Australian Government
The Treasury

Modelling the incidence of the company tax

Xavier Rimmer

The Treasury

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Overview

- Background
- Model
  - Overview
  - Key simplifying assumptions
  - Limitations
- Measures of welfare, efficiency and incidence
- Scenarios
- Results

Background

- Based on Business tax working group work and model development
- BTWG Terms of reference
  - Impacts on national income, looking at
    - Rate lowering, base broadening scenarios
    - Focus on long-run economic impacts
- Treasury continued to look at the impact of the company income tax

Model – Overview

- Independent Economics (IE) CGE model
  - Comparative static (long run) model
- Tax detail
- Detailed domestic economy
  - Detailed production function
  - Detailed incorporation of company tax
- Partial representation of foreign sector

Model – Overview, continued

- 9 Types of capital
  - 7 types of reproducible capital
  - 1 mobile factor in fixed global supply
  - 1 immobile factor in fixed local supply
- Land
- Labour

Model – Key simplifying assumptions

- Foreign investors finance all capital expansion
  – Fixed ownership of domestic capital stock
- Exogenous required after tax rate of return
  – Foreign capital enters/leaves until the domestic after tax rate of return equals the globally required rate

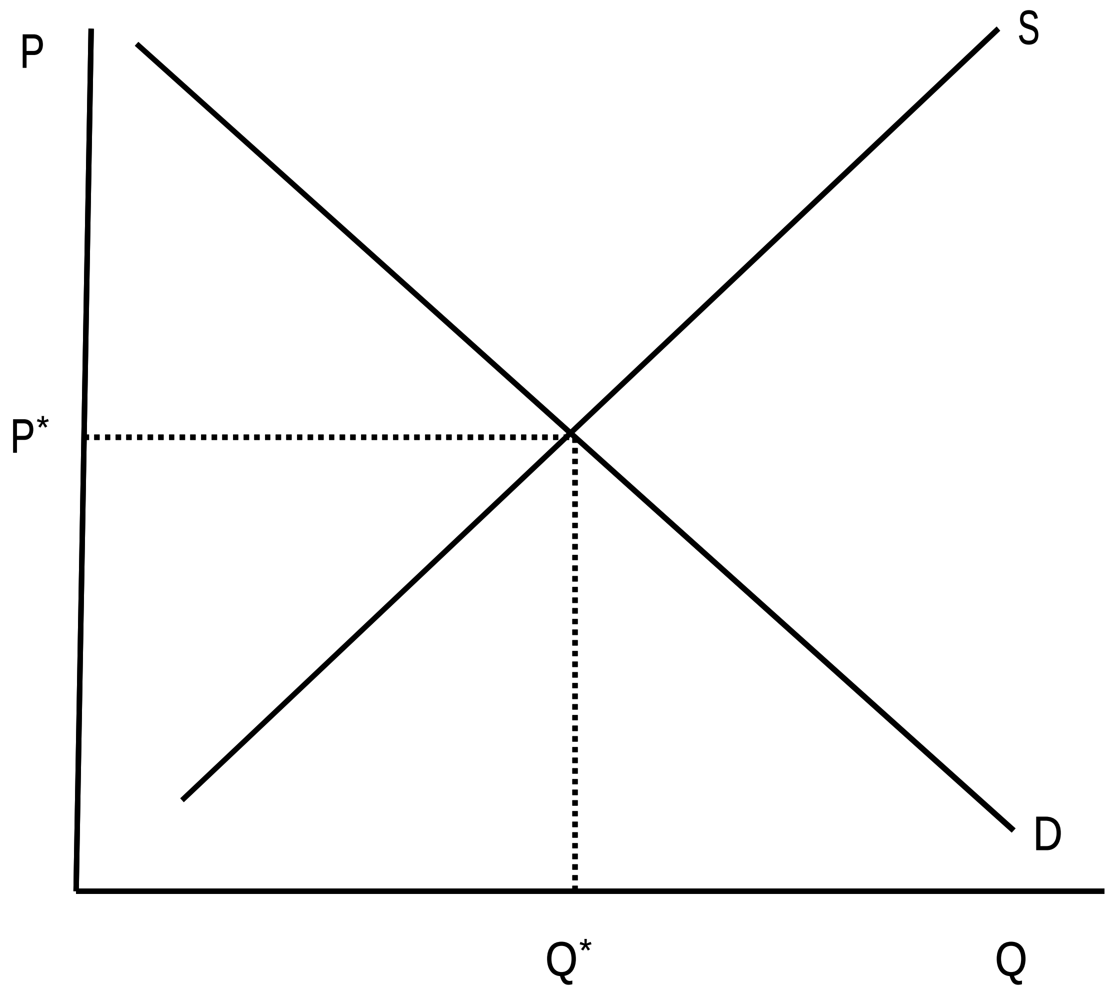
Model - Limitations

- Long-run model
  - No transitional effects of changes
- Small open economy assumption (partial foreign sector) means we cannot properly examine the response of foreigners
  - Foreigners receive windfall gain from increased return to fixed factors
  - However, movement of consumption to/from Australian exports over states the welfare effect

