



How trees attract tourists

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Nearly everyone is a tourist in the forest

Shortbread and
tartan don't woo
tourists, says expert

Online marketing attracts
Spanish tourists

Scenery and
nature most
frequently cited
by visitors from
ALL countries



What drives destination choices?

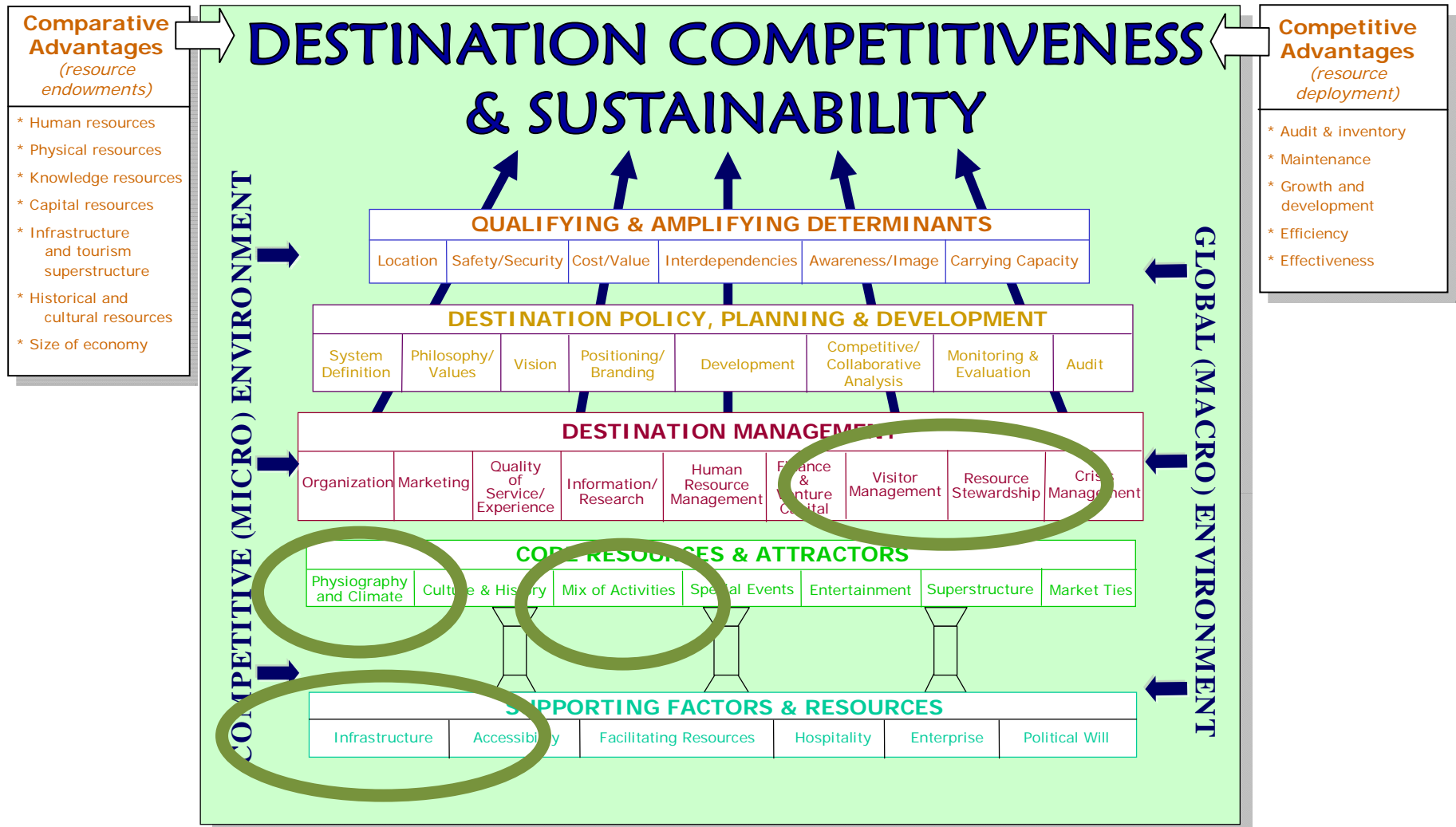
- Less empirical
 - Psychological needs analysis
 - Sequential choice models
 - Sociological theory
 - Expert opinion
- More evidence-based
 - Travel trade modelling
 - Visitor stated preferences on destination characteristics (not usually comparative)
 - Micro-observation and visitor characteristics
 - Revealed preference: where visitors (and investors) *actually go*



This paper

- Macro/meso revealed preference study of tourism in Scotland
- Modelling aspect of a 2007-2009 report commissioned by Forest Research
- Other aspects included
 - literature review of forest tourism studies
 - two dozen case studies of tourism businesses engaged with the forest resource

