Covergence Clubs and Regression Trees

0686 - Spatial Economics

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Data

- Wie und warum eingeschränkt (2000 onwards)
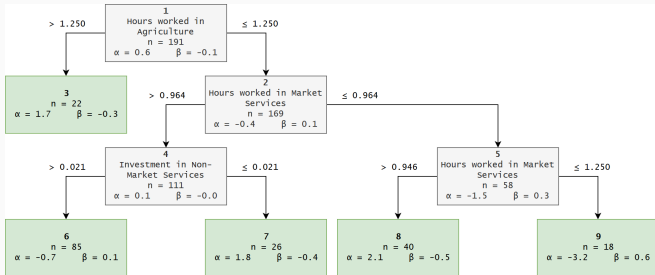- Welche Variablen & Länder
- Hübscher Plot

Oh what a merry regression tree

- Split observations into clubs:

```
tree <- function(data, split_vars, end_criteria) {
  split <- find_best_split(...)

  if (!end_criteria) {
    return(list(tree(split$data1, ...),
                tree(split$data2, ...)))
  } else { # if(end_criteria)
    return(data)
  }
}
```

Regression Tree

- Receive a tree-structure of data:

- Caveat: linear model with spatially filtered data

- Tested with simulated and real data
- Compares well against partykit (Hothorn and Zeileis 2015)

- Clubs
- LM vs. SAR vs. SEM

Hothorn, Torsten, and Achim Zeileis. 2015. "partykit: A Modular Toolkit for Recursive Partytioning in R." *Journal of Machine Learning Research* 16: 3905–9. http://jmlr.org/papers/v16/hothorn15a.html.