



Institute for  
Fiscal Studies

# UK Motoring Taxes: The Road Ahead

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# Motoring is a significant source of tax revenue

2011–12	Revenue (£ bn)	% Receipts	% GDP
Fuel duties	27.0		
VAT on duty	5.4		
VED	5.9		
<b>Total motoring</b>	<b>38.3</b>		

**£ bn**

Total receipts	
GDP	

Source: IFS calculations from OBR Autumn Statement 2011 estimates

# Motoring is a significant source of tax revenue

2011–12	Revenue (£ bn)	% Receipts	% GDP
Fuel duties	27.0	4.7%	1.8%
VAT on duty	5.4	0.9%	0.4%
VED	5.9	1.0%	0.4%
<b>Total motoring</b>	<b>38.3</b>	<b>6.7%</b>	<b>2.5%</b>

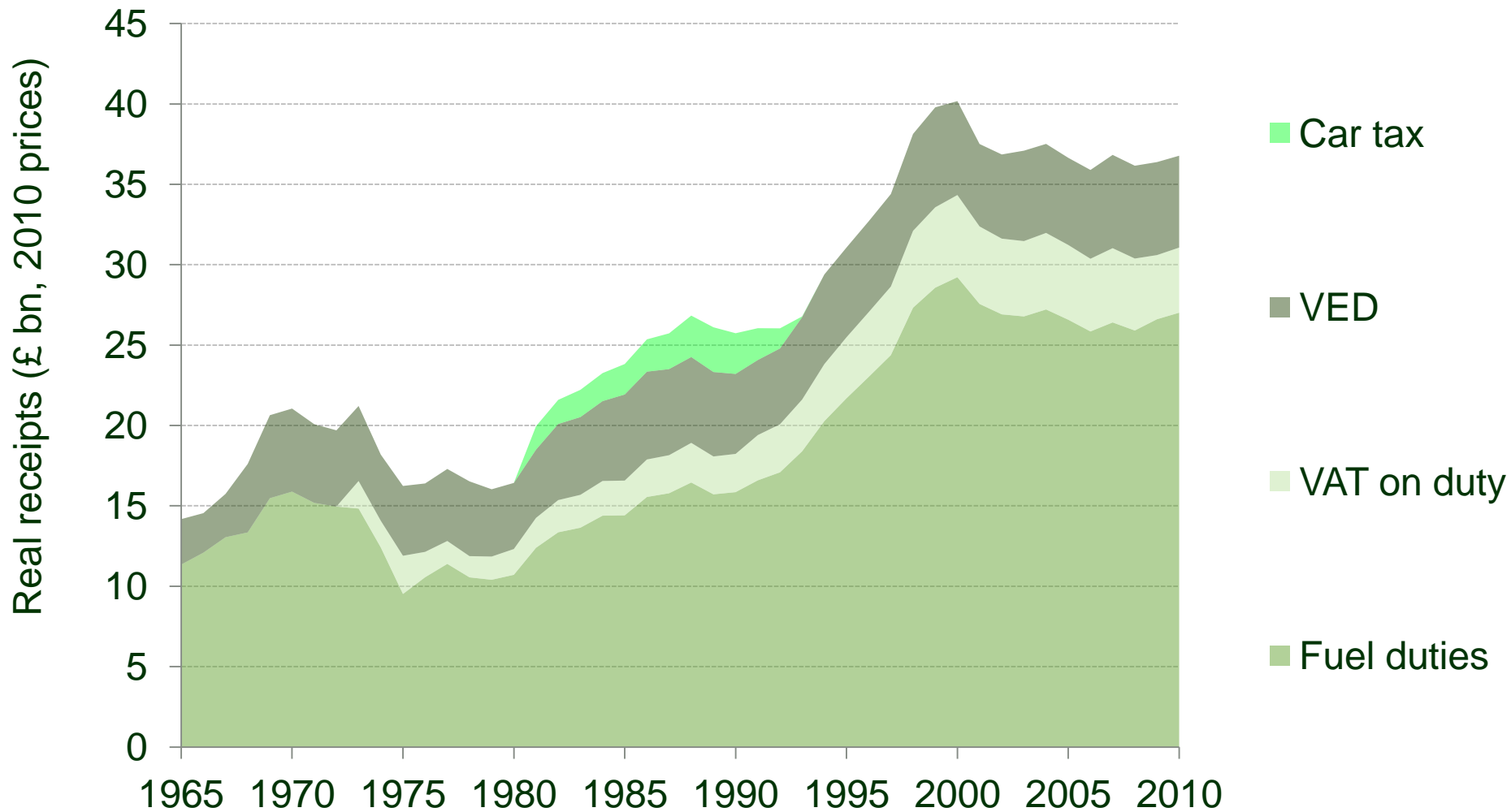
**£ bn**

Total receipts	575.5
GDP	1,521.0

Source: IFS calculations from OBR Autumn Statement 2011 estimates

# Real revenues are near historic highs ...

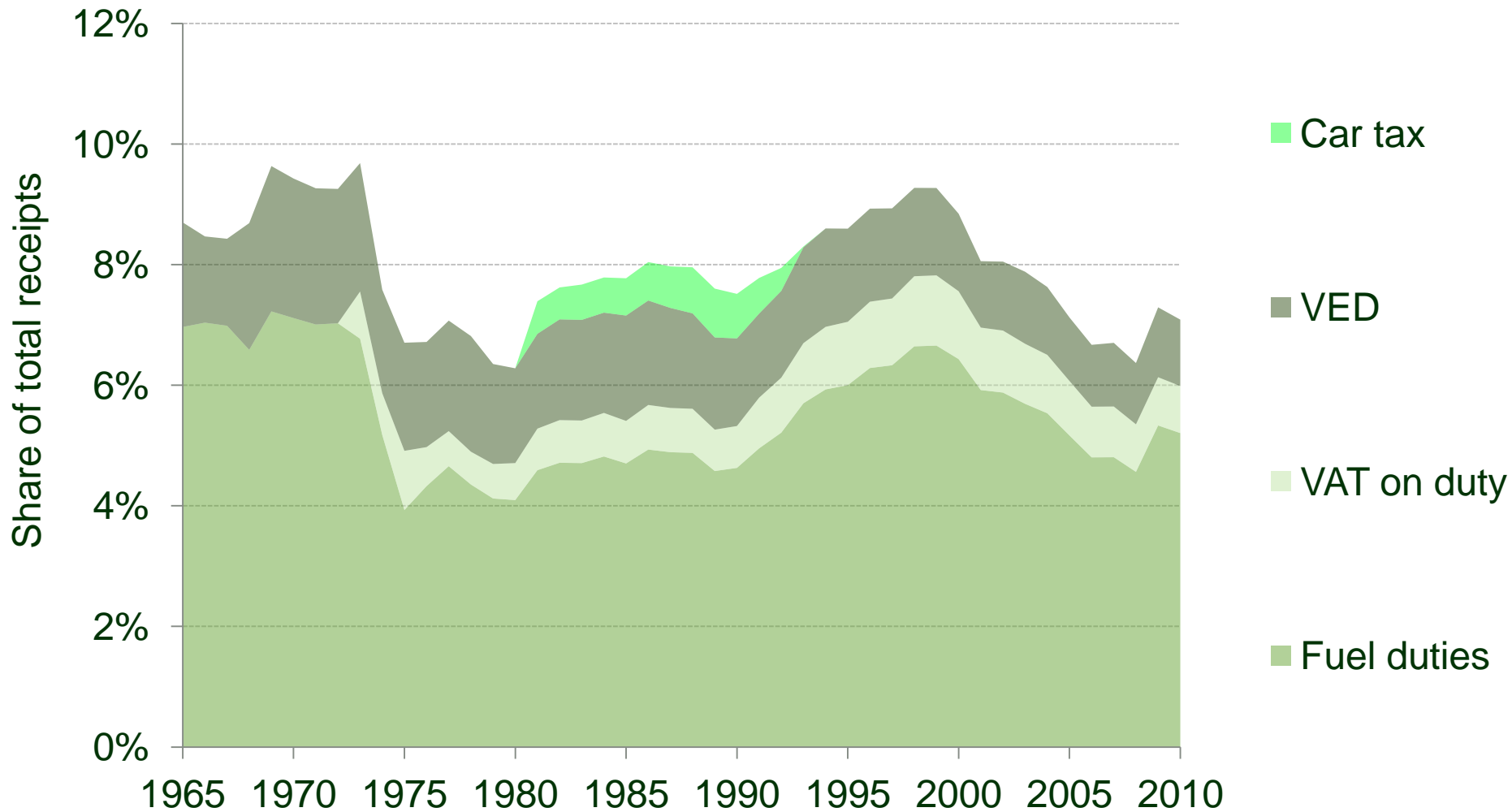
Inflation-adjusted receipts of motoring taxes (2010 prices), 1965–2010



Source: IFS calculations from ONS data, deflated using GDP deflator from HM Treasury data

