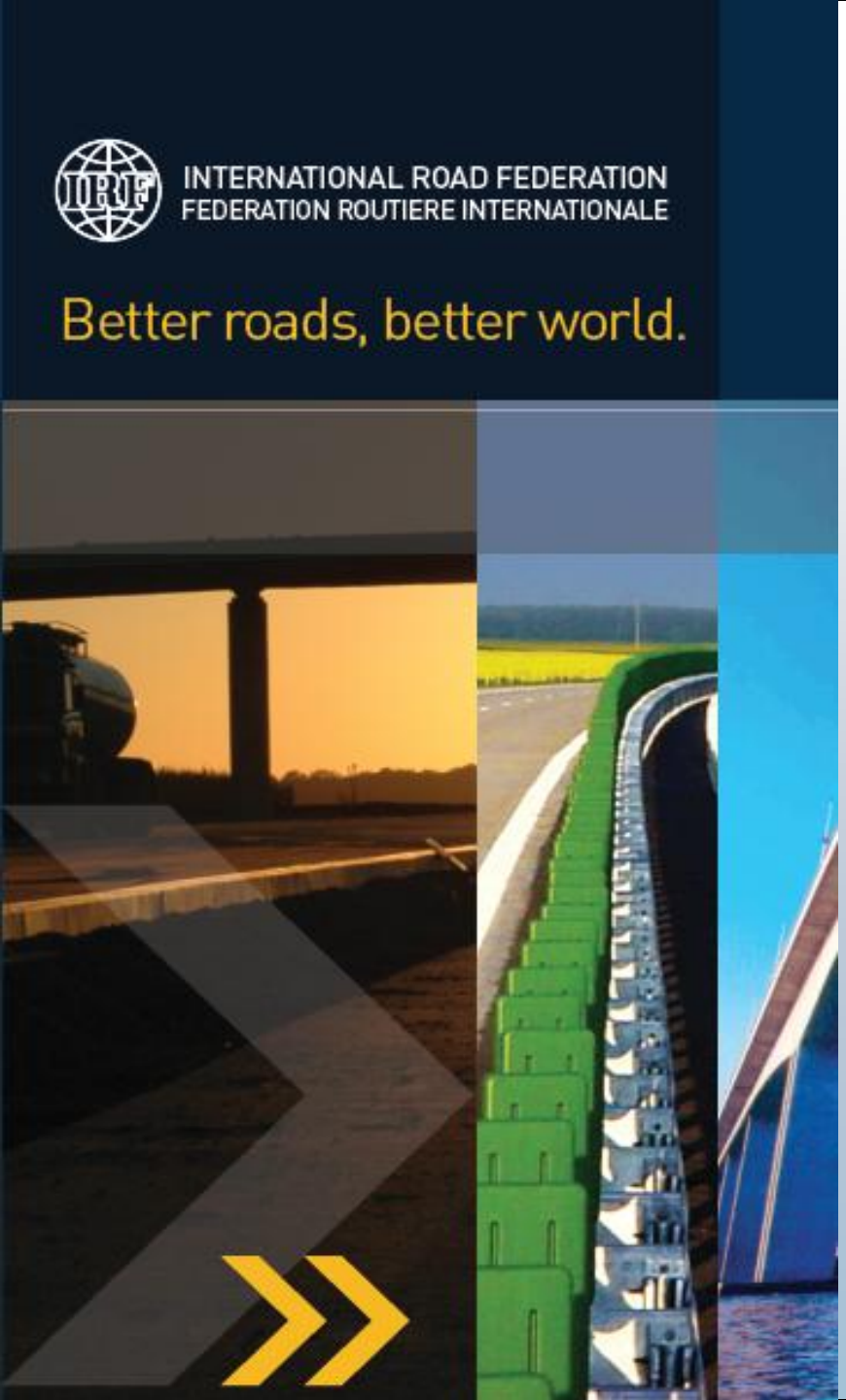

International Workshop on Measuring Investment in Transport Infrastructure
ITF/OECD

9-10 February 2012
IEA, Paris

The importance of data in public & private assessments of transport projects

Cristian Gonzalez
Programme Officer
Statistics & Data

- IRF Presentation
- Data Collected – World Road Statistics
- Initiatives : Road Financing & Economics
- Economic Evaluation (private and public project data)
- A method: Cost-Benefit Analysis
- Conclusions

INTERNATIONAL ROAD FEDERATION
FEDERATION ROUTIERE INTERNATIONALE

Not-for-profit organisation - Established in 1948.

