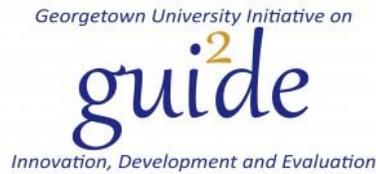


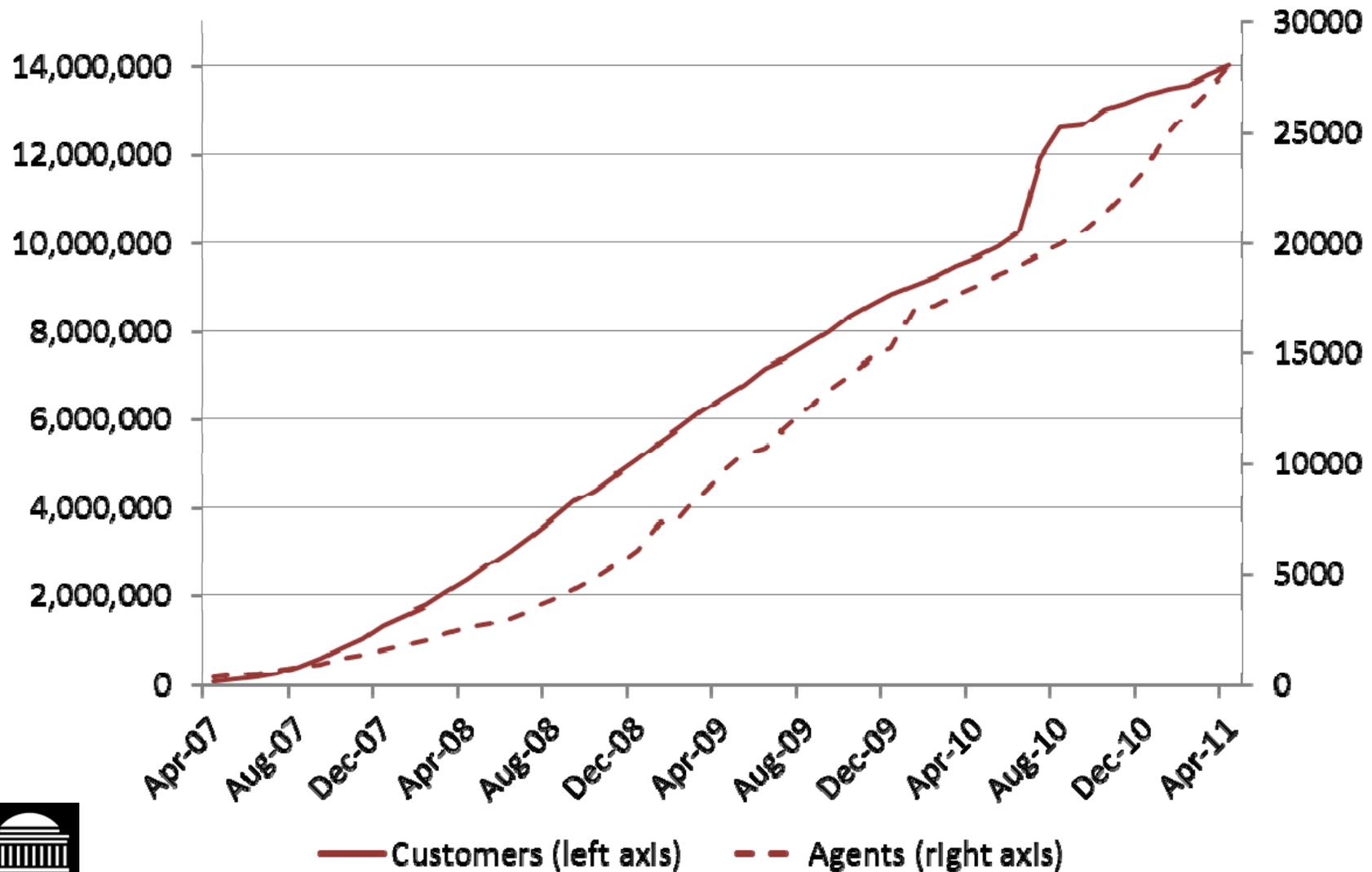
# The Mobile Money Revolution in Kenya: Can the Promise be Fulfilled?



