Fancy Title like 'Balancing volatility: The interplay between spatiotemporal smoothing and electrical storage for variable renewables

Humboldt-Universität zu Berlin
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Management Science / Heinz-Nixdorf Chair

Energy Informatics Computer Based Processing of Energy Data
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Seminar Paper by

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List of Tables

List of Figures

Contents

1 Introduction

To cite, just put Sinn (2017) (see bib file for reference key)

2 Literature Review

2.1 Headline

3 Spatiotemporal smoothing of variable renewables

3.1 s

4 Analysis

4.1 Model

Example code

```
[105]   # Labor supply choice tables
[106]   df.female = df.out %>% filter(gender == "FEMALE")
[107]   vars      = names(df.out)[grep("labor", names(df.out))][3:1] # invert
[108]
[109]   labor.supply.f    = lapply(vars, function(x) group.share(df.female, x, 1))
[110]   labor.supply.f.df = do.call(cbind.data.frame, labor.supply.f) %>%
[111]       set_colnames(c("Nonparticipation", "Half time", "Full time"))
```

Example formula

$$P(Y = 1|X = x) = \Phi(x'\beta) \tag{1}$$

4.2 Data

Example image

```
library(png)
img = readPNG("images/ger.png")
plot.new()
rasterImage(img,0,0,1,1)
```
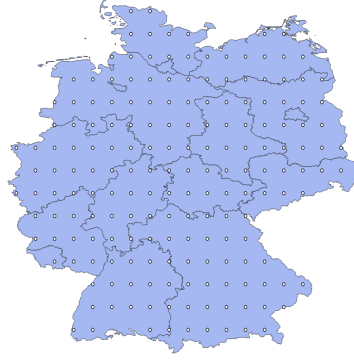
Figure 1: Hello! I am the figure caption.

5 Results

5.1 Storage capacity under optimal spatiotemporal smoothing

5.2 Sensitivities

6 Conclusion

7 References

Sinn, Hans-Werner. 2017. "Buffering Volatility: A Study on the Limits of Germany's Energy Revolution." *European Economic Review* 99. Elsevier: 130–50.

8 Appendix

Declaration of Authorship

We hereby confirm that we have authored this Seminar paper independently and without use of others than the indicated sources. All passages which are literally or in general matter taken out of publications or other sources are marked as such.

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