German
Advisory Group
Ukraine

Technical Note [TN/02/2017]

Estimation of the short run fiscal impact of introducing the Exit Capital Tax: Methodology and further calculations

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1. Introduction and approach

- PB/12/2017 presents an estimation of the short run fiscal impact in case ECT is introduced in 2018

- This TN is a supplement to PB/12/2017, explaining the methodology, calculations and assumptions used

- Each numbered section of this TN refers to the corresponding section of PB/12/2017

2. Approach and data sources

- Key concept "Fiscal impact" of ECT introduction
- Fiscal impact is the difference between
  - Expected revenues of the proposed ECT system
  - Foregone revenues of continuing the present CPT system
- Fiscal impact scenario models the impact of the draft law submitted to the Cabinet of Ministers by the Ministry of Finance in 2017
- We calculate the fiscal impact mainly for 2018, but also include hypothetical ECT revenues for 2016 (the counterfactual case if the ECT had been in operation in 2016 already) to allow comparison with other studies

- Sources of data:
  - Ministry of Finance: Revenues of CPT, related taxes for 2016
  - IER Kyiv: Forecast of CPT revenues for 2018
  - SFS: Detailed data on CPT tax base for 2014-2016
  - IMF (World Economic Outlook, April 2017): GDP forecast for 2018

3. Foregone revenues from a CPT system

<u>Explanation of the concept of foregone revenue</u>

- Foregone revenue: The revenues that would be lost if the CPT is abandoned by January 2018 (according to present draft law)
  - CPT revenues from all companies except banks incl. revenues from withholding tax on dividends to non-resident legal persons for the tax years starting 2018
  - PIT revenues from dividend income of natural persons resident in Ukraine (dividends would no longer be taxable under PIT)
- However: Some revenues of the CPT system would persist in 2018 even if the ECT is introduced and hence are not counted as „foregone revenues". These revenues must not be counted under foregone revenues
  - Banks would continue to pay CPT
  - Due to expected relaxation of capital controls by the NBU, some dividends *on profits accrued in the years before 2018* would be paid out in 2018 and be subject to withholding tax (only dividends on profits made in the years starting 2018 are ECT taxable)

<u>Necessity of data corrections</u>

- Our underlying 2018 CPT forecast is derived from the IER Macroeconomic Forecast
- Needs to be adjusted for expected relaxation of NBU capital controls (dividends to non-residents, not included)

3. Foregone revenues from a CPT system

Explanation of the table (slide 6 of the PB)

	2018, UAH bn
1) CPT revenues	70.7
2) + Withholding tax on dividends to non-residents	10.6
3) + PIT on dividends to natural persons	0.4
4) - CPT paid by banks	1.6
5) - Withholding tax on dividends to non-residents	5.6
= Foregone revenues from CPT system	**74.7**

1) IER forecast for 2018 CPT revenues
   - Includes Bank CPT (must be subtracted => 4))
   - Does not reflect increased withholding tax income expeced in 2018 due to relaxation of NBU capital controls (=> 2, 5)

2) Extension of CPT forecast: Own calculation of increased withholding tax income in 2018 under CPT
   - Due to NBU capital controls, many companies could not pay out full dividends to non-residents since 2015
   - Led to lower CPT revenues (dividends to non resident legal persons are subject to withholding tax
   - We assume that capital controls will be fully relaxed by the end of 2017
   - As this is not assumed in the CPT forecast, need to account for higher withholding tax revenues
   - See next slide for description of calculation

3. Foregone revenues from a CPT system

3) PIT on dividends to natural persons
- With the ECT draft, PIT on dividends would no longer be paid, hence needs to be counted as foregone revenue
- Data on amount of dividends to natural persons in 2016 from SFS, extrapolated to 2018 by applying nominal GDP growth rate

4) CPT by Banks
- Current ECT draft foresees that banks continue to pay CPT until 2020
- 2016 CPT revenues from banks in SFS data, extrapolated to 2018 using GDP growth rate
- We hence subtract the CPT revenues for banks from foregone revenue

