

# Development Economics

Development Microeconomics

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Chapter 1

# Development economics: Evolution [1]

## ■ Friedrich List

- While an individual promotes only his own interest, a state promotes the interest of all its citizens.
- Free trade can be beneficial for all states only if they are at similar levels of development, and autarky may initially be necessary to foster industrialisation in the weak states.

## ■ Mihail Manoilescu

- Terms of trade of raw material exporting countries deteriorate instantaneously, and hence trade can be an avenue of exploitation.

# Development economics: Evolution [2]

- G. Feldman and Prasanta Mahalanobis
  - The growth rate of an economy increases if there is a greater emphasis on (and, hence, investment in) the capital goods sector, as opposed to the consumer goods sector.
  
- Alexander Chayanov
  - Peasant households, especially those involved in subsistence farming, would produce only the amount that they consume, and it would be difficult, perhaps impossible, to give them an incentive to produce a surplus.

# Development economics: Evolution [3]

## ■ Paul Rosenstein-Rodan

- How to achieve industrialisation to reduce or eliminate unemployment.
- The main impediment to the investment required for such industrialisation was the size of the market.
- The problem of size could be overcome by way of coordination among industries, but that is difficult because private investors do not take externalities into consideration.
- Without external intervention, the country would never attain the critical level of industrialisation beyond which risk-taking entrepreneurs would help alleviate the coordination problem.
- Government intervention might be required to provide the big push that would put the country beyond this threshold.

# Development economics: Evolution [4]

- Ragner Nurkse and Albert Hirschman
  - Balanced versus unbalanced growth
  - Forward and backward linkages
- Arthur Lewis
  - Marginal productivity of labourers in the agricultural sector of developing countries is zero.
  - It is, therefore, possible to move labourers from the agricultural to the industrial sector without reducing the agricultural output, and, hence, without an increase in industrial wages.

# Walrasian markets

- Constant returns to scale
- Pure competition
- Perfect information
- Insignificant transactions costs and externalities
- Institution neutrality
- Price-sensitive adjustments that unambiguously clear markets

# Response of development economists

- Departure from Walrasian economics
  - Information-based market failures and fragmentation
  - Coordination failure and frequency-dependent equilibria
  - Self-reinforcing mechanisms
- But mindful about
  - Disciplining effects of market rivalry
  - Importance of price-guided allocative efficiency
  - Limited capabilities of governments in de facto changing the lives of the people for the better
  - The tension between, as well as the compatibility of, equity and efficiency
  - Institutions are important but not necessarily exogenous

# Meeting of minds? [1]

## ■ Economists

- A peasant household rationally maximises an objective function, subject to various constraints, and thereby decides, e.g., how to distribute household labour between farm and off-farm activities

## ■ Sociologists and social anthropologists

- Peasant actions determined by cultural and social constraints

## ■ Economists

- In a competitive set-up, households that do not behave rationally would lose their land etc, such that, in the long run, (remaining) peasants would behave in a rational optimising manner



# Meeting of minds? [2]

## ■ Observation

- Patron-client relationships in agriculture

## ■ Sociologists and social antropologists

- Social custom
- “Moral” economy

## ■ Economists

- Result of a complex optimisation process whereby the landlords and the landless labourers behave strategically in a way that smoothens labour supply for the former and income/consumption for the latter

# Social norms [1]

## ■ Mancur Olson

- “[U]nless the number of individuals in a group is quite small, or unless there is coercion or some other special device to make individuals act in their common interest, rational, self-interested individuals will not act to achieve their common or group interests.”
  - » But people vote, pay taxes, and offer their services to voluntary organisations

## ■ Implication

- In this world, some people are more willing than others to cooperate, so as to be able to benefit from collective action
  - » How does one such person signal to another such person that (s)he is willing to cooperate?