Our vision: To improve road networks worldwide
Our mission: To be the voice of the road infrastructure industry
Our values: Commitment to safe, smart and sustainable roads

Our private sector members benefit from worldwide exposure for their products and services among key decision makers in over 115 countries.

INTERNATIONAL ROAD FEDERATION
FEDERATION ROUTIERE INTERNATIONALE

Focus Areas

Projects

CHANGER
Greenhouse Gas Calculator

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inaroad Innovation Award for Road Transport in Developing Countries

IRF WORLD ROAD STATISTICS

Better roads, better world

IRF's flagship product: World Road Statistics

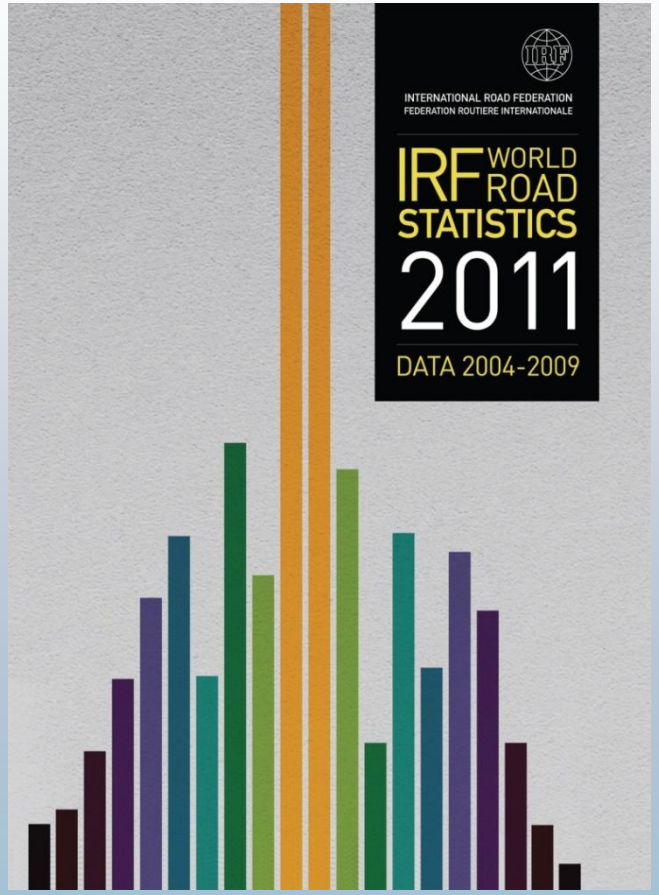
Edited yearly since 1964.

Most recent edition WRS 2011 covering 2004-2009.

Paper edition, electronic edition.

Data compendium 1963-2009, raw data, no analysis.

Financed by member contributions and data sales.