Conceptual framework



Datasets – dependent variables

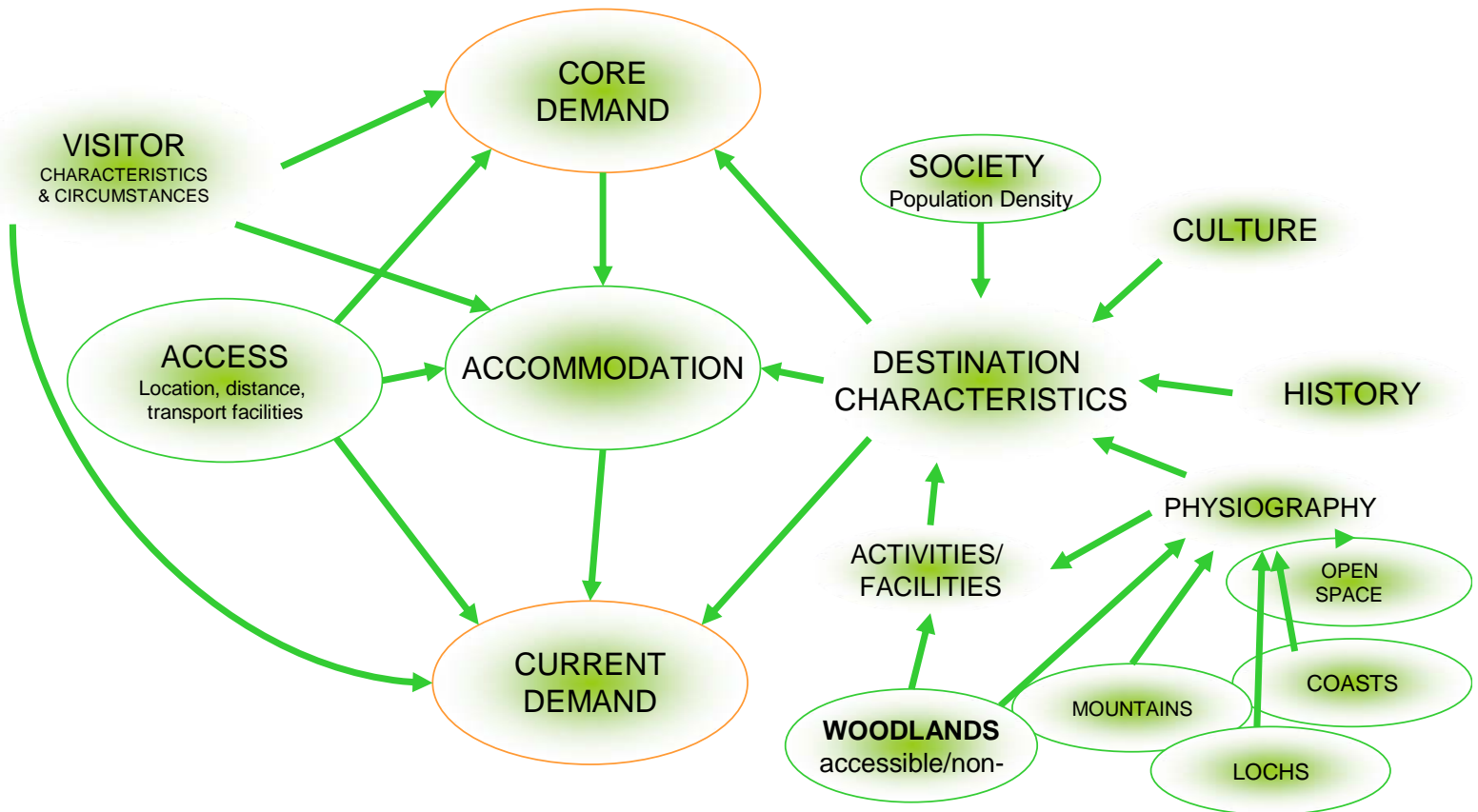
- Length of trips, number of trips, spend
 - International Passenger Survey
 - UK Tourism Survey
 - Scottish Recreation Survey
 - visitScotland accommodation register (number of beds)

unusually

- all broken down by Council Area

NB: visitor data as often presented has been ‘massaged’ to remove information content, so it is not much use for analysis