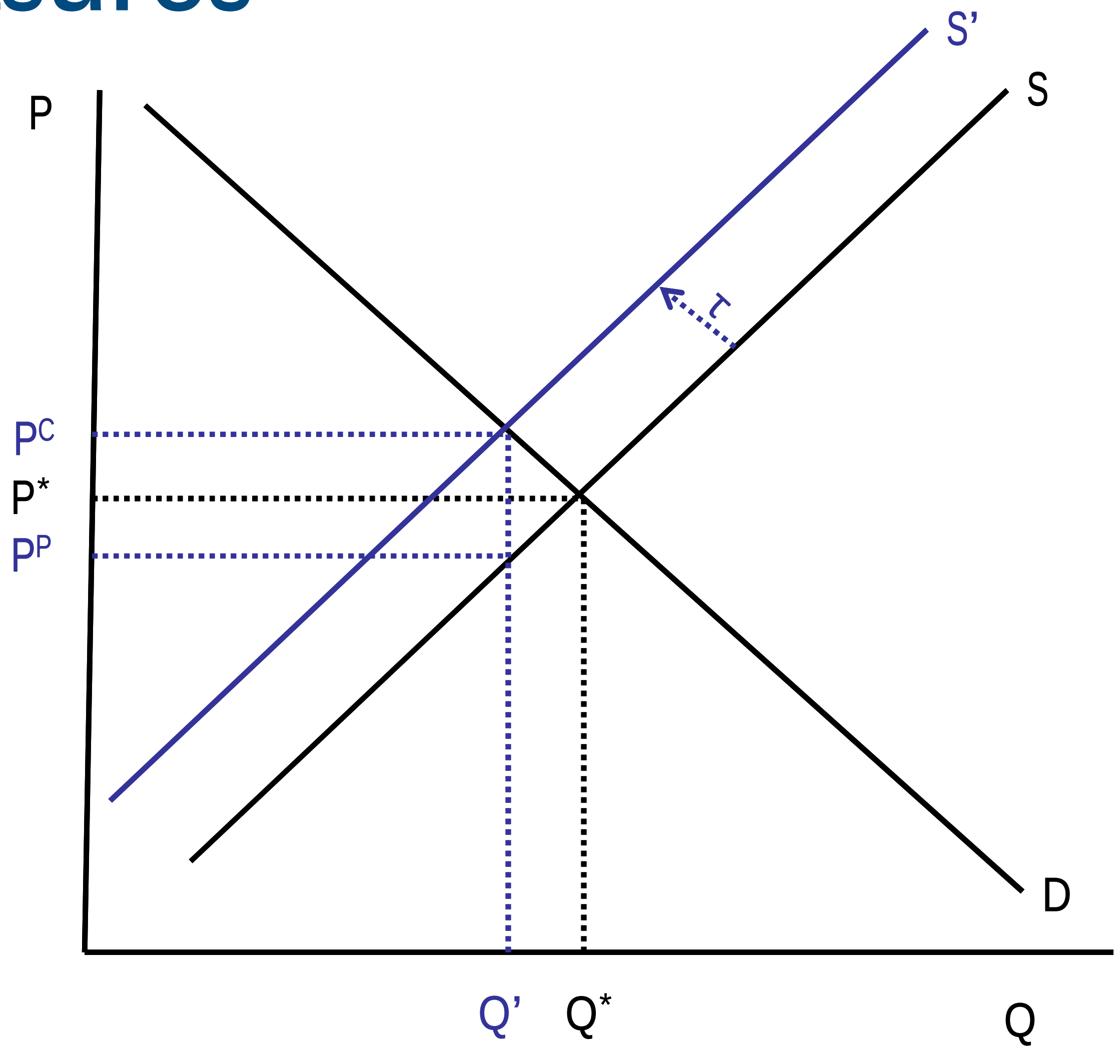
Measures

- This analysis requires a range of measures of the impact of taxes, chiefly:
  - Household welfare
    - Full-consumption [= consumption plus leisure valued in consumption units]
  - Excess burden
    - Efficiency of tax
  - Economic incidence
    - Distribution of impact

