



A Price Worth Paying

MAKING ROAD CHARGING WORK **FOR EUROPE**

Benefits of External Cost Internalisation

Stephen Perkins

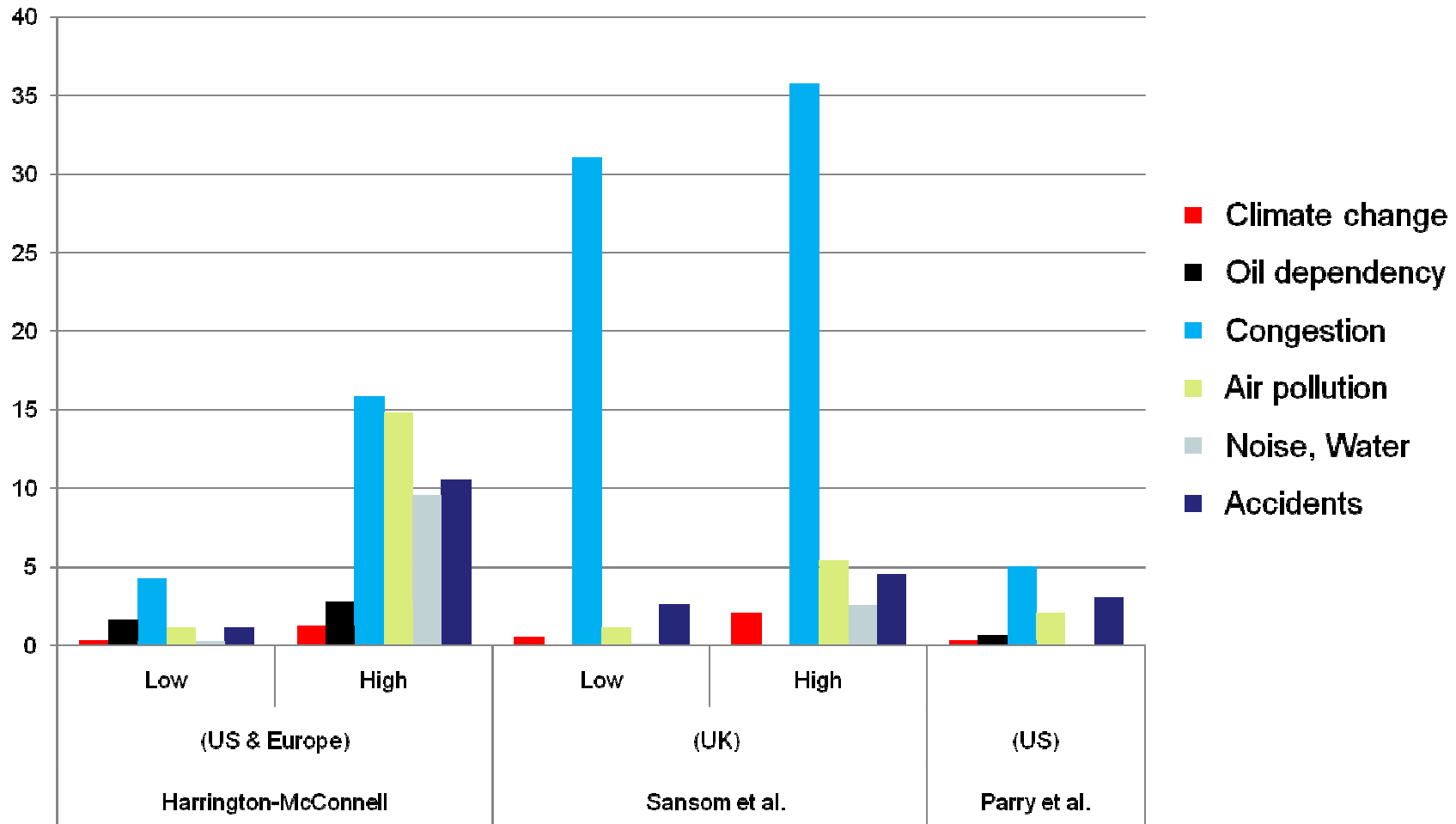
International Transport Forum

Eurovignette Directive

- Benefits
 - Prevents discrimination: discounts for local vehicles, higher charges for foreigners
- Risks
 - Pricing rule based on cost coverage not efficiency
 - Might limit scope for congestion charging
- Amendment
 - Methodology for incorporating external costs