An operational model of destination choice



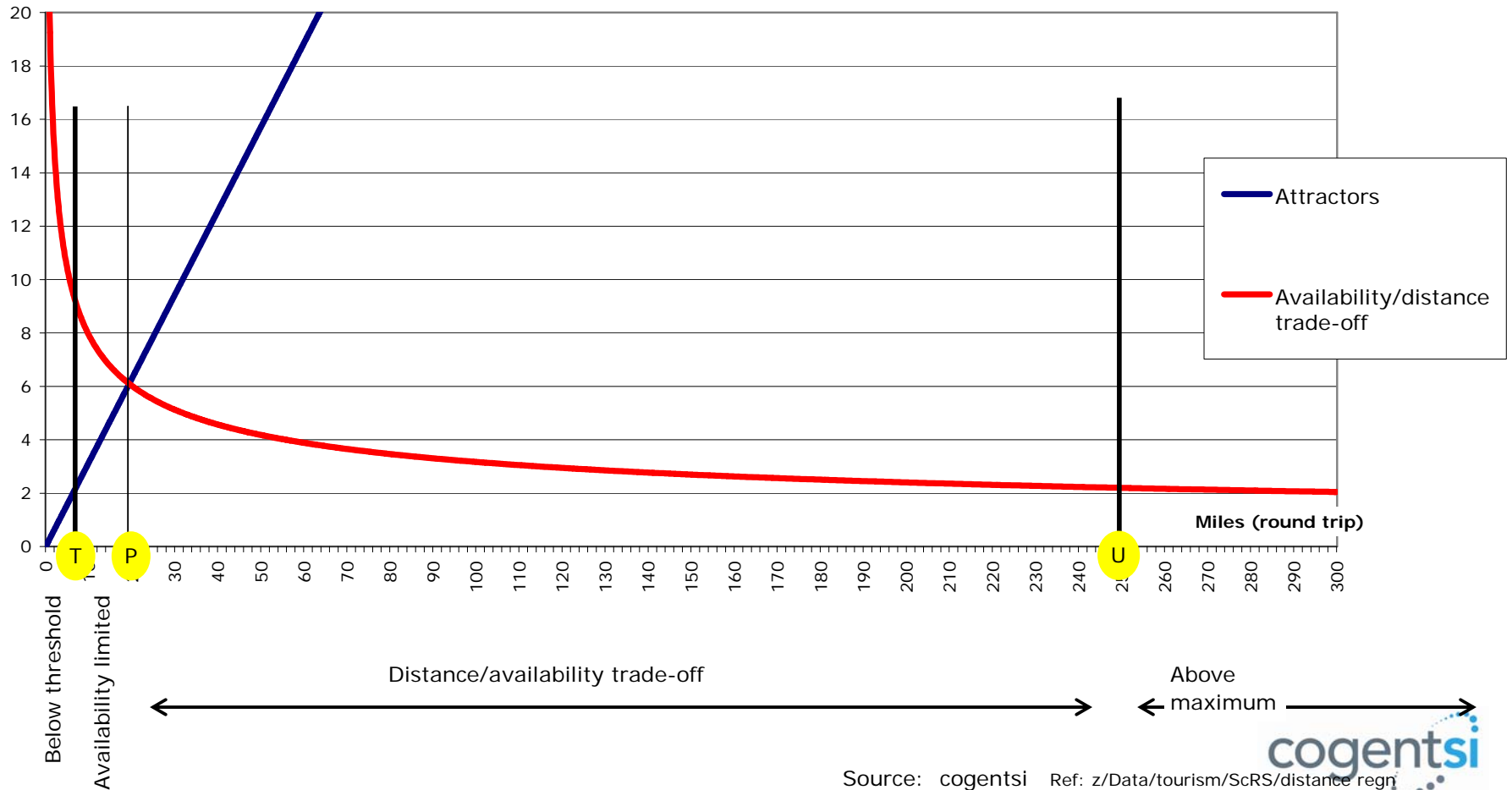
Datasets – independent variables

- Distance from origin/entry
- Urban density
- Rural sparsity
- Munro/m2
- Coastal dummy
- Island Dummy
- Coast length
- Lochs %
- Forest
- Access to forest

