

# Branch Expansion versus Digital Banking: The Dynamics of Growth and Inequality in a Spatial Equilibrium Model

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## Abstract

We develop a heterogeneous-agent model with local spatial markets to study the relationships among bank expansion, growth, and inequality. In the model, households choose their occupations, consumption, and holdings of loans and portfolio assets that vary by liquidity. Banks choose the locations of new branches, which affect the financial frictions facing households across regions. We calibrate the model using a geographic information system to evaluate the rapid bank expansion in Thailand between 1986-1996. The model quantifies the sources of growth and inequality over time and across space and the potential role of digital banking in substantially reducing regional heterogeneity.

**JEL codes:** C54, E23, E44, F43, O11, O16, R11, R13

**Keywords:** financial inclusion, bank expansion, spatial equilibrium, economic growth, transitional dynamics, digital banking

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