



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

53rd Annual Transportation Research Forum

Tampa, March 14-17, 2012

Financing the Future Transportation System

Developing Country Finance

Dr. Andreas Kopp
World Bank

Financing the Future Transportation System

Main messages

- Developing countries will see shifts in transport finance
- Reduction in tax finance comes with economic and fiscal risks
- How to recover costs and balance risks

Developing countries will see shifts in transport finance

- Developing countries seek reduction in tax and debt financing (too, but for different reasons)
 - No fiscal crisis like in many OECD countries
 - But strong commitment to reduced public debt/GDP ratios, due to fears of ‘crowding out’ in middle income countries
 - Reduced lending from IFI’s to poor countries in the aftermath of the financial crisis

Developing countries will see shifts in transport finance

- Example Turkey: massive transport system expansion plans

Table 3: Infrastructure expansion and equipment purchases 2011 - 2023

Road (km)		Rail	
Divided road	11,523	High-speed railway (km)	10,000
Highway	5,302	Conventional railway (km)	5,000
Hot-mix bituminous paving	58,436	Double railway (km)	800
Single-platform road	9,100	Electrical railway (km)	8,000
Pavement maintenance	124,000	Signalization (km)	8,000
Bridges	78	Rehabilitation (km)	500
Tunnels	84	Connection lines	40
Total	208,523	Logistics center	16
		High-speed trains	180
		Railway engines	300
		EMU	120
		DMU	24
		Freight wagons	8,000

Source: Government of Turkey, Ministry of Transport and Communication, Transport and Communication Strategy – Targets for 2023. Ankara 2011.

Developing countries will see shifts in transport finance

- Financing needs of > \$ 200 bn.
- Debt financing excluded by primary surplus targets
- Some fiscal space will come from public sector reform
- Major part of the finances needed are expected to come from private finance mobilized by concessionaires