5) Withholding tax on dividends to non-residents
- Some of the withholding tax revenues in 2018 would be due to dividends paid *ex-post* on profits made before 2018
- These would be subject to CPT even if ECT is introduced, hence need to be subtracted from foregone revenue
- See next slide for calculation method

3. Foregone revenues from a CPT system

<u>Calculation of correction of withholding tax revenues</u>

- We assume that in 2016, 50% of accrued dividends to non-resident legal persons were paid out and the rest were held back, payment pending relaxation of capital controls

- Reason for assumption: 2012-2016 NBU balance of payment data data (current account, investment income (debit)) shows that even under 0% nominal growth of UAH profits 2012-2016 (GDP *nominal* growth was 70% due to inflation), dividends in 2016 were ca. 50% of 2012 level. We hence conclude that dividends to non-residents were severely depressed in 2016 not only by the economic situation (low profits to pay dividends on) but also and significantly by the NBU capital controls.

- This implies higher dividend payments after relaxation of the capital controls – assumed for 2018
  a. Companies can pay out will pay out all dividends to non-residents in 2018
  b. Companies will pay out „delayed dividends“ for pre-2018 profits, held back due to capital controls, in 2018

3. Foregone revenues from a CPT system

- 2) includes withholding tax on *both* a. and b. dividends
- Calculation
  - Key correction: *Accrued* dividends to non-residents in 2016 = *Paid-out* dividends to non-residents (legal persons) in 2016 x 2.
  - For other years: Assume constant GDP share of accrued dividends to non-resident legal persons 2014-2018
  - Hence apply GDP growth rates to calculate *accrued* dividends to non-resident legal persons 2014-2018
  - For a. (dividends to non-resident legal persons on 2018 profits): Apply withholding tax rate
  - We assume an effective average withholding tax rate of 10% (statutory rate of 15% but subject to exceptions etc due to double tax treaties)
  - For b. we subtract paid-out dividends 2014-2017 from the accrued dividends to get the backlog of accrued, but not paid out dividends (due to NBU restrictions) that we assume would be paid out and taxed in 2018.
- 5) As the withholding tax revenues from b. (on 2014-2017 profits) would be made even in case of ECT introduction, they are not foregone revenues. We hence subtract them in 5)
- (Effectively, b. revenues do not play a role in our calculations – they are added and then subtracted, we included them in 2) to avoid confusion about their existence)

4. ECT revenues: Calculation and data base

- We calculate ECT revenue by applying the foreseeen respective ECT to the components of the tax base as defined in the draft law (see table on next slide)
- 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%
- Data base: SFS data on component magnitudes in 2016
- Data does not exist for all components of the new tax base
- Some definitions/corrections issues for several other components

- **See table on next slide for components, tax rates, data availability and issues**

4. ECT revenues: Components of the ECT base

Component	ECT rate, %	Availability
Dividends to natural persons	**15**	Yes
Dividends to non-resident legal entities	**15**	Yes, but corrections needed due to NBU restrictions
Transfers by state owned enterprises to the state budget	**15**	Yes
Transfer Pricing Corrections	**20**	Yes
Interest accrued to non-resident related parties for debt exceeding 3.5 times the equity of the ECT payer	**20**	Yes, but ECT tax base is broader (no 50% EBITDA threshold)
Interest accrued to non-resident related parties for debt between 1.5 and 3.5 times the equity of the ECT payer	**5**	No
Interest paid/accrued to parties in low-tax countries	**20**	Yes, some double counting with related party interest
Royalties to non-residents	**20**	Yes, but ECT base broader than for CPT
Funds paid in context of joint ventures to non-ECT payers in excess of funds initially contributed by the non-payer	**20**	No
Funds transferred to non-residents in the context of insurances except for insurance fees meetings standards set by state	**20**	Yes
Non-repaid/repayable financial aid to non-ECT payers	**20**	No
Value of free-of-charge transfers to non-ECT payers	**20**	No
Amount of financial aid or free of charge transfers to non-profit organisations in excess of 0.5% net sales income	**20**	No
Payments to non-profit organisations for purposes other than those specified in the tax code	**20**	Yes
Payments (cash or cashless) for investments in objects outside Ukraine	**20**	Yes
Payments to a non-resident that the ECT payer is actin on behalf of (agency or commission agreements)	**20**	No
Payments into the charter capital or operational capital of a resident trust fund not subject to ECT	**20**	No
Payments to related parties, resident under the simplified system of taxation for the purchase of goods, works, services	**20**	No

