

An aerial photograph of the Dubai skyline at sunset. The Burj Khalifa is the central focus, towering over other skyscrapers. The sky is a mix of orange, pink, and blue. In the foreground, there are complex highway interchanges and modern buildings with glass facades.

Securing international investment in railways: Financial collaboration in market regeneration

**Middle East Rail Conference
Dubai, 25th February 2020**

**Howard Rosen Chairman
Rail Working Group
Switzerland**



Identifying the trends in the rail sector

- Railways gradually being recognised as an essential part of the sustainable development agenda
- More passenger and freight traffic must be moved to the rails for good environmental and economic reasons
- Increasing cross border operations e.g. Belt & Road Initiative
- Urban rail transport is a strategic necessity
- New technology opening out new opportunities



Identifying the trends in the rail sector

New Technology

**Regenerative
braking**

**Supercapacitor
trams**

**Low-noise
rolling stock**

**Automated
train operation**

**High-speed
trains**

**Automatic
coupling
systems**

**Artificial
intelligence and
platooning**

**Real-time rolling
stock location
and diagnostic
systems**

**Variable-gauge
rolling stock**

**Positive train
control/ERTMS
& other in cab
signal systems**

**Hybrid, clean
diesel &
hydrogen/fuel cell
locomotives**







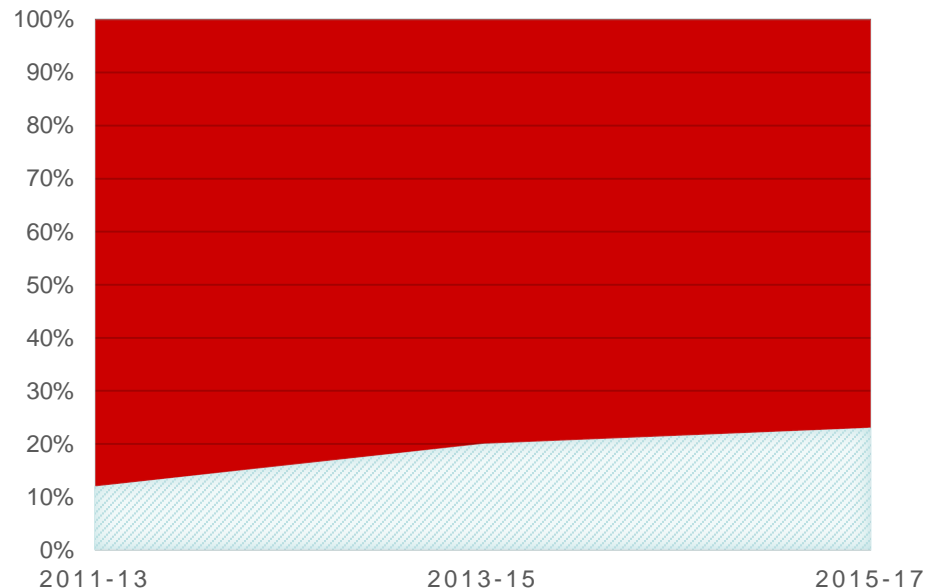
Identifying the trends in the rail sector



- Separation of operations and infrastructure
- Privatisation of state actors
- Rail sector gradually liberalised
 - = Public *and* Private operators
 - = Open access
 - = More competition – and a more competitive industry
 - = More private finance
- Public and business demanding a higher quality of service
- Governments cannot afford the massive investment needed in the railways



Identifying the trends in the rail sector

PERCENTAGE OF ROLLING STOCK
ORDER VOLUMES (EUROPE)
USING PRIVATE FINANCING



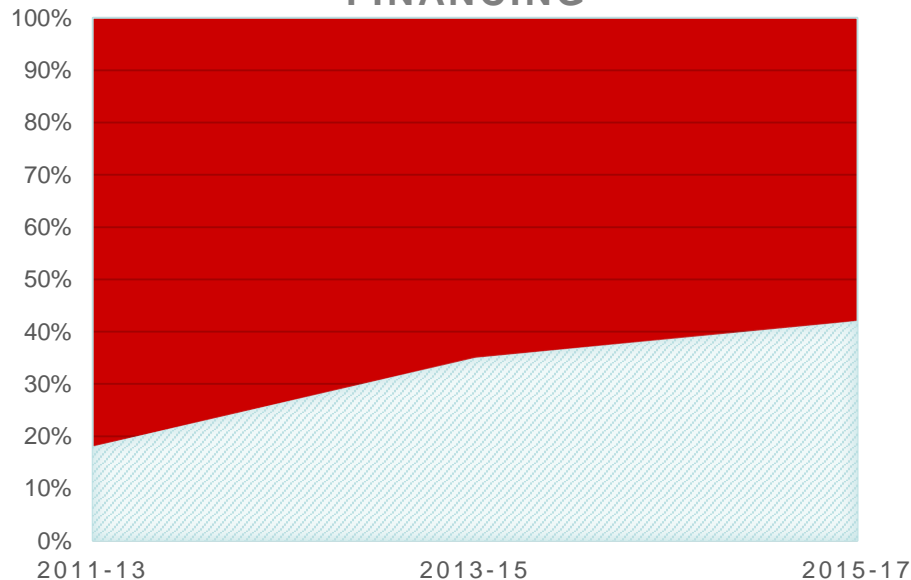
 = public finance
 = private finance



Source:
Roland Berger
reports for the
Rail Working
Group



Identifying the trends in the rail sector

PERCENTAGE OF PROJECTS
(EUROPE) USING PRIVATE
FINANCING



 = public finance
 = private finance

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Analysing the funding requirements

