Background

The market above should be added to the WorkFlow/MQD in the time range 1Jan 2017-1July2017.

- Note upfront. If you see any market settings in market config, take them with caution and assume these are false. We changed our complete approach, and hence every aspect of setting up a market should be checked/verified.
- *All documents need to be collected in this Jira and all alterations should be done using this Jira.*

Expectations

1/4 page summary about the main exchange, its markets and what is traded, whether there are different market segments etc.

In cmcrc-marketconfig-data, we collect all information about the markets. The relevant settings were discussed in session 2/3, the following points 1)-12) might not be complete, but give a guidance.

1. Types & Regex:

a. Download the official instrument list from the homepage of the exchange of all traded equities and etf. The date of effect of this list decides about the test period you will need to run on our WorkFlow system This might not be within the above mentioned time period, but more recent. At the same time please look for any documentation about volume, number of trades or similar on security (and market) level. It is recommended to

1. have the instrument list in both, ISIN and Ric format, and
2. note the date of effect

Load the list in TRTH to get an idea what types we need to download to cover all securities needed, usually 112/113 but it could be 97/96.

Adapt types in streams file in PyCharm. Even if currently there are no funds, please always add type 112 as there might have been funds in earlier times.

Request these types in TRTH for the period you have official data for to compare. This can be just a day or a week/ month dependent how the official source reports data. Build a Ric-Isin list from the TRTH data.

Please compare the 2 lists, the TRTH list and the list from the exchange, in both directions via vlookup in excel. The aim is to replicate the list from the exchange with the TRTH data. Often we need to exclude securities. Identify patterns of the rics in the official list and rules to separate them from not necessary, but reported rics in TRTH -> Regex. (See also Session2/5). We prefer regex over fix exclusions, since these are more flexible.

The instrument list is crucial. Once you think you have found the relevant regex/settings, please verify with your mentor.

b. Run the test period till daily stats in the WorkFlow. Compare the sync data (again) with the official list: Should we filter out some? Note, we aim to cover instruments of equity and funds as named on the instrument lists.

Often TRTH presents other rics within 112/113 which we are not interested in as warrants or fixed income bonds. Do vlookup in both directions, the MQD file and the official list.

If the final list is not matching or mismatches cannot be explained (no trading or else) then we need to write additional filter to filter those out in the convert step as that saves space and processing time. We call them regex filter, see GER or LSE yaml for that. Adapt the filter till the lists match. Adapt the feeds yaml file in PyCharm further (See also session 5)

2. Qualifier

Trades are classified through qualifiers indicated the kind of trade. We need to read those to process data in the correct way.

Link to the qualifier list was given in session 4.

Try to get an understanding what each qualifier means, you can add comments in the yaml file so a third person can easily follow

3. Trading hours

Find trading hours, add them to yaml files.

open: opening time

close: closing time, see LSE as example.

Regarding the closing time, TRTH is sometimes displaying trades delayed. The market might close officially at 18:30 but the last trade in TRTH might be displayed at 18:30:27. We need to adapt the closing time to the actual TRTH closing time, otherwise we would miss the last trades. Please request the closing session of a liquid security in TRTH and try to find the last onmarket trade and decide whether the closing time needs to be adapted.

4. Check the raw data

Request one day trading and quotes of a liquid security and have a look whether there are any strange things, as trades without volume or price, qualifiers we do not have etc.? If so, ask a senior person to have a look (see also session 5)

5 trading and listing market. yaml

Please have a look in these files in Pycharm. Is the market there? If you compare it to main markets as LSE or US markets do you have the feeling something is missing?

6. tracks.yaml

Please have a look in this file which defines which convert jobs will be available.The market should be specified there five times.

7. Public Holidays

please adapt the public holidays file in pycharm: collect public holidays (bank holidays) of at least the past 3 years till 1/1/18 and add them in the public holiday file in pycharm in the style:

20171225 Christmas Day.

Half trading days need to be handled in the trading hours section in the streams file, please see lse.

Please document everything and save all files in this ticket. Ask any member of the business team if you need help.

Changes in Pycharm need to be commited and pushed in a new branch each time, please do that in this ticket.

8. Initial QA - comparison with official stats - See session 5

If you are finished, you will need to download test data on the WorkFlow, let the WorkFlow run incl. daily stats. When finished you can verify the results on MQD-QA, by downloading the daily stats data and qa it with the official data of the exchange. The time horizon you will need to qa depends on the data availability, see point 1. QA needs to be done on a security base and market level.

You have 1.5 weeks to adapt the yaml file max. Please let your mentor know when you think you are finished.

Once you have you are sure that your market settings are correct and the out put data matches the official data as far as you can tell

9. Download the data

which is needed to run the following metrics from 1Jan2017-1July2017: Daily stats Quoted Spread Effective Spread Variance ratio Daily adjusted return

10. Create relevant dependencies for your market

11. Run the jobs, eventually fix errors

Once the sync jobs are completed and successful the data is on the MQD (QA)

12. QA the metrics on a market level

You will need to QA the results when the WorkFlow is completed. Address irregularities as spikes, drops and structure breaks. Add warnings where needed. You might need to adapt the market config file. (Session 5/6)

In addition to applying your knowledge about the requirements to set up a market correctly, please apply what you have learned within the Uptick course and session 7 here:

13. Create a new metric on Jupyter

Create a rolling 5-days-adjusted-return metric and plot