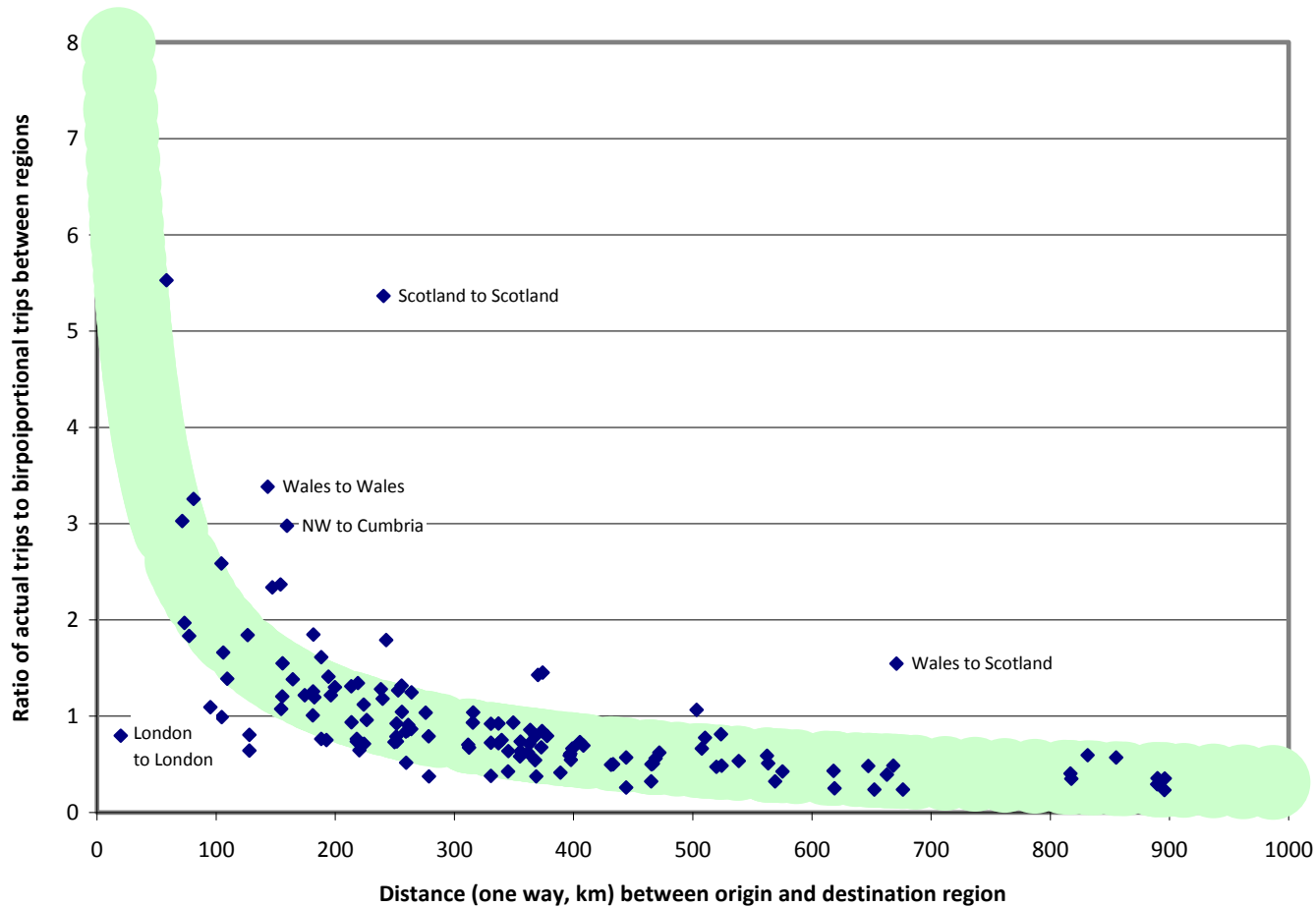


Role of distance

A schematic model



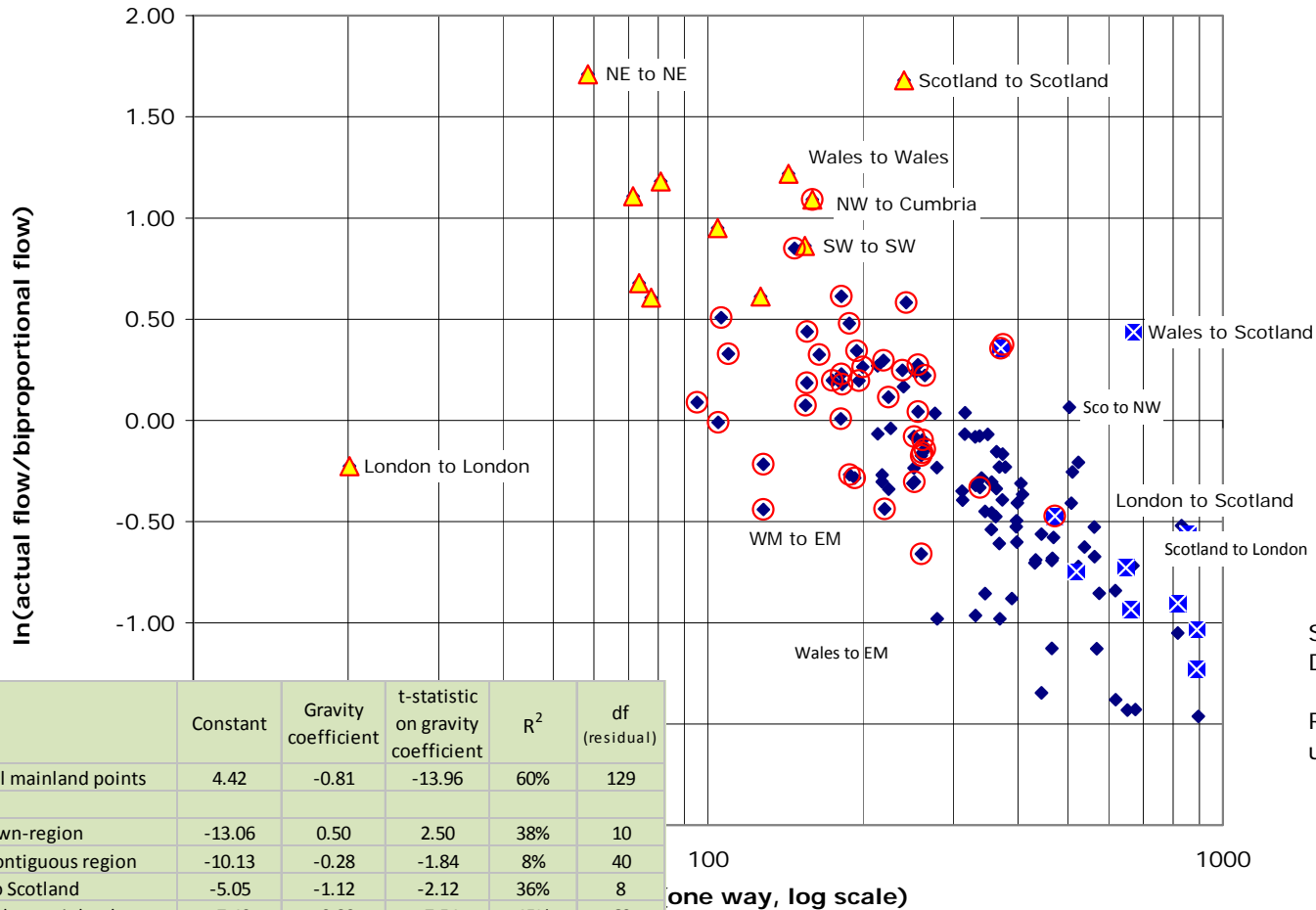
Overall, long distances make tourism less likely



