1 Data

Path	Contents
data/raw_data.xlsx	Raw hourly data for DK1, DK2, and DE in separate worksheets
data/daily.xlsx	Daily data for DK1, DK2, and DE in separate worksheets
data/intraday.xlsx	Off-peak 1, off-peak 2, and peak hour data for DK1, DK2, and DE in separate worksheets
data/weekly.xlsx	Weekly data for DK1, DK2, and DE in separate worksheets
data/dk1_daily.txt	Input data for the DK1 daily volatility models
data/dk2_daily.txt	Input data for the DK2 daily volatility models
data/de_daily.txt	Input data for the DE daily volatility models
data/dk1_intraday.txt	Input data for the DK1 intraday effects models
data/dk2_intraday.txt	Input data for the DK2 intraday effects models
data/de_intraday.txt	Input data for the DE intraday effects models
data/dk1_weekly.txt	Input data for the DK1 weekly volatility models
data/dk2_weekly.txt	Input data for the DK2 weekly volatility models
data/de_weekly.txt	Input data for the DE weekly volatility models

Note that we have removed gas price data because it originates from a proprietary source. The data we used can be obtained from a Bloomberg terminal using the ticker EEXGNCGR.

2 Figures

The generation of Figures 1-5 requires Matlab and Econometrics toolbox version 2006a or greater. Figure 6 requires the R core package version 3 or greater. Please see the comments within the scripts for further details on generating the Figures.

- Figure 1: run descriptive_statistics/average_hourly_prices.m
- Figure 2: run descriptive_statistics/price_volatility.m
- Figures 3 and 4: run descriptive_statistics/hourly_res_monthly.m
- Figure 5: run descriptive_statistics/price_volatility_autocorrelation.m

- Figure 6: run Test 9 in models/daily.R

3 Tables

The generation of Tables 2-18 require the R core package (version 3 or greater) and libraries "lmtest", "portes", and "tseries". Please see the comments within the scripts for further details on generating the Tables.

- Table 1: This table does not contain data or simulation results
- Table 2: Run Tests 1 and 2 in models/daily.R
- Table 3: Run Tests 3 and 4 in models/daily.R
- Table 4: Run Tests 5-8 in models/daily.R
- Table 5: Run Test 1 in models/intraday.R
- Table 6: Run Test 2 in models/intraday.R
- Table 7: Run Tests 3-5 in models/intraday.R
- Table 8: Run Tests 1-3 in models/weekly.R
- Table 9: Run Tests 4 and 5 in models/weekly.R
- Table 10: Run Tests 6-9 in models/weekly.R
- Tables 11 and 12: Run the tests in descriptive_statistics/adf_daily.R, descriptive_statistics/adf_intraday.R, and descriptive_statistics/adf_weekly.R
- Table 13: Run Tests 10-12 in models/daily.R
- Table 14: Run Tests 6-8 in models/intraday.R
- Table 15: Run Tests 10-12 in models/weekly.R

- Table 16: Run Tests 13-15 in models/daily.R
- Table 17: Run Tests 9-11 in models/intraday.R
- Table 18: Run Tests 13-16 in models/intraday.R