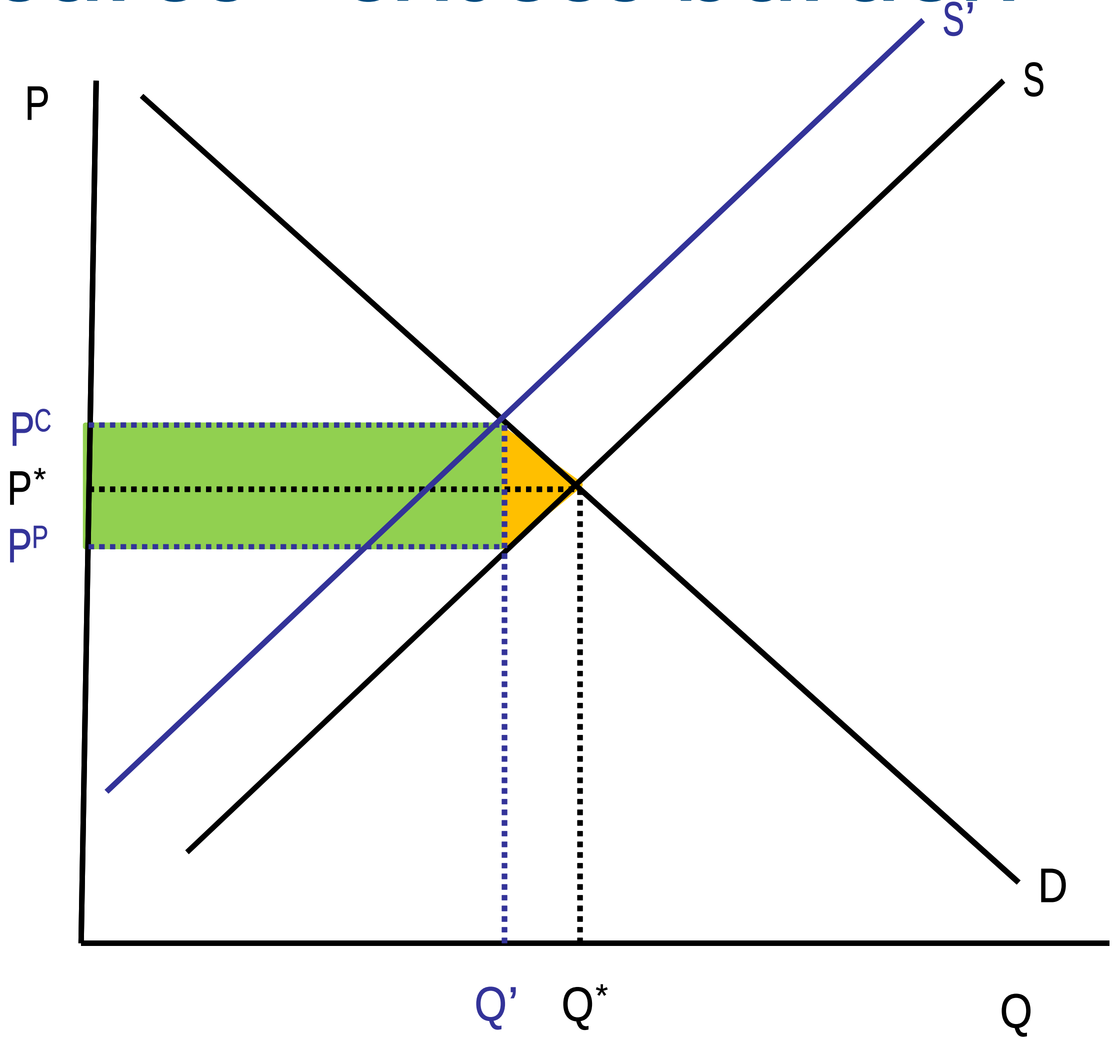
Measures



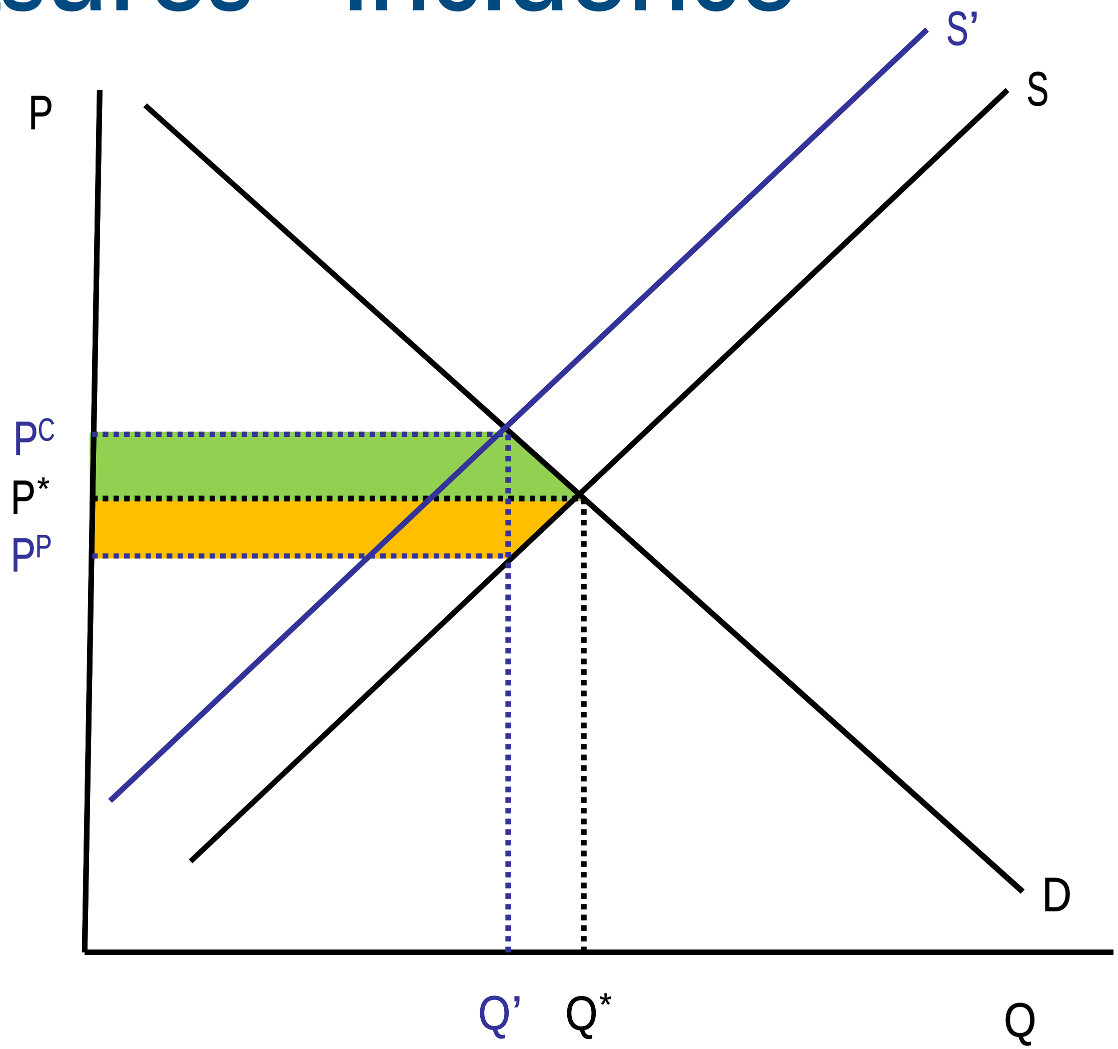
Measures



Measures - excess burden



Measures - incidence



Scenarios

- Measuring the incidence of a 1 percentage point reduction in the company tax rate
- 3 versions of the model to test the sensitivity of results to the existence of:
  - Economic rents
  - Imperfect capital mobility

Results

- Declining domestic capital income
  - $\downarrow \tau \rightarrow \uparrow K \rightarrow \downarrow MP_K \rightarrow \downarrow Cost\ of\ prod^n \rightarrow \uparrow GDP$
  - $\downarrow MP_K\ \&\ \overline{K_D} \rightarrow \downarrow Y_{K,D}$
- Rising labour income
  - $\uparrow K \rightarrow \uparrow MP_L \rightarrow \uparrow w \rightarrow \uparrow L_s \rightarrow \downarrow w\ (net \uparrow w)$
  - $\uparrow w \uparrow L_s \rightarrow \uparrow Y_{LS} \rightarrow C$
- Ambiguous leisure effect
  - $\uparrow w \uparrow L_s \rightarrow \uparrow w \downarrow L_E \rightarrow ?\, Y_{LE}$