Source: UKTS and DREAM®trade

Ref: [z/imindustries/ttt/tourism/ukgravitymodelupdate/chart 5](#)

Impact of distance on visitor flows



- ◆ ln(actual flow/biproportional flow)
- ▲ Own region ('distance' based on square root of area)
- ⊠ Visits to Scotland
- Contiguous regions

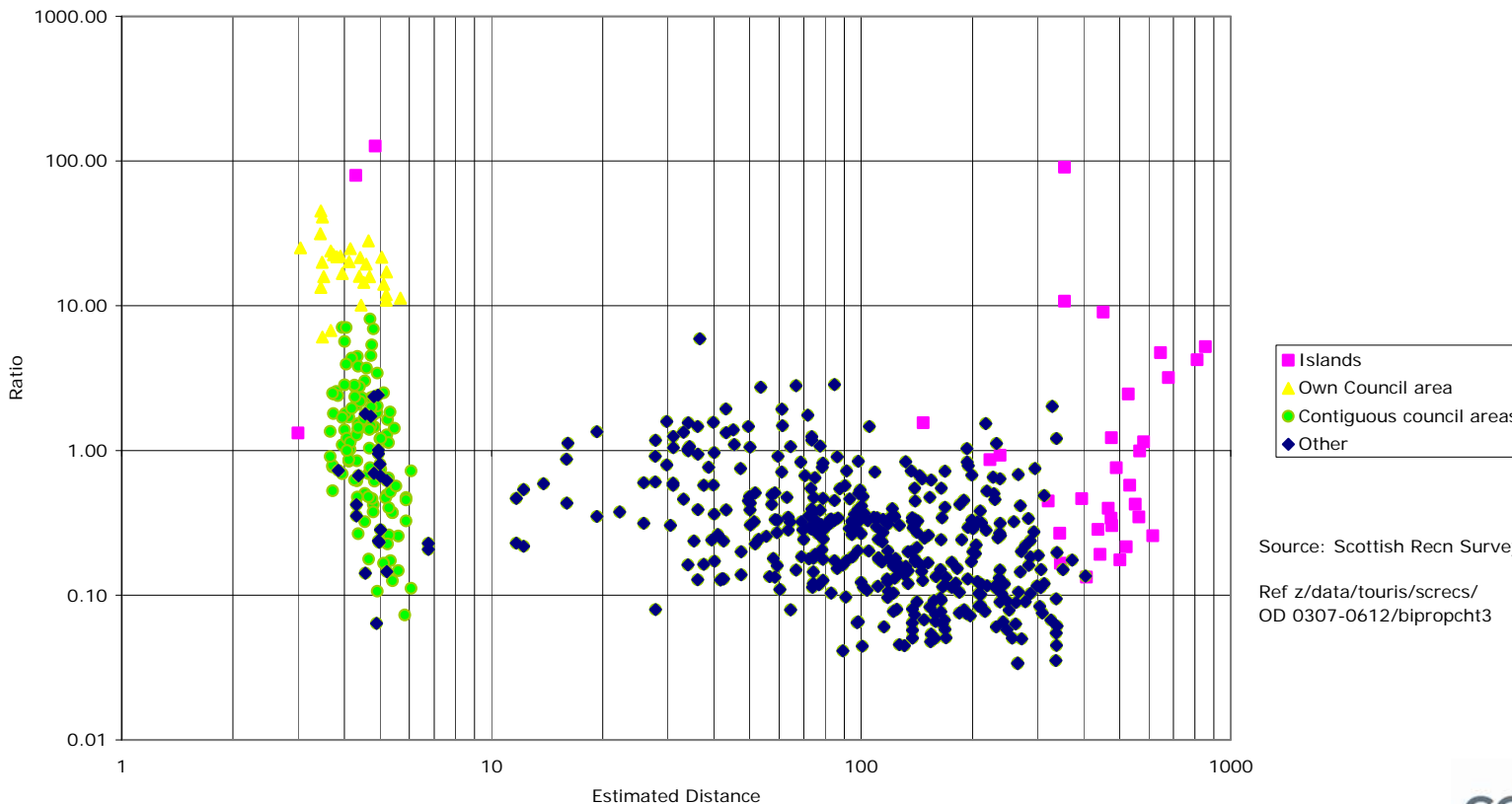
Source: UKTS and DREAM®trade

Ref: z/industries/ttt/tourism/uk gravity model update

