

# The Effect of MNP on Switching Costs in the Thai Mobile Telecom Market

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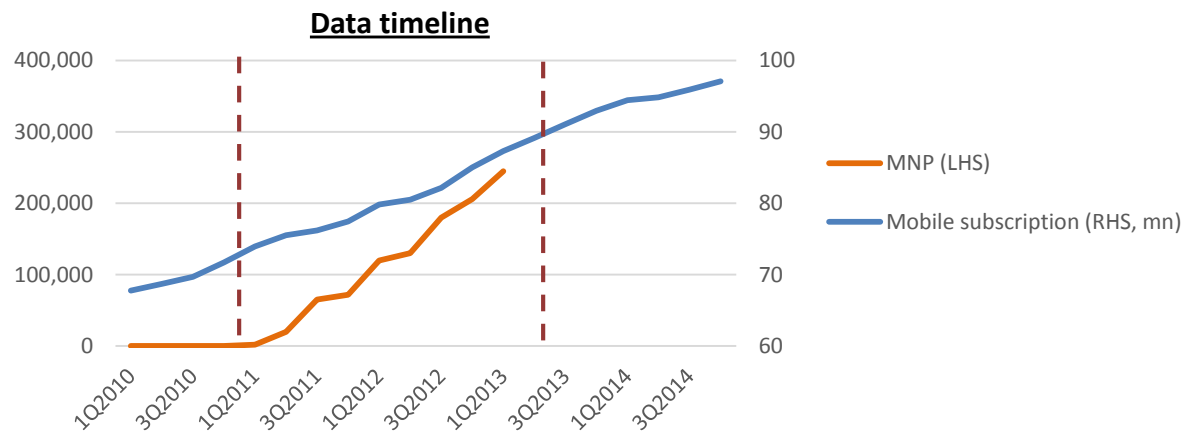
Discussion by  
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# Big picture recap

- **Research question:** Estimating the impact of MNP on switching cost, allowing for heterogeneity across individuals
- **Data:** Revealed preference using individual-level survey data from NBTC
- **Model:** Mixed logit with random coefficients
- **Results:** Large SW, MNP reduced SW by 28%
- **Policy implication:** WTP for SW and MNP, simulations for other policies e.g. raising awareness of MNP or other measures that further reduce switching costs

# Identification of switching cost

- Data: 2010 – 2014 before/after the implementation of the MNP policy



- A naïve reduced-form regression:  $\Pr(S_{ijk} = 1 | \mathbf{X}_i, \mathbf{Z}_j, \mathbf{Z}_{k \neq j}, \text{MNP}_i)$ 
  - Endogeneity in  $\alpha^{SW}$  and  $\alpha^{MNP}$
- Other source of variation:
  - Distinguishing between switching w/ and w/o MNP?

# Identification of switching cost (2)

- A step back: when do I want to switch my provider?

- Weak coverage in my area

- Amazing offers from another provider

- Important contact makes a switch

- Not too difficult to switch

} **Z**

} **SW**

- Conditioning on  $\mathbf{X}_i$ , only difference between choices matters (and SW+MNP).

$$U_{ij} = \mathbf{X}'_i \boldsymbol{\beta}_j + \mathbf{Z}'_j \alpha_i^Z + \alpha_i^{SW} S_{ij} + \alpha_i^{MNP} S_{ij} \cdot MNP_i + \gamma p_j + \varepsilon_{ij}$$

- Capturing differentiation?

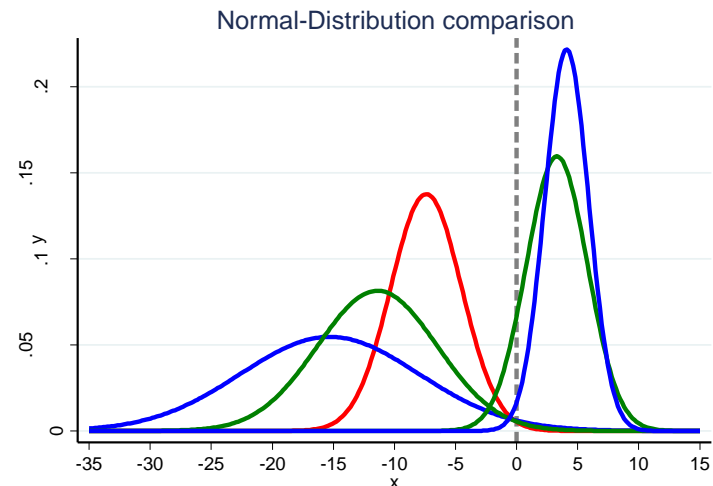
- Heterogeneous SWs across providers due to firms' lock-in strategies

- Variation across individuals in location and service provider's coverage area

# Heterogeneity through random coefficients

- Sources of heterogeneity in  $\alpha_i^{SW}, \alpha_i^{MNP}$
- Heterogeneity by assuming the distribution of the parameters
  - Interpreting  $\mu$  conditioning on  $X_i$
  - Interpreting  $\Sigma$  substitution pattern
  - Normal distribution assumption

$$\alpha_i = (\alpha_i^Z, \alpha_i^{SW}, \alpha_i^{MNP}) \sim i.i.d. N(\mu, \Sigma)$$



- How much do we gain from random coefficients?
  - A different way to introduce individual-heterogeneity that can be interpreted with policy implications?

# Other points

- How was the data sampled? Voluntary or mandatory survey by NBTC?
  - Provide some clue on direction of possible self-selection bias
  - Perhaps evidence on random sampling
- Interpreting the MNP effect
  - MNP awareness/MNP introduction
- Internet subscription effect – proxy for information access?
- Linear trend