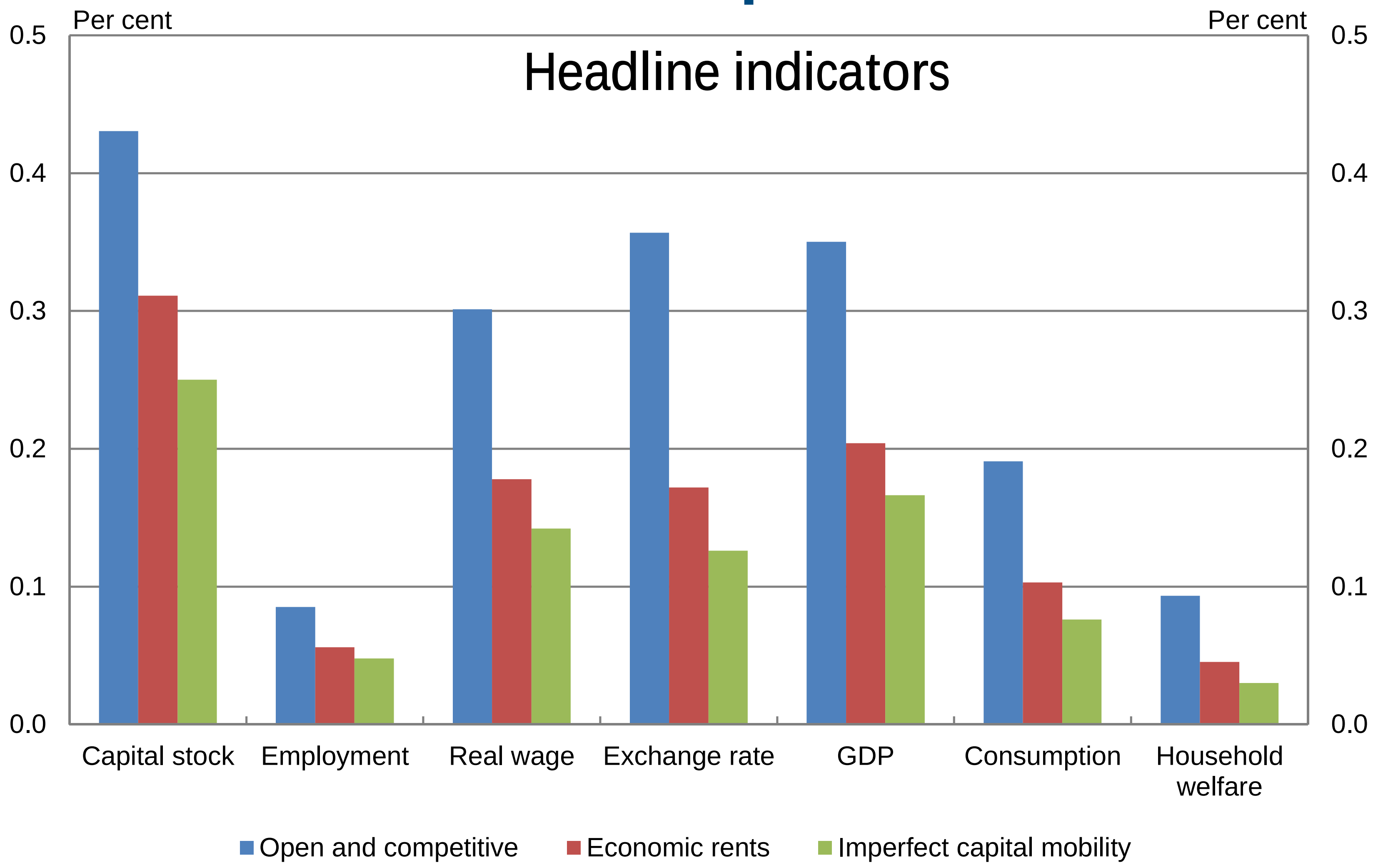
Scenarios

Scenario	Economic rents	Perfect capital mobility
Open and competitive economy	û	ü
Economic rent (main)	ü	ü
Imperfect capital mobility	ü	û

Results – Excess burden

$m 2011-12	Open and competitive	Economic rents	Imperfect capital mobility
Change in household welfare	1,035	509	421
Change in government revenue	-615	-915	-994
Marginal excess burden	168%	56%	34%

Results – Macro impacts



Results – Incidence

Domestic welfare change ($m 2011-12)	Open and competitive	Economic rents	Imperfect capital mobility
Domestic			
Leisure	-510	-333	-284
Labour & lump sum transfers	2026	668	289
Capital income	-481	174	333
Household full consumption	1035	509	337
Foreign			
Fixed factors	202	223	207

Results – Incidence

Domestic welfare change ($m 2011-12)	Open and competitive	Economic rents	Imperfect capital mobility
Leisure	-510	-333	-284
Consumption	1545	842	622
Labour & lump sum transfers	2026	668	289
Capital income	-481	174	333
Variable capital	-913	-790	-566
Fixed factors	432	964	899
Household full consumption	1035	509	337