# ... but fallen relative to other receipts recently

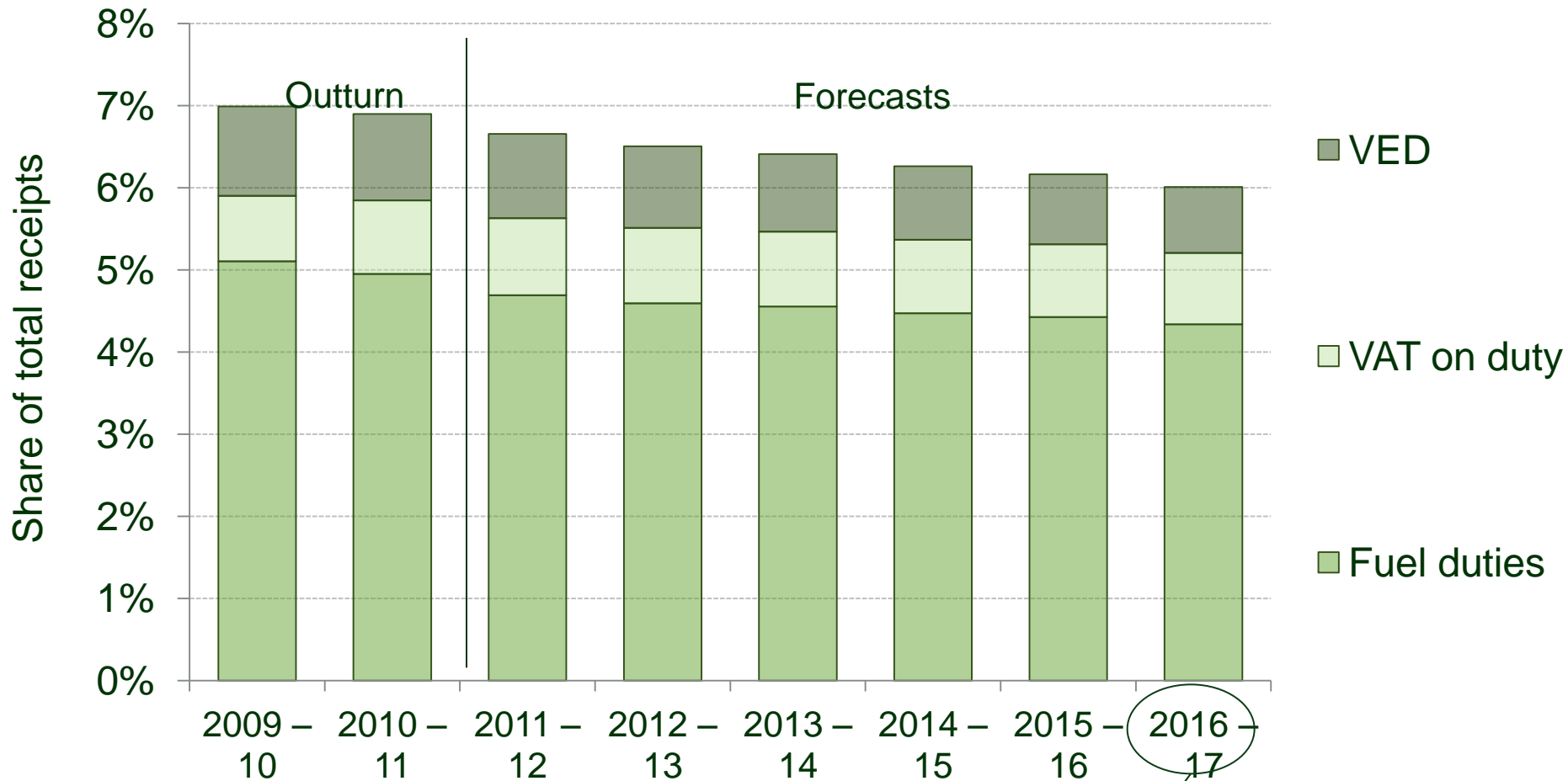
Motoring taxes as a share of total receipts, 1965–2010