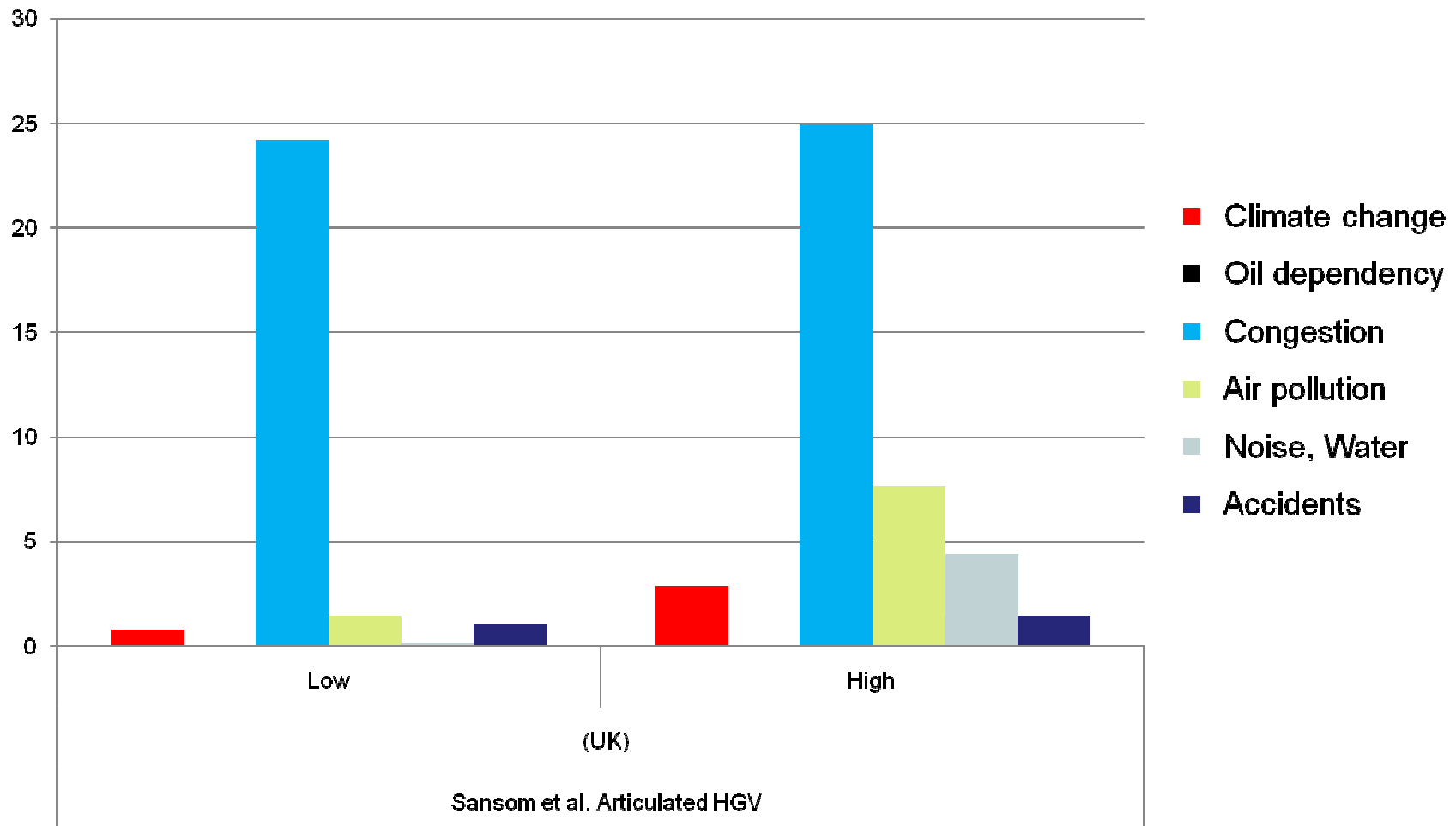
External cost estimates vary but congestion is always the biggest marginal cost category

US cents/mile



Congestion biggest cost for trucks too

Pence per vkm



Estimating the benefits

- Research results modelling internalisation
- Road pricing results
 - London Congestion Charge
 - Swiss Heavy Vehicle Fee (HVF)
 - German HGV km-charge (Maut)

