

writeup

Sumeng Wang

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Methodology and tests:

For this project, I implemented both monte carlo method and explicit method in order to check the validity of my solution, since I found that my solution is quite different from others'. As a result, I obtained the same solution from both methods. It would be safe to conclude that either I solved the problem correctly, or I have a fundamental misunderstanding of the concept.

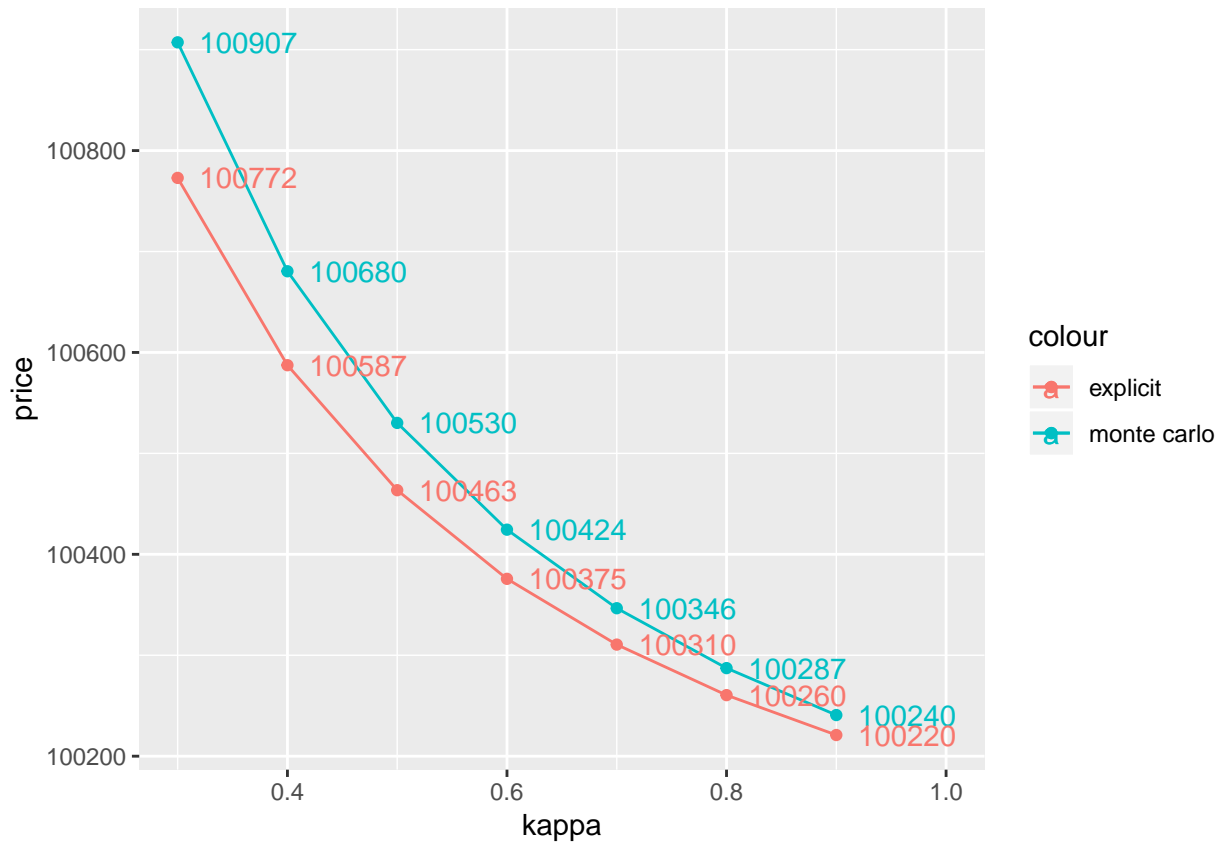
Problem 1

a.

