













### Volatile energy markets and financial stability risks

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#### Agenda

- The real and financial side of the electricity market
- The role of central counterparties (CCP:s) in the financial system
- Government credit guarantees



# The real and financial side of the electricity market

- In the Nordic region, the main market place for electricity is Nord Pool where the spot price is determined by supply and demand through auctions
- Financial contracts based on electricity can be traded on an exchange or bilaterally
- In the Nordic region, the main exchange for such contracts is Nasdaq Commodities
- Electricity sellers and buyers are hedging by selling and buying future production and consumption at prices determined in advance
  - Households and firms wish to secure future electricity costs
  - Electricity producers wish to secure compensation for future production costs





## The role of central counterparties (CCP:s) in the financial system

- Derivative trading entails counterparty risk
- CCP:s contribute to a more secure trading by acting as buyer to all sellers and seller to all buyers
- CCP:s have become increasingly important players in financial systems
- $\rightarrow$  Important for the financial stability
- The Swedish National Debt Office (SNDO) is resolution authority for CCP:s, i.e. Nasdaq Clearing, since August 2022





### Global growth of central clearing







- Before the 2008 financial crisis, the majority of trading in derivatives was bilateral
- Lack of regulation led to major risk levels in the financial system



G20 Leaders agreed that all standardised derivatives contracts should be cleared through central counterparties



New regulations have been put in place and central clearing has evolved



#### The central counterparty safety net

- To be able to guarantee payment at all times, the CCP has a safety net for losses that may arise for various reasons (the "waterfall")
  - 1. Require collateral Variation Margin and Initial Margin
  - 2. Dedicated own resources
  - 3. Default fund



#### Large price increases in August

- Electricity producers enter contracts to sell electricity at predetermined prices at specific future dates
- Losses are compensated each day
  - Do not necessarily match the cash flow of the electricity producers that have to borrow to pay margins
- The exceptional price rise and price volatility in August led to difficulties in borrowing sufficiently to meet margin requirements
- Member failure to meet margin requirements and defaults may lead to spill-over effects and potentially to financial instability

#### Price of Nordic Power baseload Financial Future

Price in euro per MWh



Note. Quarterly data

Source: Bloomberg



#### Government guarantees to electricity producers

- The Debt Office was mandated to provide credit guarantees for loans to electricity producers 5 September 2022 (valid until 31 March 2023)
- The purpose of the measure was to prevent that a lack of liquidity created risks for contagion to other parts of the financial system
- Electricity producers can apply for a loan through their bank, which applies for a credit guarantee from the Debt Office
  - The guarantee covers 80 per cent of the loan
  - The overall guarantee framework amounts to SEK 250 billion
  - Denmark and Finland swiftly introduced corresponding schemes for liquidity support
- No applications have been submitted to date



#### **Final remarks**

- Central counterparties have become important for financial stability
- Nasdaq Clearing also offers central clearing of equity and fixed income derivatives and there may be contagion from stress elsewhere
- The government credit guarantee scheme is a preventive measure established to avoid that a liquidity shortage triggers more serious problems







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