Modelling ferry passenger numbers and tourist overnights

Carl Marcussen

Centre for Regional and Tourism Research,

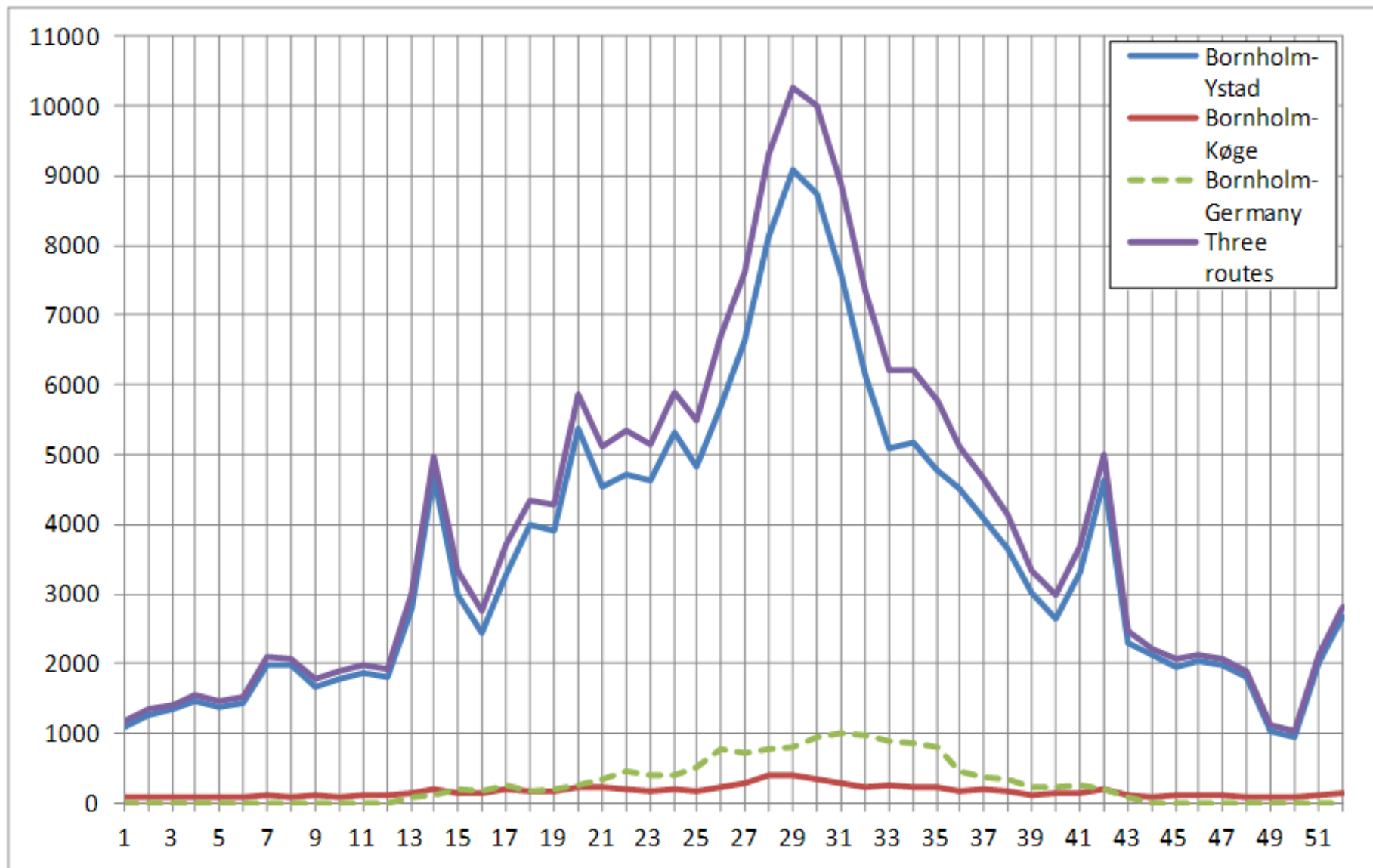Bornholm, Denmark, www.crt.dk

Background

- The island setting. (1.7m; Ystad-Rønne 77%; DK: 52%; G: 36%; ..)

