

```
////////////////////////////////////  
// Basic linear RE model - Learning Dynare: AR (1) Model  
// Prof. Marcelo Arbex (Uwindsor)  
////////////////////////////////////
```

```
// Name of the endogenous variable
```

```
var x;
```

```
// Name of the exogenous variable
```

```
varexo e;
```

```
// Parameters of the model
```

```
parameters rho se;
```

```
rho = 0.95;
```

```
se = 0.02;
```

```
// The model
```

```
model(linear);
```

```
x = rho*x(-1)+e;
```

```
end;
```

```
initval;
```

```
e=0;
```

```
x=0;
```

```
end;
```

```
steady;
```

```
check;
```

```
//We are giving a shock to variable e of one standard deviation se  
shocks;
```

```
var e;
```

```
stderr se;
```

```
end;
```

```
//Alternatively you could write
```

```
//shocks;
```

```
//var e = se^2;
```

```
//end;
```

```
stoch_simul( periods=2000 );
```