- Infrastructure
- Operations
- Rolling stock

The current funding models

- Public finance
 - ☐ Equity, state loans and grants, aid
- Public Export Finance
 - ☐ ECA, state or para-statal loans or guarantees
- Private investment
 - ☐ Privatisation: equity and debt for private companies
 - ☐ Secured debt
 - ☐ Leasing
 - ☐ BOT/PPP

Financing Infrastructure

- Public finance
 - ☐ Equity, state loans and grants, aid
 - ☐ MDB support or guarantees
- Private investment
 - ☐ Equity and debt for private companies
 - ☐ Real estate value capture

Financing Operations

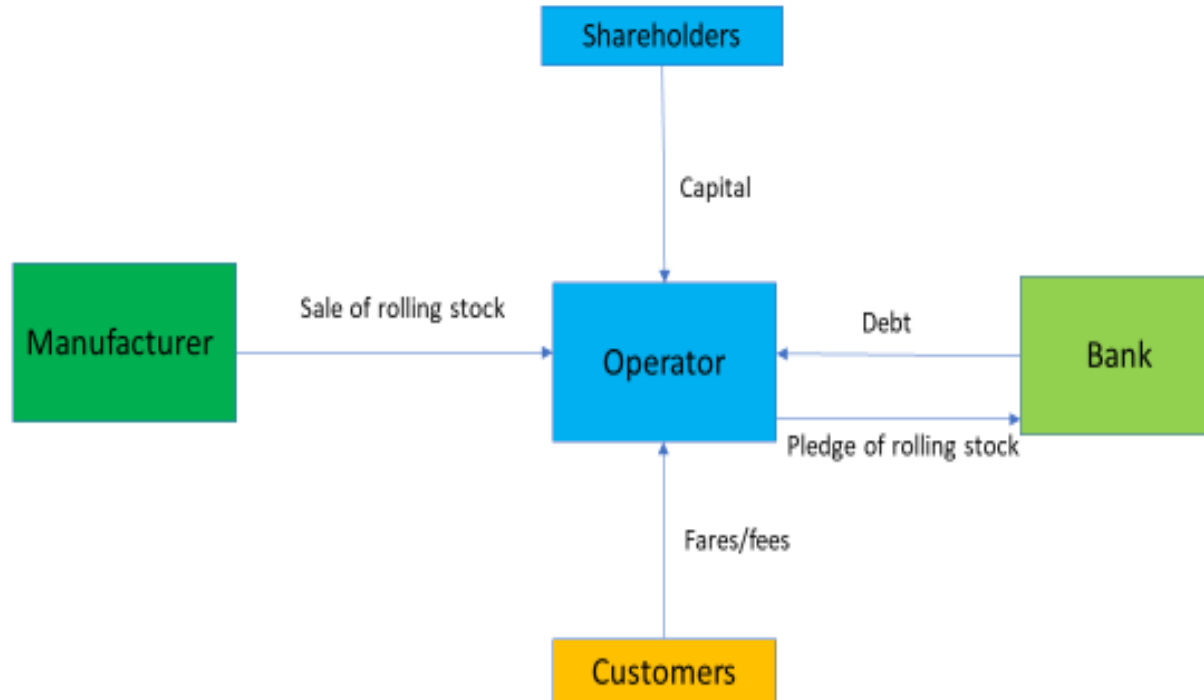
- Public finance
 - ☐ Equity
 - ☐ State subsidies, loans or grants
- Private investment
 - ☐ Equity and debt for private companies
 - ☐ Fare box financings

