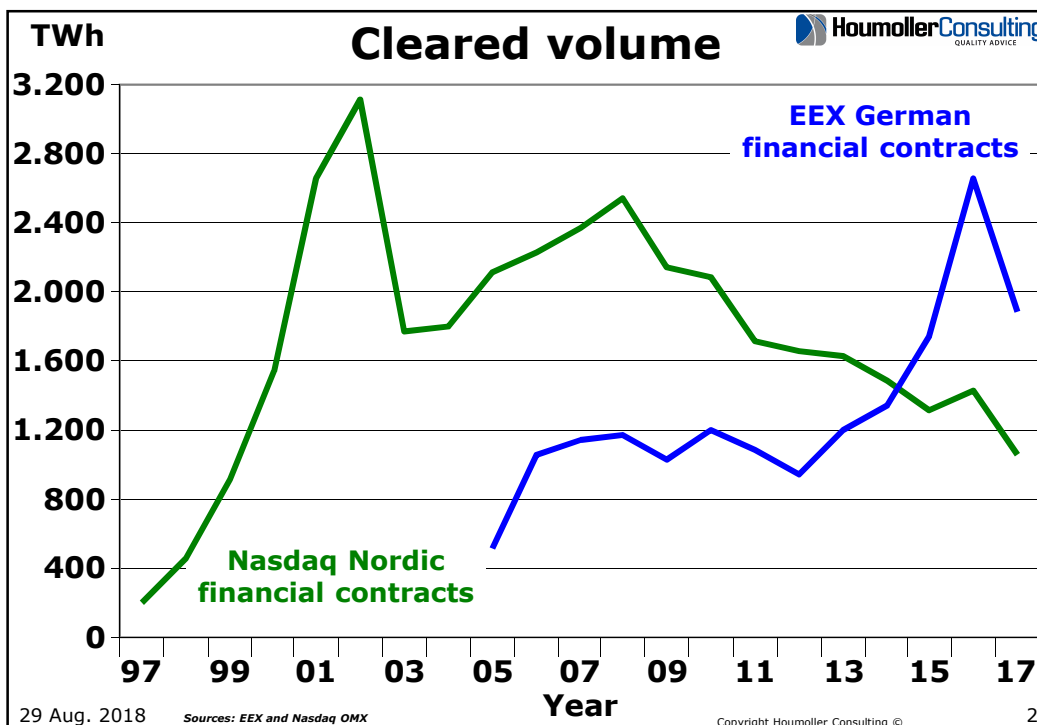
## Liquidity

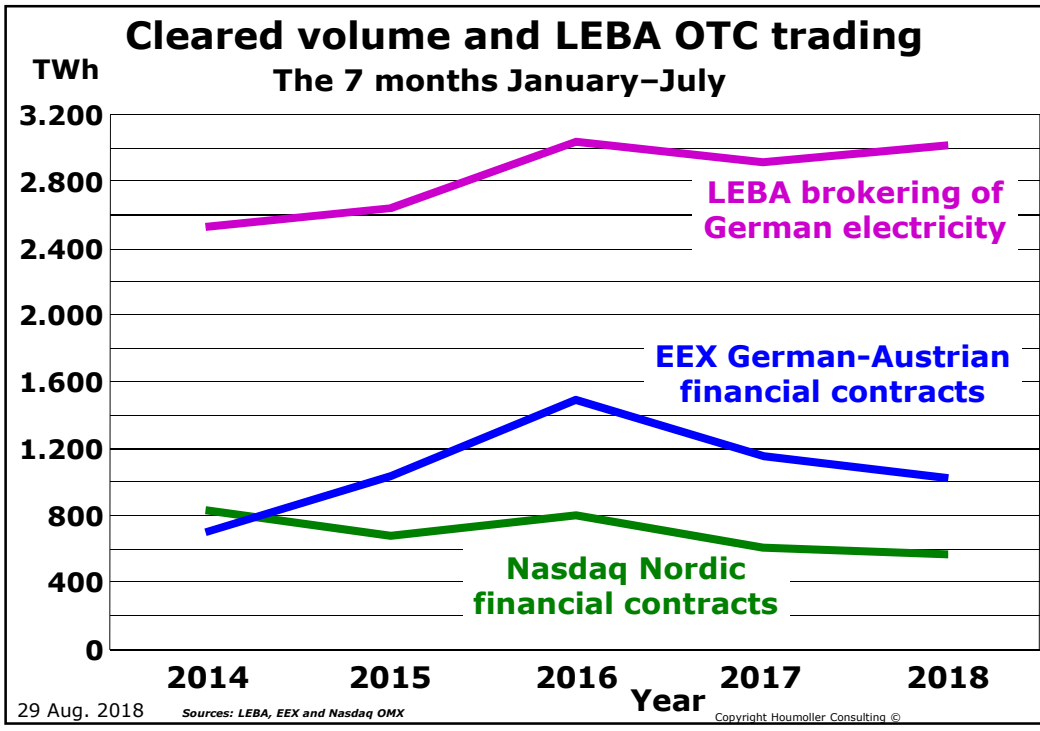
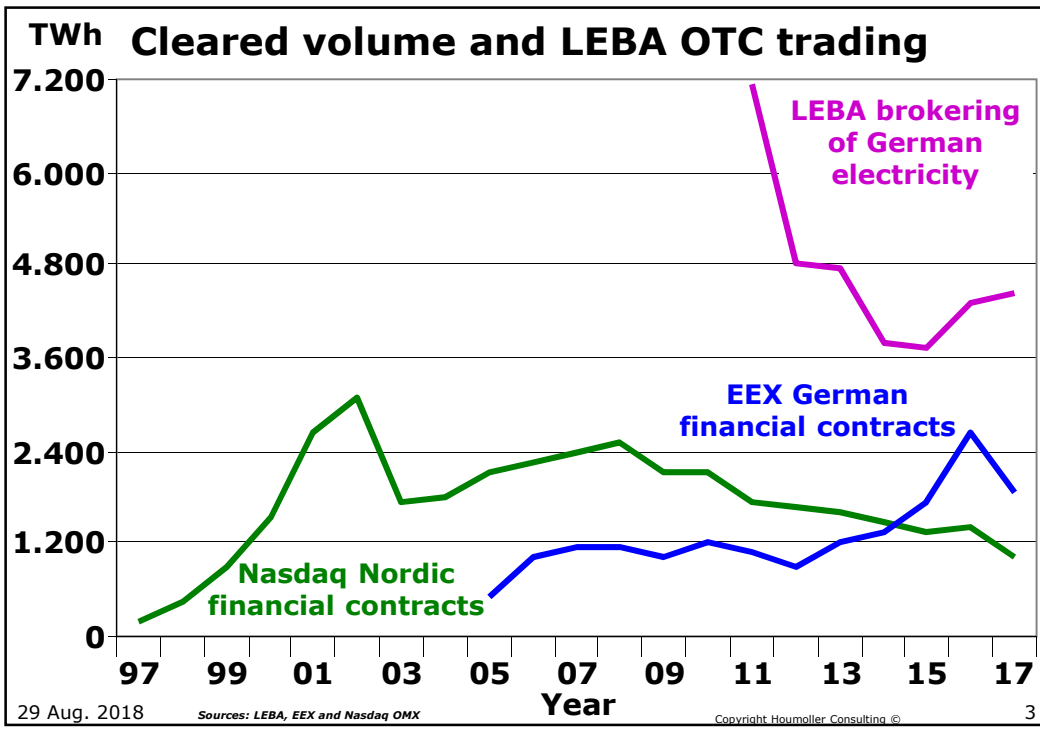
**Anders Plejdrup Houmøller**  
*CEO, Houmoller Consulting*

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- **At the three following slides, for EEX and Nasdaq OMX, the blue and the green curves illustrate the cleared volume:**
  - ✓ (contracts traded off-exchange and subsequently cleared) + (contracts traded at the exchange).
- **LEBA is the London Energy Brokers' Association.**
- **The LEBA curve includes all physical forward contracts for power arranged by the LEBA OTC brokers**
  - ✓ Including contracts that are registered on clearing platforms.
  - ✓ The LEBA curve does not include financially settled contracts.