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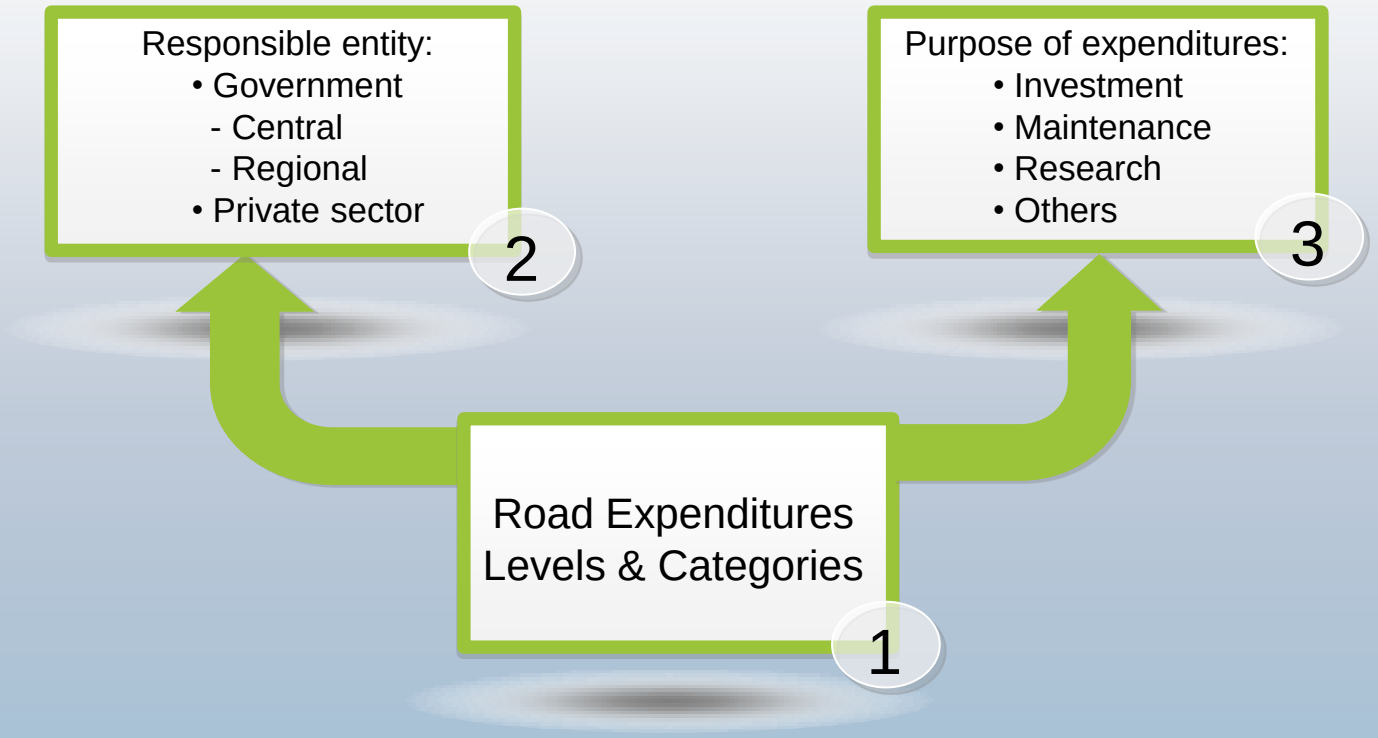
Road expenditures



Total road expenditure per administrative levels - countries abstract (US$ million)

Country	Year	Central	Regional/Local	Private
Australia	2009	4'450.541	9'776.847	5'592.703
Austria	2003	1'284.470	688.335	1'641.900
Canada	2009	992.359	24'734.479	
Chile	2009	685.412	787.607	
Congo, Rep.	2003	20.385	23.753	
Denmark	2006	398.665	2'295.722	
Estonia	2005	85.332	86.869	
Ethiopia	2003	72.046	34.139	
France	2009	4'558.824	20'000.000	7'352.941
Ireland	2004	654.080	209.583	
Korea, Rep.	2009	7'378.000	7'245.000	3'337.000
Latvia	2009	261.748	163.602	
Malta	2009	49.277	8.375	
New Zealand	2009	1'474.747	409.091	
Norway	2009	2'984.775	1'612.457	
Peru	2004	241.779	78.321	
Poland	2003	1'224.275	966.208	
Slovenia	2009	318.060	568.614	
South Africa	2007	1'063.837	1'389.898	
Spain	2009	5'887.375	5'107.479	1'314.176
Switzerland	2009	2'524.272	2'718.447	
Ukraine	2008	1'085.571	106.990	1.104
United Kingdom	2005	8'764.781	9'735.264	
United States	2008	724.520	172'728.849	
Zambia	2005	160.751	61.996	

