

TRANSPORT INFRASTRUCTURE FINANCING

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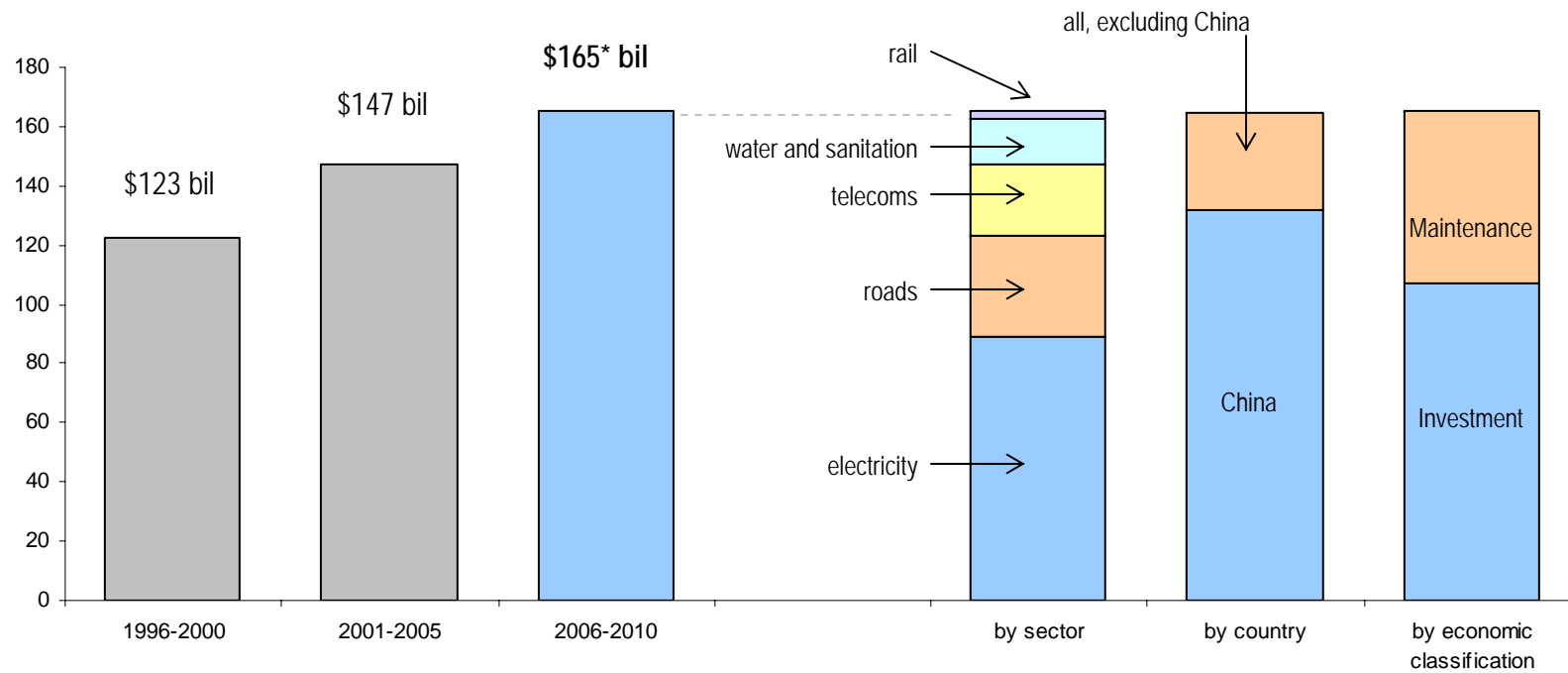
World Bank

Bangkok, Sept. 16, 2005



EAST ASIA'S INFRASTRUCTURE NEEDS

East Asia, estimated infrastructure expenditure, actual and projected, 1996 – 2010 (\$ billion / year)



