

# TRANSPORT NOTES

TRANSPORT ECONOMICS, POLICY AND POVERTY THEMATIC GROUP



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## Notes on the Economic Evaluation of Transport Projects

*In response to many requests for help in the application of both conventional cost benefit analysis in transport and addressing of the newer topics of interest, we have prepared a series of Economic Evaluation Notes that provide guidance on some of issues that have proven more difficult to deal with.*

*The **Economic Evaluation Notes** are arranged in three groups. The first group (TRN-6 to TRN-10) provides **criteria** for selection a particular evaluation technique or approach; the second (TRN-11 to TRN-17) addresses the selection of values of various **inputs** to the evaluation, and the third (TRN-18 to TRN-26) deals with specific **problematic issues** in economic evaluation. The Notes are preceded by a **Framework** (TRN-5), that provides the context within which we use economic evaluation in the transport sector.*

*The main text of most of the Notes was prepared for the Transport and Urban Development Department (TUDTR) of the World Bank by Peter Mackie, John Nellthorp and James Laird, at the Institute for Transport Studies (ITS), University of Leeds, UK (The draft text of Note 21 was prepared for ITS by I.T. Transport Ltd). TUDTR staff have made a few changes to the draft Notes as prepared by ITS. Funding was provided from the Transport and Rural Infrastructure Services Partnership (TRISP) between the Department of International Development (DFID) of the Government of the United Kingdom and the World Bank.*

*The Notes will be revised periodically and we welcome comments on what changes become necessary. Suggestions for additional Notes or for changes or additions to existing Notes should be sent to [rcarruthers@worldbank.org](mailto:rcarruthers@worldbank.org)*

## ECONOMIC APPRAISAL OF REGULATORY REFORM – CHECKLIST OF ISSUES

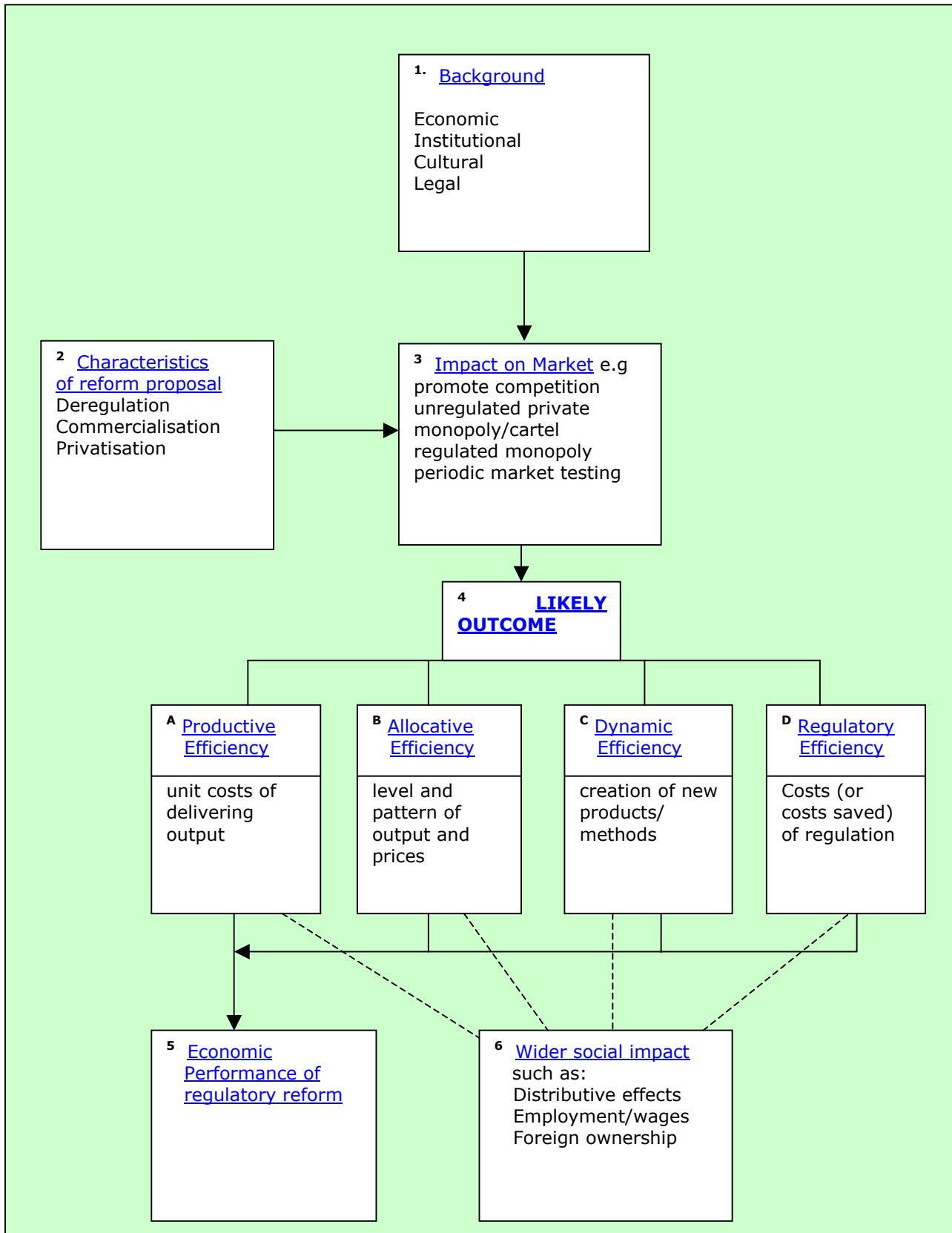
Regulatory Reform is a key plank of World Bank policy, and is therefore a large subject, with dedicated toolkits and associated websites (for example the Port Reform Toolkit and the Toolkit for Public Private Partnership in Highways).