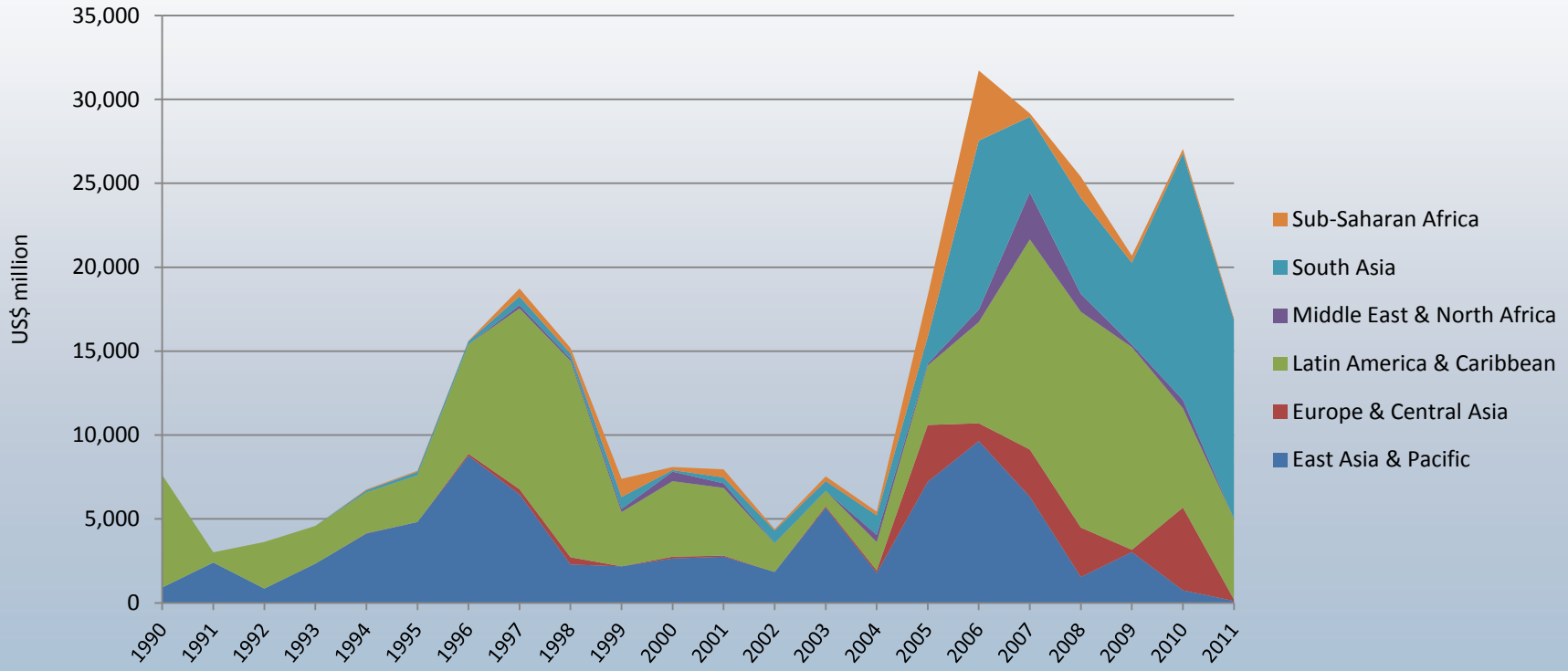
Source: IRF WRS 2011

Total road expenditure per nature - countries abstract (US$ million)

Country	Year	Construction	Maintenance	Others
Bahrain	2003	62.527	10.595	6.186
Bulgaria	2003	54.243	31.642	14.904
Cameroon	2007	229.752	293.382	4.264
Chile	2009	670.844	629.336	172.840
Estonia	2005	119.781	30.494	21.926
Ethiopia	2003	79.935	21.314	4.936
Finland	2009	357.591	1'006.401	375.999
Iceland	2009	127.894	69.384	20.969
India	2009	2'932.063	210.201	0.823
Ireland	2004	563.841	299.134	0.689
Latvia	2009	202.008	196.648	26.694
Lithuania	2009	85.258	109.687	89.509
Malta	2009	7.952	31.207	18.493
Mexico	2009	3'073.130	781.224	523.164
Mozambique	2009	141.326	69.495	26.207
New Zealand	2009	1'366.522	512.987	4.329
Norway	2009	2'053.460	2'165.398	378.374
Peru	2004	226.596	78.500	32.590
Poland	2003	1'001.283	888.197	301.003
Slovenia	2009	524.103	216.369	146.203
Sweden	2009	1'614.671	1'301.714	327.712
Switzerland	2009	1'245.630	293.204	130.097
Turkey	2009	5'901.224	196.894	261.835
Ukraine	2008	516.766	478.403	174.299
United States	2008	91'147.709	44'714.305	37'591.355

Source: IRF WRS 2011

Total transport investment by region and year (US$ million) low and middle income countries - private sector



Source: PPI World Bank

IRF knows the economic value of roads and the importance of sound asset management.