4.2 ECT revenues: Calculation of Scenario 1

- Scenario 1 is the simplest scenario:
  - Extrapolation of tax base components from actual 2016 values to expected 2018 values by applying nominal GDP growth rates
  - Then apply ECT tax rates
- No behavioural adaptation by taxpayers to new tax system in this scenario

- Exception: We correct dividends to non-resident legal persons (paid in 2018 on 2018 profits) in line with the correction of withholding tax revenues as described in slide 6 (2016 dividends to non-resident legal persons x 2, apply GDP growth for 2018 value)
- This implies 2018 ECT from this tax base component are *doubled* in comparison to not making this correction

- We make *no corrections* on the other components with missing data or data issues
- Reason: Lack of solid information to make corrections with
- Remaining data issues will lead to an *underestimation of 2018 ECT revenues*
- See slide 11 for explanation why we believe the underestimation to be relatively small

4.2 ECT revenues: Scenario 1 by component

Category	ECT tax base, UAH m		ECT rate	ECT revenue, UAH m	
	2016	2018		2016	2018
Dividends to natural persons	6,646.7	8,574.7	15%	997.0	1,286.2
Dividends to non-resident legal entities	21,600.0	50,750.0	15%	3,240.0	7,612.5
Transfers by state owned enterprises to the state budget	22,400.0	28,897.6	15%	3,360.0	4,334.6
Transfer pricing corrections	2,610.6	3,367.9	20%	522.1	673.6
Interest accrued to non-resident related parties for debt exceeding 3.5 times the equity of the ECT payer	49,265.1	63,555.4	20%	9,853.0	12,711.1
Interest paid/accrued to parties in low-tax countries	15,700.0	20,254.1	20%	3,140.0	4,050.8
Royalties to non residents, not tax deductible under the CPT	1,212.1	1,563.7	20%	242.4	312.7
Funds transferred to non-residents in the context of insurances*	149.3	192.6	20%	29.9	38.5
Payments to non-profit organisations for purposes other than those specified in the tax code	8,400.0	10,836.6	20%	1,680.0	2,167.3
Payments (cash or cashless) for investments in objects outside Ukraine	4,400.0	5,676.3	20%	880.0	1,135.3
Preliminary Sum	**132,383.8**	**193,669.0**	**-**	**23,944.4**	**34,322.7**
Correction for Banks in tax base (continue to pay CPT)		-	-	-461.6	-654.4
ECT Revenue		-	-	**23,482.8**	**33,668.3**
% of GDP		-	-	***1.0%***	***1.1%***

*Source: Own calculations; *except for insurance fees meetings standards set by state*

4.2 ECT revenues: Impact of missing data on tax base

- No data for 8 of 18 components of the tax base of ECT
- However: Probably small volumes in missing components:
  - Most not deductible for CPT => no incentive to use for tax avoidance
  - Example: „Non-repayable financial aid to non-ECT payers"
- Some biases of further 4 components
  - Low dividends to non-residents (NBU restrictions): corrected
  - ECT tax base broader for royalties and related party interest
  - Double counting between related party & tax haven interest payments
  - Biases work in both directions, unclear total effect
- **Exact impact of missing/unprecise data cannot be estimated**
- **We expect at most a small underestimation of total ECT base**