- The paper is a spin-off from a report on ferry services and tourism.

- Monthly data is often the maximum level of detail.

- The idea of exploiting transportation data for tourism insight is generally applicable.
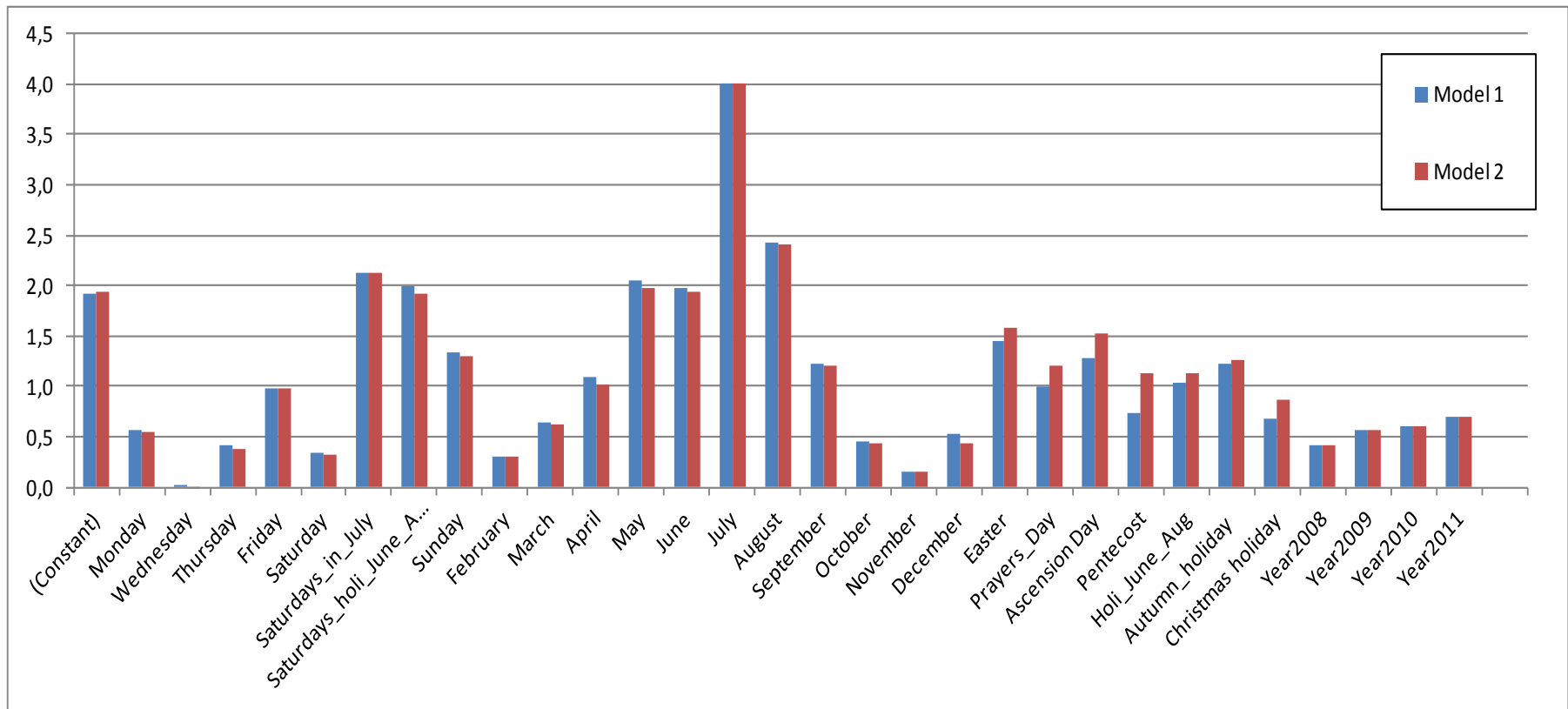
Purposes

To use historical time series of ferry passengers and ferry roundtrips per day to ..