Source: IFS calculations from ONS data

# The trend looks set to continue in the short-term

## Forecast motoring taxes as a share of total receipts

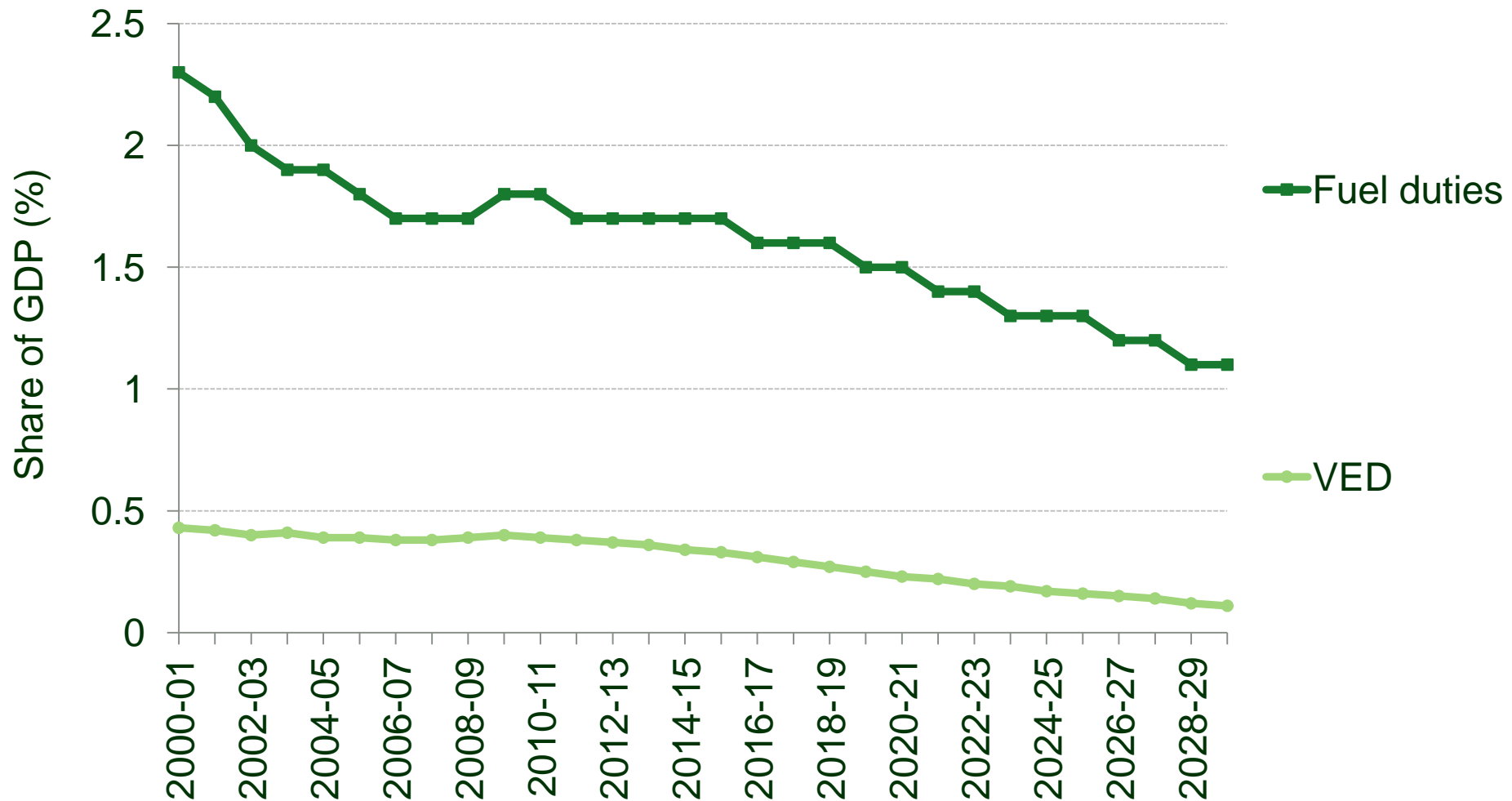


6.0%: lowest since 1954

Source: IFS calculations from OBR data

# Revenues could continue to erode in long-run

Forecast motoring taxes as a share of GDP, 2000–01 to 2029–30



Source: OBR *Fiscal Sustainability Report* (2011)

# Putting the long-term decline into context

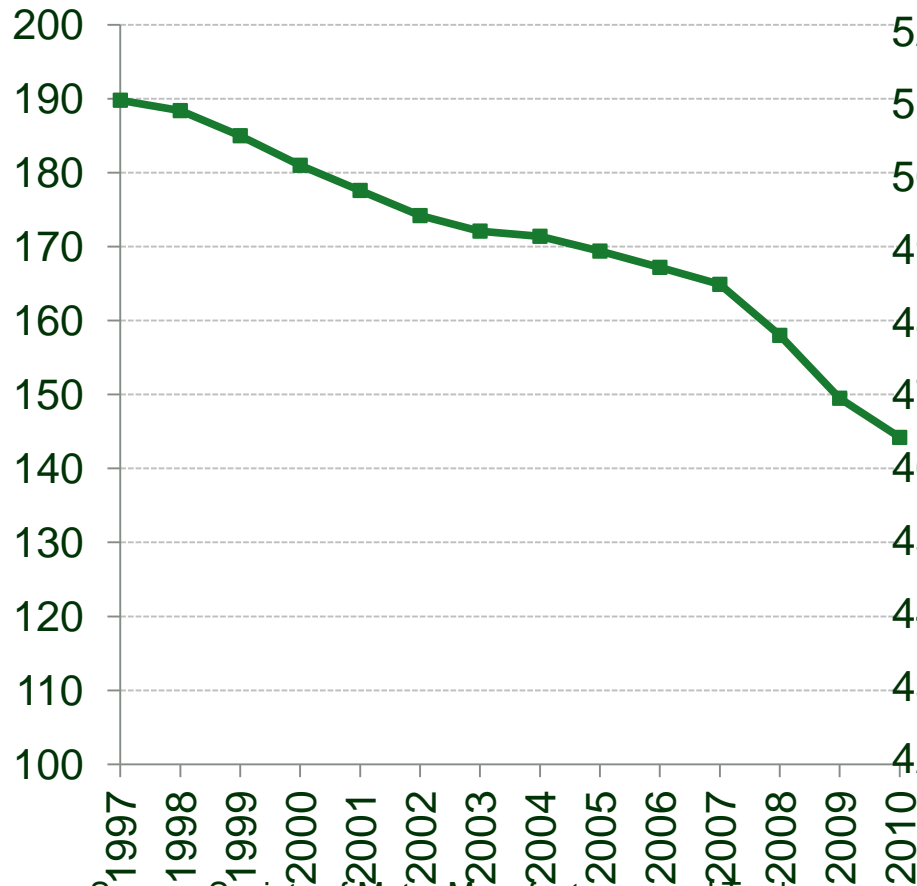
- Receipts 0.9% of GDP lower by 2029–30 if OBR correct
- Equivalent to about £13.2 billion in today's terms
- Approximate tax changes to generate £13 billion include:
  - 3.4p rise in the basic rate (from 20p)
  - 2.7ppt rise in the main rate of VAT (from 20%)
  - 51% rise in main fuel duty rate (from 58p)
- Overstating the likely decline?
  - Assume no change in VED thresholds: 85% of fleet exempt by 2030
- Or understating?
  - Assume fuel duty inflation-adjusted each year
  - Unlikely if oil prices remain high – Autumn Statement froze rates



