betaDelta: Internal Tests

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Tests

```
#> test-betaDelta-beta-delta-adf
#> Test passed
#> Call:
#> BetaDelta(object = object, type = "adf")
#>
#> Standardized regression slopes with ADF standard errors:
#> Call:
#> BetaDelta(object = object, type = "adf")
#>
#> Standardized regression slopes with ADF standard errors:
#> Test passed

#> test-betaDelta-beta-delta-methods

#> Call:
#> BetaDelta(object = object, type = "mvn")
#>
#> Standardized regression slopes with MVN standard errors:
#>            est     se      t df     p   2.5%  97.5%
#> NARTIC  0.4951 0.0759 6.5272 42 0.000 0.3421 0.6482
#> PCTGRT  0.3915 0.0770 5.0824 42 0.000 0.2360 0.5469
#> PCTSUPP 0.2632 0.0747 3.5224 42 0.001 0.1124 0.4141
#> Call:
#> BetaDelta(object = object, type = "mvn")
#>
#> Standardized regression slopes with MVN standard errors:
#> Call:
#> BetaDelta(object = object, type = "adf")
#>
#> Standardized regression slopes with ADF standard errors:
#>            est     se      t df      p   2.5%  97.5%
#> NARTIC  0.4951 0.0674 7.3490 42 0.0000 0.3592 0.6311
#> PCTGRT  0.3915 0.0710 5.5164 42 0.0000 0.2483 0.5347
#> PCTSUPP 0.2632 0.0769 3.4231 42 0.0014 0.1081 0.4184
#> Call:
```

```
#> BetaDelta(object = object, type = "adf")
#>
#> Standardized regression slopes with ADF standard errors:
#> Call:
#> BetaDelta(object = object, type = "mvn")
#>
#> Standardized regression slopes with MVN standard errors:
#>           est     se       t df p   2.5%  97.5%
#> NARTIC 0.7622 0.0618 12.3341 44 0 0.6376 0.8867
#> Call:
#> BetaDelta(object = object, type = "mvn")
#>
#> Standardized regression slopes with MVN standard errors:
#> Call:
#> BetaDelta(object = object, type = "adf")
#>
#> Standardized regression slopes with ADF standard errors:
#>           est     se      t df p   2.5%  97.5%
#> NARTIC 0.7622 0.0604 12.625 44 0 0.6405 0.8838
#> Call:
#> BetaDelta(object = object, type = "adf")
#>
#> Standardized regression slopes with ADF standard errors:
```

#> test-betaDelta-beta-delta-mvn

```
#> Test passed
#> Call:
#> BetaDelta(object = object, type = "mvn")
#>
#> Standardized regression slopes with MVN standard errors:
#> Call:
#> BetaDelta(object = object, type = "mvn")
#>
#> Standardized regression slopes with MVN standard errors:
#> Test passed
```

#> test-betaDelta-diff-beta-delta-methods

```
#> Call:
#> DiffBetaDelta(object = BetaDelta(object, type = "mvn"))
#>
#> Difference between standardized regression coefficients with MVN standard errors:
#>                   est     se      z      p    2.5%  97.5%
#> NARTIC-PCTGRT  0.1037 0.1357 0.7640 0.4449 -0.1623 0.3696
#> NARTIC-PCTSUPP 0.2319 0.1252 1.8524 0.0640 -0.0135 0.4773
#> PCTGRT-PCTSUPP 0.1282 0.1227 1.0451 0.2960 -0.1123 0.3688
```

```
#> Call:
#> DiffBetaDelta(object = BetaDelta(object, type = "mvn"))
#>
#> Difference between standardized regression coefficients with MVN standard errors:
#> Call:
#> DiffBetaDelta(object = BetaDelta(object, type = "adf"))
#>
#> Difference between standardized regression coefficients with ADF standard errors:
#>                   est     se      z      p    2.5%  97.5%
#> NARTIC-PCTGRT  0.1037 0.1212 0.8555 0.3923 -0.1338 0.3411
#> NARTIC-PCTSUPP 0.2319 0.1181 1.9642 0.0495  0.0005 0.4633
#> PCTGRT-PCTSUPP 0.1282 0.1215 1.0555 0.2912 -0.1099 0.3664
#> Call:
#> DiffBetaDelta(object = BetaDelta(object, type = "adf"))
#>
#> Difference between standardized regression coefficients with ADF standard errors:

#> test-betaDelta-diff-beta-delta

#> Test passed
#> Test passed
#> Test passed
#> Test passed

#> test-zzz-coverage

#> Test passed
#> Test passed
#> [[1]]
#> [[1]][[1]]
#> [[1]][[1]]$value
#> [[1]][[1]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[1]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[2]]
#> [[1]][[2]]$value
#> [[1]][[2]]$value[[1]]
#>      2.5%     97.5%
#> 0.6404985 0.8838331
#>
#>
#> [[1]][[2]]$visible
```

```
#> [1] TRUE
#>
#>
#> [[1]][[3]]
#> [[1]][[3]]$value
#> [[1]][[3]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[3]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[4]]
#> [[1]][[4]]$value
#> [[1]][[4]]$value[[1]]
#>                           2.5%     97.5%
#> NARTIC-PCTGRT  -0.1338262589 0.3411391
#> NARTIC-PCTSUPP  0.0004975295 0.4632974
#> PCTGRT-PCTSUPP -0.1099011119 0.3663832
#>
#>
#> [[1]][[4]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[5]]
#> [[1]][[5]]$value
#> [[1]][[5]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[5]]$visible
#> [1] TRUE
#>
#>
#> [[1]][[6]]
#> [[1]][[6]]$value
#> [[1]][[6]]$value[[1]]
#> [1] TRUE
#>
#>
#> [[1]][[6]]$visible
#> [1] TRUE
```

Environment

```
ls()

#> [1] "nas1982"  "root"     "tex_file"
```

Class

```
#> [[1]]
#> [1] "data.frame"
#>
#> [[2]]
#> [1] "root_criterion"
#>
#> [[3]]
#> [1] "character"
```

References

R Core Team. (2023). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. Vienna, Austria. https://www.R-project.org/