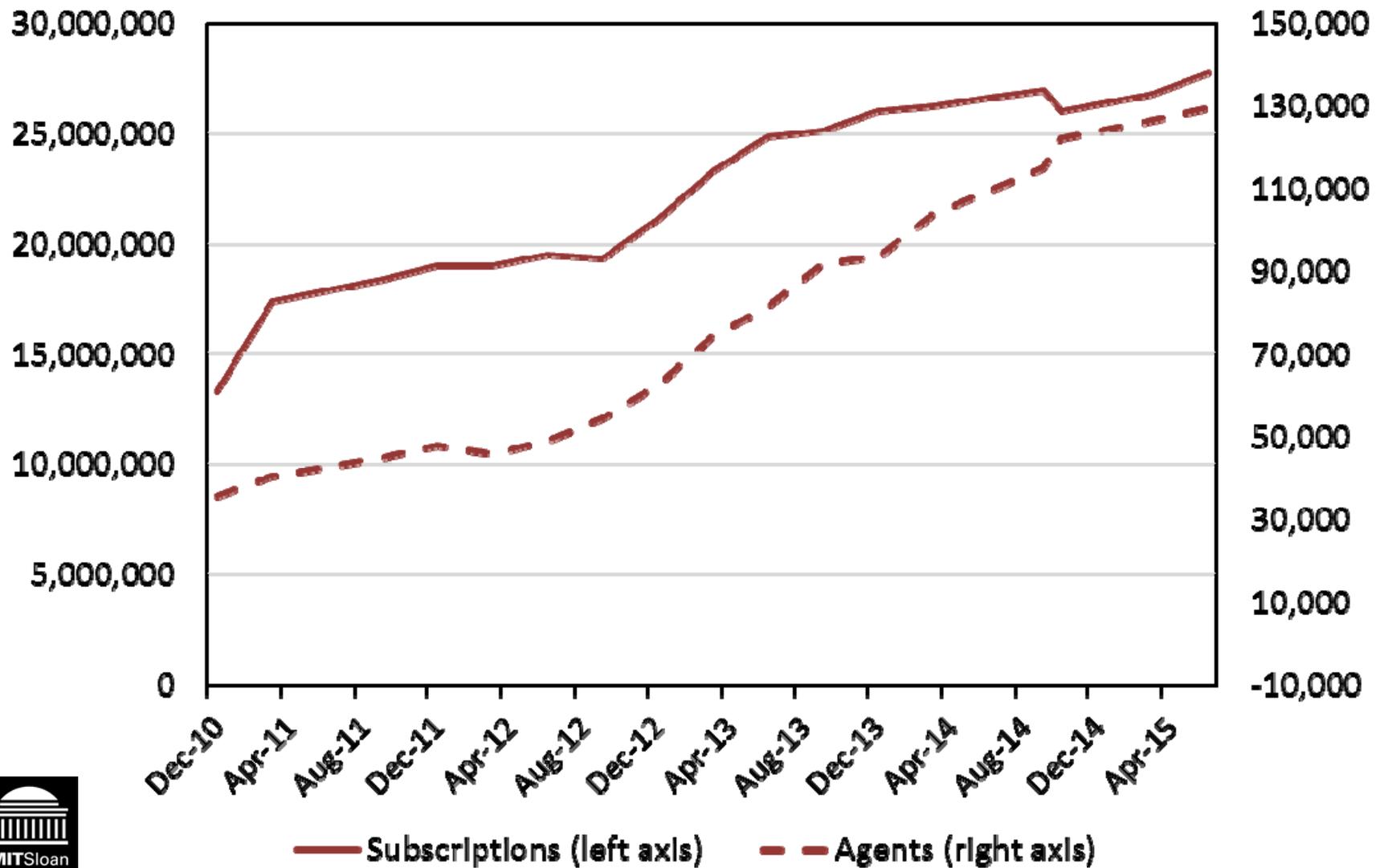
# An Efficient Financial System

- **Decades of research: efficient financial systems are key to economic growth and poverty reduction**
- **One major reason financial markets in the developing world lack efficiency is high transaction costs**
  - Traditionally, financial systems have been bank based: branches are few and far between and accounts expensive to maintain
