

Author's Note

This master's thesis has been written in R Markdown (ALLAIRE ET AL., 2018) to make it transparent and reproducible for the reader. All resources are available on my GitHub account¹ <https://github.com/pkinif/Thesis>. The latter is organized following the methodology of GANDRUD (2013). Each section of this thesis corresponds to an R Markdown file in the `Child` folder. The `Child/ThesisSkeleton.Rmd` file is the parent document which merges all the `child` directories into a consolidated pdf document, namely the one you are reading. The `Child/Analysis` sub-folder contains a list of makefiles whose outputs are saved into `Child/Analysis/DataBase`.

The platform I have used is Rstudio which is an open source software for R (R CORE TEAM, 2018). Here is the information of my session:

```
sessionInfo()

## R version 3.4.4 (2018-03-15)
## Platform: x86_64-w64-mingw32/x64 (64-bit)
## Running under: Windows 10 x64 (build 17134)
##
## Matrix products: default
##
## locale:
## [1] LC_COLLATE=French_Belgium.1252 LC_CTYPE=French_Belgium.1252
## [3] LC_MONETARY=French_Belgium.1252 LC_NUMERIC=C
## [5] LC_TIME=French_Belgium.1252
##
## attached base packages:
## [1] stats      graphics  grDevices  utils      datasets  methods   base
##
## other attached packages:
## [1] kableExtra_0.9.0          knitr_1.20
## [3] plyr_1.8.4                RCurl_1.95-4.10
## [5] bitops_1.0-6              rlist_0.4.6.1
## [7] rvest_0.3.2               xml2_1.2.0
```

¹For now, the repository containing my thesis project is private. If you wish to get an access to it, please send me an email to pierrick-kinif@hotmail.be.

```

## [9] xtable_1.8-2                ggpubr_0.1.6
## [11] magrittr_1.5                 car_2.1-6
## [13] tidyquant_0.5.4             forcats_0.3.0
## [15] stringr_1.3.0               readr_1.1.1
## [17] tidyr_0.8.0                 tidyverse_1.2.1
## [19] quantmod_0.4-12             TTR_0.23-3
## [21] lubridate_1.7.2             tibble_1.4.2
## [23] PerformanceAnalytics_1.5.2 xts_0.10-2
## [25] zoo_1.8-1                   purrr_0.2.4
## [27] Hmisc_4.1-1                 ggplot2_2.2.1
## [29] survival_2.41-3             lattice_0.20-35
## [31] stargazer_5.2.1             data.table_1.10.4-3
## [33] dplyr_0.7.4                 plm_1.6-6
## [35] Formula_1.2-2
##
## loaded via a namespace (and not attached):
## [1] nlme_3.1-131.1             pbkrtest_0.4-7             RColorBrewer_1.1-2
## [4] httr_1.3.1                 rprojroot_1.3-2           tools_3.4.4
## [7] backports_1.1.2            R6_2.2.2                   rpart_4.1-13
## [10] lazyeval_0.2.1             mgcv_1.8-23                colorspace_1.3-2
## [13] nnet_7.3-12                gridExtra_2.3              mnormt_1.5-5
## [16] curl_3.1                   compiler_3.4.4             quantreg_5.35
## [19] cli_1.0.0                  formatR_1.5                htmlTable_1.11.2
## [22] SparseM_1.77               sandwich_2.4-0             scales_0.5.0
## [25] checkmate_1.8.5            lmtest_0.9-35              psych_1.7.8
## [28] quadprog_1.5-5             digest_0.6.15              foreign_0.8-69
## [31] minqa_1.2.4                rmarkdown_1.9              base64enc_0.1-3
## [34] pkgconfig_2.0.1            htmltools_0.3.6            lme4_1.1-15
## [37] htmlwidgets_1.0            rlang_0.2.0                readxl_1.0.0
## [40] rstudioapi_0.7             bindr_0.1.1                jsonlite_1.5
## [43] acepack_1.4.1              Matrix_1.2-12              Rcpp_0.12.16
## [46] Quandl_2.8.0               munsell_0.4.3              stringi_1.1.7
## [49] yaml_2.1.18                MASS_7.3-49                grid_3.4.4
## [52] parallel_3.4.4             bdsmatrix_1.3-3            crayon_1.3.4

```

## [55]	haven_1.1.1	splines_3.4.4	hms_0.4.2
## [58]	pillar_1.2.1	reshape2_1.4.3	glue_1.2.0
## [61]	evaluate_0.10.1	latticeExtra_0.6-28	modelr_0.1.1
## [64]	nloptr_1.0.4	MatrixModels_0.4-1	miscTools_0.6-22
## [67]	cellranger_1.1.0	gtable_0.2.0	assertthat_0.2.0
## [70]	broom_0.4.3	viridisLite_0.3.0	bindrcpp_0.2
## [73]	cluster_2.0.6	maxLik_1.3-4	

Author's Declaration

I, Pierrick KINIF, certify that this master's thesis does not incorporate without acknowledgment, any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief, it does not contain any material previously published or written by another person where due reference is not made in the text.

June 7, 2018

SIGNED

DATED

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