Policy Considerations in the Taxation of Foreign Direct Investment

Summary of findings of a 2005-06 OECD project

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Discussion points

- Policy setting, concerns, questions.
- Objectives of ‘taxation and FDI’ project.
- Analysis of empirical studies of tax effects on FDI.
- Policy considerations in taxing inbound FDI.
- Policy considerations in taxing outbound FDI.
- Efficiency considerations (inbound/outbound FDI).
- Assessing the FDI response to tax reform.
  - Selection of cross-border tax planning strategies.
  - Implications of ignoring tax-planning.
Policy setting, concerns and questions

- Increasing mobility of capital, global production activities and financing strategies – policy makers face difficult questions and tradeoffs.

- How sensitive is FDI to tax?
  - Key to analyzing tax reforms, estimating revenues, deciding appropriate policy response to tax competition.
  - Policy interest in recent evidence to this basic question.

- Does a high/low host tax burden imply low/high FDI?
  - Mixed evidence / no obvious pattern.
  - Try to assess influence of host country characteristics and other factors on sensitivity (elasticity) estimates.
OECD Corporate AETR (%) and Inbound FDI Performance Index, 2005

Source: IFS corporate tax database (AETR data not available for all OECD countries), World Investment Report 2006 UNCTAD
Other policy concerns and questions

- How should corporate tax-planning by MNEs factor in?
  - Evidence of increasing tax-planning by MNEs (next slide).
  - Effects on tax revenues may be significant (difficult to assess).
  - Influence on ‘true’ tax burden on FDI may be significant and important to assess to enable assessments of:
    - Host/home country tax effects on FDI.
    - Tax burden on MNEs versus SMEs.
    - Influence of tax incentives on effective tax rates on FDI.
    - Influence of policy on effective tax rates on FDI.

S1 = total pre-tax earnings (all CFCs)
S2 = earnings of low-tax CFCs in 7 major low-tax countries: Ireland, Singapore, Bermuda, Cayman Islands, Netherlands, Luxembourg, Switzerland
S3 = total tangible capital (all CFCs)
S4 = total tangible capital of low-tax CFCs in 5 major holding company low-tax countries: Bermuda, Cayman Islands, Netherlands, Luxembourg, Switzerland

Source: Tax Notes International, Vol. 41, No. 5, 6 February 2006
Other policy concerns and questions

- What are the main policy considerations of OECD countries guiding the taxation of inbound and outbound FDI?
- What are the policy implications of alternative efficiency frameworks (aiming to maximize global or national welfare)?
- How are policy makers responding to international competitiveness pressures?
  - Pressure to lower the CIT rate on inbound FDI (question of general versus targeted rate cuts).
  - Pressure to limit/reduce home country tax on outbound FDI – active as well as passive income.
  - Acceptance of some degree of base stripping.
  - Anti-avoidance rules – balancing tax base protection with need to provide internationally competitive system.
Main Objectives of WP2 Project

- 2005-06 project on ‘taxation and FDI’, by Working Party No2 (WP2) of the OECD Committee on Fiscal Affairs – three main objectives:
  - Review empirical studies of tax effects on FDI – attempt to explain different estimates of response of FDI to tax.
  - Report economic policy considerations in the tax treatment of inbound / outbound FDI (without country attribution).
  - Develop a framework (model) to consider implications of tax-planning for standard tax burden measures (used to assess FDI response to tax reform).
Main findings of analysis of empirical studies

- On average, FDI falls by 3.7% following a 1% point increase in the tax rate on FDI.
- Wide range of estimates, depending on host country conditions, types of industries included, time period examined – complex relationship amongst factors.
- FDI from exemption countries not found to be more sensitive to tax than FDI from credit countries.
- Intra-EU FDI not found to be more sensitive to tax than US FDI (inbound/outbound).
- Studies using more recent data find greater response of FDI to tax.
Main policy considerations for inbound FDI