- **How can we lower transaction costs?**

# Mobile Money: First Four Years



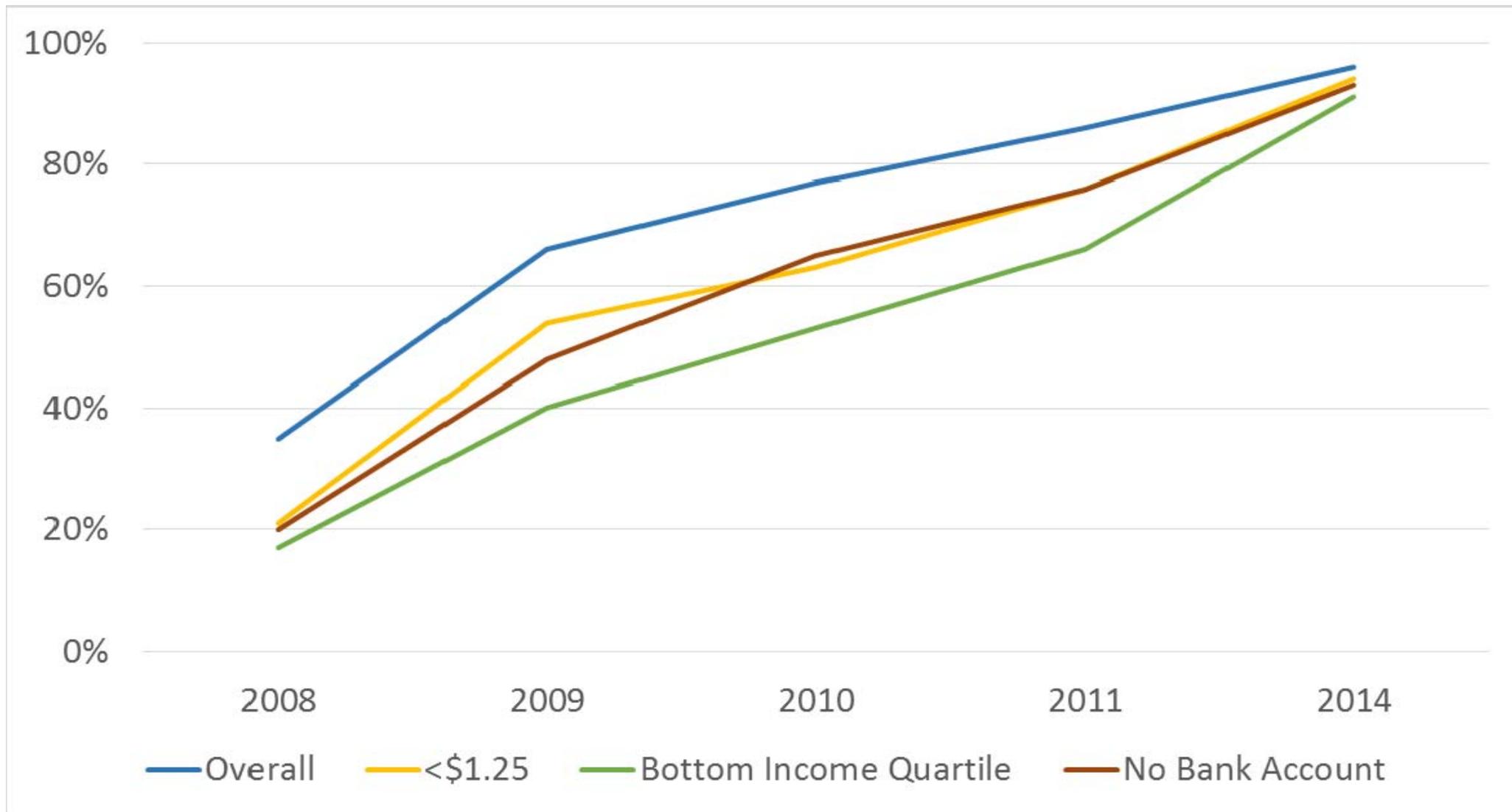
# The Industry: Next Four Years



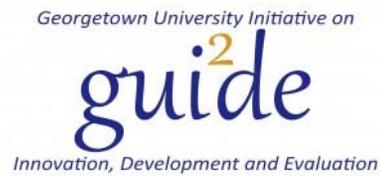
# Household Survey

- **Large household panel survey across most of Kenya (92% coverage)**
- **Conducted in 2008, 2009, 2010, 2011 and 2014**
  - Last two rounds excluded Nairobi

