# Discrete Choice Models

## Loading the data sets

```
library(mlogit)
```

```
## Loading required package: dfidx
```

```
##
## Attaching package: 'dfidx'
```

```
## The following object is masked from 'package:stats':
##
##     filter
```

```
library(Ecdat)
```

```
## Loading required package: Ecfun
```

```
##
## Attaching package: 'Ecfun'
```

```
## The following object is masked from 'package:base':
##
##     sign
```

```
##
## Attaching package: 'Ecdat'
```

```
## The following object is masked from 'package:datasets':
##
##     Orange
```

```
data("Cracker",package="mlogit")
data("Yogurt",package="Ecdat")
```

## Viewing the data

```
 first 10 observations out of 9648
```

id choice alt feat price chid idx 1 1 FALSE dannon 0 8.1 1 1:nnon 2 1 FALSE hiland 0 6.1 1 1:land 3 1 TRUE weight 0 7.9 1 1:ight 4 1 FALSE yoplait 0 10.8 1 1:lait 5 1 TRUE dannon 0 9.8 2 2:nnon 6 1 FALSE hiland 0 6.4 2 2:land 7 1 FALSE weight 0 7.5 2 2:ight 8 1 FALSE yoplait 0 10.8 2 2:lait 9 1 TRUE dannon 0 9.8 3 3:nnon 10 1 FALSE hiland 0 6.1 3 3:land

~~~ indexes ~~~~ chid alt 1 1 dannon 2 1 hiland 3 1 weight 4 1 yoplait 5 2 dannon 6 2 hiland 7 2 weight 8 2 yoplait 9 3 dannon 10 3 hiland indexes: 1, 2 [1] “id” “choice” “alt” “feat” “price” “chid” “idx”
~~~

Table 1: Market Shares: Yogurt data

| Brand | mean | sd |
|---|---|---|
| dannon | 0.4022 | 0.4904 |
| hiland | 0.0294 | 0.1691 |
| weight | 0.2293 | 0.4205 |
| yoplait | 0.3391 | 0.4735 |

Table 2: Prices: Yogurt data

| Brand | mean | sd |
|---|---|---|
| dannon | 8.1635 | 1.0629 |
| hiland | 5.3629 | 0.8054 |
| weight | 7.9491 | 0.7735 |
| yoplait | 10.6821 | 1.9063 |

Table 3: Feature: Yogurt data

| Brand | mean | sd |
|---|---|---|
| dannon | 0.0377 | 0.1906 |
| hiland | 0.0369 | 0.1886 |
| weight | 0.0377 | 0.1906 |
| yoplait | 0.0560 | 0.2299 |