# What's behind the decline?

## Increased fuel efficiency...

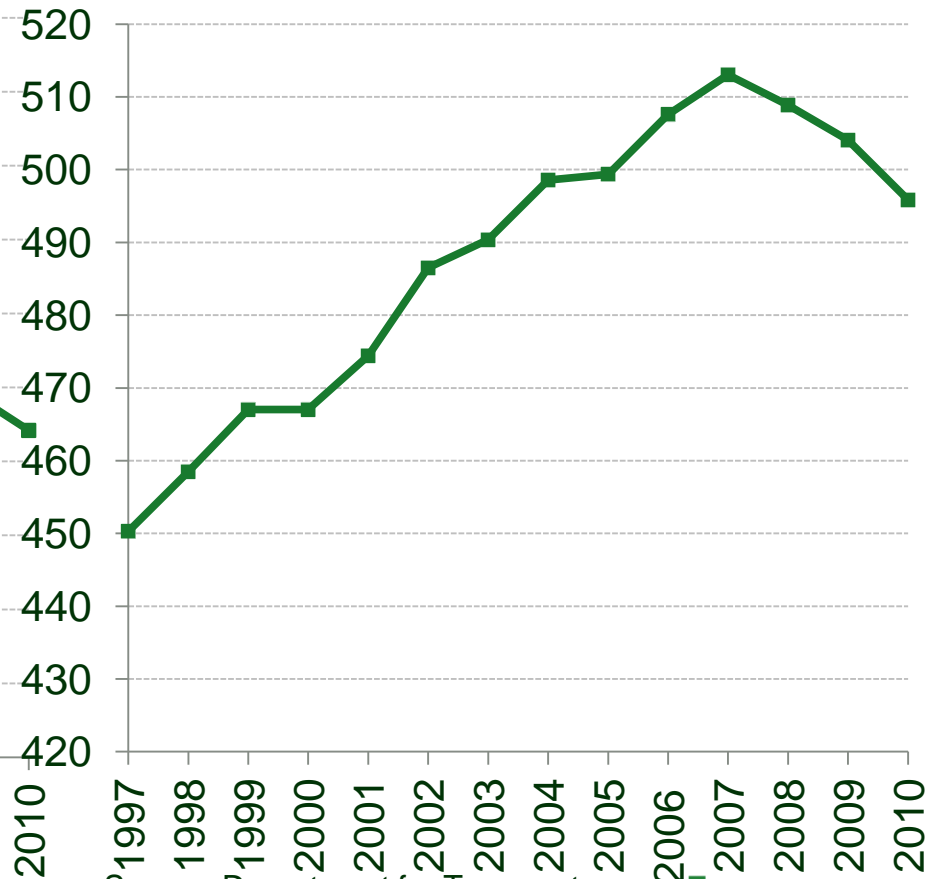
Avg. new car emissions, g CO<sub>2</sub>/km, 1997–2010



Source: Society of Motor Manufacturers and Traders

## ... and recession-hit road use ...

Motor vehicle km (billions), 1997–2010 (GB)