- FDI may yield net increase in domestic income.
- Competing considerations (revenue, equity, efficiency, international competitiveness).
- Central question of sensitivity of FDI to tax – relevance of market size, location-dependent profits, ability to tax.
- Importance of host country fundamentals – tax cannot compensate for weak fundamentals.
- Relevance of many taxes (not just CIT).
- Various approaches in responding to international tax competition.
- Challenges in responding to tax avoidance.
Main policy considerations for outbound FDI

- May give efficient market access, scale economies, spillover benefits.
- Revenue, equity, efficiency, competitiveness considerations.
- Production efficiency central to dividend credit/worldwide system – in practice tax relief similar to (greater than?) exemption/territorial system.
- Increasing use of new financial products/structures, tax haven affiliates.
- Increasing business demands for tax relief beyond deferral of tax on active business income in foreign markets.
- Limited reach of anti-deferral / anti-exemption systems in most countries with CFC systems.
- Interest deductions available on amounts borrowed to fund outbound FDI raising limited home country tax revenue.
Efficiency considerations (inbound FDI)

- Review contrasts efficiency results from standard tax competition literature (based on neo-classical models) with those from the new economic geography literature – emphasis on different conclusions and need for additional research.

- Results from the standard tax competition literature:
  - Tax competition results in capital tax rates being set inefficiently low (negative externalities); small countries set lower CIT rates than large
  - Inefficient to tax capital where country faces a perfectly elastic supply of foreign capital – more efficient to tax labour directly
  - Questions raised over results (ability to optimally tax labour, rents?)
Results from new economic geography literature:

- As trade costs fall, capital mobility increases, optimal tax rate falls.
- Where K&L move together:
  - higher tax rates need not discourage capital (public goods).
  - optimal tax rate is socially optimal rate (capital and labour have the same preferences).
- Where K&L do not move together:
  - tax competition is harmful (CIT rates set too low from societal perspective).
  - only large countries constrained to charge CIT rates lower than they would wish.
  - negative correlation between high CIT rate and K/L ratios predicted by basic tax competition model may be reversed.

Need for additional research to reconcile models and policy conclusions.
Efficiency considerations (outbound FDI)

- Subsequent revision (27 March) – replacing para. 372-405 – draws attention to implications of mobile production and tax-planning to CEN/CIN/CON standards – emphasis on inability of any standard to achieve efficient outcome in all cases.
- CEN (Musgrave (1963)) – support of dividend credit system
- CIN (Horst (1980)) – support dividend exemption system
- Refinements by Razin and Sadka (1991), Bruce (1992), Keen and Piekkola (1997), Mackie and Rousslang (2000) – offers mixed support for dividend credit / dividend exemption
Efficiency considerations (outbound) cont’d

- CON (Desai and Hines (2003)) – focus on M&A and production differences across firms – support for dividend exemption
  - CON (and CIN) assume local competition, location-specific rents
  - For mobile rents, relevant rate comparisons are across many competing countries – CIT rates vary to the extent host country CIT rates vary
  - Tax-planning – effective tax rates in a given location for a given business activity can be expected to vary across investors
Efficiency considerations (outbound) cont’d

- Apparent inability of any standard (CEN/NIN/CON) to achieve efficient outcome in all cases.
- Practical approach observed:
  - Allowance for extended deferral
  - Recognition that some income stripping may be efficiency enhancing
  - Minimize wide variation in effective tax rates through anti-avoidance provisions.
Assessing the FDI Response to Tax Reform and Tax Planning

- Reliance on forward-looking effective tax rates to estimate the impact of corporate tax reform on FDI flows.
- Marginal/average effective tax rates (METRs/AETRs) ignore tax-planning:
  - Potentially serious limitation when used to gauge the FDI response to tax reform (e.g. outbound FDI from high-tax country with dividend credit system).
- Standard METR/AETR framework elaborated to highlight effects of various forms of tax-planning:
  - thin-capitalization of high-taxed subsidiaries,
  - double-dip financing,
  - income conversion / use of hybrid instruments,
  - tax haven finance affiliates / use of hybrid structures.
- Illustrative results to encourage policy-makers/analysts to address this issue.
Basic approach in OECD countries to assessing FDI response to tax reform

