

```
////////////////////////////////////  
// Basic linear RE model - Learning Dynare: Backward-Forward looking models  
// Prof. Marcelo Arbex (Uwindsor)  
////////////////////////////////////
```

```
var y,x; // Name of the variable
```

```
varexo e; // Name of the exogenous variable
```

```
parameters lb,mu,b,rho,se; // Parameters of the model
```

```
rho = 0.95;
```

```
se = 0.02;
```

```
mu = 0.8;
```

```
lb = 1.2;
```

```
b = -1;
```

```
// Equations of the model
```

```
model;
```

```
y(+1) - (lb+mu)*y + lb*mu*y(-1) = b*x;
```

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

```
end;
```

```
initval;
```

```
e=0;
```

```
x=0;
```

```
y=0;
```

```
end;
```

```
steady;
```

```
// Checking Dynamic Properties
```

```
check;
```

```
// Declaring the shocks
```

```
shocks;
```

```
var e; stderr se;
```

```
end;
```

```
// Launch solving procedure
```

```
stoch_simul(linear, irf=20, relative_irf);
```