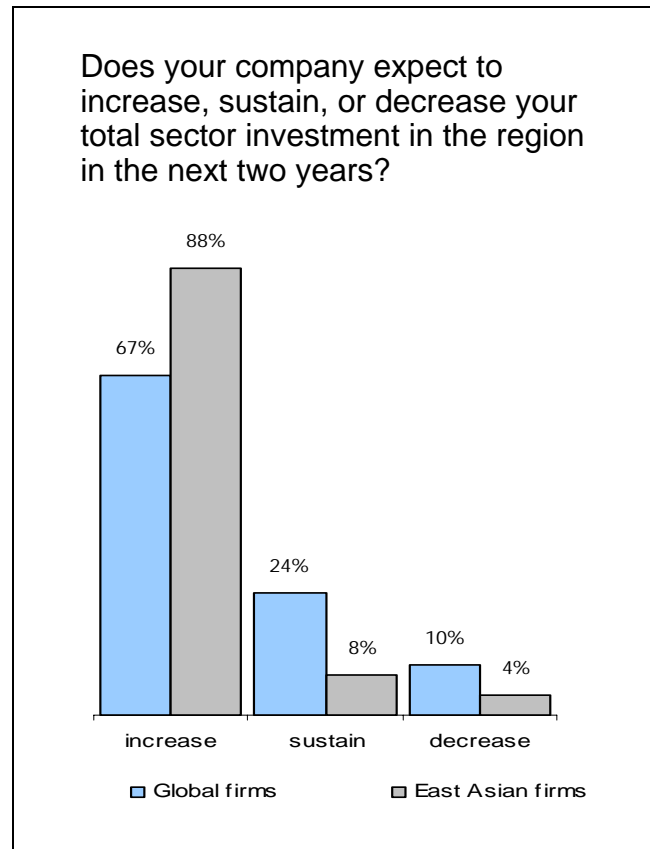
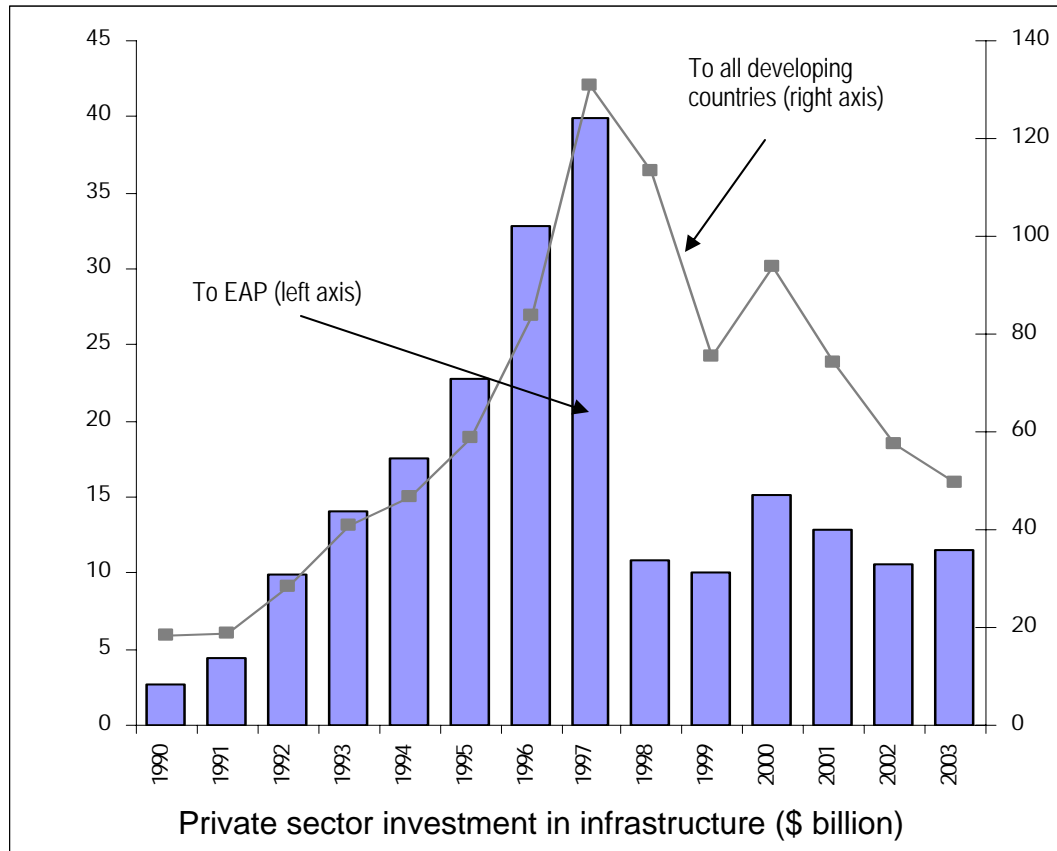
* Based on econometric simulations consistent with projected regional growth, and efficiency prices. Due to data limitations, the simulation excludes a number of key infrastructure services, notably ports and airports, and all but major roads