IRF provides you:

- Access key information on road investment programmes
- Meet future consortium partners for your next project bid
- Guide governments with policy advice on sustainable levels and mechanisms for funding for roads
- Put road maintenance on the political agenda
- Be part of thought-leaders on road financing & economics
- Access key, fact-based direct and indirect economic impact analysis for road investment.

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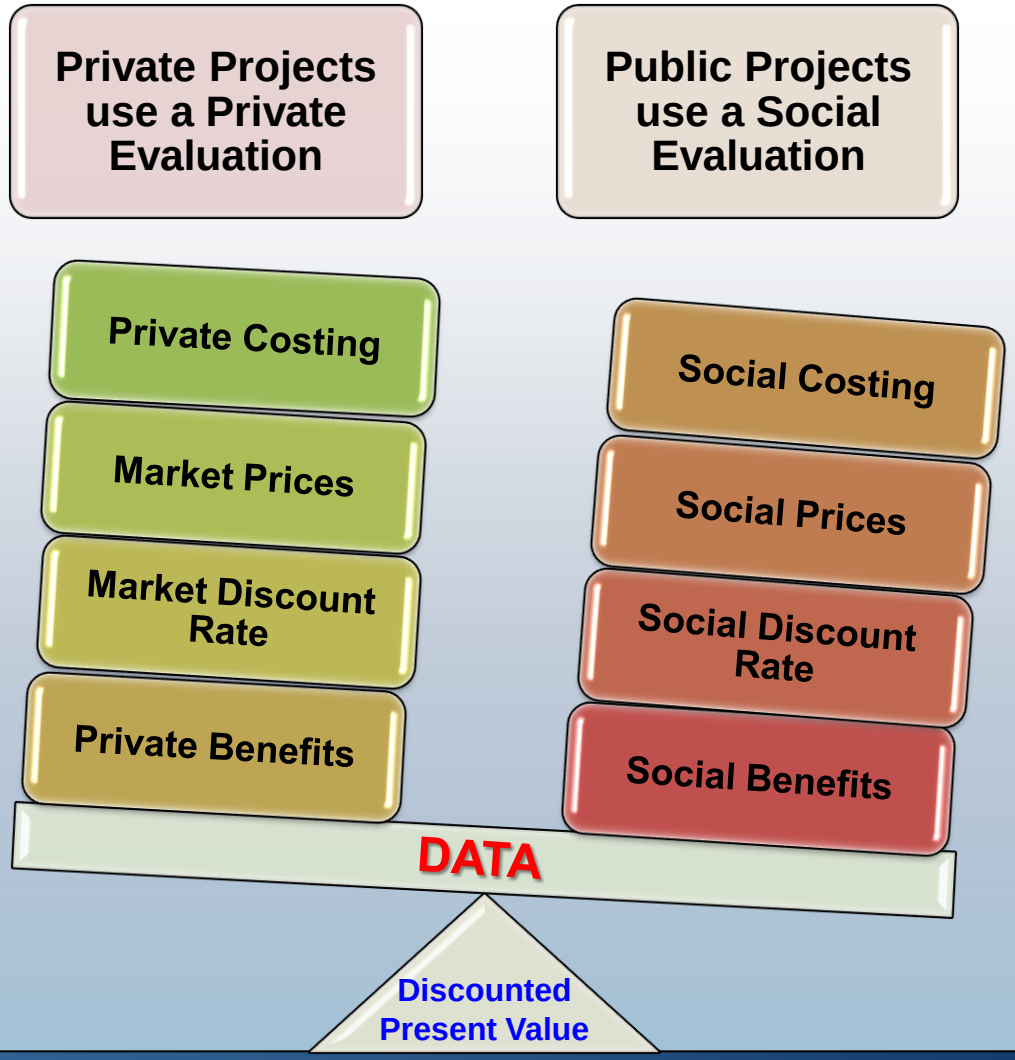
Better roads, better world