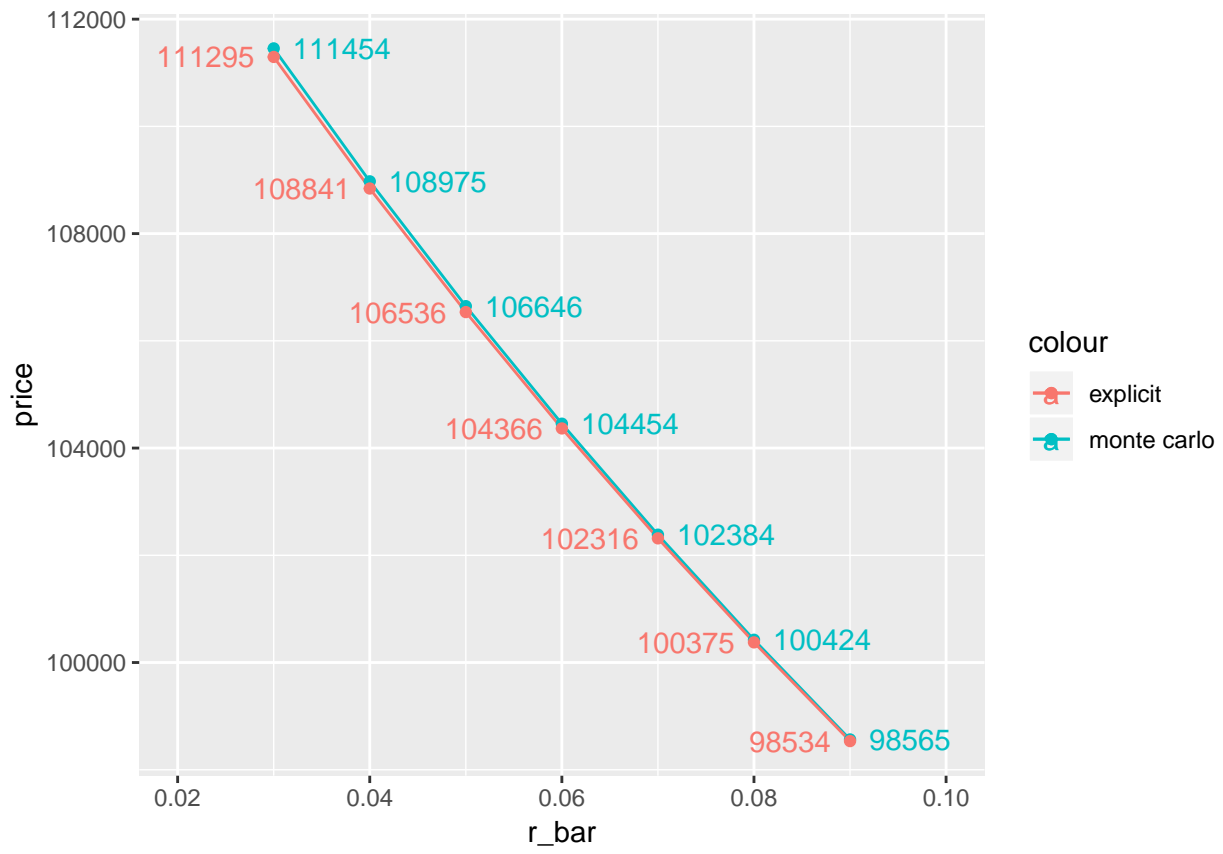
Monte Carlo: 100424

Explicit formula: 100376

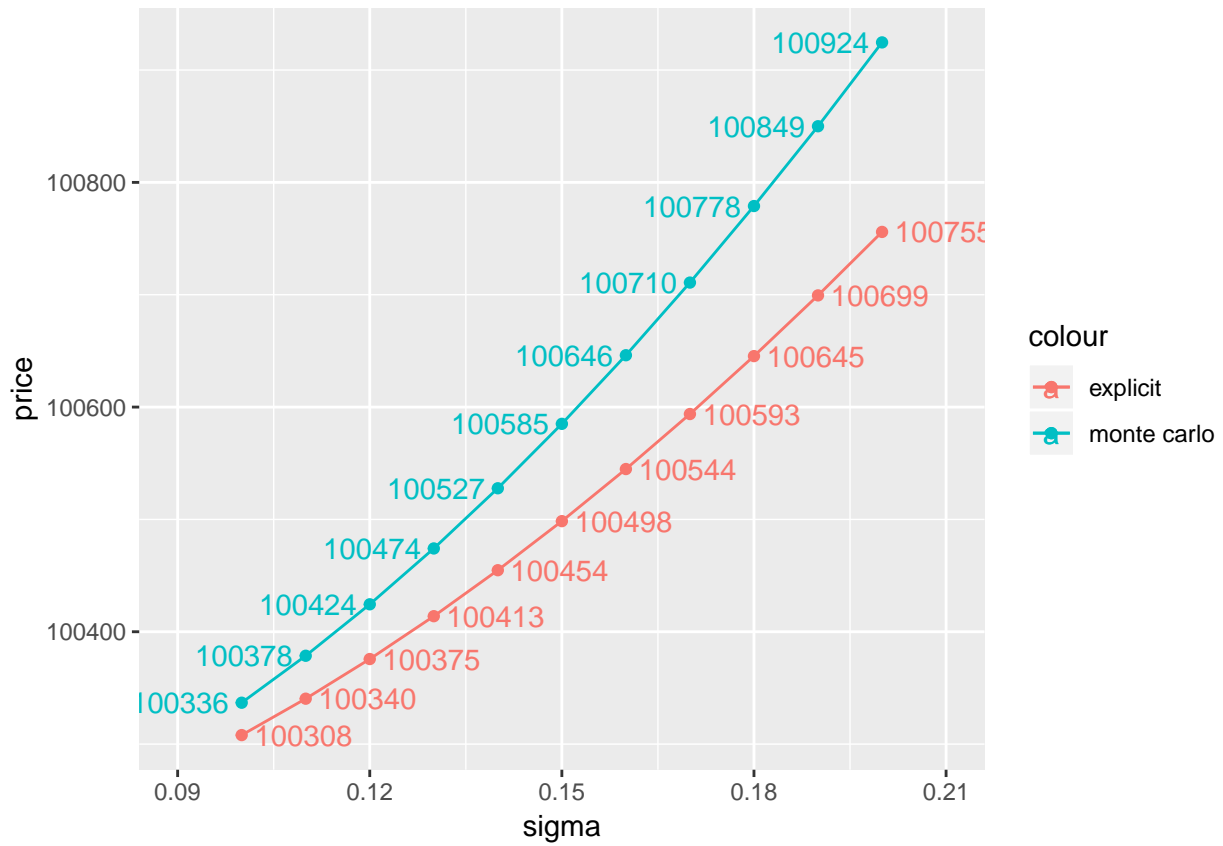
b.



c.



d.



Problem 2

Monte Carlo: -0.0286197

Explicit formula: -0.028752

Problem 3

Monte Carlo: Duration = 3.3122, Convexity = 10.3626

Explicit formula: Duration = 3.31532, Convexity = 10.3852