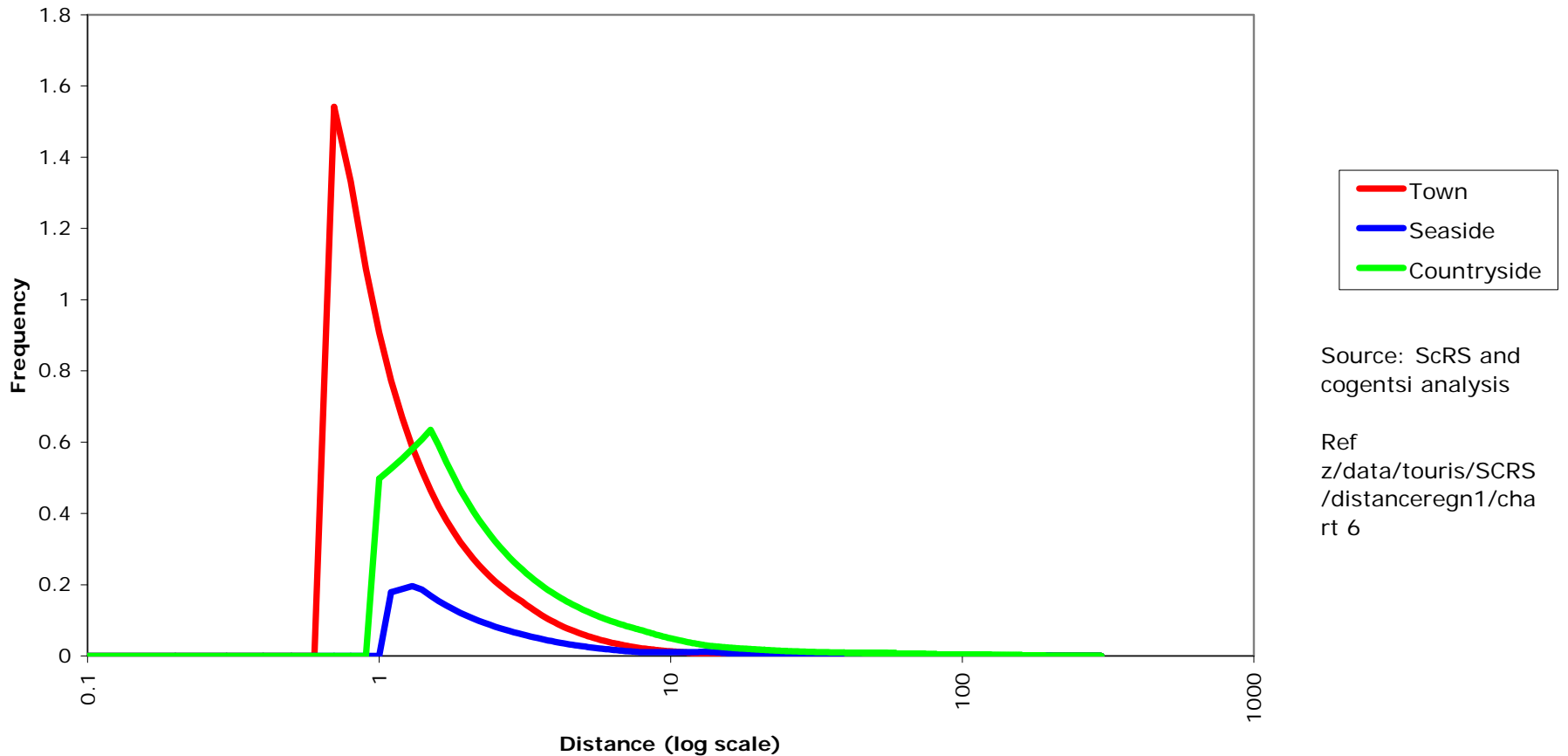
	Constant	Gravity coefficient	t-statistic on gravity coefficient	R ²	df (residual)
All mainland points	4.42	-0.81	-13.96	60%	129
Own-region	-13.06	0.50	2.50	38%	10
Contiguous region	-10.13	-0.28	-1.84	8%	40
To Scotland	-5.05	-1.12	-2.12	36%	8
Other mainland	-7.49	-0.80	-7.54	45%	69
Source: cogentsi estimates	Ref: y/industries/tourism/ukgravitymodelupdate/regnsunmary				

