

An Overview of the PMwR Package

Enrico Schumann
es@enricoschumann.net

The aim of `PMwR` is to provide a small set of reliable, efficient and convenient tools that help in processing and analysing trade and portfolio data. The package does not provide a complete application to be used ‘as is’, but tools for creating such an application.

The package grew out of various pieces of software that I have written since 2008.¹ The package is under active development and changes frequently, simply because the code has been written over many years and is in need of being groomed for general use.²

Specifically, interfaces to functions may not be stable yet (e.g., argument names are currently being made consistent across functions); in some cases, generic functions may be introduced. The **recommended practice** is therefore to **explicitly name arguments in function calls** and not pass arguments by position. Any changes in argument names will be documented in the ChangeLog (<http://enricoschumann.net/R/packages/PMwR/ChangeLog>) and so can be easily followed.

The latest version of the package is available from <http://enricoschumann.net/R/packages/PMwR/>. To install the package from within R, type

```
> install.packages('PMwR', type = 'source',  
                  repos = c('http://enricoschumann.net/R',  
                          getOption('repos')))
```

within a session. The package depends on several other packages, which can be obtained from the same repository.

There is currently no automatic build for Windows. If you wish to use the package on Windows and have problems building it, then please contact me and I will provide you with a Windows version.

What the package provides

The package provides functions that can serve as building blocks for many activities in portfolio management. Three examples follow; all details are in the manual:

<http://enricoschumann.net/R/packages/PMwR/manual/PMwR.html>.

I am grateful for comments, suggestions and corrections. Please send bug reports directly to the package maintainer, for instance by using `bug.report`.

```
> utils::bug.report("[PMwR] Unexpected behaviour in function <XXX>",  
                   maintainer("PMwR"), package = "PMwR")
```

Testing strategies

See `?btest`.

Keeping track of transactions

The package provides functions that work with journals (sometimes called blotters). See `?journal` and `?position`.

¹ In the unlikely case that you come across a really-old version of the package: it was called `PM` before 2012.

² Even if `PMwR` is under development: the package is to provide reliable code. Hence, for all computations, unit tests are included. As of package version 0.7-0, there are 324 tests included. These tests are stored in subdirectory `unitTests`.

Computing P&L and returns

See `?returns`, `?rc`, `?pl` and `?unit_prices`.