Datenexport

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Die Exportformate von R

- In R werden offene Dateiformate bevorzugt
- Genauso wie `read.X()` Funktionen stehen viele `write.X()` Funktionen zur Verfügung
- Das eigene Format von R sind sog. Workspaces (`.RData`)

Beispieldatensatz erzeugen

```
A <- c(1,2,3,4)
B <- c("A","B","C","D")

mydata <- data.frame(A,B)
```

Überblick Daten Import/Export

- wenn mit R weitergearbeitet wird, eignet sich das `.RData` Format am Besten:

```r
save(mydata, file="mydata.RData")
```

Daten in `.csv` Format abspeichern

```
write.csv(mydata,file="mydata.csv")
```

- Wenn mit Deutschem Excel weitergearbeitet werden soll, eignet sich write.csv2 besser

```
write.csv2(mydata,file="mydata.csv")
```

- Sonst sieht das Ergebnis so aus:

	A
1	,"A","B"
2	1,1,"A"
3	2,2,"B"
4	3,3,"C"
5	4,4,"D"

Das Paket `xlsx`

Figure 2:

```r
library(xlsx)
write.xlsx(mydata,file="mydata.xlsx")
```

Das Paket `foreign`

Reading/Writing Stata (.dta) files with Foreign

December 4, 2012

By is.R()

Figure 3:

- Funktionen im Paket `foreign`

R topics documented:

Daten in stata Format abspeichern

```r
library(foreign)
write.dta(mydata,file="data/mydata.dta")
```

Das Paket `rio`

```r
install.packages("rio")
```

Import, Export, and Convert Data Files

The idea behind **rio** is to simplify the process of importing data into R and exporting data from R. This process is, probably unnecessarily, extremely complex for beginning R users. Indeed, R supplies an entire manual describing the process of data import/export. And, despite all of that text, most of the packages described are (to varying degrees) out-of-date. Faster, simpler, packages with fewer dependencies have been created for many of the file types described in that document. **rio** aims to unify data I/O (importing and exporting) into two simple functions: `import()` and `export()` so that beginners (and experienced R users) never have to think twice (or even once) about the best way to read and write R data.

Figure 5:

Daten als .sav abspeichern (SPSS)

```r
library("rio")
# create file to convert

export(mtcars, "data/mtcars.sav")
```

Dateiformate konvertieren

```
export(mtcars, "data/mtcars.dta")

# convert Stata to SPSS
convert("data/mtcars.dta", "data/mtcars.sav")
```

Links Export

- Quick R für das Exportieren von Daten:
- Hilfe zum Export auf dem cran Server
- Daten aus R heraus bekommen