# Social norms [2]

## ■ Linear public good game

- Each participant asked to decide how much of his/her endowment to contribute towards a public good
  - » If all participants make a contribution, each participant gets half the total contribution made during the game
  - » If at least one participant contributes zero, all participants get zero units

## ■ Observed outcome

- Participants contribute 40-60% of endowment even in one-shot games
- The ability to cooperate increases with the number of rounds of the game
- If allowed, people spend their personal endowments to punish participants who do not contribute

# Social norms [3]

- Implications for types of players
  - Rational egoist
  - “Conditional cooperators” who are willing to contribute provided at least some of the others reciprocate
  - “Willing punishers” who are willing to bear the cost of punishing freeriders
- How do norm-users evolve and survive in a world of rational egoists?
  - Evolutionary theories
  - Evolutionary psychology
    - » “[H]umans use a different approach to reasoning about deontic relationships -- what is forbidden, obligated, or permitted -- as contrasted to reasoning about what is true and false.”

# Social norms [4]

## ■ Implications of available evidence

- Individuals have the propensity to learn social norms that are “shared understandings about actions that are that are obligatory, permitted, or forbidden”
- Norms are not always reducible to pragmatic calculations
- Non-adherence to social norms can result in a cost, whether by way of guilt (when self-inflicted) or by way of shame (when knowledge of non-adherence is known to others)
- The extent to which individual behaviour is embedded in social norms is higher in traditional societies where the uncertainties about the physical environment are more acute, or where these norms are easier to enforce

# Systematic anomalies [1]

- A man buys a bottle of wine for £10. It turns out to be an excellent choice, and in 5 years time the price per bottle rises to £200. He is not willing to pay £200 for a bottle of this wine, *but he is not willing to sell for £200 either.*
  - Endowment effect
    - » “People often demand much more to give up an object than they will be willing to pay to acquire it”
  - Status quo bias
    - » “A preference for the current state that biases the man against both buying and selling his wine”
  - Loss aversion
    - » “The disutility of giving up an object is greater than the utility associated with acquiring it”

# Systematic anomalies [2]

## ■ Gambler's fallacy

- “If a fair coin has not (say) come up for tails for a while, then on the next flip it is “due” for a tails because a sequence of flips of a fair coin ought to include about as many tails as heads.”

## ■ Anchoring

- People are shown pictures of an object that are initially blurred, but sharpen in focus over time
- Different people start concentrating on the pictures at different points in time
- People who started concentrating early in the process were less likely to identify the object correctly

# Questioning rationality

## ■ Travellers' paradox

- Two tourists buy the same antique at an exotic location
- On the way back, the airline damages both these souvenirs
- The airline asks the two men to separately declare the value of the souvenir, such that the value is between 2 and 100
- If both declare the same value, each is paid that amount
- If Person 1 declares a value of  $V_1$ , Person 2 declares a value of  $V_2$ , and  $V_1 > V_2$ , then Person 1 gets  $V_2 - 2$  while Person 2 gets  $V_2 + 2$
- The Nash equilibrium is (2, 2)
- In reality, both would choose numbers that are much higher than 2



# Inductive reasoning [1]

- Each economic agent holds in his mind a set of plausible hypotheses
- Each time an event related to these hypotheses occurs, he makes a mental record of the success or failure of each of these hypotheses in predicting this event
- He retains hypotheses that seem to predict the event well, and discards those that fail to do so
- The outcome is hysteresis, i.e., once a hypothesis has been deemed credible, it must have a record of failure before it is discarded

# Inductive reasoning [2]

## ■ El Farol problem

- Every weekend, 100 people have to decide whether or not to go to a bar
- The bar is small, and an evening at the bar is enjoyable only if a maximum of 60 people turn up
- Each person would, in that case, decide to go to the bar if he expects fewer than 60 to turn up, and vice versa
- There is no obvious way to model the total attendance at the bar, and hence each person would have to use inductive reasoning instead
  - » If *all* believe that a *few* will go, then *all* will go
  - » If *all* believe that *most* will go, then *none* will go

# Things to remember

- “[A]dherence to the principle of maximisation .... should be regarded more as a crude heuristic device than as a definitive statement to human behavioural regularity”
- “One should always look very closely at apparent irrational behaviour to see whether there could be some pattern there after all”
- “[The] approach of .... methodological individualism should not be interpreted as a way to undervalue the substantive role of social interaction in influencing individual behaviour or in determining the rules of the game that individuals play”