- Basic partial equilibrium approach to assessing FDI response to tax reform outlined in report – illustrative results from UK APTAX model (credit and exemption countries).
- Table 6.1 considers estimated inbound FDI response to a cut in MiddleTax CIT rate from 30% to 25% (next slide).
- Table 6.2 considers estimated outbound FDI response from the same tax cut.
- Estimates rely on typical (mean) estimated tax elasticity of FDI where AETR is explanatory tax variable ($\varepsilon=-5.9$, as reported in chapter 3 (Table 3.7)).
**Basic approach to assessing FDI response to tax reform**

Table 6.1 Tax Reform Effects on Inbound FDI into MiddleTax

<table>
<thead>
<tr>
<th>Home country tax system</th>
<th>AETR pre-reform (CIT=30%)</th>
<th>AETR post-reform (CIT=25%)</th>
<th>% change in FDI into MiddleTax</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI from LowTax (CIT=15%) exemption</td>
<td>24.26</td>
<td>20.10</td>
<td>24.54</td>
</tr>
<tr>
<td>FDI from HighTax (CIT=40%) exemption</td>
<td>25.92</td>
<td>21.78</td>
<td>24.43</td>
</tr>
<tr>
<td>FDI from LowTax (CIT=15%) credit</td>
<td>24.26</td>
<td>20.10</td>
<td>24.54</td>
</tr>
<tr>
<td>FDI from HighTax (CIT=40%) credit</td>
<td>32.66</td>
<td>32.05</td>
<td>3.60</td>
</tr>
</tbody>
</table>

Source: APTAX model, HM Revenue and Customs, U.K.
Basic approach to assessing FDI response to tax reform (cont’d)

Table 6.2  Tax Reform Effects on Outbound FDI from MiddleTax

<table>
<thead>
<tr>
<th></th>
<th>Middletax (home country) tax system</th>
<th>AETR pre-reform (CIT=30%)</th>
<th>AETR post-reform (CIT=25%)</th>
<th>% change in outbound FDI from MiddleTax</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI into LowTax (CIT=15%)</td>
<td>exemption</td>
<td>11.96</td>
<td>11.96</td>
<td>0</td>
</tr>
<tr>
<td>FDI into HighTax (CIT=40%)</td>
<td>exemption</td>
<td>32.02</td>
<td>32.02</td>
<td>0</td>
</tr>
<tr>
<td>FDI into LowTax (CIT=15%)</td>
<td>credit</td>
<td>22.48</td>
<td>18.98</td>
<td>20.65</td>
</tr>
<tr>
<td>FDI into HighTax (CIT=40%)</td>
<td>credit</td>
<td>32.02</td>
<td>32.02</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: APTAX model, HM Revenue and Customs, U.K.
Selection of cross-border tax-planning strategies

- Standard modelling assumptions:
  - fixed finance weights across conventional financing instruments.
  - no tax planning.
- Financing weights should be representative, relevant to actual tax burden for host/home country combination (use of fixed weights is a simplification) – fixed finance weights may be unrepresentative (e.g. thin capitalisation of high-taxed subs).
- (Limited) data suggests growing use of triangular structures; use of new financial products, hybrid entities.
- FTC pooling (mixing) possibilities and treatment of royalties in credit systems important to ETRs (typically not modelled).
Selection of cross-border tax planning strategies

Figure 6.1
Standard financing structure

PCo
(country A)

<table>
<thead>
<tr>
<th>Third-party debt (35%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained earnings (55%)</td>
</tr>
<tr>
<td>Equity shares (10%)</td>
</tr>
</tbody>
</table>

OpCo
(country B)