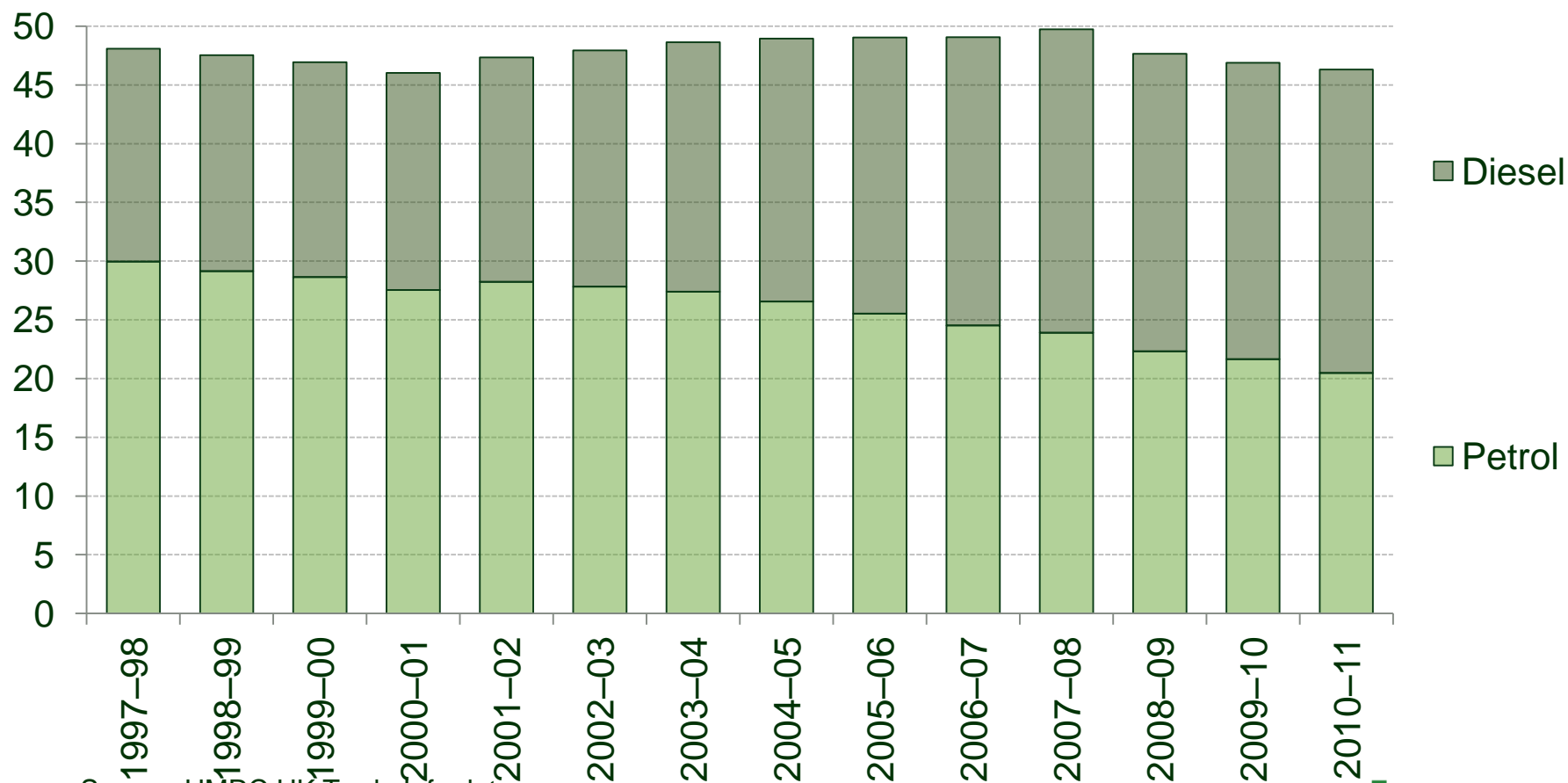


Source: Department for Transport

# What's behind the decline?

... have combined to reduce fuel sales

Sales of vehicle fuel, billion litres, 1997–98 to 2010–11

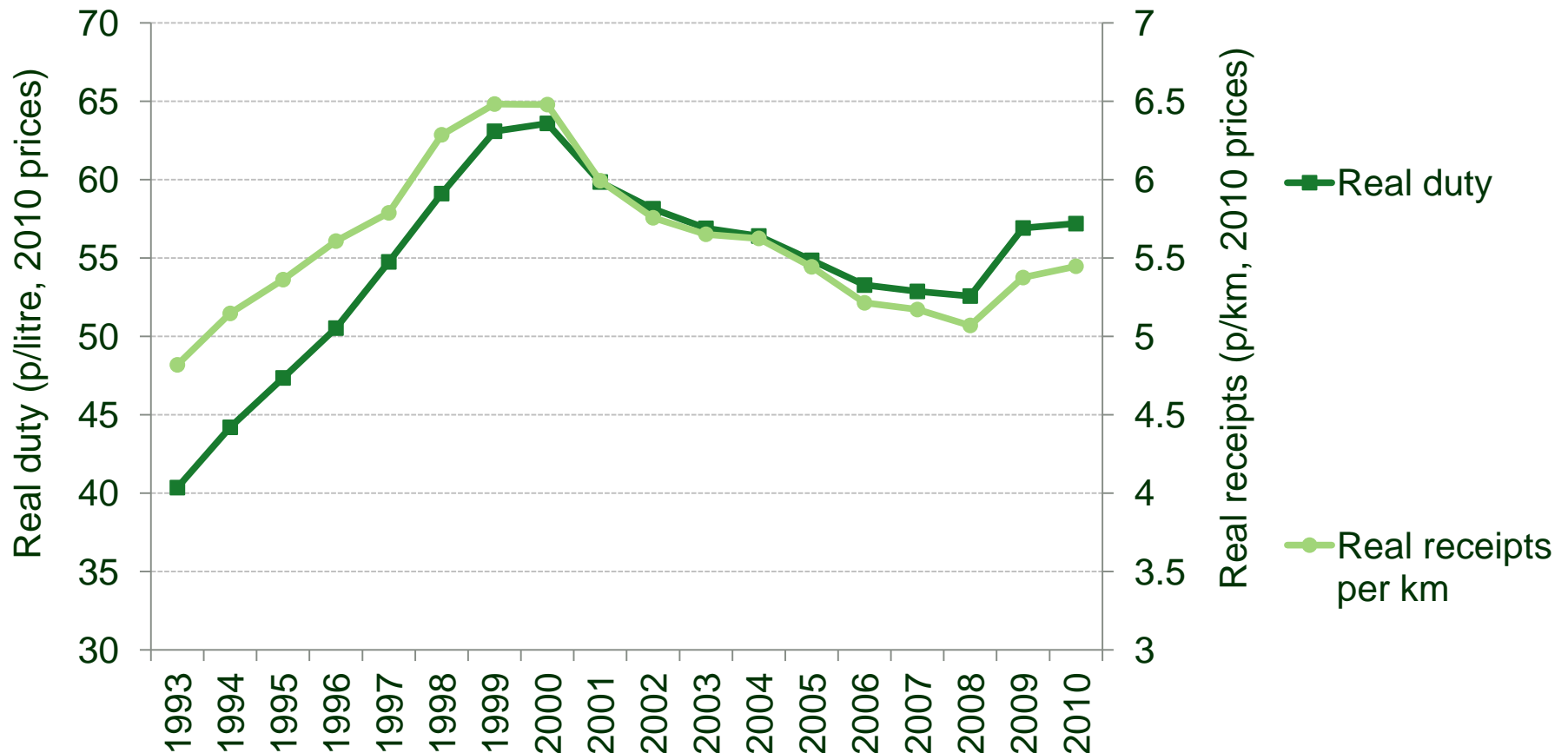


Source: HMRC UK Trade Info data

