Estimation of the short run fiscal impact of introducing an Exit Capital Tax

David Saha, Robert Kirchner, Oleksandra Betliy, Olga Geychuk

in cooperation with

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Executive summary

- **Topic**: Estimation of the short run fiscal impact if the Corporate Profit Tax (CPT) is abandoned in favour of the Exit Capital Tax (ECT) in January 2018

- **Results for 2018**:  
  - Optimistic case: Shortfall of UAH 36.9 bn or 1.2% of GDP (revenue falls from 2.4% of GDP to 1.2% of GDP)  
  - Pessimistic case: Shortfall of UAH 47.3 bn or 1.5% of GDP (revenue falls from 2.4% of GDP to 0.9% of GDP)

- **Pessimistic case**: Possibility of large fiscal shortfall exceeding previous estimates

- **Reason**: Taxpayers can react to new reality by lowering the amount of profits to be distributed

- **Further risk**: The ECT in its current shape may enable widespread legal tax avoidance

**Recommendation**

- If the ECT is adopted, budget policy should be cautious and include measures to offset the estimated fiscal shortfall
Structure

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2. Approach
3. Foregone revenues from a CPT system
4. ECT revenues
   1. Calculation and data base
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   4. Comparison with other studies
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7. Recommendations
1. Introduction

- Discussion is ongoing about the possible introduction of an „Exit Capital Tax“ to replace the Corporate Profit Tax in Ukraine
- A draft law has been submitted by the Ministry of Finance to the Cabinet of Ministers in July that foresees ECT introduction for 2018
- German Advisory Group has analysed ECT in previous papers
  - PS/01/2017 „Corporate Profit Tax vs. Exit Capital Tax: Analysis and recommendations“: Description, ECT/CPT comparison, recommendations
  - PB/03/2017: „Taxation of distributed profits: International Experience“: International experience with tax systems similar to ECT
- Conclusion from both analyses
  - High risk of revenue losses from ECT, especially in short run
  - Positive economic impact possible, but uncertain
- This briefing: Estimation of short-run fiscal impact due to ECT introduction
- See TN/02/2017 for the assumptions and methodology used here
2. Approach

- We estimate values for the tax year 2018
- Scenario analysis for ECT revenues allows accounting for unknown factors:
  - Incomplete data on ECT tax base
  - Responses of taxpayers to change of tax base and tax rate
- Possible range rather than point estimate as a base for budget planning
- Fiscal shortfall = Foregone revenues from CPT system – ECT revenues
- 2016 hypothetical values allow comparison with other studies

<table>
<thead>
<tr>
<th></th>
<th>(2016)</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foregone revenues from CPT system</td>
<td>Actual values</td>
<td>Forecast</td>
</tr>
<tr>
<td>ECT revenues</td>
<td>Built from actual data</td>
<td>Forecast</td>
</tr>
</tbody>
</table>

\[ \text{Fiscal shortfall due to ECT introduction} \]
3. Foregone revenues from a CPT system

<table>
<thead>
<tr>
<th>Foregone revenues in case of ECT introduction, 2018</th>
<th>2018, UAH bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPT revenues</td>
<td>70.7</td>
</tr>
<tr>
<td>+ Withholding tax on dividends to non-residents</td>
<td>10.6</td>
</tr>
<tr>
<td>+ PIT on dividends to natural persons</td>
<td>0.4</td>
</tr>
<tr>
<td>- CPT paid by banks</td>
<td>1.6</td>
</tr>
<tr>
<td>- Withholding tax on dividends to non-residents</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>= Foregone revenues from CPT system</td>
<td>74.7</td>
</tr>
<tr>
<td>% of GDP</td>
<td>2.4%</td>
</tr>
<tr>
<td>(GDP, UAH bn)</td>
<td>(3,074.5)</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance, IER (CPT forecast), IMF World Economic Outlook Apr. 2017 (GDP forecast), own calculations

Note: We subtract two revenues of the CPT system that would be received in 2018 despite ECT introduction.
• CPT from banks (excluded from ECT)
• Withholding tax on dividends for pre-2018 tax years paid out in 2018 due relaxed NBU restrictions (assumption)
• We do not consider here that some CPT revenues for 2017 profits would only be paid to the budget in 2018
4.1 ECT revenues: Calculation and data base

ECT revenue calculation: By component of the tax base

- Components: Transactions of ECT payers „with capital exit“ (distributions of company profit to non-ECT payers)
  - Dividends to natural or legal persons outside the ECT system
    - Tax rate: 15%
  - „Deemed dividends“: Other transactions with capital exit e.g.:
    - Interest payments to related parties above a threshold
    - Specific royalty payments
    - Financial aid or free of charge transfers of goods
    - Tax rate: 20%
- Remark: ECT allows for immediate full expensing of investment (equipment, plant,...)

