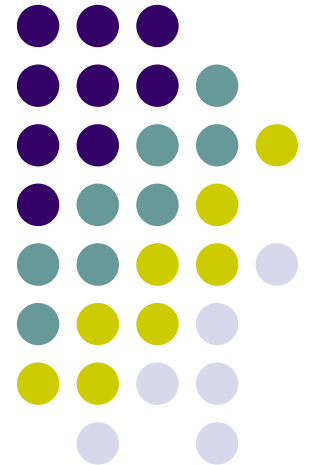
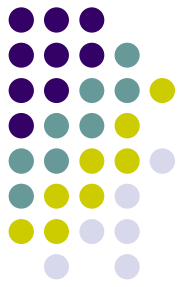


# Capital markets and the equalization of the capital-labor ratio

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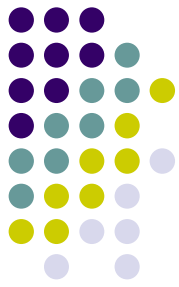


# Capital moves very slowly within the same country



- In the developing world moving capital is extraordinarily costly.
- One way to look at the cost of mobility is to compare lending and deposit rates within the same sub-economy.
- This answers the question: what is the cost of moving capital from someone who has some money to someone who needs some money within the same town or region?
- Another is to compare lending rates for different borrowers
- This answers the question what is the additional cost of moving capital from borrower A to borrower B.
- There many, many studies on this: I will mention just a few (see Banerjee (2002) for more)

# Deposit rates versus lending rates

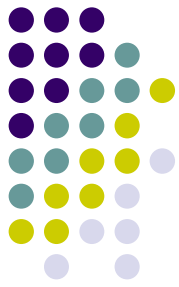


- The "Summary Report on Informal Credit Markets in India" (Dasgupta, 1989) reports interest rates for a variety of non-bank lenders in India.
  - For Finance Corporations the maximum deposit rate for loans of less than a year is 12% while the minimum lending rate is 48%.
  - For hire-purchase companies in Delhi, the deposit rate was 14% and the lending rate was at least 28%.
  - For handloom financiers, the gap between the deposit rate and the lowest lending rate was 26%.
- Aleem (1990) reports data from a study of professional moneylenders that he carried out in a semi-urban setting in Pakistan in 1980-1981.
  - The average interest rate charged by these lenders is 78.5%. The opportunity cost of capital to these lenders was 32.5%.
  - The bank deposit rate was 10%.

# Lending rates for different borrowers



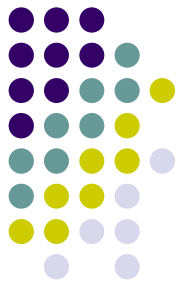
- Once again from the "Summary Report on Informal Credit Markets in India" (Dasgupta, 1989)
  - Finance Corporations offer advances for a year or less at rates between 48% per year and the utterly astronomical rate of 5% per day.
  - The rates on loans of more than a year varied between 24% and 48%.
  - Handloom Financiers charge rates between 44% and 68%.
  - The average rate for professional money-lenders (who in the rural sample give about 75% of the commercial informal loans) was 51.86%, but about half the loans were at rates of 60% or more but another 40% or so had rates below 36%.
- The study by Aleem (1990) reports that the standard deviation of the interest rate was 38.14% compared to an average lending rate of 78.5%.



# More lending rates

- Ghate (1992) reports on a number of case studies from all over Asia:
  - The study from Thailand found that interest rates were 2-3% per month in the Central Plain but 5-7% in the north and north-east (note that 5 and 7 are very different).
- Fafchamps (2000) reports on two surveys in Zimbabwe and Kenya
  - Interest rates for Black businessmen was 2.5% as against 5% for businessmen from the main business community (Whites in Zimbabwe, Indians in Kenya)

# Caveat 1: Default cannot explain these gaps



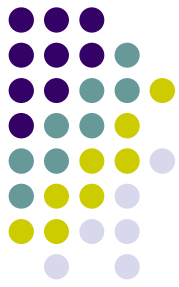
- The "Summary Report on Informal Credit Markets in India" attempts to decompose the observed interest rates into their various components
  - Find that the default costs explain 7 per cent of the total interest costs for handloom financiers and 4% for Finance Companies.
- The study by Aleem gives default rates for each individual lender. The median default rate is between 1.5 and 2% and the maximum is 10%.