# What's behind the decline?

More efficiency & falling real duty means each km is taxed less

Average duty rate and receipts per kilometre, 1993–2010 (2010 prices)

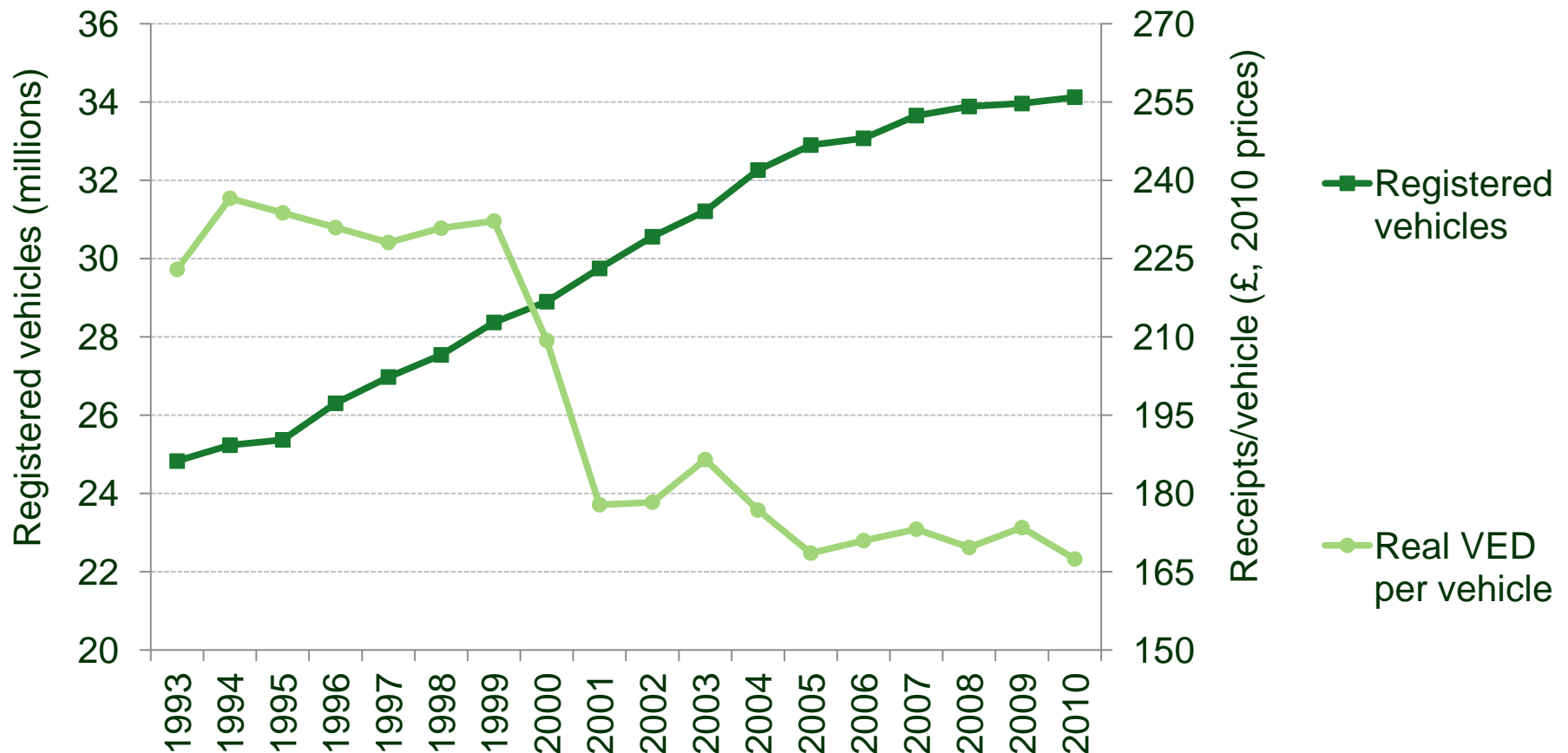


Source: IFS calculations from DfT and ONS data, deflated using all-items RPI index