<table>
<thead>
<tr>
<th>Inter-affiliate debt (33%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity shares (33%)</td>
</tr>
</tbody>
</table>

| Retained earnings (33%) |

Dividends Interest
Selection of cross-border tax planning strategies

Figure 6.2

Triangular structure

PCo (country A) \[\text{Royalties} \rightarrow \text{OpCo (country B)}\]

IntCo (tax haven country C) \[\text{Retained profit} \rightarrow \text{PCo (country A)}\]

\[\text{Equity} \rightarrow \text{Intangibles (license)} \rightarrow \text{OpCo (country B)}\]

\[\text{Equity} \rightarrow \text{Inter-affiliate loans} \rightarrow \text{Intangibles (license)} \rightarrow \text{OpCo (country B)}\]

\[\text{Dividends} \rightarrow \text{Interest} \rightarrow \text{Royalties} \rightarrow \text{OpCo (country B)}\]
Selection of cross-border tax planning strategies

Figure 6.3
Hybrid entity structure

PCo (country A)

IntCo (tax haven country C)

BrIntCo (country B) (hybrid entity)

Royalties

Equity
Intangibles (license)

Contributed surplus (equity)
Debt (loans)
Intangibles (license)

Retained profit

Interest
Royalties
Selection of cross-border tax planning strategies

Figure 6.4
Hybrid instrument financing

PCo (country A)

Hybrid security
Common equity shares

Retained profit

OpCo (country B)

Dividends on common equity
Interest/dividends on hybrid security
Cross-border financing developments

- Existence of financing/repatriation structures to lower host/home country tax on FDI raises question – how prevalent?
- Limited publicly available information, in part reflecting different treatment in National Accounts of transactions with tax haven finance affiliates (‘special purpose vehicles’).
- However, available data suggest the need to address this area
  - Insight provides by data on activities of CFCs of U.S. investors, compiled from tax returns filed by U.S. parent companies with foreign operations (reported in Tax Notes International) – see slide 6.
Analysis of tax-planning effects considers the following cases:

I. retained earnings of parent used to purchase equity shares of foreign sub
II. retained earnings of parent, used to purchase equity shares and debt of foreign sub (thin capitalization of high-tax subsidiaries in certain cases)
III. third-party debt of parent used to purchase equity shares of foreign sub
IV. third-party debt of parent used to purchase equity shares and debt securities of foreign subsidiary (‘double-dip’ financing)
V. third-party debt of parent used to purchase equity shares and hybrid instruments of foreign sub, and
VI. third-party debt of parent used to purchase equity shares of tax haven finance sub investing funds in equity shares and debt securities of foreign subsidiary. Earnings invested offshore indefinitely in passive assets.
Chart 6.2

AETRs for FDI into High-tax Country
(home CIT rate 30%, host CIT rate 40%)

Credit system

Exemption system

IC  IIC  IIIC  IVC  VC  VIC  IE  IIE  IIIE  IVE  VE  VIE

Case I: RE-->NE
Case II: RE-->NE+BS
Case III: BP-->NE
Case IV: BP-->NE+BS
Case V: BP-->NE+HY
Case VI: BP-->NE-->NE+BS (triangular)

{RE=retained earnings; NE=new equity; BP=bond finance parent, BS=bond finance sub; HY=hybrid instrument}
(Cases II, IV and V: leverage parameter for sub is $\beta=0.35$; Case VI: $\beta=0.50$)
Chart 6.3

AETRs for FDI into Low-tax Country

(home CIT rate 30%, host CIT rate 15%)

Credit system

Exemption system

Case I: RE-->NE
Case IV: BP-->NE+BS ($\beta=0$)
Case II: RE-->NE+BS ($\beta=0$)
Case V: BP-->NE+HY ($\beta=0$ under credit system)
Case III: BP-->NE
Case VI: BP-->NE-->NE+BS (triangular)