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## Open Interest




### For a financial contract

- **For a given financial contract, the Open Interest is the net hedging done by means of the contract.**
- **This is not the same as the contract's turn-over**
  - ✓ **As players may move in and out of positions in the contracts.**
- **For each of the coming years, a following slide gives you the Open Interest as of the end of last week for**
  - ✓ **Nasdaq OMX's annual Nordic System Price contracts.**
  - ✓ **EEX's German contracts**
    - **Phelix-DE and Phelix-DE/AT contracts.**

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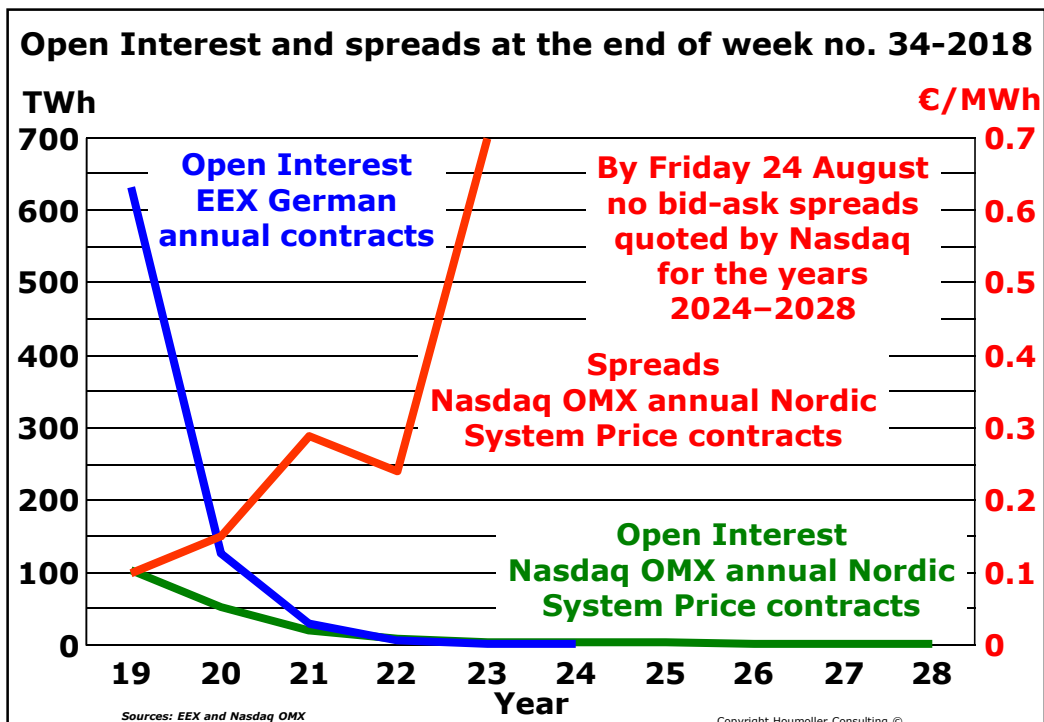
## Spread



### For a financial contract

- **For a given financial contract, the spread can be seen as a price of getting the hedge associated with the contract.**
- **The bigger the spread, the higher the price of hedging.**
- **Worst case for a given contract: no spreads quoted for the contract.**
- **The following slide gives you the spreads as of the end of last week for Nasdaq OMX's annual Nordic System Price contracts.**

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## Conclusion

- **Germany is the liquid market**
  - ✓ See also the turn-over of LEBA's physical futures.
- **By using EEX's financial contracts, you can hedge for the nearest calendar year**
  - ✓ The liquidity for the more distant future is very low.
- **The liquidity for the Nordic financial contracts seems to be collapsing.**

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**FTRs Financial Transmission Rights**  QUALITY ADVICE

**PTRs Physical Transmission Rights**

- By using FTRs and/or PTRs, we can link the Nordic electricity market to the liquid German market.
- Denmark and Germany have PTRs on the Danish-German links
  - ✓ January 2019, Denmark and Germany will introduce FTRs on the Danish-German interconnectors.
  - ✓ May 2019, Denmark and the Netherlands will introduce FTRs on the Danish-Dutch Cobra interconnector.
- TSOs are obliged to offer PTRs or FTRs on cross-border links
  - ✓ Unless other existing tools provide market participants sufficient hedging opportunities.
- **My recommendation is to introduce FTRs on the Nordic-German links and on the inter-Nordic links.**
- This will provide the Nordic market with good short-term hedging options
  - ✓ By creating links to the liquid short-term German market.
- At [www.houmollerconsulting.dk](http://www.houmollerconsulting.dk), from the sub-page **Facts and findings**, you can find information on FTRs.

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**Thank you for your attention!**

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