Data base: SFS data on component magnitudes in 2016

- Data does exist only for 10 of 18 components of the new tax base
- Some definitions/corrections issue for 4 of the available components
- However, for the most important components, data is available
4.2 ECT revenues: Scenarios

We present 3 illustrative scenarios to determine a possible range for ECT revenues

- S1: Simple extrapolation:
  - Extrapolation of 2016 data on the components of the new ECT tax base
  - No reactions by taxpayers to the new tax system
- S2 and S3: Reactions of taxpayers incorporated
  - Based on S1 values
  - Taxpayer reactions to new tax base (S2) and tax rate (S3)

<table>
<thead>
<tr>
<th>Summary of ECT revenue scenarios</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reaction to tax rate change</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>S1 - Simple extrapolation</td>
</tr>
<tr>
<td>S2 - Reaction to tax base change</td>
</tr>
<tr>
<td>S3 - Reaction to tax rate change</td>
</tr>
</tbody>
</table>

*Correction applied to dividends paid to non-residents. NBU regulations since 2014 restricted dividend payments. Correction assumes constant GDP share of dividends from pre-2014.*
### Scenario 1 - Simple extrapolation

**S1 Simple extrapolation**

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECT revenue, UAH bn</td>
<td>23.5</td>
<td>33.7</td>
</tr>
<tr>
<td>% of GDP</td>
<td>1.0%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

*Source: Own calculations. See TN/02 for a detailed table of revenue by tax base component. Note: 2016 values included only for comparison with studies only using 2016 values.*

- **Concept:**
  - 2016 data exists on most of the transactions that will make up the new ECT.
  - This data is extrapolated to 2018 using fixed GDP shares.
    - Exception: Dividends to non-residents increase more in 2018 due to assumption of relaxed NBU restrictions (see TN/02/2017 for details).
  - S1 considers this data as if the ECT already were in operation in 2016.
  - Key difference between ECT and CPT tax base: ECT tax base only includes profit distributions, reinvested profit is not taxed.

- **Result:** ECT would yield revenues of UAH 33.7 bn in 2018, 1.1% of GDP.

- **Shortcomings of simple extrapolation:**
  - Does not consider reactions of taxpayers to tax base (see Scenario 2).
  - Does not consider reactions of taxpayers to tax rate (see Scenario 3).
Scenario 2 - Reaction to tax base change (I)

- Crucial to consider the reaction of taxpayers (companies) to vastly changed tax base
- Short-run:
  - Reinvest profits rather than pay out dividends (tax deferment)
  - Profits would eventually be paid out and taxed after investments amortise
  - This is part of the economic motivation of the ECT
  - Also possible: „Wait and see“ reaction, retain profit in company without investing
- Medium-run:
  - Exploit possible tax base loopholes (tax avoidance)
  - This is a typical risk with a new tax base
- Short- and medium-run reactions go in the same direction: Reduction of ECT revenues
- 3 reaction channels by companies
  - Dividend payments
  - „Deemed dividend“ payments
    - As these are mainly related-party operations, we assume that companies can largely control the volumes of these transactions in the short run
  - Profit distributions to the state budget by SOEs
Scenario 2 - Reaction to tax base change (II)

S2 - Reaction to tax base change

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECT revenue, UAH bn</td>
<td>19.1</td>
<td>27.4</td>
</tr>
<tr>
<td>% of GDP</td>
<td>0.8%</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

Source: Own calculations

- **Concept:**
  - Taxpayers react to new tax base by reducing profit distribution
  - Key assumption: Dividends and „deemed dividends“ are equally reduced by 20%
    - See TN for different values
  - Implicit assumption of relatively strong controllability of deemed dividends
  - Profit distribution of state owned enterprises reduced by 10%
    - SOEs under higher pressure to distribute profits than private companies
  - No reaction of taxpayers to change in tax rates

- **Result:** Significant revenue loss possible (S2: Only 81% of S1 ECT revenues in 2018 )
  - High uncertainty about extent of reaction, which is difficult to estimate
Scenario 3 - Reaction to tax rate change

<table>
<thead>
<tr>
<th>S3 – Reaction to tax rate change</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECT revenue, UAH bn</td>
</tr>
<tr>
<td>ECT revenue, UAH bn</td>
</tr>
<tr>
<td>% of GDP</td>
</tr>
</tbody>
</table>

Source: Own calculations, elasticity estimate: Dwenger and Steiner (2012)

- **Concept:**
  - Under ECT, effective tax rates on distributed profits will be lower than before
  - Main reason: No withholding tax/PIT on dividends
  - See TN/02/2017 for full discussion
  - Companies react to tax rate change by intensifying and/or de-shadowing activities
  - Leads to smaller loss of tax revenues (the “Laffer effect“)
  - Calculated using an empirical estimations of the „elasticity of taxable income“
  - We use a relatively high elasticity result of -0.5, implying an optimistic revenue estimate

- **Result:** Slightly higher ECT revenues than under S1 (+UAH 3.2 bn in 2018)
  - Not a very large effect of reaction to tax rates
4.3 ECT revenues: Summary of results

Considerable uncertainty remains about ECT revenues:
- Unclear magnitude of reactions of taxpayers, esp. to tax base change
- Missing data on several components of the tax base