4.2 ECT revenues: Calculation of Scenario 2

- Difference from Scenario 1: Reaction of companies to new tax base
  - Dividends: Reduced by 20%
  - SOE profit distributions to public budgets: Reduced by 10%
  - Deemed dividends: Reduced by 20%
  - See annex for alternative values
- As profit distributions (dividends, SOE profit distributions, deemed dividends) are now the tax base, there is an incentive to reduce them (i.e. retain/reinvest profits) and defer taxation in the short run
- Effectively assumes that „deemed dividends“ also are to some extent controllable by companies and will be reduced following ECT introduction
- SOEs are likely to face some public pressure to pay profits into public budgets, we therefore assume that they will reduce profit distributions less than private companies

4.2 ECT revenues: Scenario 2 by component

Category	ECT tax base, UAH m		ECT rate	ECT revenue, UAH m	
	2016	2018		2016	2018
Dividends to natural persons	5,317.3	6,859.7	15%	797.6	1,029.0
Dividends to non-resident legal entities	17,280.0	40,600.0	15%	2,592.0	6,090.0
Transfers by state owned enterprises to the state budget	20,160.0	26,007.8	15%	3,024.0	3,901.2
Transfer pricing corrections	2,088.5	2,694.3	20%	417.7	538.9
Interest accrued to non-resident related parties for debt exceeding 3.5 times the equity of the ECT payer	39,412.0	50,844.3	20%	7,882.4	10,168.9
Interest paid/accrued to parties in low-tax countries	12,560.0	16,203.3	20%	2,512.0	3,240.7
Royalties to non residents, not tax deductible under the CPT	969.7	1,251.0	20%	193.9	250.2
Funds transferred to non-residents in the context of insurances*	119.4	154.1	20%	23.9	30.8
Payments to non-profit organisations for purposes other than those specified in the tax code	6,720.0	8,669.3	20%	1,344.0	1,733.9
Payments (cash or cashless) for investments in objects outside Ukraine	3,520.0	4,541.0	20%	704.0	908.2
Preliminary Sum	**108,147.0**	**157,824.9**	**-**	**19,491.5**	**27,891.6**
Correction for Banks in tax base (continue to pay CPT)		-	-	-375.8	-531.8
ECT Revenue		-	-	**19,115.8**	**27,359.8**
% of GDP		-	-	**0.8%**	**0.9%**

*Source: Own calculations; *except for insurance fees meetings standards set by state*

4.2 ECT revenues: Calculation of Scenario 3

- Difference from Scenario 1: Includes taxpayer reaction to changed tax rates

<u>Change of tax rates</u>

- ECT draft law implies a reduction of tax rates for distributed corporate profits
  - 15% for dividend payments and distributions of SOE profits to the state
  - 20% for „deemed dividends“
- Present CPT system
  - 18% CPT on profit
  - Dividends paid to natural persons: 5% PIT and 1.5% military duty
  - Dividends paid to non-resident legal persons: 15% withholding tax (maximum, can be reduced depending on bilateral double tax treaties, we assume a 10% average effective tax rate)

➢ ECT implies a *partial* decrease of tax rates on distributed profits
  - Tax rate reduction of up to 11% on profits distributed through dividends
  - Tax rate increase of 2% on profits distributed through deemed dividends

4.2 ECT revenues: Calculation of Scenario 3

<u>Calculation of taxpayer response</u>

- Elasticity of taxable income measures how the tax base reacts to tax rate changes

- We use an estimate of the elasticity of taxable income for the corporate tax base by Dwenger and Steiner (2012)* of -0.5
- This estimate is at the high end of the literature, implying a relatively large reaction to tax rate changes
- Other papers such as Gruber and Rauh (2007) estimate the elasticity at -0.2, implying a lower reaction to tax rate changes (and hence deviation of Scenario 3 from 1).