{RE=retained earnings; NE=new equity; BP=bond finance parent, BS=bond finance sub; HY=hybrid instrument}

(Cases II and IV: leverage parameter for sub $\beta=0$; Case V: $\beta=0.35$ for exemption, $\beta=0$ for credit; Case VI, $\beta=0.50$)
Chart 6.4
METRs for FDI into High-tax Country
(home CIT rate 30%, host CIT rate 40%)

<table>
<thead>
<tr>
<th>Credit system</th>
<th>Exemption system</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC 42.2%</td>
<td>IE 32.2%</td>
</tr>
<tr>
<td>IIC 33.2%</td>
<td>IIE 42.2%</td>
</tr>
<tr>
<td>IIIC 17.3%</td>
<td>IIIE 39.4%</td>
</tr>
<tr>
<td>IVC -2.4%</td>
<td>IV 17.3%</td>
</tr>
<tr>
<td>VC -2.4%</td>
<td>IE -14.1%</td>
</tr>
<tr>
<td>VC -14.1%</td>
<td>IVE -2.4%</td>
</tr>
<tr>
<td>VC -2.4%</td>
<td>VIE -14.1%</td>
</tr>
</tbody>
</table>

Case I: RE-->NE  Case IV: BP-->NE+BS
Case II: RE-->NE+BS  Case V: BP-->NE+HY
Case III: BP-->NE  Case VI: BP-->NE-->NE+BS (triangular)

{RE=retained earnings; NE=new equity; BP=bond finance parent, BS=bond finance sub; HY=hybrid instrument}
(Cases II, IV and V: leverage parameter for sub is β=0.35; Case VI: β=0.50)
Chart 6.5

**METRs for FDI into Low-tax Country**

*(home CIT rate 30%, host CIT rate 15%)*

Credit system

<table>
<thead>
<tr>
<th>Case</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>RE→NE</td>
</tr>
<tr>
<td>II</td>
<td>RE→NE+BS (β=0)</td>
</tr>
<tr>
<td>III</td>
<td>BP→NE</td>
</tr>
</tbody>
</table>

Exemption system

<table>
<thead>
<tr>
<th>Case</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV</td>
<td>BP→NE+BS (β=0)</td>
</tr>
<tr>
<td>V</td>
<td>BP→NE+HY (β=0 under credit system)</td>
</tr>
<tr>
<td>VI</td>
<td>BP→NE→NE+BS (triangular)</td>
</tr>
</tbody>
</table>

(RE=retained earnings; NE=new equity; BP=bond finance parent, BS=bond finance sub; HY=hybrid instrument)

(Cases II, IV and V: leverage parameter for sub is β=0.35; Case VI: β=0.50)
Implications of tax planning to assessments of the FDI response to tax reform

- Standard approach may understate FDI response in certain cases (e.g. investors in relatively high-tax countries operating dividend credit systems).
- Standard approach may overstate FDI response in certain cases (e.g. by overestimating impact on after-tax profit, to the extent profit is stripped out pre-reform).
- Analysis of tax-planning suggests ‘true’ impact of tax reform on AETR and FDI may differ widely from predictions under standard model – but does not point to a necessarily more accurate set of estimates.
Implications of tax planning to assessments of the FDI response to tax reform

Complications:

- Wide range of possible AETR values depending on financing/repatriation policies at firm level.
- Degree of tax-planning is unclear (depends on assessment of private marginal benefits and costs) – may vary by type of business activity, and by host/home country.
- Even if know tax-planning strategies, they may be difficult to build into a model.
- Even if assume home country taxation of investment returns is avoided, can’t focus on host country taxation alone – cost of finance depends on home country tax treatment of interest.
Implications of tax planning to assessments of the FDI response to tax reform

- Complications (cont’d):
  - Use of AETRs subject to measurement error (random or systematically biased) may lead to biased elasticity estimates.

- Overall implication – estimates of the FDI response to tax reform must be used with considerable caution.