The vicious circle of poverty and undernutrition
14.74, lecture 2
The capacity curve
Figure 1: The Capacity Curve
The Piece Rate
Figure 2: Labor Supply
Possible equilibria
Figure 3: Possible Equilibria
The effect of non-labor income
Figure 4: Effect of Non-Labor Income on the Capacity Curve
Distribution of land
Figure 5: Distribution of Land Owned by Individuals Ranked
Labor supply as function of land owned
Figure 6: Effective Reservation Wage by Land Owned
Different types of equilibria
Figure 7: Type of Equilibria
Policy experiments

• Land Reform:
  – MAY improve production and employment (how?)
  – CAN improve production without increasing employment (how?)
  – Is it possible to improve the lot of the poor without decreasing someone’s lot?
  – The economy is PARETO EFFICIENT: it is impossible to improve the welfare of someone without decreasing the welfare of someone else

• Minimum wage

• Cash tranfer
A dynamic version

- Introduce some dynamics: you can “borrow” or “invest” in your capacity
- What may happen to the capacity curve of tomorrow as a function of how you eat today
Capacity curve with different nutrition histories
Implications

• With better nutrition history, can produce more for each level of nutrition

• Suppose an employer could reap the benefit of investing in a worker, what would they now want to do?

• Do they have incentives to do so in a casual labor market?

• Possible arrangements:
  – Borrowing: what is the difficulty?
  – Long term contracts (bonded labor; slavery: *Time on the cross*)
Intra family issues

• Suppose you have a family of two, how should they share resources?
Unequal Sharing of Poverty
Interpretation

• Resources may not be shared equally within the family
  – Gender discrimination
  – Widows: “Witch Killings” in Africa (Ted Miguel)
  – Children and Adults: households may decide to feed adults. Combined with the dynamic version of capacity curve, this may perpetuate the cycle.
Conclusion

• Convexity (S shape) of capacity curve can generate poverty trap
• Next time: we will empirically examine the composition of the capacity curve and see whether there is evidence of convexity.
• What we need for a poverty trap
  – Strong relationship between income and nutrition
  – Strong relationship between nutrition and productivity