MEETING EAST ASIA'S INFRASTRUCTURE

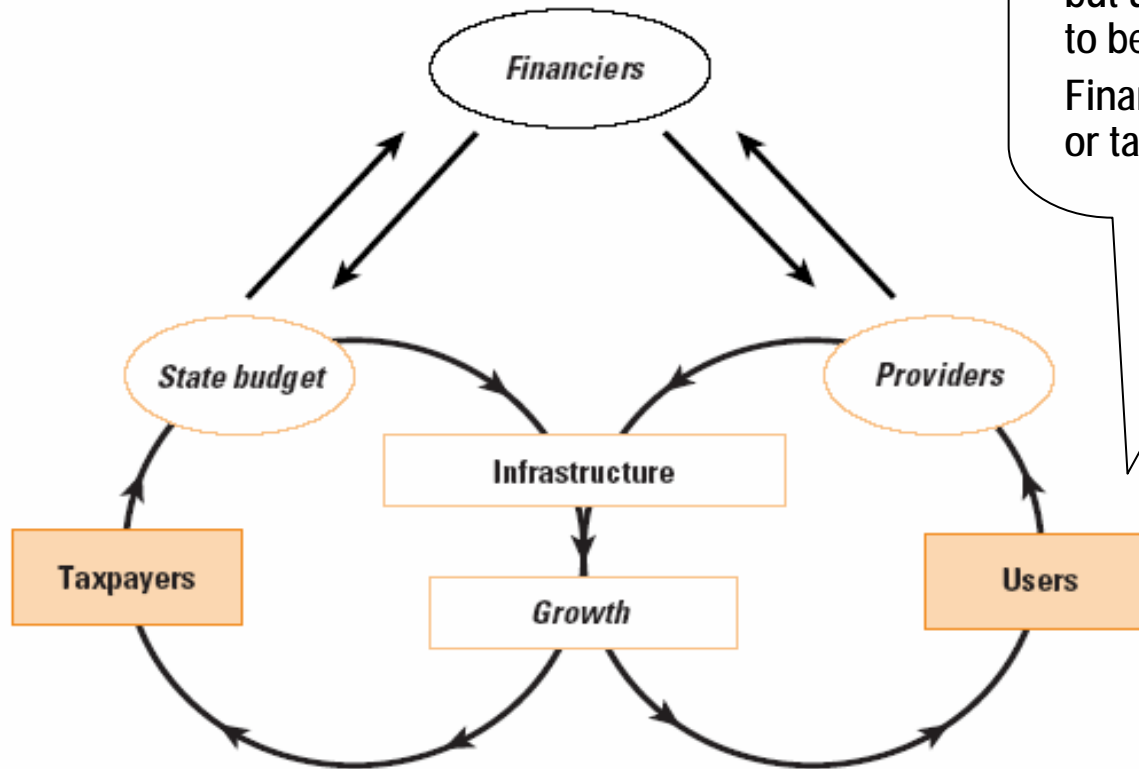
THE PRIVATE SECTOR

The private sector bubble has burst...