1. make suggestions for future ferry schedules for an island – in this case Bornholm
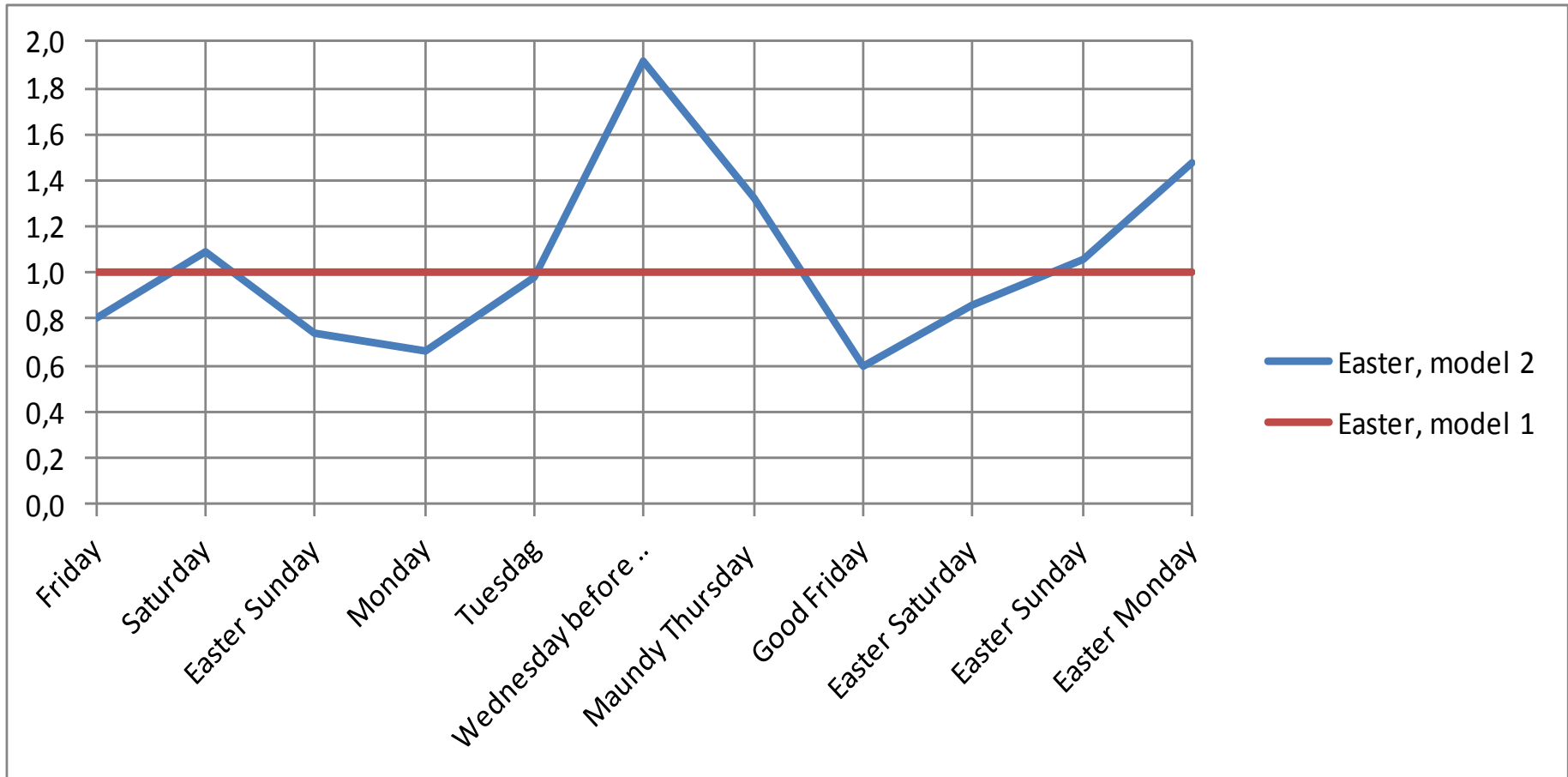2. estimate the unknown daily and weekly number of overnights