# M-PESA Adoption by Households



# What Did Mobile Money Do?



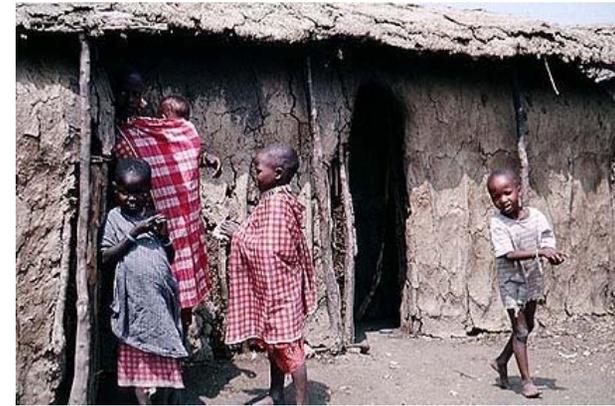
# Financial Health/Wellbeing

- A core component of *financial health/wellbeing* is resilience, the ability to respond to unexpected negative events, or shocks

# Resilience and Social Economies

- **Little private insurance and few public sector safety nets**
- **Instead: social ties create an insurance network to pool risk: is this efficient?**
  - Ideal network is as different in risk profile from you as possible
  - But transactions have to cross geographical space which has costs

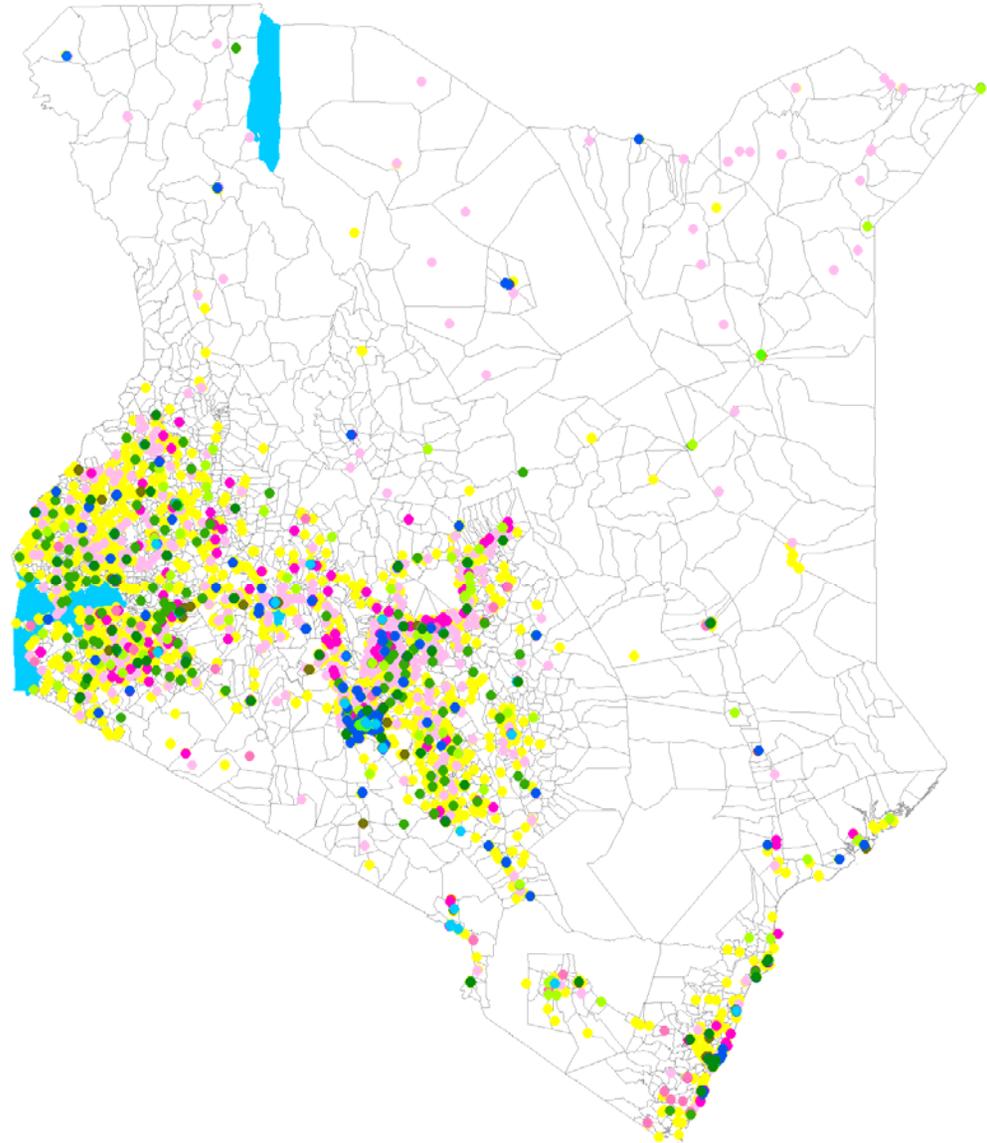
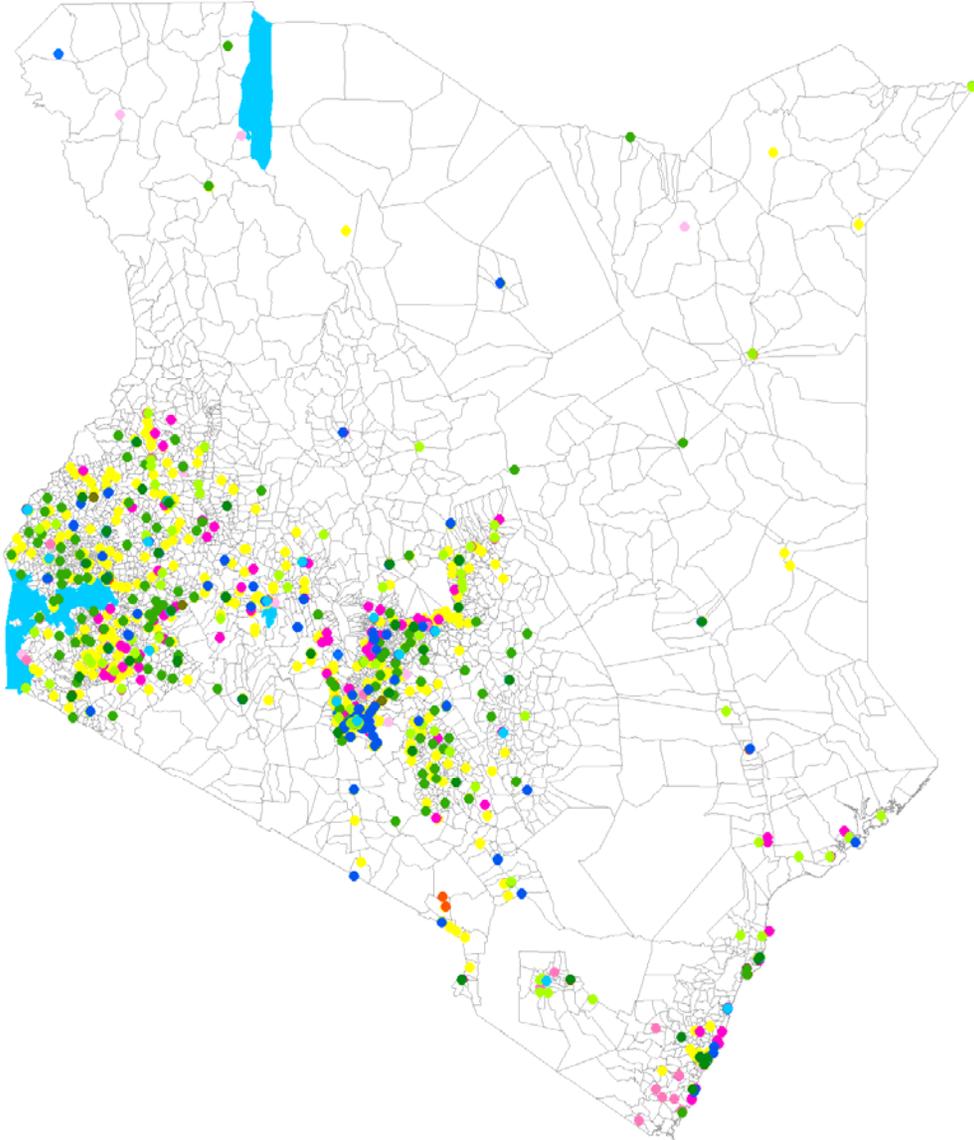
# Financial Intermediation



