

# Advanced Macro

## Assignment 5

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## Integration

Julia code: [click here](#).

```
# Julia code  
# See A5.jl
```

### Discretization of an AR(1) process

- a) Simulate a Markov chain
- b) Use Tauchen and Rouwenhorst's to discretize
- c) Compute the first four moments
- d) Plot

	Data	Tauchen	Tauchen	Rouwenhorst	Rouwenhorst
		$N = 5$	$N = 15$	$N = 5$	$N = 15$
<i>mean</i>	-0.075	-0.002	0.049	0.071	0.08
<i>var</i>	22.214	13.94	12.168	20.772	21.403
<i>skew</i>	0.056	-0.01	-0.005	0.021	-0.042
<i>kurt</i>	-0.13	-0.981	-0.998	-0.491	-0.191
<i>acorr</i>	0.905	0.84	0.845	0.898	0.902

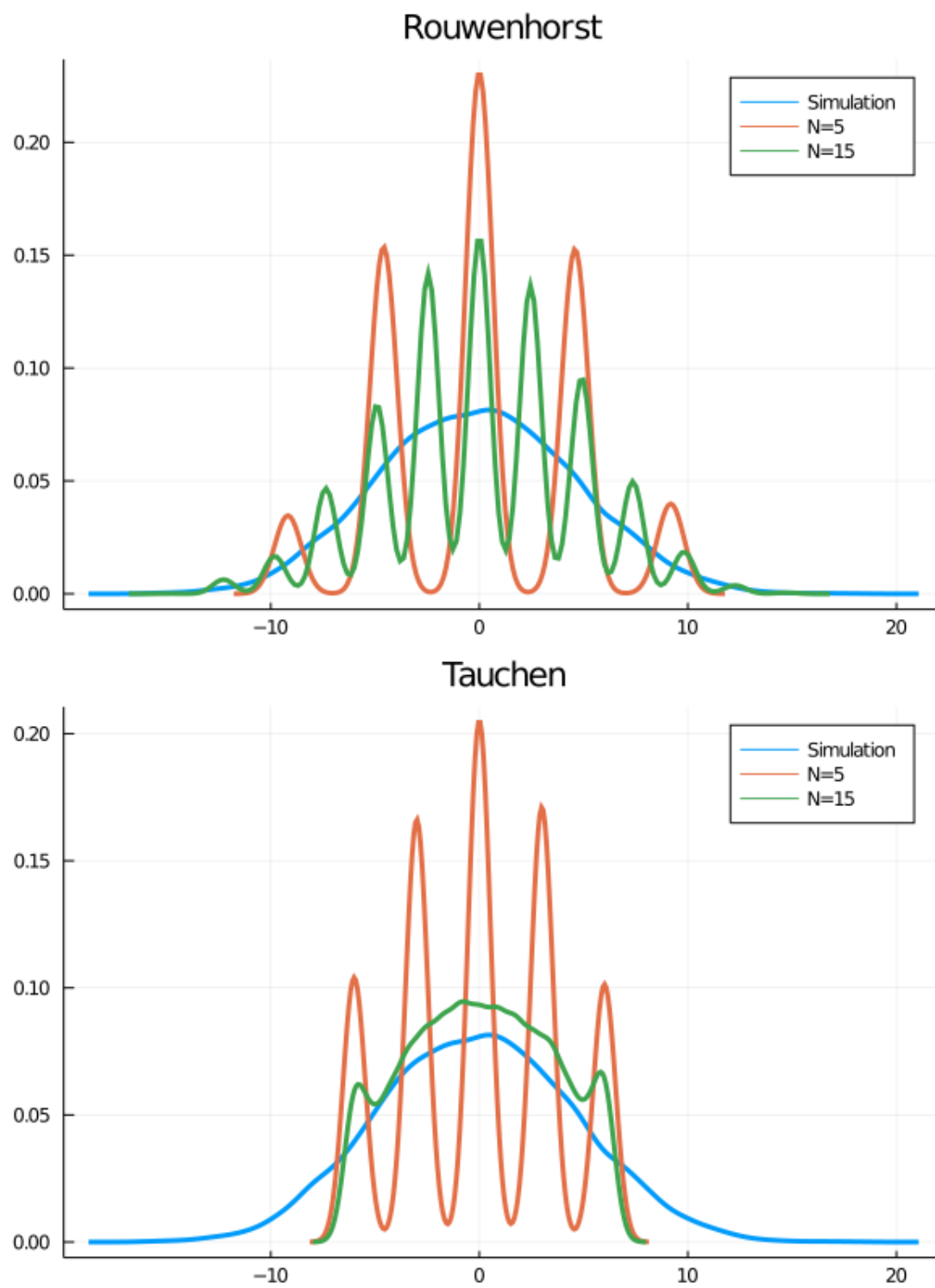


Figure 1: Density of Markov chains