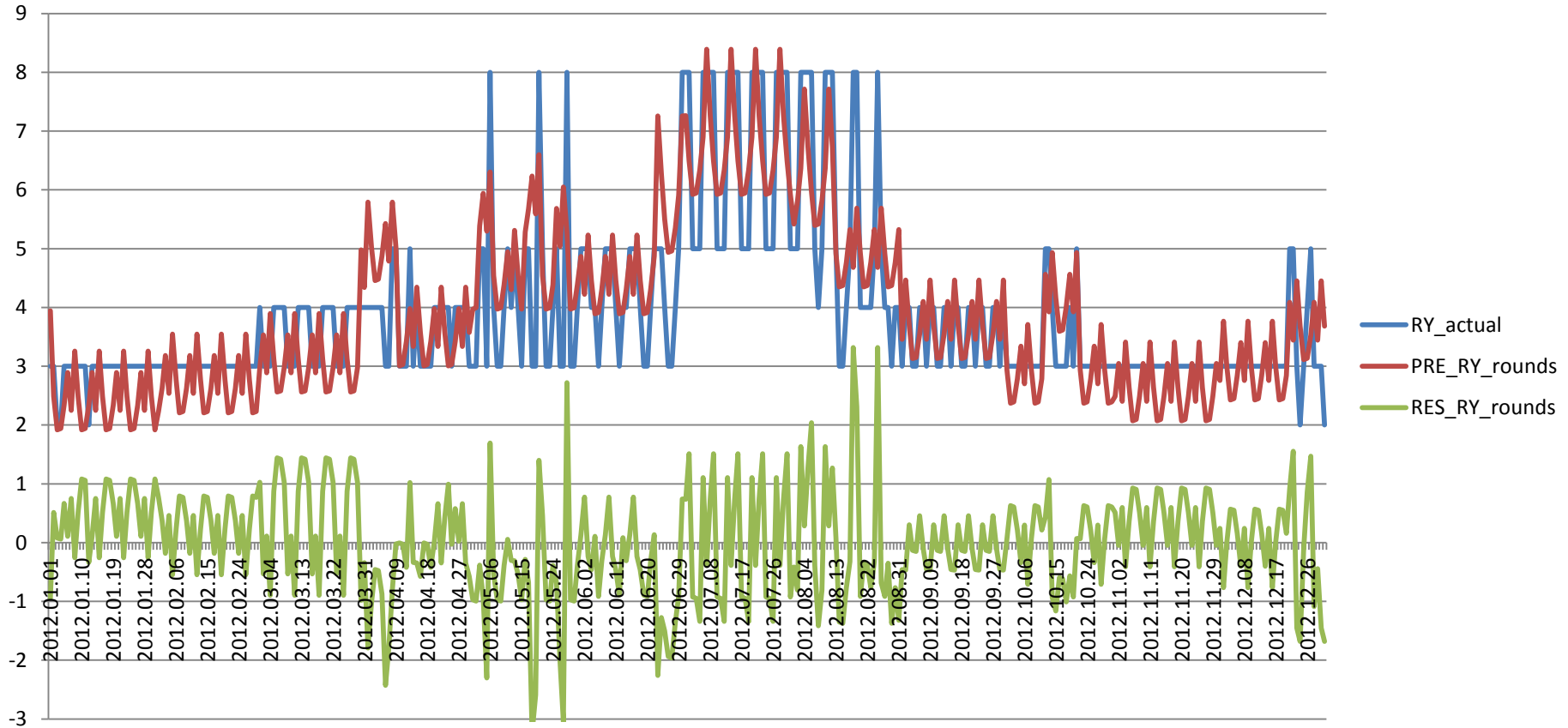# Number of passengers per week per route to/from Bornholm 2012

Coefficients for number of roundtrips per day – for different determinants

Model 1 and model 2 –
The "dummy variable" for Easter

Comparison of actual number of roundtrips per day – and "modelled"

Conclusions - applications and implication

• Air transport is more important than ferry transport for many destinations, but the illustrated technique can be applied to air..

• If data on a daily basis is available, airport or sea-port data, this can be utilized to gain additional insight into tourist streams.

• Tourism business can adapt their capacity according to predicted number of arrivals (by air or sea ..)

• Modifying the holiday 0-1 variable → R^2 up 3 points

Discussion – and Q&A

Discussion:

In what ways can tourism managers benefit from knowledge about tourism flows – arrivals .. ?

Questions?

Thank you.