# What's behind the decline?

Vehicle numbers up, but VED per vehicle down as efficiency rises

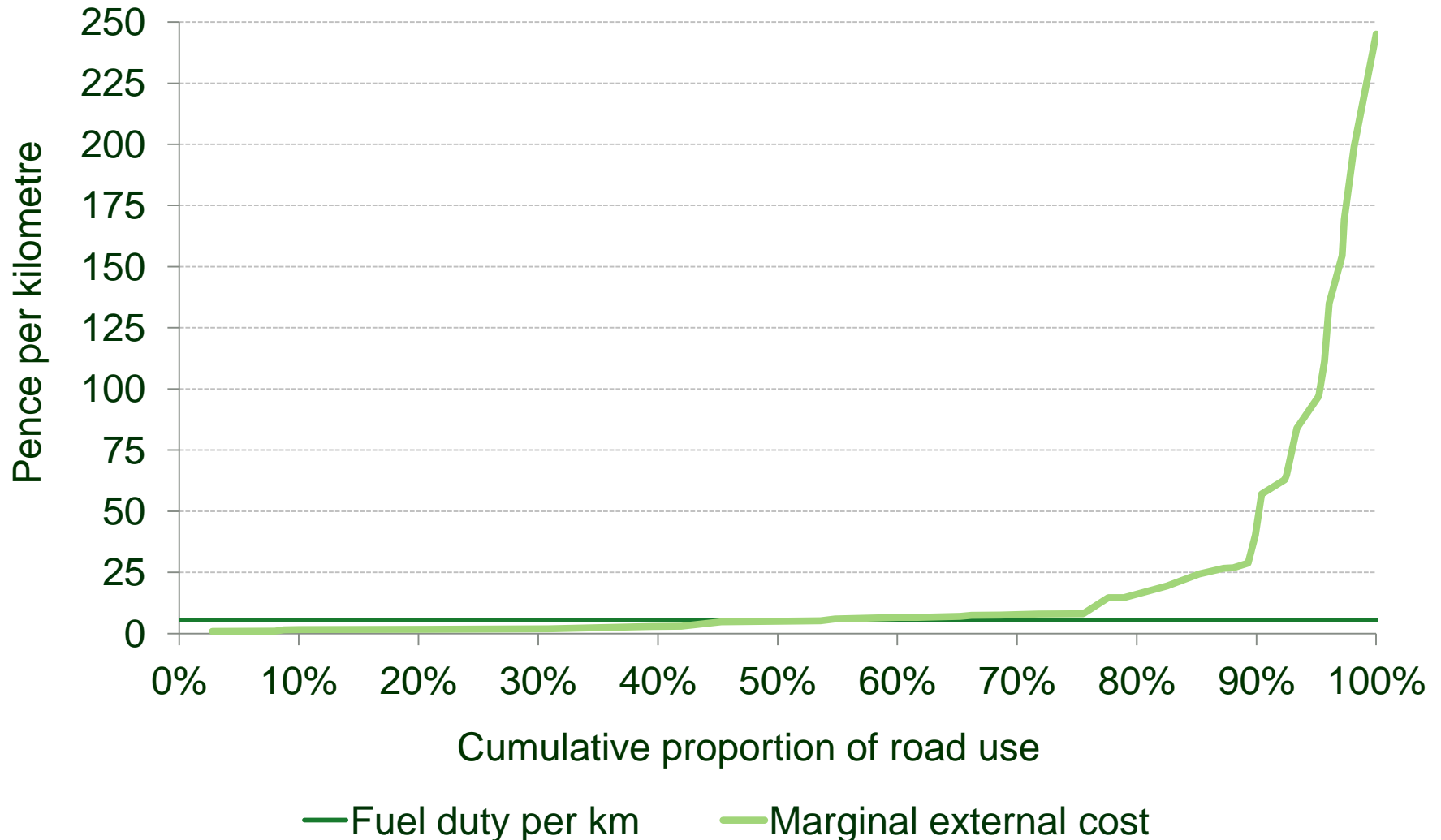
Registered vehicles and real VED receipts per vehicle, 1993–2010 (2010 prices)



Source: IFS calculations from DfT and ONS data, deflated using all-items RPI index

# The economic rationale for road pricing is clear

Distribution of marginal external costs of road use (pence/km), 2010



Source: IFS calculations from DfT (2010) estimates

# But fiscal pressure may be spur for reform

- Economic case is well-known, certainly since Eddington (2006)
- Would need ever higher real duty to offset revenue loss
  - Increasingly regressive if poor households have less efficient cars
  - Duty becomes ever-worse instrument to target external costs
- Road use may provide more secure tax base than vehicles & fuel
- CCC (2010) estimates:
  - Fleet efficiency 168g CO<sub>2</sub>/km (2011) to 76g (2030)
  - 60% new car sales electric (zero fuel) by 2030
  - Road use 516 billion vehicle km (2011) to 637 billion (2030)
- Government should recognise this and start to lay ground now
  - Road user charging should be largely offset by cuts to fuel duty
  - Need to make the case for reform: inaction not a neutral policy!