... but sentiment is positive



FLOW OF FUNDS FOR INFRASTRUCTURE



Financiers can change the time profile of taxes & user charges by providing loans or equity but ultimately those loans need to be repaid..
Financier help to smoothen tax or tariff increases

TAXES: TRENDS

- Is the fuel tax running out of gas?
 - Infrequent changes;
 - Fewer \$/ltr. though twice as many Km/ltr.;
 - Ineffective in capturing true costs;
- Trends:
 - Favor balanced transport system: cars-public transport (US, EU);
 - Surge of local taxes: sales tax, new real estate tax, payroll tax, fuel tax, other;
- Local voice & politics influence investment decisions

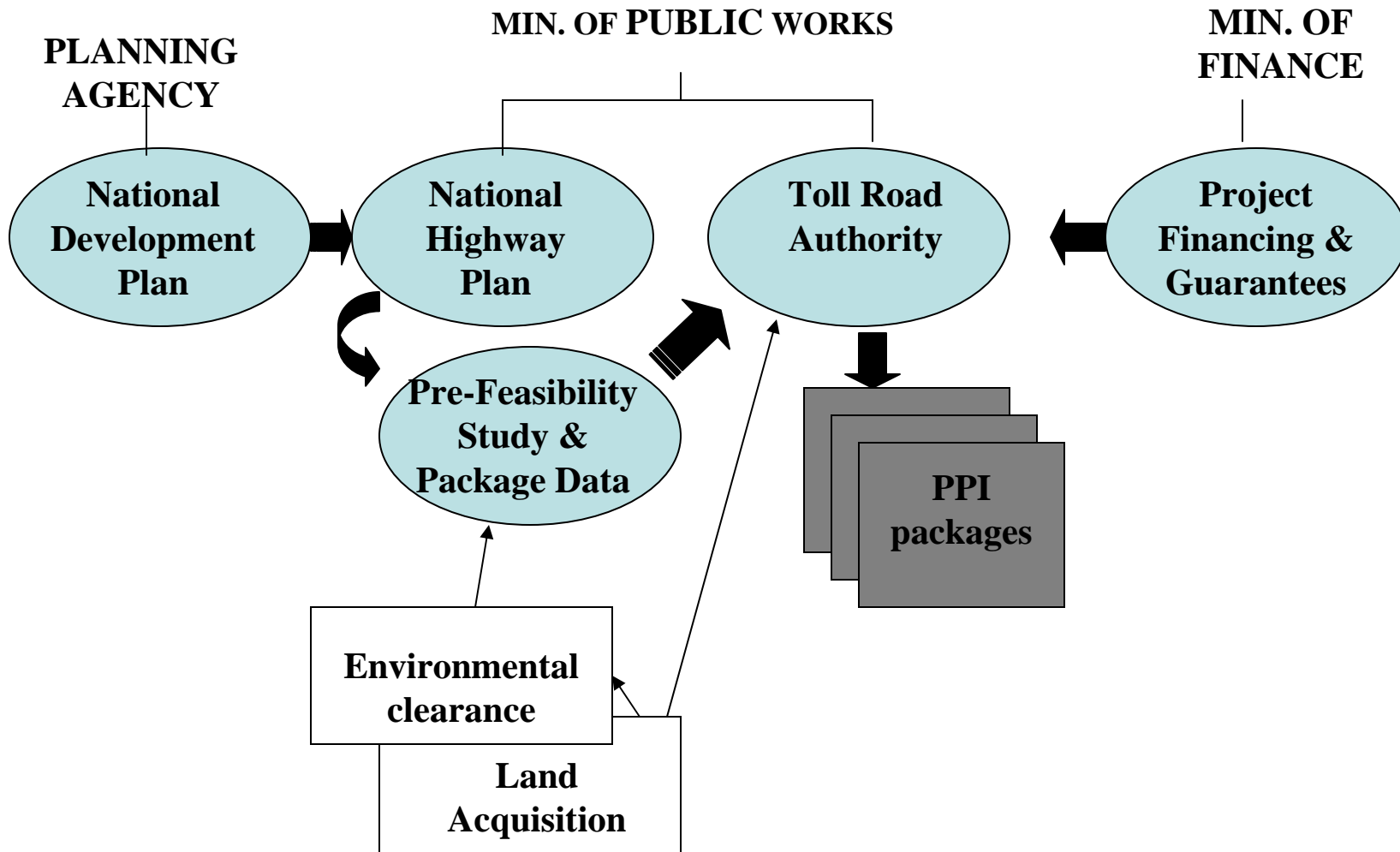
USER FEES: TRENDS

- Fee = Capital + O&M + Externalities (noise, air, accidents, congestion);
- In EU: 8.3 Euro though true costs = 12-24 euro;
- Fee structure needs to be altered to align costs & price w/o any change in overall tax level;
- IT solutions: distance based user fees (US, Germany); congestion pricing (Singapore, London).

PRIVATE SECTOR OPTIONS IN TRANSPORT

- **Community** (Sweden)
- **State Corporation** (UK- Hwy agency, Chile-Port Corp., German Rly., China toll roads);
- **Management Contract** (Uganda -Hwy, Zambia-rail);
- **Lease** (Las Vegas transit, Mexico Rly., Australia: airports, Philippines: LRT3);
- **DBFO** (UK-Trunk roads, London underground, Athens Airport, Portugal: motorways);
- **BOTs** (California SR91; France: Millau Viaduct, India: Nhava Sheva port; S. Africa/Asia: road concessions);
- **Franchise** (UK-train, buses, Bagota-buses, Australia-public tr.);
- **Private Co.** (UK-Railtrack, Airports in Australia, NZ, Germany, Mexico)