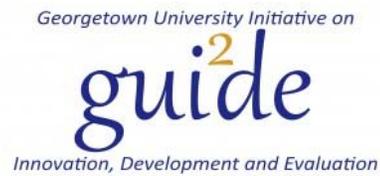
# Transaction Costs

- **Kenyans faced large costs of transacting with the financial system**
  - The distance to the closest bank branch in 2007 was 9.2 km
  - 32% of households lived more than 10 km from a bank branch
  - 19% of households lived more than 20 km from a bank branch
- **M-PESA lowered transaction costs dramatically**
  - Costs: for average distance of 200 km, KShs 35 vs. a KShs 460 bus
  - Distance to an agent was 4.9 km in 2007 (fell to 1.9 km by 2011)
  - 46% of households lived within 1 km of an agent

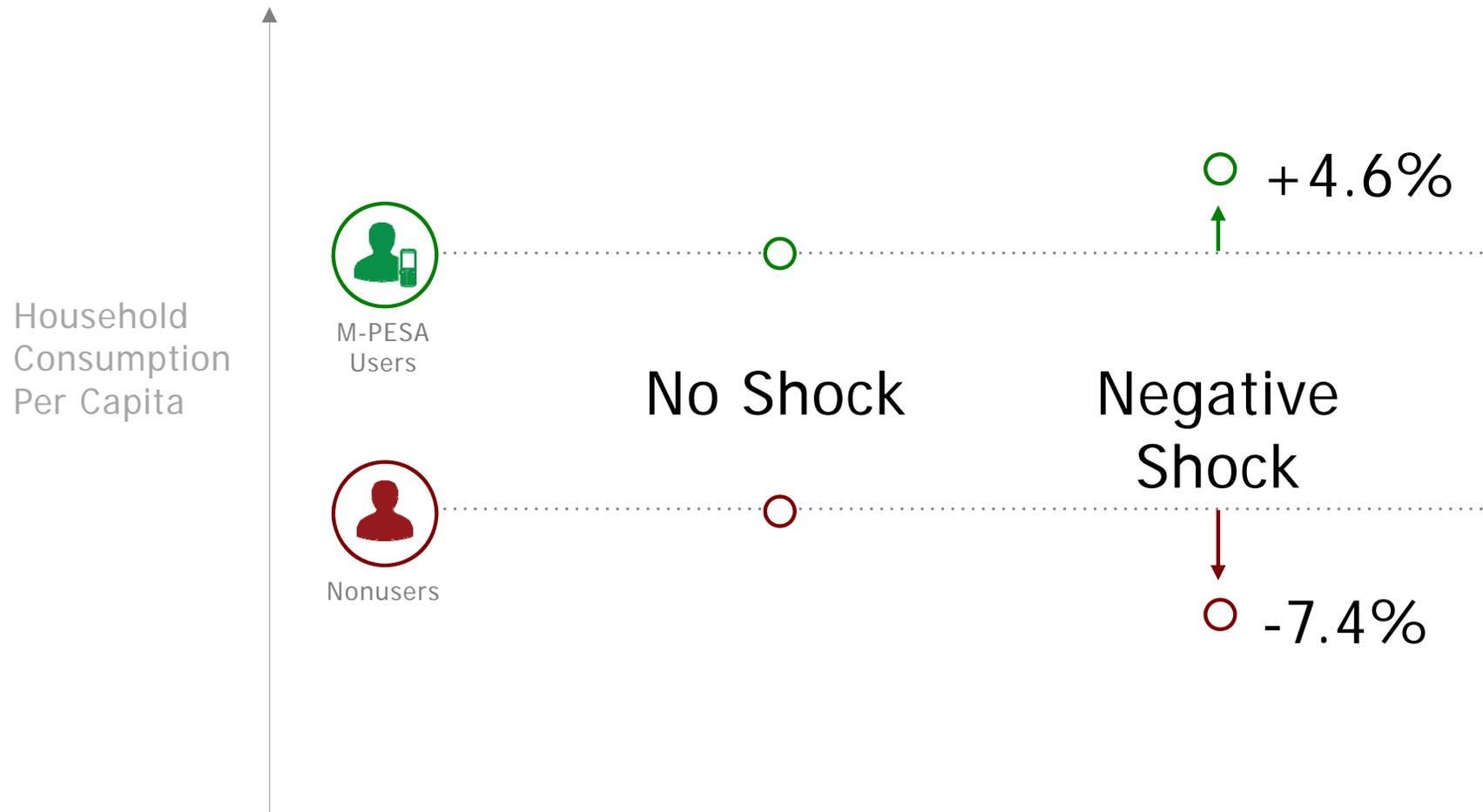
# Financial Service Points, 2007-2011



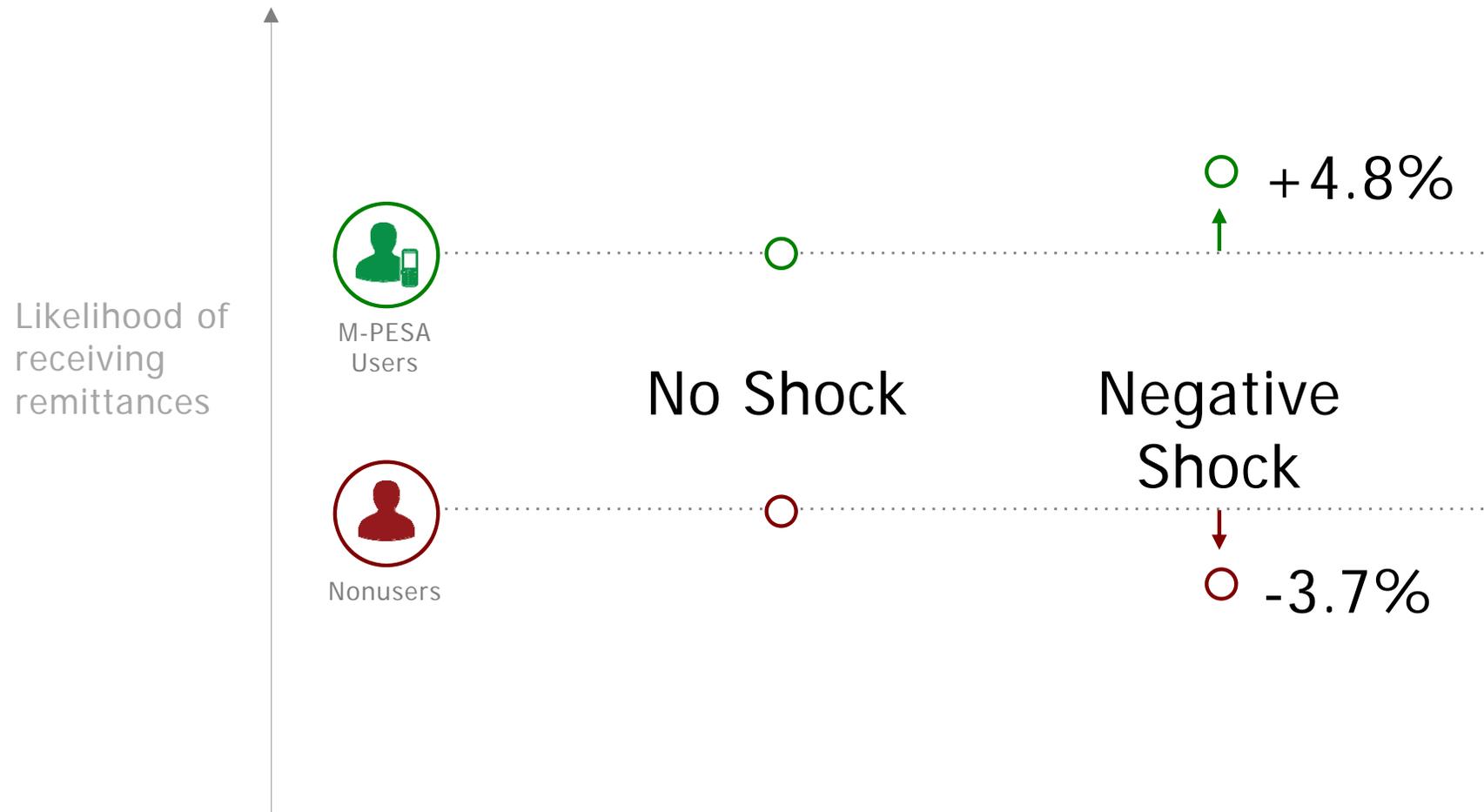
# The Effects of Lower Transaction Costs