Developing countries will see shifts in transport finance

Contingent liabilities arise from demand guarantees in currently favored model

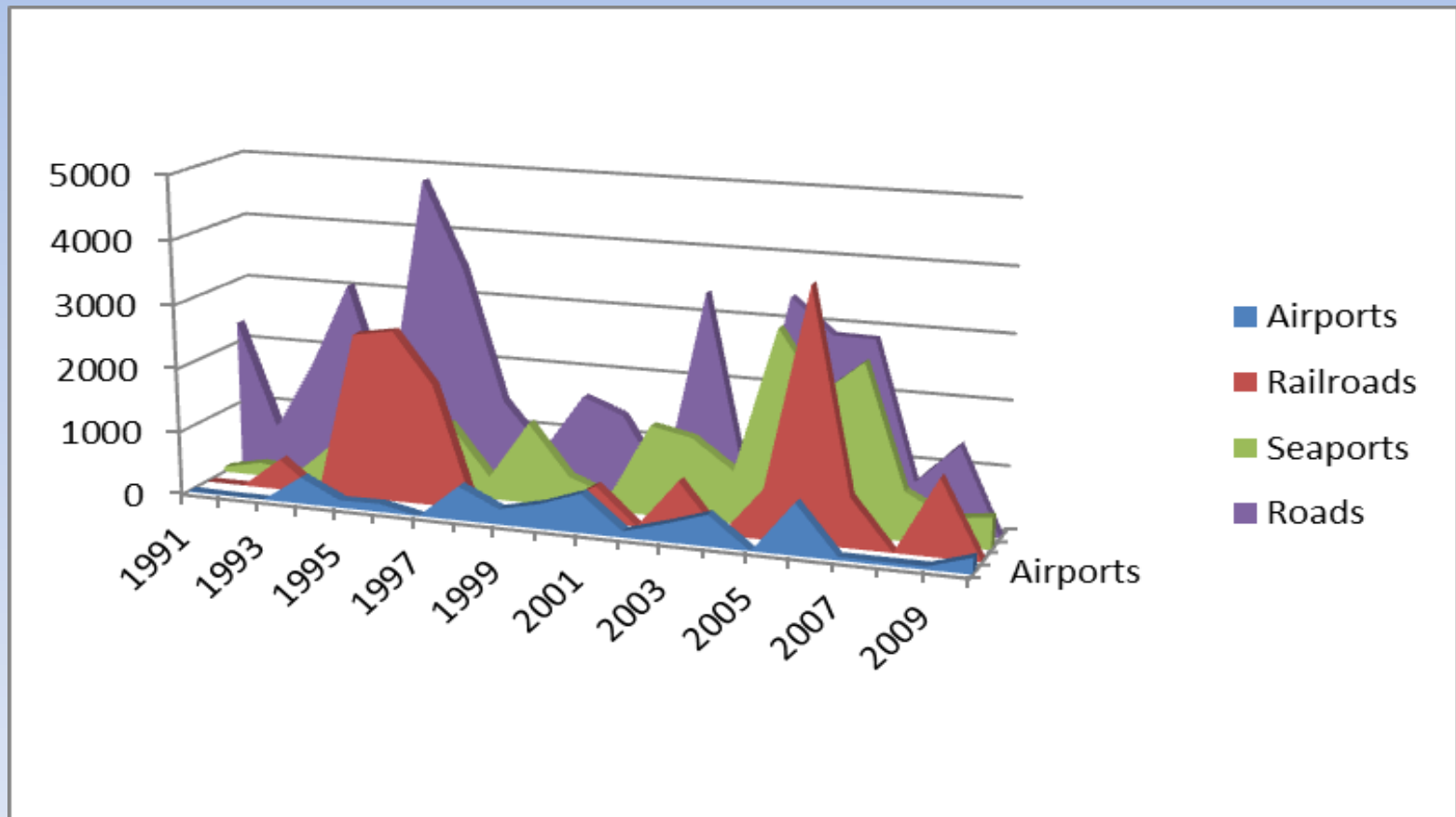
- Road agency KGM invites bidding with pre-specified tolls
 - Bidders compete in lengths of contracts
 - Demand guarantees will bring down contract periods to about 15 years.
- ⇒ Strong risk allocation to the public sector

The record of private finance in transport infrastructure

- \$ 1000 billion private funds were committed between 1990 and 2005 to all infrastructure sectors, small share of overall investment demand
- Transport had only about 15 per cent of these commitments
- Amounts to \$ 10 billion annually for all developing countries
- A substantial fraction of the commitments is not disbursed

The record of private finance in transport infrastructure

- WB private finance commitments to projects



Fiscal hopes were often disappointed

- Commitment to initial contracts lacked credibility
- WB study for Latin America: 75 % of all contracts were renegotiated to obtain better terms for the private investor
- Cost overruns were difficult to contain
- Demand uncertainties (uncertainties on the development of the modal structure) are shifted to the public sector.

Private finance and the challenges of cost recovery

- Payment mechanisms determine risk allocation
 - Cost recovery by user charges:
 - All risk assigned to investor,
 - Strongest incentives for cost control and service quality
 - But: risk of underutilization of capacity
 - Usage related payment by shadow tolls, part or all of the revenue per unit of service is paid by the public partner

Private finance and the challenges of cost recovery

- Payment mechanisms determine risk allocation
 - Availability payment: demand guarantee
 - Assigns all risk to the public sector if it covers full costs
 - No incentives to cut costs and improve quality
 - In some cases learning process to adopt mixed models
 - Availability payments that do not cover full costs, and allow for charges
 - Minimum revenue guarantees that leave incentives for cost cutting and service improvement

Summary

- An increase in new models of combining traditional with private finance of transport infrastructure is likely in developing countries
- It has played a relatively small role in transport in the past.
- Mixed models of availability payments and user charge cost coverage invite investment and avoid risk assignment to public sector
- Risk of renegotiation is often higher in DCs