Financing Rolling Stock

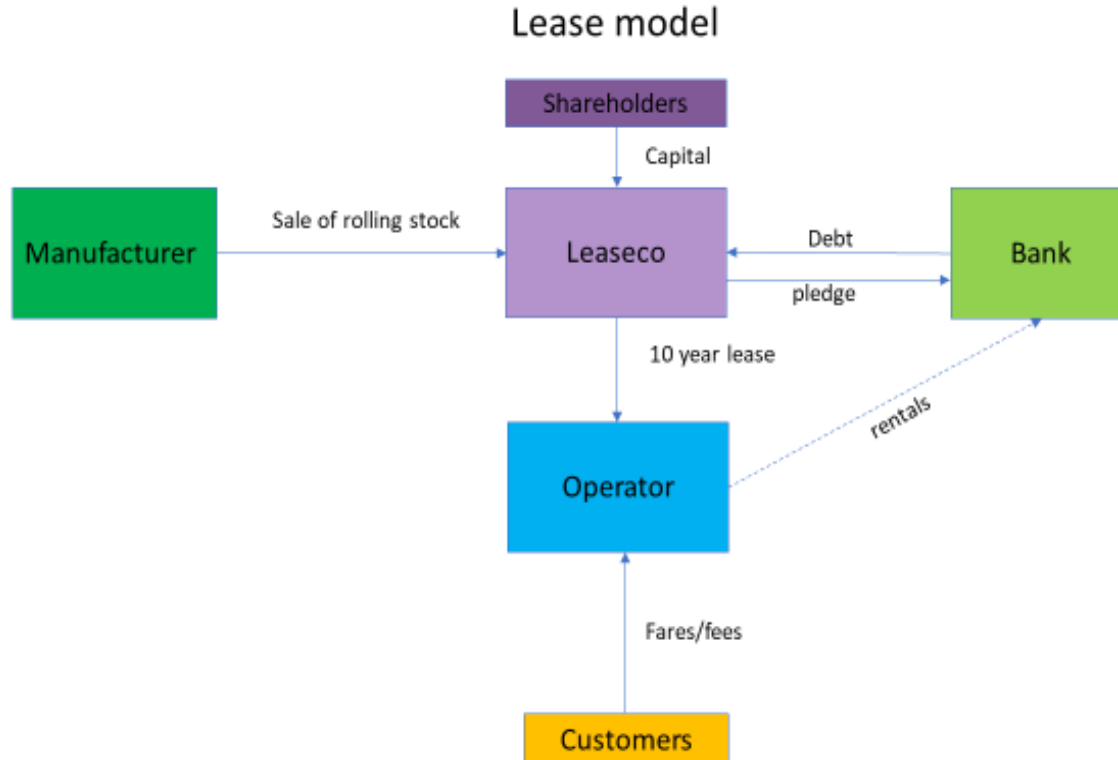
- Public finance
 - ☐ Equity, debt and grants for state operators
 - ☐ ECA/MDB credit support
- Private investment
 - ☐ Equity
 - ☐ Secured debt
 - ☐ leases

Financing Rolling Stock

Debt model



Financing Rolling Stock



The problems for rolling stock funders

- No common rules on debtor insolvency
- No national title or security registries
- Identifiers unstable (from a creditor's perspective) and inconsistent across the sector
- Limited legal infrastructure domestically and internationally
- Repossession issues for creditors on debtor default/insolvency
- Public Policy and Public Interest
- Banks' capital requirements and Basel II and III
- Limited commercial tracking of location and status of assets
- Additional security issues and conflict of laws when financed assets cross borders



Luxembourg Rail Protocol

- Applies the Cape Town Convention to rolling stock **when debtor is located in a contracting state**
- Global system of international legal rights and priorities for secured creditors, lessors and conditional vendors
- Common rules for enforcing creditor rights upon debtor default or insolvency
- Public international registry of security interests in Luxembourg accessible 24/7 online
- Will introduce global unique identification system for railway equipment

The Luxembourg Rail Protocol applies to ALL Rolling Stock

- Wherever manufactured, whatever gauge and operability standards
- Broadly defined: “..vehicles movable on a fixed railway track or directly on, above or below a guideway.” This covers:
 - ☐ Inter-urban and urban rolling stock
 - ☐ Specialist boring and other rail mounted equipment
 - ☐ Metro trains and trams
 - ☐ Monorail trains and cable cars
 - ☐ People movers/shuttles at airports
 - ☐ Cranes and gantries at ports
 - ☐ Hyperloop pods

Unique Vehicle Identification

- Rolling stock must be uniquely identifiable to register interest
- Unique Vehicle Rail Identification System (URVIS) will be established by registry regulations
- First global unique and permanent identification system for rolling stock
- 16-digit number allocated by the Registrar in Luxembourg that will never be re-used
- Affixed permanently to each item of rolling stock by the manufacturer, maintainer or keeper

The Protocol's status

- Adopted in 2007 (4 ratifications and operational registry required to enter into force – expected next 12 months)
- Appointment of Regulis SA (SITA subsidiary) as Registrar in Luxembourg in December 2014
- Ratified by Gabon, Luxembourg and Sweden (and the EU) and Kenya (hopefully) about to ratify
- Signed by Italy, Germany, France, Mozambique, Switzerland and UK - all moving towards ratification
- Also under review by many other governments.

Private finance for all three elements?

- PPP and BOT
- A potential problem or a solution
 - ☐ One size fits all?
 - ☐ Asking the private sector to take unknowable risks
 - ☐ Political risk
 - ☐ Timing issues
 - ☐ Differentiate between public finance and public delivery;
one does not mean the other

Conclusions

- Railways have to grow and investment urgently needed
- Governments have limited resources
- Market regeneration needs a mixture of public and private finance
- Private finance has its place but it's not a panacea
- Operations can go into the private sector through concessions and franchises
- Rolling stock fully financeable through the private sector as long as is secure (best if Luxembourg Rail Protocol in place)
- Infrastructure building is best state financed but not necessarily state managed

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