Possible range for ECT revenues:
- Under these constraints, we believe a possible range for ECT revenues in 2018 is delimited by our scenario calculations
  - Optimistic result: S3 – UAH 36.9 bn, 1.2% of GDP
  - Pessimistic result: S2 – UAH 27.4 bn, 0.9% of GDP

### Summary of results, ordered by revenues

<table>
<thead>
<tr>
<th>Scenario</th>
<th>2016</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UAH bn</td>
<td>% of GDP</td>
</tr>
<tr>
<td>S3</td>
<td>25.0</td>
<td>1.1%</td>
</tr>
<tr>
<td>S1</td>
<td>23.5</td>
<td>1.0%</td>
</tr>
<tr>
<td>S2</td>
<td>19.1</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

Source: Own calculations

<table>
<thead>
<tr>
<th>Scenario</th>
<th>2016</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UAH bn</td>
<td>% of GDP</td>
</tr>
<tr>
<td>S1</td>
<td>23.5</td>
<td>1.0%</td>
</tr>
<tr>
<td>S2</td>
<td>19.1</td>
<td>0.8%</td>
</tr>
<tr>
<td>S3</td>
<td>25.0</td>
<td>1.1%</td>
</tr>
</tbody>
</table>
### 4.4 Comparison with other studies

#### ECT Revenue estimates

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UAH bn</td>
<td>% of GDP</td>
</tr>
<tr>
<td><strong>Other studies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFS</td>
<td>16.8</td>
<td>0.7%</td>
</tr>
<tr>
<td>Ministry of Finance</td>
<td>25.0</td>
<td>1.1%</td>
</tr>
<tr>
<td>Institute of the Future</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Shevtsova</td>
<td>30.5</td>
<td>1.3%</td>
</tr>
<tr>
<td>Shemiatkin/Shevtsova</td>
<td>17.4</td>
<td>0.7%</td>
</tr>
<tr>
<td><strong>Our estimates</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimistic result</td>
<td>25.0</td>
<td>1.1%</td>
</tr>
<tr>
<td>Pessimistic result</td>
<td>19.1</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

*Source: Studies of authors above, all GDP values from IMF World Economic Outlook April 2017, own calculations*

*Note: 2016 values for comparison purposes only*

- Our optimistic result is fully in line with other studies with ECT rev. of 1.1-1.3% of GDP
- However, our pessimistic result of 0.9% of GDP (2018) is somewhat below other studies
- Pessimistic result incorporates possible reactions to tax base change
- **Our results highlight the large fiscal risks associated with the ECT in the short run**
5. Fiscal impact

<table>
<thead>
<tr>
<th>Fiscal shortfall in 2018, UAH bn</th>
<th>Optimistic result</th>
<th>Pessimistic result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foregone revenues from CPT system</td>
<td>74.7</td>
<td>74.7</td>
</tr>
<tr>
<td>- ECT Revenue</td>
<td>36.9</td>
<td>27.4</td>
</tr>
<tr>
<td>= Fiscal Shortfall</td>
<td>37.8</td>
<td>47.3</td>
</tr>
</tbody>
</table>

% of GDP

1.2% 1.5%

Source: Own calculations

- Fiscal shortfall in 2018 between 1.2% and 1.5% of GDP
  - Fiscal impact broadly in line with experience of other countries that introduced ECT (Estonia, Macedonia) or a similar system (Moldova) - see PB/03/2017

Further considerations for budget policy:

- Budget impact of ECT introduction will be split over 2018 and 2019 budget
- Reason: Difference between tax years and budget years
- CPT for 2017 tax year will partly be paid in 2018 budget year
- ECT for 2018 tax year will partly be paid in 2019 budget year
- Full budget impact of ECT in 2019, same order of magnitude expected
6. Medium-term perspective

- Tax deferment in short-run only: Eventually, profits will be distributed
- Enforcement: Easier auditing of tax declarations by SFS may increase revenues
  - Partial recovery of tax revenues is to be expected in medium term
- Risk of large tax avoidance: If ECT tax base not comprehensively formulated, taxpayers can shift profit distribution to untaxed transactions => lower tax revenues
- Indication: ECT tax base much lower than CPT tax base in 2016
- Two possible reasons:
  - Extremely low profit distributions in 2016 or
  - Existence of profit distributions that would not be taxed by ECT
- Implication of latter case: ECT revenues may not recover in medium term
  - Constant policy response (anti-avoidance measures) necessary

Outlook:
- Probable reduction of fiscal shortfall in medium term
  - Depends on effectiveness of policy in implementing anti-avoidance measures
- Risk that loopholes in the ECT tax base may enable widespread legal tax avoidance and reduce medium term revenue prospects unless closed
7. Recommendations

Recommendation in case of ECT is adoption, taking effect January 2018:

- A cautious budget policy should include measures to offset the estimated fiscal shortfall

Recommendations in case ECT is adopted, but implementation postponed

- The SFS should collect comprehensive data on the ECT tax base over one full year to allow a more precise estimate
- Further research should be undertaken on reactions to the new tax base
- Intensive efforts should concentrate on closing potentially remaining loopholes in the tax base
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