TOLL ROAD CONCESSIONING: A FRAMEWORK



EAP BUSINESS STRATEGY

Leveraging Bank Group finance and private flows - example: Nam Theun 2, Laos

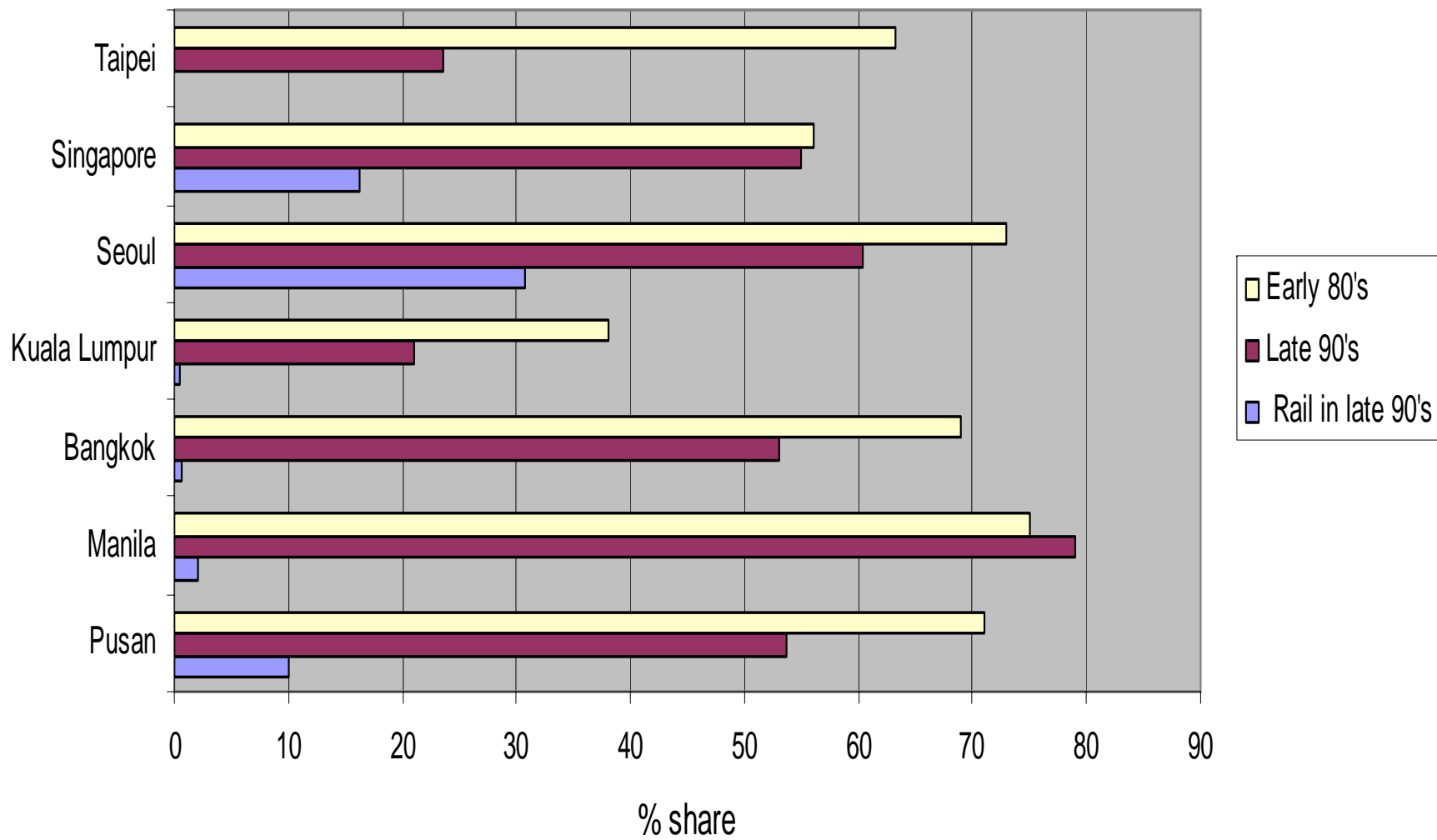


- \$1.45 billion hydro project (incl. contingent financing) exporting energy to Thailand
- Leveraged private sector financing of \$1.2 billion through IDA guarantee of \$50 million, IDA grant of \$20 million and MIGA guarantee up to \$200 million.
- Entailed partnership with other donors, including ADB, AFD and EIB

What scale of private sector financing?

	Bangkok		Kuala Lumpur			Manila
	BTS	Blue	Star	Putra	Monorail	LRT III
Cost	\$1.23 bn	\$3.13 bn	\$0.9 bn	\$1.54 bn	\$0.32 bn	\$0.68 bn
% Govt. Depot sites		80% for land+Civil	10%	0	0	0
% Govt. Loan	0%	0%	20%	25.6%	25.4%	0%
% Private	33%	25.6% for Eqpt/O&M	10%	20.4%	22%	28%
Other Debt	66.8%	74.4%	60%	54%	52.6%	72%
Govt Action	Planning to buy	Planning to buy	Assets taken in 2000	Asset taken in 2000	NA Listed	Lease>rev15% return.