Private Projects use a Private Evaluation
Public Projects use a Social Evaluation
Private Costing
Market Prices
Market Discount Rate
Private Benefits
Social Costing
Social Prices
Social Discount Rate
Social Benefits
DATA
Discounted Present Value

1) Costing Analysis

PRIVATE COSTING

Construction & Contingencies Costs
- Materials
- Labour
- Energy
- Equipments

Maintenance & Operation Costs
- Materials
- Labour
- Energy
- Equipments

Other Recurrent Costs
- Administration
- Training
- Promotion & Education

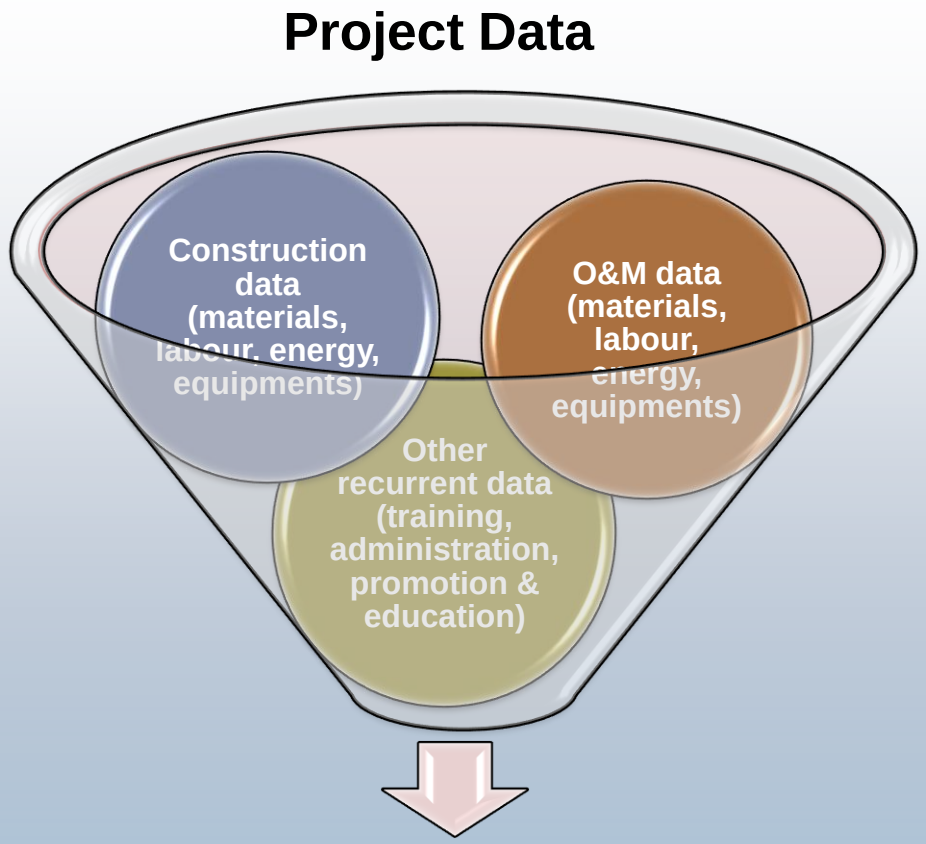
Indicators:

- AEC. Annual equivalent cost
- AIC. Average incremental cost

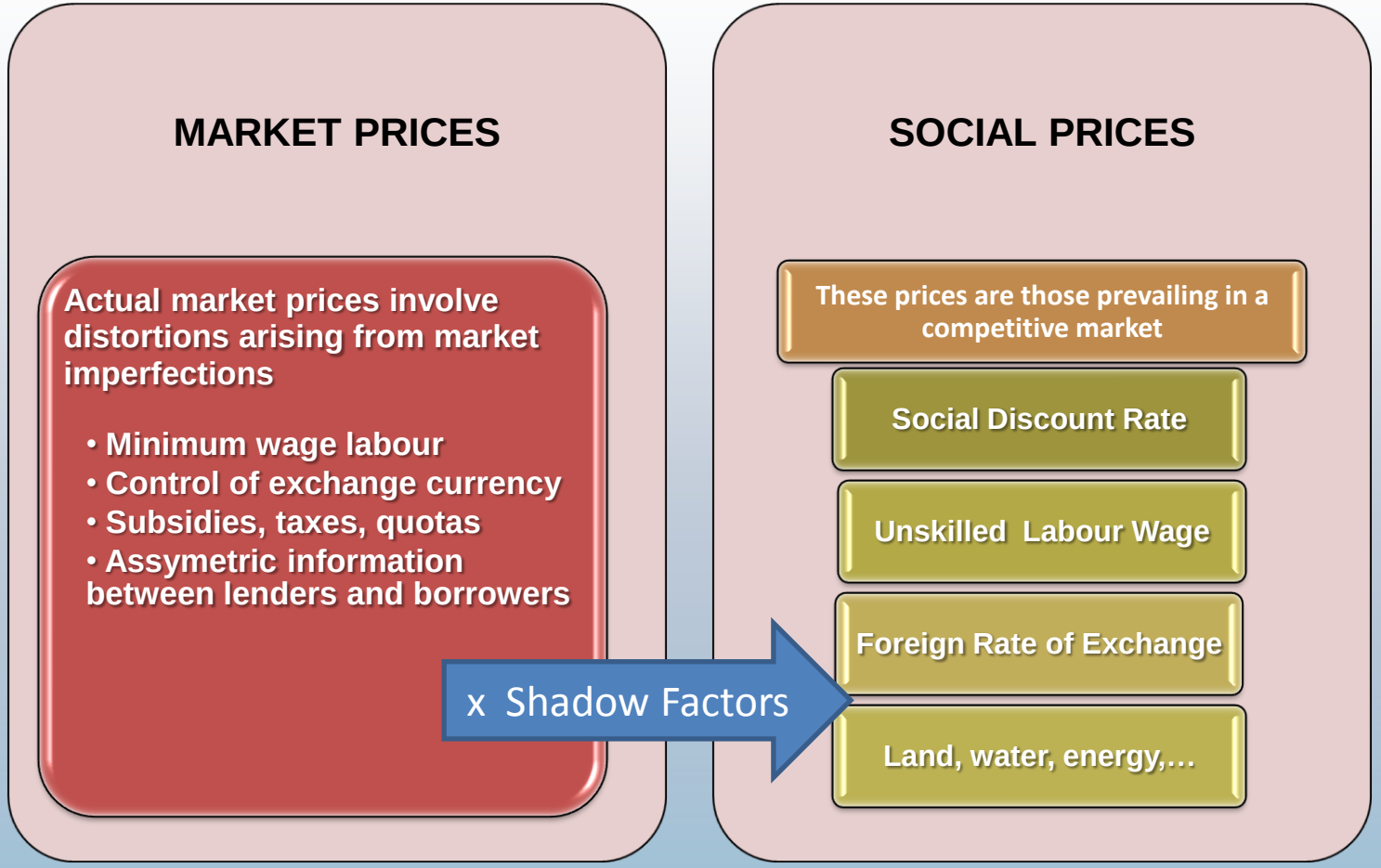
SOCIAL COSTING

Opportunity cost of resources, because of scarcity, to the national economy investing in infrastructure:
- Construction & Contingencies Costs
- Maintenance & Operation Costs
- Other Recurrent Costs