The purpose of this brief note is to set out a checklist of issues which need to be considered when assessing the likely economic impact of regulatory reform. There is a great deal of relevant world literature, but a note of caution is appropriate when considering the transferability of experience, and especially outcome, from one country to another. Circumstances alter cases.

By regulatory reform, we mean changes in the economic regulation of particular sectors via deregulation, commercialisation, franchising, tendering, and privatisation. Changes in quality regulation (e.g. safety) and social regulation (e.g. minimum wages, working conditions) are not considered here.

A possible framework for thinking about the effects of regulatory reform is set out in the diagram in [Box 1](#) below. The structure of the rest of the note refers to the diagram. The general principles of economic appraisal apply here – the assessment requires an open minded assessment of a range of policy options against the base case and against each other.

**Box 1: Framework for Effects of Regulatory Reform**



## **BACKGROUND**

- Relevant characteristics of the economy and society;
- Relevant experience with market reforms in other sectors;
- Institutional capacity to handle and maintain proposed reform;
- Strategic issues such as foreign ownership or participation; and
- Legal structure; allocation of powers between jurisdictions.

## **CHARACTERISTICS OF REFORM PROPOSAL**

### **Deregulation:**

- Open commercial market?
- Area of system franchise?
- Break up and competitive tendering?
- Form of tender competition
- Monitoring/penalties/transfer arrangements;
- Functional specification of policy/planning/service delivery; and
- Residual regulation.

### **Commercialisation:**

- Adjusting prices/outputs to market levels.

### **Privatisation:**

- Sale (or lease) of state assets; and
- Relevant restrictions on sale/resale

The policy instruments may be combined together in various ways to make up a policy package. As with projects, the analyst should consider the case for the package as a whole, and for individual components within the package.

## **IMPACT ON MARKETS**

- What is really, honestly, expected to happen? For example:
- If the market is opened, will it be potentially or actually competitive? Can competition be sustained? Will there be instability and does this matter?
- If the market is franchised or tendered will there be effective pressure for gains in efficiency? What does this depend on? How can competitive pressure be maintained over time?
- If the firm or sector is privatised, what difference will this make to their behaviour? Are there social obligations? Do these have value or are they worthless?
- If there is a regulator, what is his/her position (a) in relation to the Government (dependent/independent); (b) in relation to the regulated firms? Does the culture or financing of the regulator make capture likely? What is the general legal and instructional context in terms of control of monopoly, restrictive practices, predation, cartelisation etc?

## **LIKELY OUTCOME**

### **Productive Efficiency**

What will happen to the unit costs of producing output? How will this happen? Productivity gains, changes in wages? How credible is this – any relevant benchmarks or parallel cases? How do you judge the degree of parallelism for assessment purposes?

### **Allocative Efficiency**

What will happen to the level and pattern of prices and outputs? Will cross-subsidy be stripped out resulting in some outputs rising and others falling or ceasing to exist? Will the pattern of prices (e.g. peak/off-peak) change? How will enhanced productive efficiency affect the pattern of output which it is efficient to produce? In a regulated set-up, how is the behaviour of regulator/planners likely to affect the pattern of prices and output?

### **Dynamic Efficiency**

Are there obvious opportunities for products, varieties which don't currently exist because of the dead hand of central control? Is there a chance of competing more effectively in regional/national/international markets?

### **Regulatory Efficiency**

What are the likely costs of the regulator's office? Who controls these costs, how is s/he funded? What are the risks of capture/corruption? In what detail is it possible for the regulator to monitor/enforce?

### **ECONOMIC PERFORMANCE OF REGULATORY REFORM**

This needs to bring together the assessment under [Section 4](#) points A-D into an integrated conclusion.

### **WIDER SOCIAL IMPACTS**

Decisions of this nature are rarely purely economic. Relevant considerations will be:

- Effects on labour of market reforms especially where above market wage levels or labour market restrictions have been in place;
- Feasibility of re-employment of displaced labour. Where retraining is part of the package, what costs should be included in appraisal of the reform?
- The pattern of gains and losses e.g. treatment of profit to foreign interests;
- Likely disruption effects such as strikes, demonstrations, attacks on plant and equipment;
- Effects on users who have been traditionally cross-subsidised (lightly used services if any, free concessionary travel etc); and
- Longer term impacts on land-use through changes in network structure.