Results of Optimising Charges

Joint ECMT-EC Research: *Reforming Transport Taxes 2003*

Billion Euros / year	Britain	France	Germany	Netherlands	Finland
Welfare gains	17	10	9	1	0.3
Revenue changes	+ 39	+ 28	+ 42	+ 6	- 1
Air pollution and CO₂ costs (Result of optimising emissions control technology as well as traffic)	- 54%	- 50%	- 37%	- 33%	- 42%
Congestion Average increase in metropolitan rush-hour road traffic speed	+ 11%	+ 9%	+15%	+ 9%	+ 9%



Main changes

- Welfare increases in countries where there is congestion
- Higher charges
 - Trucks, cars, vans in urban areas and some interurban routes
- Lower charges
 - small cars in many rural areas

Changes for Trucks

- Large cities, 40% increase at peak times, London, 100% increase (over pre CC costs)
- Off peak in cities, 20% increase
- Extra urban motorways
 - mixed pattern
 - Germany, optimal charge 50% higher than current charges including Maut

London CC relative to cost of congestion

Oxford University Transport Studies Unit supports TfL modelling that charge is about right but:

- Cars over-charged
- Trucks under-charged
- Vans about right at 8 pounds – undercharged at previous 5 pounds level
- Economic benefits of 180 million pounds a year (225 million Euros)

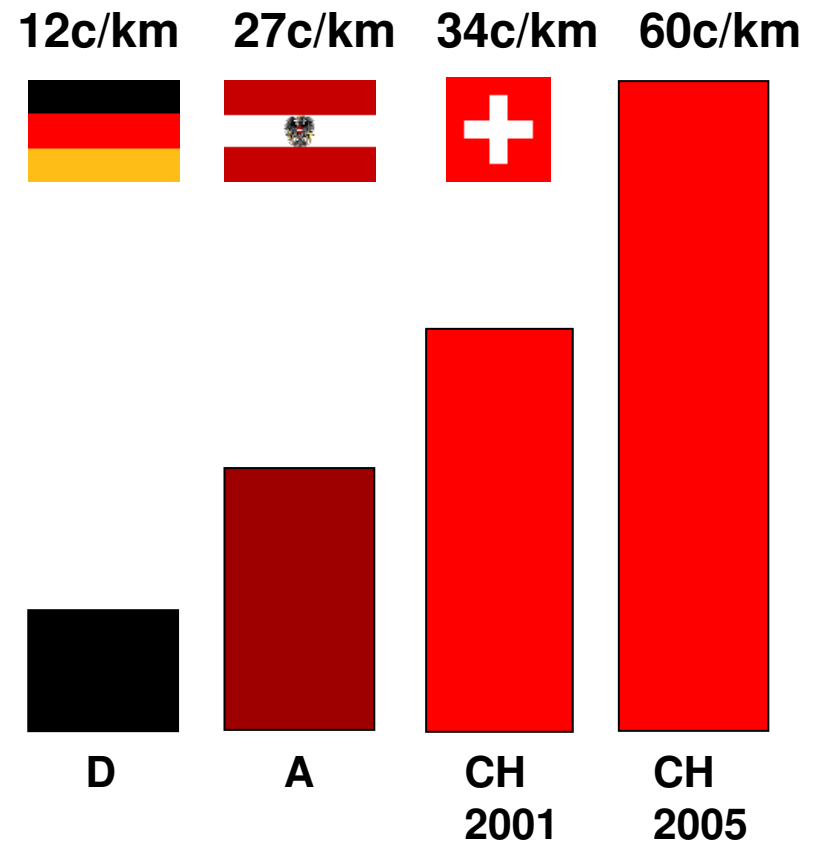
London CC Impact

- 30% reduction in congestion
- Switch from cars to metro and bus
- No reduction in economic activity
- 20% reduction in CO₂ emissions

Impact of km charges on haulage

- Swiss HVF
 - 20% increase in charges per vkm
 - 18% increase in productivity
 - vkm 12% lower than they would have been
- Maut
 - Empty runs down 13%

Charge for a 40t lorry



Does Eurovignette revision matter?

- National governments are looking at varying truck charges to manage congestion
- Need sufficient differentiation for high peak congestion costs
- Welfare and productivity gains large
- Km charges coming for cars