# "Table of content" of presentation

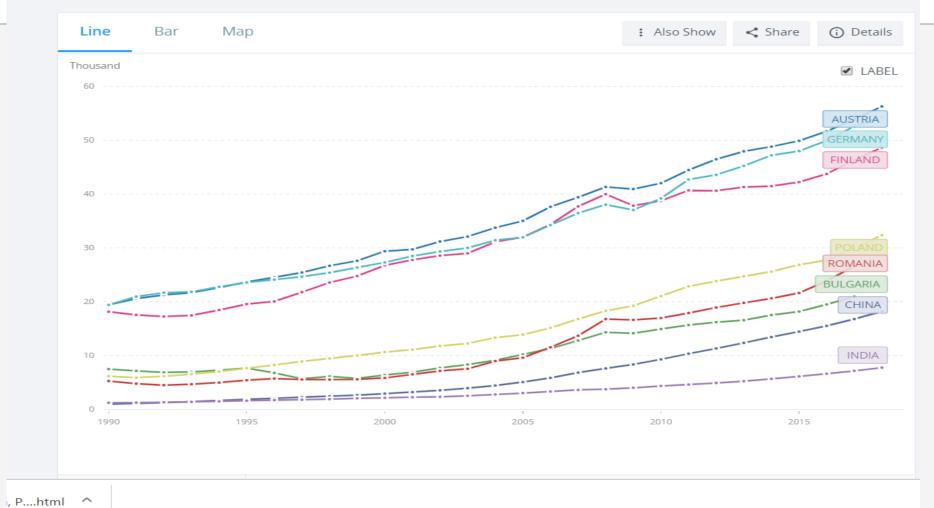
1. Importance of infrastructure on Social Impact

2. Informal transport as a Social Benefit

#### GDP per capita, PPP (current international \$)

World Bank, International Comparison Program database.

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## Social Impact of Informal Transport

### **■** Scheduled Service

- Incurs large fixed costs
- Displays economies of densities
  - Declining average cost
  - Requires large level of demand to be profitable
- Develops congregating passengers
- Often lacks property rights in developing countries
- Faces residual demand

# ParatransitService

- Incurs low fixed costs
  - Labor is primary cost
  - Depends on opportunity cost of informal operation
  - ☐ Rising marginal cost curve
- Displays market advantage
- Interlopes on Scheduled service
- ☐ Gets first cut of the market

### Informal Sector Has Market Advantages...

- Supply Advantage
  - Flexible entry and exit
  - ☐ Flexibility on choosing route and schedule
  - Flexibility in negotiating traffic

### Demand Advantage

- Available "now"
- Smaller and faster
- Sometimes door-to-door
- Sometimes more pleasant
- Often safer (from crimes from other riders, waiting at bus stops, etc.)

# Informal Passenger Transport



# Informal Transport: Armenia

- Vibrant informal bus service. At Republican Square a bus every 5-7 seconds. People knew the right bus. Low fares.
- Political leadership and public officials disliked the "chaos" and wanted a scheduled service with large buses.
- A sophisticated travel models were developed. A trial scheduled service was started in a high demand corridor.
- □ The experiment failed. Travelers favoured the value of informal transport with low fares and frequent service.

### ...But Informal Transport Causes Externalities

- Curbside conflicts, "chaos", congestion, safety, environmental problems
- Drivers often poorly trained and discourteous
- Enforcement is done through extralegal means
- Incentive Structure is Misaligned
  - Revenue sharing arrangement leads to destructive behavior
  - Excess supply is possible
- Difficult to regulate through administrative measures

# Freight Transport



# Informal Goods Transport



## Conclusions—Policy Implications

- Size of informal sector determined by macroeconomics
- Extent of scheduled service limited by the informal sector
- Administrative measures to eliminate informal sector are unproductive and unpopular
- Formalizing the informal sector, without harm to the formal sector, should be the policy choice.
- Establish separate bus stops/terminals for informal sector
- Involve route associations in regulation and enforcement.
- Must include both passenger and goods transport. Both need infrastructure

# Infrastructure: Case of Azerbaijan

- Village of Poladli unconnected from road network by Pirsaat river. There was a bridge for small cars.
- □ For 6-8 months of the year the farmers could not get their products to market wheat, pomegranates, and meat.
- A new bridge was built with World Bank support, and the 13 km local road was "improved" (gravel was not graded, graders were 'ponies', the grader drivers were untrained, etc).
- Poladli and the neighboring village promised to maintain the road. Key to success: Motivation.
- □ (Political dimension: the Palladia chairman lost its job; the Pres was not consulted!)

# Pirsaat River



# Poladli Road



## Infrastructure: The Outcomes are popular

- Poladli experienced visible rapid growth.
- The team wanted to make a 'Social impact study' from building the bridge and included money for it in the next loan.
- However, the new team took the money to develop the next project! The Study was never made.
- The team heard the villagers. The Palladia chairman became a friend. He and others gave opinions about what was important.
- The team had interest in the village's 'other economy'; textiles they'd made, especially the old ones, and talked with the families involved.

# Improving Infrastructure Is Popular



### Conclusions

- Informal transport supports local economy
- ☐ Informal transport needs infrastructure
- Improving infrastructure seems more popular than social impact studies!