Density of attractions and distance very important for day visits

Ratio of recreation trip flows to biproportional



The distribution of travelling distance in the Scottish Recreation Survey -stylised



Source: ScRS and cogentsi analysis

Ref
z/data/touris/SCRS
/distanceregn1/chart 6

Multiple regression results

- Two stage recursive model for overnight visitors
 - Independent variables determine accommodation
(NB therefore v important for investment)
 - Independent variables plus accommodation determine visitors
 - ‘Reduced form’ (ie without accommodation) also estimated
- ‘Residual (‘non-distance’) model for ScRecSurv
 - Overall explanatory power good
 - Individual variables correct signs, but could be more precise

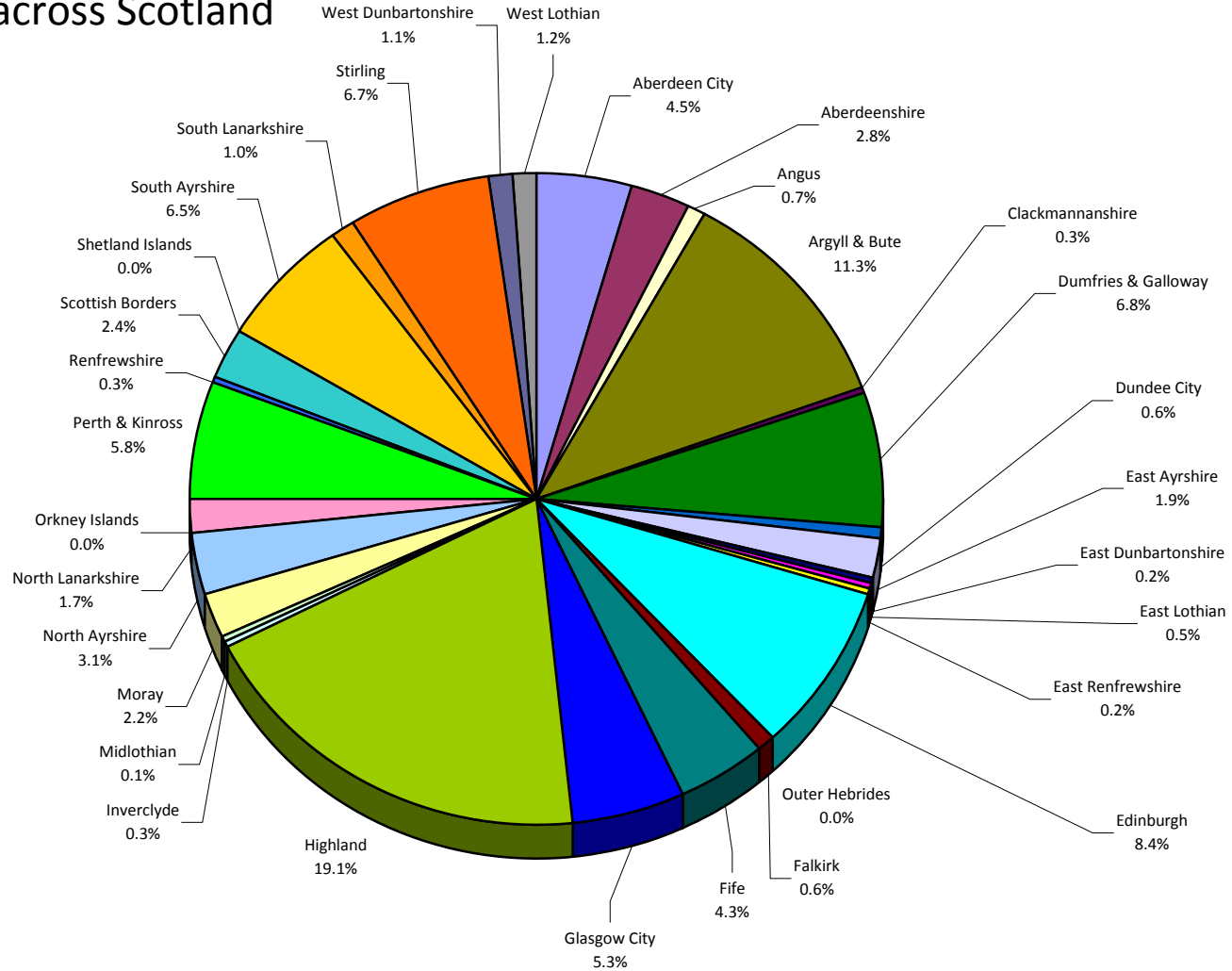


Key Forest results

- Forest is good for tourism
- Accessible forest is very good for tourism
- (Accessible forest is good for recreation:
INaccessible forest is BAD for recreation)



