working paper

DB

June 17, 2016

simple model

$$
\begin{aligned}
&\ln(\text{ftpay}_{2012,k}) \\
&\quad = \quad \beta_{0,\text{state}_k,\text{code}_k,\text{type}_k} \\
&\qquad\qquad +\beta_{1,\text{state}_k,\text{code}_k,\text{type}_k} \times \ln(\text{ftpay}_{2007,k}) + \varepsilon_k
\end{aligned}
$$

Model discussed

$$
\begin{aligned}
& \ln(\text{ftpay}_{2012,k}) \\
& \quad = \quad \beta_{0,\text{state}_k,\text{code}_k,\text{type}_k} \\
& \qquad\quad + \beta_{1,\text{state}_k,\text{code}_k,\text{type}_k} \times \ln(\text{ftpay}_{2007,k}) + \varepsilon_k
\end{aligned}
$$

R code

```r
library(pubBonneryLahiriTran2016)
demo(mcmc)
```

Slide with Plot