# Caveat 2: the market seems competitive



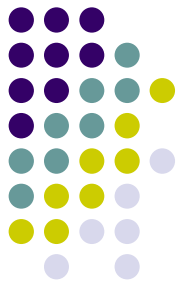
- Lots of lenders in the same place. Aleem's study involved 14 money lenders in a single market place.
- No evidence of excess profits in lending
  - Ghate (1992)
  - Aleem (1990)
  - Dasgupta (1989)

# Why is moving capital so costly?



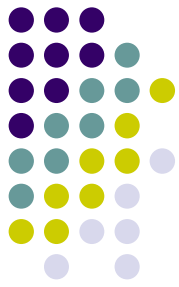
- High risk of default
- Passive default
  - Small businesses are bad at cash management
  - Lots of risk that are not properly allowed for
- Active default
  - Assets can vanish in the night.
  - People can refuse to pay.
  - Courts can take for ever
- Lending rates are high because preventing default is costly

# What makes preventing default so expensive?



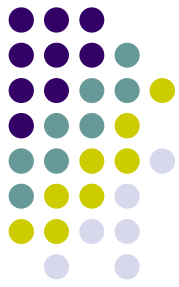
- The monitoring multiplier
  - When the cost of monitoring goes up, the interest rate has to go up, which makes default more likely and hence requires more monitoring, which pushes the interest rate up further, etc.
  - Small differences the ability to monitor can lead to big differences in the interest rate
- Fixed costs of monitoring
  - Many of the costs of monitoring are fixed costs. Someone has to go and check the addresses, etc.
  - Smaller the loan, greater the burden of the fixed cost
  - Poorer the borrower smaller the loan (excess leverage increases risk of default)

# Consequently we observe



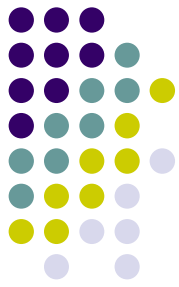
- Firms at the wrong scale
  - We already saw that many firms are willing to pay interest rates of 50% or more. This is a lower bound on their marginal product of capital (MPK).
  - In Banerjee and Duflo (2004), we estimate a MPK of 90% or so for medium sized firms in India
  - The average marginal product inferred from the ICOR is less than 25%.
  - Some firms must have a low return on capital
- Poor matching between talent and money:
  - Banerjee and Munshi (2004): family firms connected to cash-rich families tend to be more capital-using and much less efficient than comparable firms

# With enormous productivity costs



- Banerjee and Duflo (2005) argue that the costs of misallocation are potentially large enough to explain away the entire productivity gap between India and the US.
- Hsieh and Klenow fit a production function to plant level data from India and China and conclude
  - “TFP could double if capital and labor were allocated efficiently within 4-digit industries”

# How about cross-border lending?

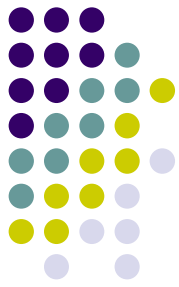


- Every problem that afflicts within country lending is worse for cross-border lending.
  - Unfamiliar with the legal system
  - Unwilling/unable to participate in extra-legal systems of enforcement
  - Unfamiliar with local business practices: makes monitoring harder.

# Then what?



- **Agency:**
  - But now the agent needs to be monitored
  - Typically this means that the agent has to be able to provide verifiable support for his lending decisions
  - only well-organized formal sector firms can get these loans.
- **“Trade credit”:**
  - Merchandisers often provide credit to their suppliers, using the carrot of new contracts to get them to repay.
  - Works well in countries that are part of an established supply chain. Less well when the buyer is foot-loose, e.g. in Africa
- **FDI**
  - Works if the foreigners are willing to spend time in the country.
  - Less of a problem if they are returning émigrés
  - Or if living in the country is attractive to foreigners from rich countries
  - Potentially big problem for Africa, smaller developing countries.



# Conclusion

- It is hard to imagine that the world-wide imbalances in the allocation of capital will be fixed by the world capital markets.
- In particular it seems implausible that most of the smaller countries and countries in Africa will manage to attract much foreign capital even with substantial improvement in institutions.