Declining Public Transport Use

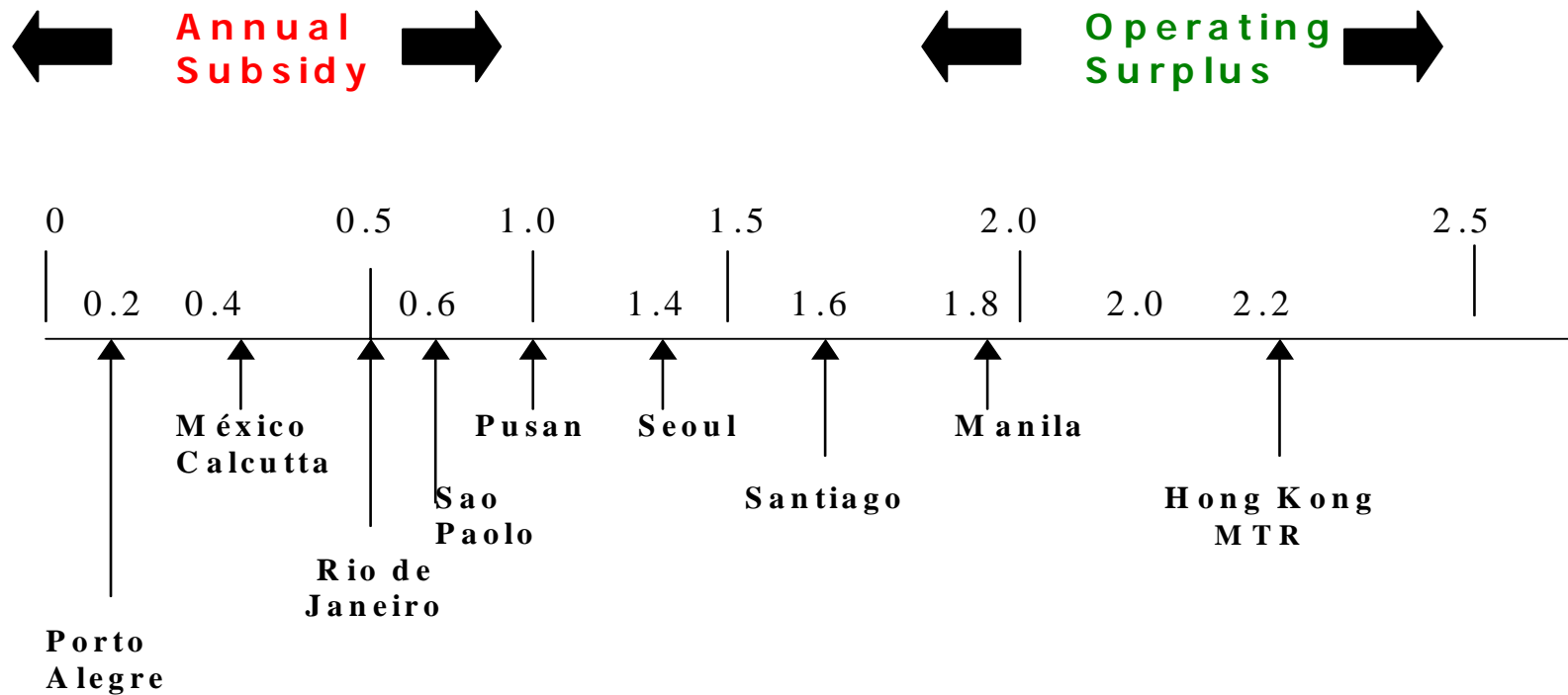


Limited Effectiveness of Rail & Bus

Cities	1980's		Late 90's				
	Cars /1000	Buses / 1000	\$GDP /Capita	Cars /1000	Buses /1000	Rail Pass / KM	Rail KM
Singapore	68	2.70	22,710	110		12,500	80
Kuala Lumpur	38	1.18	4,700	210	0.5	2,200	37
Pusan	16		8,600	145	0.7	18,000	32.3
Taipei			13,250	210		5,630	39.10
Bangkok	71	1.22	1,850	220	0.5	8,510	23.50
Manila	45		1,050	90		28,570	14.0
Seoul	127	1.55	8,600	220	0.82		
HCMC			320 (city: 1,050)	8.1 (MC:300)			

Financial Difficulties with Urban Rail Systems

Fare Revenue/Operating Costs of Metros



Strategic Approach

- **Initiate a consensus based planning process to develop “building blocks” to be implemented over time including transit priority schemes and ROW preservation**
- **Proposals must be fiscally constrained, market responsive and monitored**

Cont.

Strategic Approach

- **Implement each “building block” including the complementary policies and investments with participation of stakeholders**
- **Build government institutions to be effective regulator and purchaser of private transport services on a competitive basis**
- **Review options for mobilizing new resources for the sector**

Framework for Incremental Approach