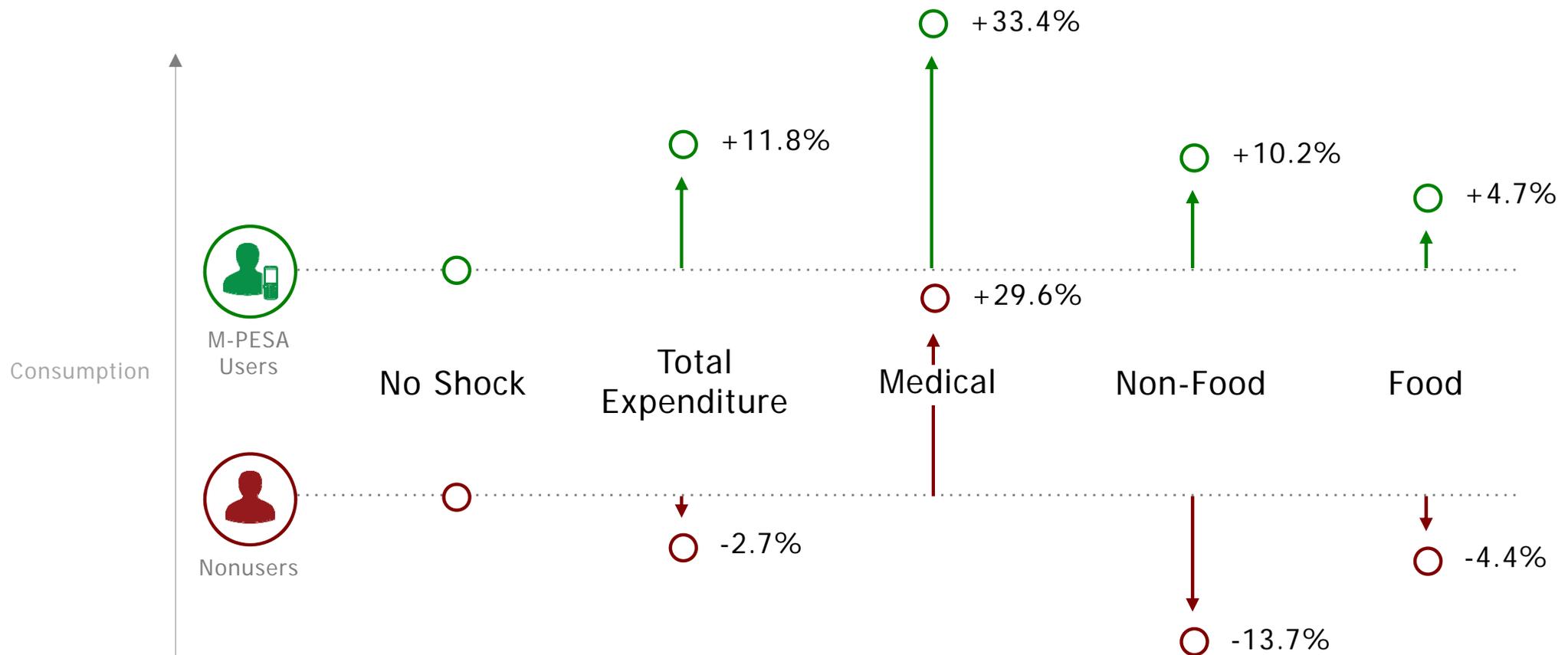
# Resilience: Overall



# Resilience: Remittances



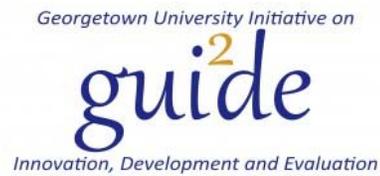
# Resilience to Health Events



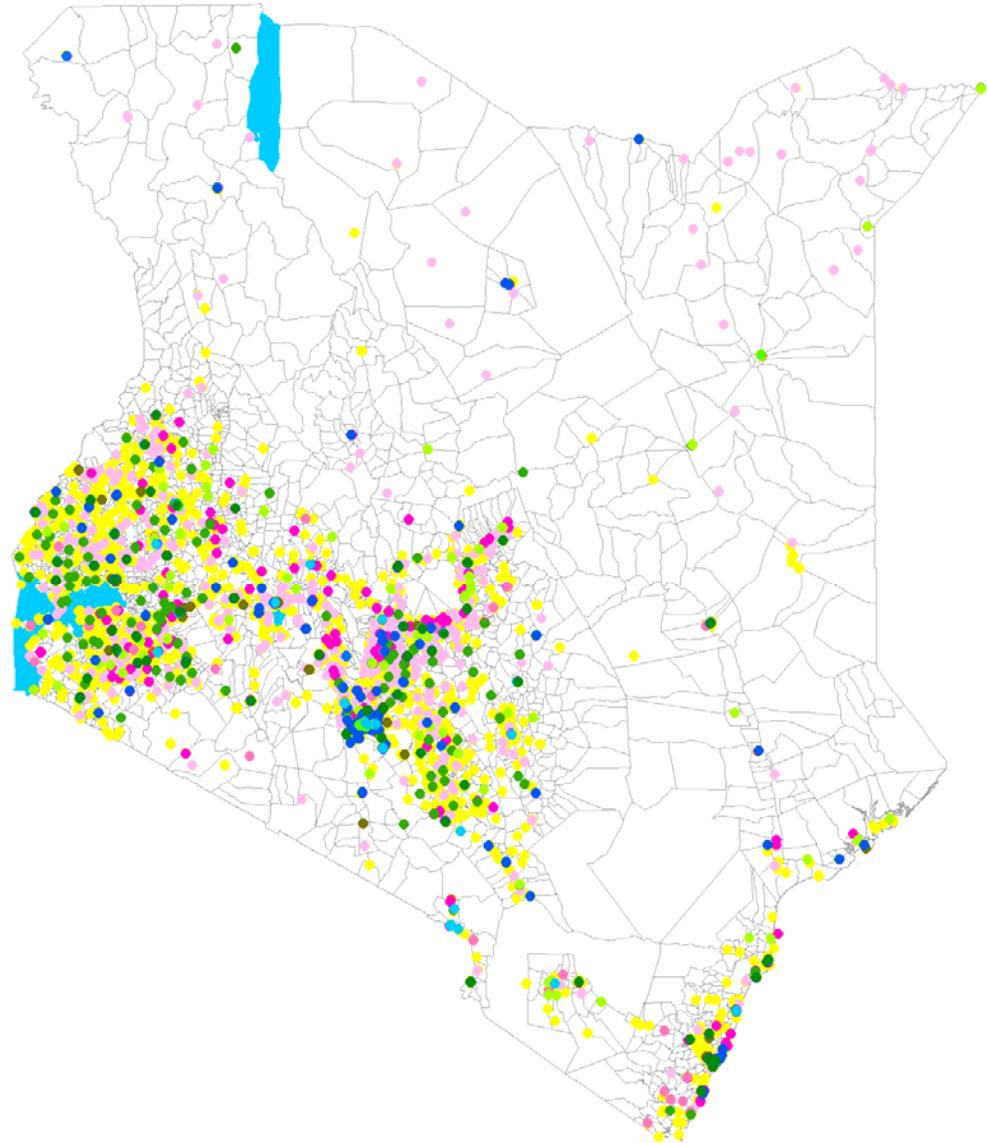
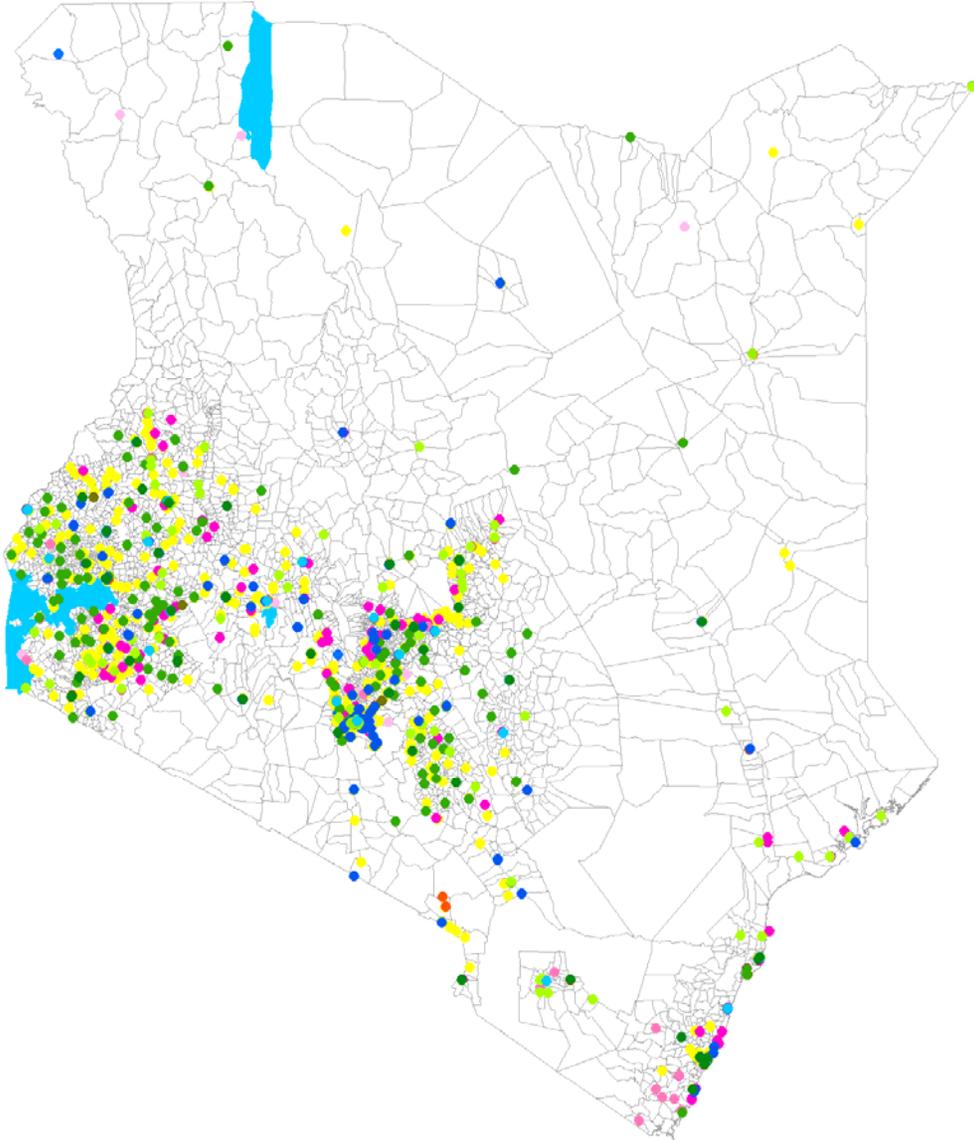
# Eight Years Later.....

- **Better access to M-PESA:**
  - Increases savings
  - Increases consumption and reduces poverty
  - Does not increase (physical) assets
  - Increases use of a bank account
  - Changes occupational choice (less likely to be a farmer, more likely to be in a business), especially for women in the household