Woodland-attributed tourism revenues: geographical distribution across Scotland

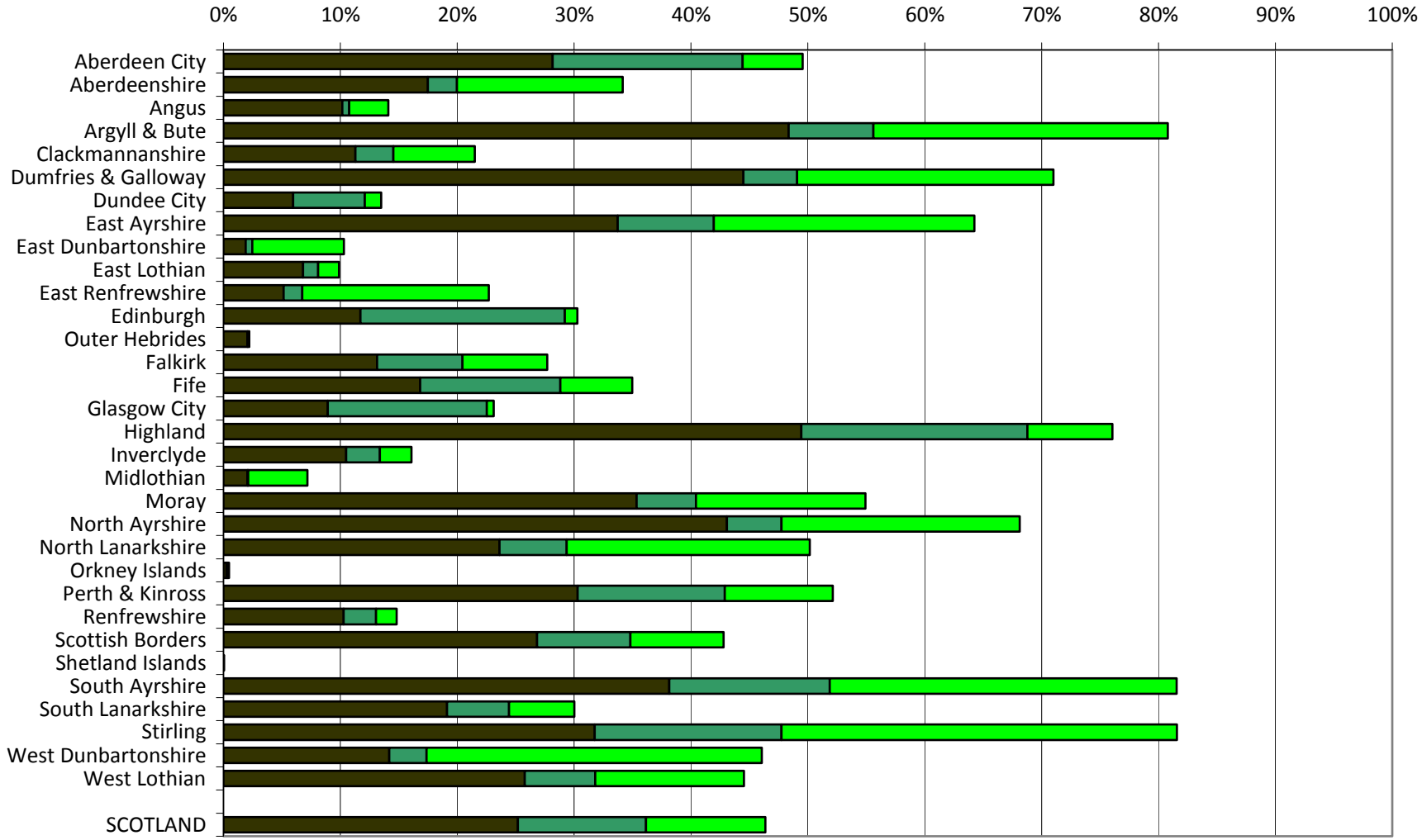


Source: cogentsi

Ref: z/data/tourism/
final effects.xls/ Chart 1



Percentage of total tourism revenues associated with woodland



UK visitors
 Overseas visitors
 Recreation

Source: this report
 Ref: [Z:/data/Tourism](#)
 Final effects/CI



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Thank you

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