1) Costing Analysis



1) Costing Analysis



2) Benefit Analysis

PRIVATE BENEFITS

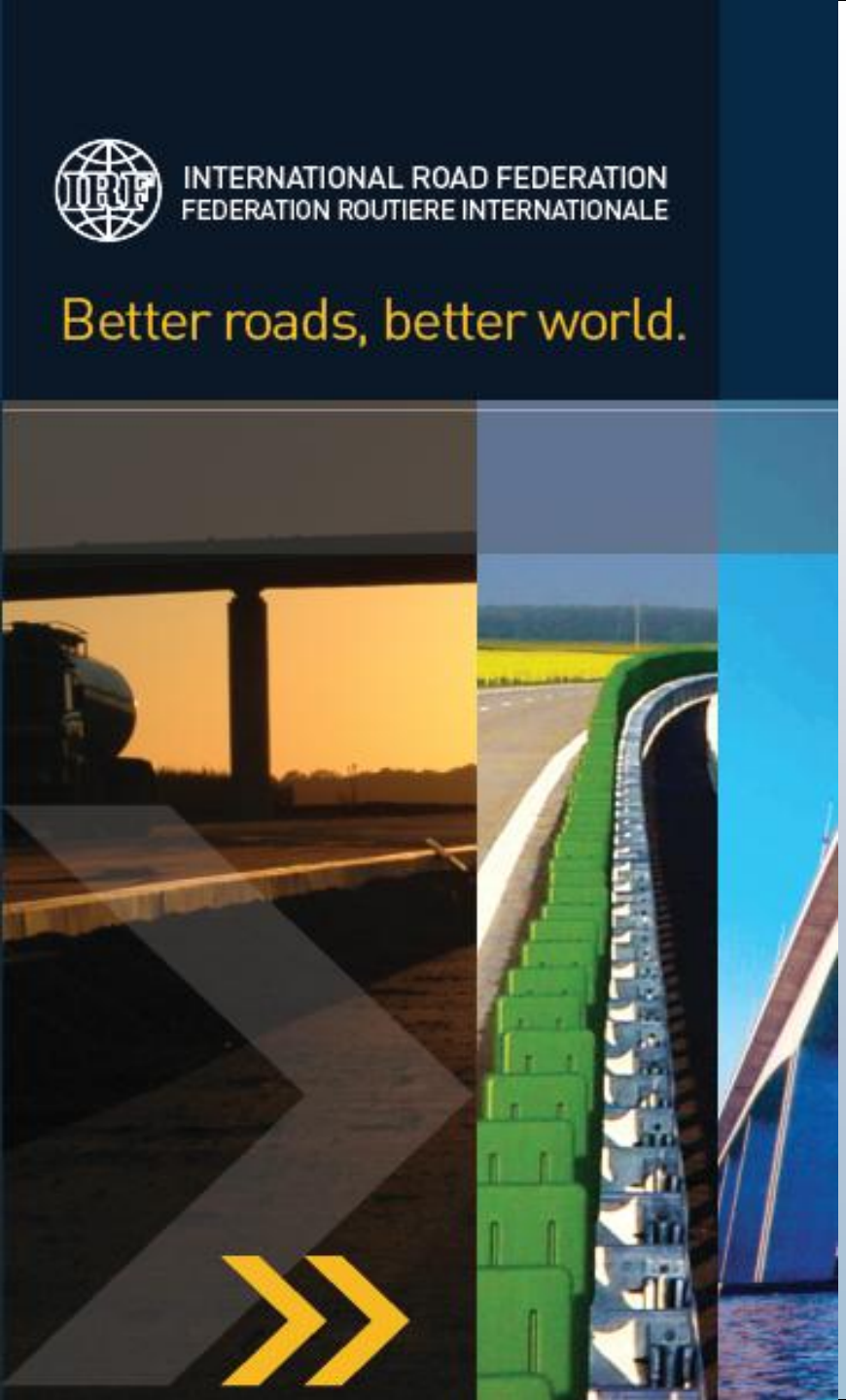
- Estimated by Road Users Charges
- Direct Toll
- Indirect Fuel Tax
- Others

SOCIAL BENEFITS

- Estimated by Econometric Analysis (in monetary values)
- Willingness to Pay
- Beneficiaires' Surplus
- Saving costs
- Others

Conclusions

- The valuation of transport projects becomes a multidisciplinary discipline
- Data remains a necessary factor to assess private and public transport projects
- Road Financing & Economics Initiative is key in providing policy guidance as well as a platform for the exchange of experience
- The use of shadow factors are crutial for a social valuation
- Econometric analysis can help in the monetary assessment of social benefits – An important non-monetary factor in transport projects



IRF WORLD ROAD STATISTICS

Thank you

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Programme Officer
Statistics & Data

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