

Advanced Macro

Assignment 4

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Optimization

Julia code: [click here](#).

```
# Julia code  
# See A4.jl
```

Direct maximization over a pair of variables.

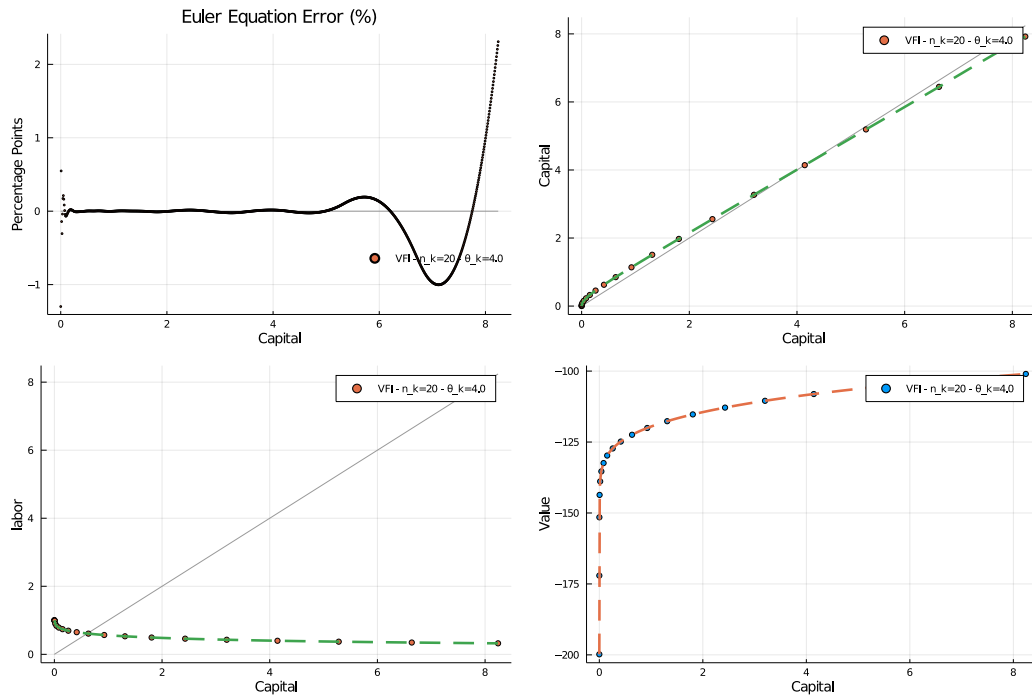


Figure 1: Multivariate maximization

Direct maximization over a single variable with other variables solved for analytically.

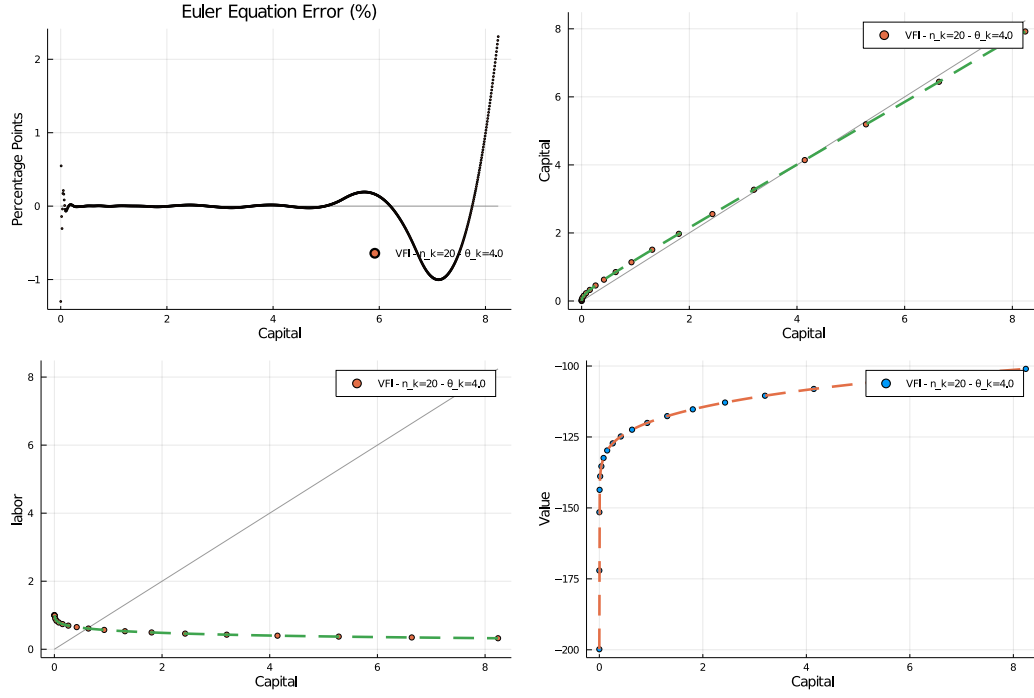


Figure 2: Univariate maximization

Section	ncalls	time	%tot	avg	alloc	%tot	avg
Monovariate VFI $n_k=20$ $\theta_k=4$	1	23.0s	56.9%	23.0s	1.66GiB	50.9%	1.66GiB
Multivariate VFI $n_k=20$ $\theta_k=4$	1	17.4s	43.1%	17.4s	1.60GiB	49.1%	1.60GiB