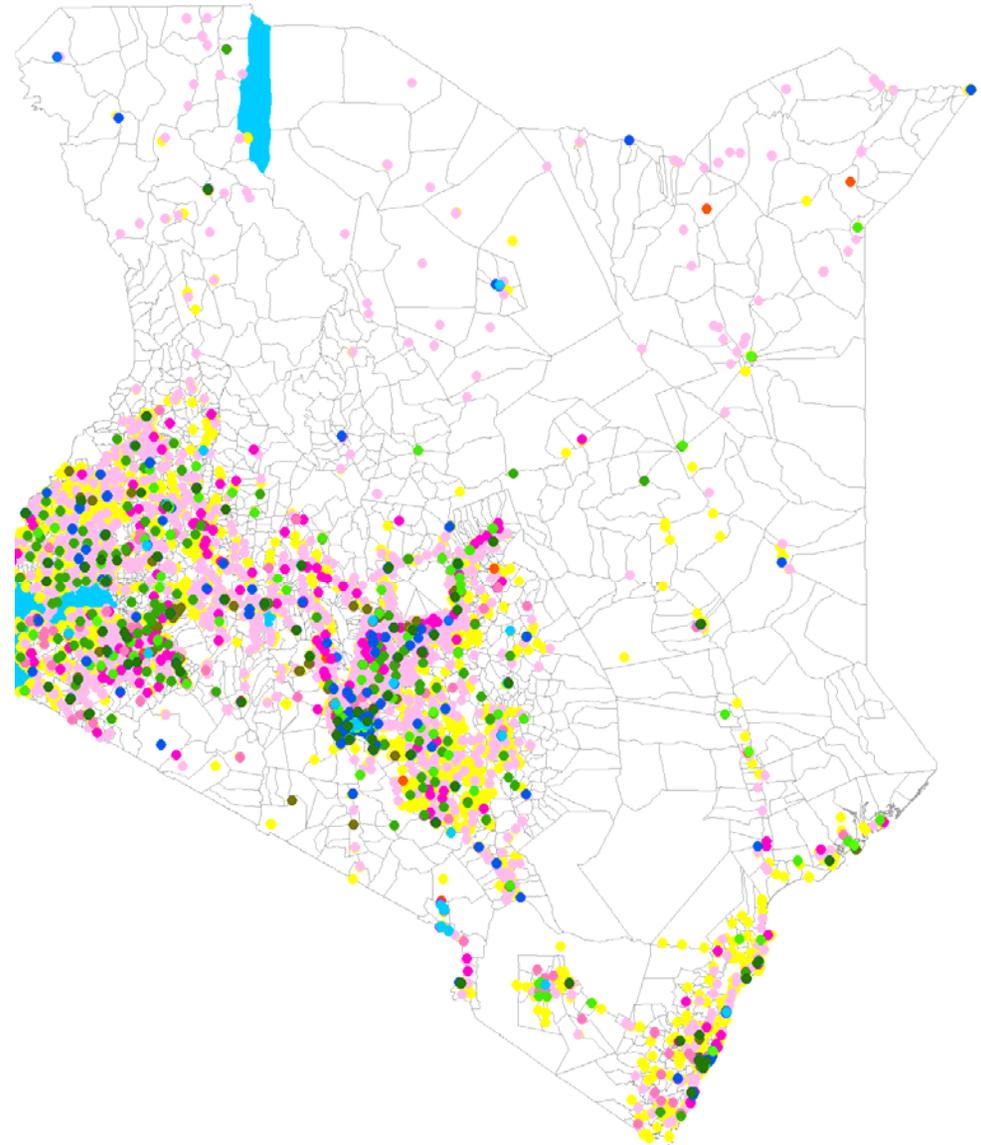
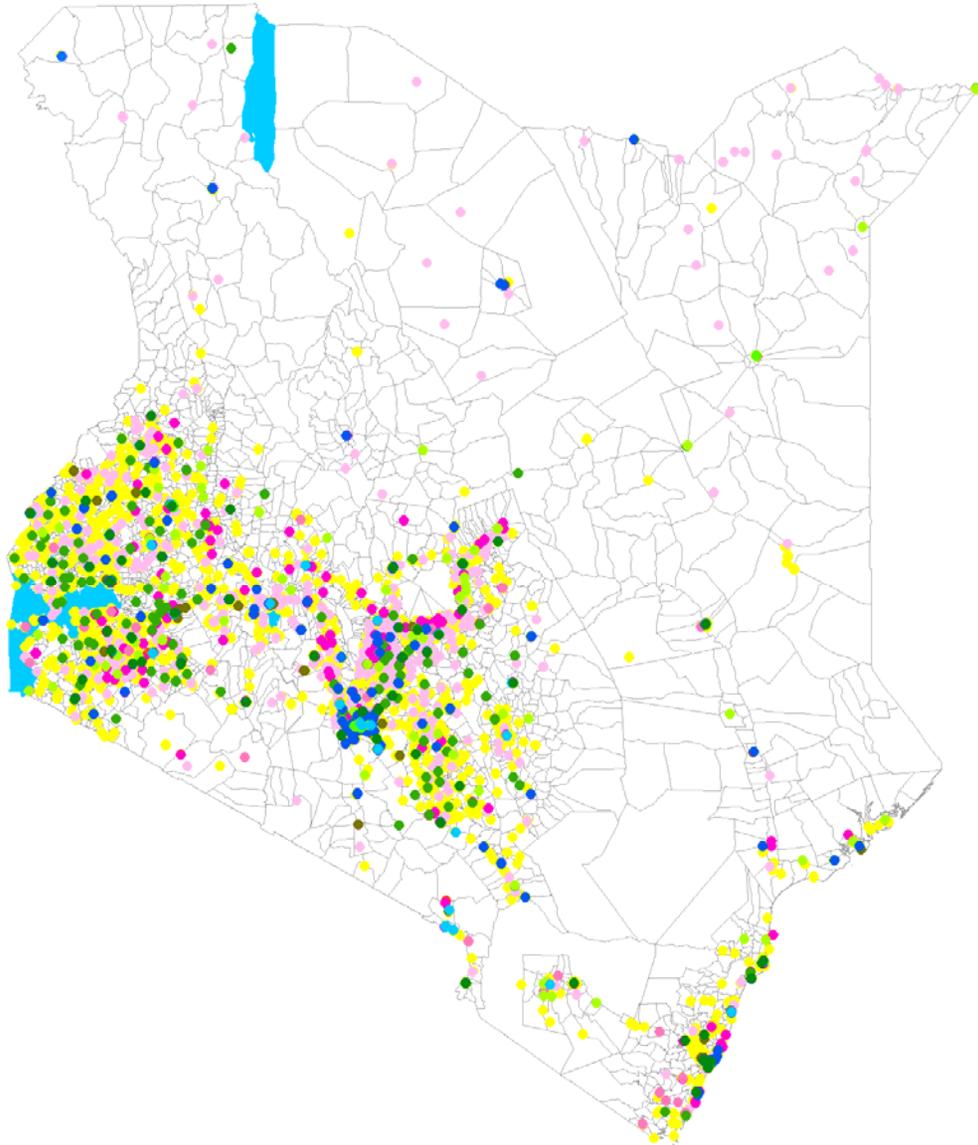
# Can the Promise be Fulfilled?



# Financial Service Points, 2007-2011



# Financial Service Points, 2011-2015



# Access, 2007-2015

## Average Distance to Closest Financial Institution

	Bank Branches	Bank Agents	Mobile Money Agents
2007	9.2 km	NA	4.9 km
2011	7.0 km	5.2 km	1.9 km
2015	6.0 km	1.9 km	1.4 km

# Few Spillovers

- **By the end of 2014, outside Nairobi, 96% of households used M-PESA for P2P transactions**
- **Less than a third use it for:**
  - Paying bills
  - Receiving payments or wages from an organization
  - Paying for other goods or services
- **Only 5% use it to repay loans**
- **Little P2B, B2B, G2P**

# Conclusions

- **Lowering the transaction costs of interacting with the financial system has improved the lives of Kenyans**
  - Resilience and vulnerability
  - Savings and investment
  - Occupational shifts for adults, especially women
- **Financial markets interact with all other markets: little evidence of spillovers**
- **Still a long way to go and a much harder way to go**