- Calculation formula for new tax base (changed component-wise, as tax rate changes differ by component:

  New tax base = Old tax base(1- (elasticity*percentage change in tax rate))*

* Nadja Dwenger, Viktor Steiner „Profit taxation and the elasticity of the corporate income tax base: Evidence from German tax return Data", *National Tax Journal,* 2012 (65), pp. 117-150

** Gruber, Jonathan, and Joshua Rauh, 2007, „How Elastic is the Corporate Income Tax Base?" in *Taking Corporate Income in the 21st Century*, Auerbach, Alan J., James R. Hines, and Joel Slemrod, eds., Cambridge, MA: Cambridge University Press.

4.2 ECT revenues: Scenario 3 by component

Category	ECT tax base, UAH m		Tax rate reduction	ECT revenue, UAH m	
	2016	2018		2016	2018
Dividends to natural persons	8,478.6	10,938.0	8%	1,271.8	1,640.7
Dividends to non-resident legal entities	29,664.0	69,696.7	11%	4,449.6	10,454.5
Transfers by state owned enterprises to the state budget	28,573.8	36,862.2	8%	4,286.1	5,529.3
Transfer pricing corrections	2,480.1	3,199.5	-2%	496.0	639.9
Interest accrued to non-resident related parties for debt exceeding 3.5 times the equity of the ECT payer	46,801.8	60,377.6	-2%	9,360.4	12,075.5
Interest paid/accrued to parties in low-tax countries	14,915.0	19,241.4	-2%	2,983.0	3,848.3
Royalties to non residents, not tax deductible under the CPT	1,151.5	1,485.5	-2%	230.3	297.1
Funds transferred to non-residents in the context of insurances*	141.8	183.0	-2%	28.4	36.6
Payments to non-profit organisations for purposes other than those specified in the tax code	7,980.0	10,294.8	-2%	1,596.0	2,059.0
Payments (cash or cashless) for investments in objects outside Ukraine	4,180.0	5,392.5	-2%	836.0	1,078.5
Preliminary Sum	**144,366.7**	**217,671.3**	**-**	**25,537.5**	**37,659.4**
Correction for Banks in tax base (continue to pay CPT)		-	-	-492.3	-718.0
ECT Revenue		-	-	**25,045.2**	**36,941.4**
% of GDP		-	-	***1.1%***	***1.2%***

*Source: Own calculations; *except for insurance fees meetings standards set by state*

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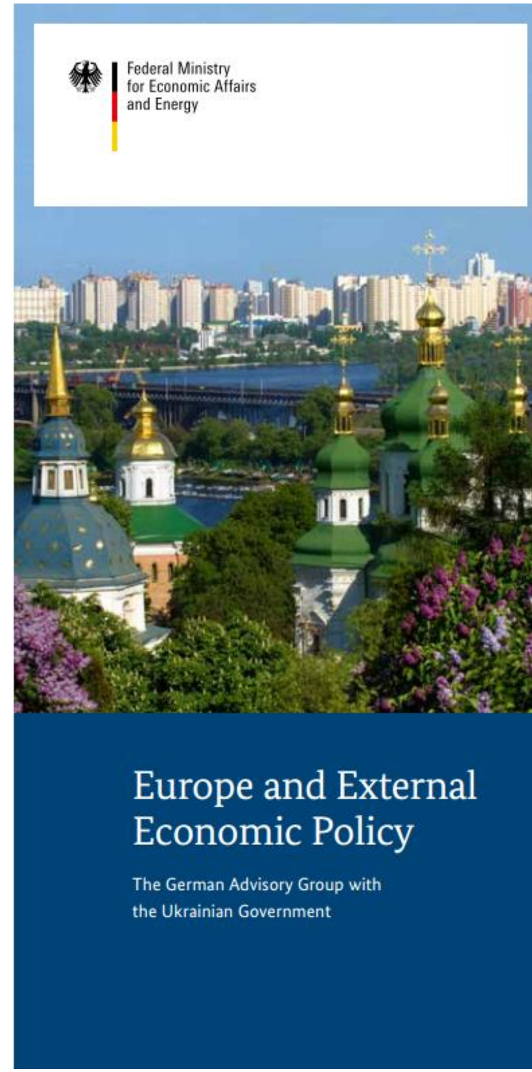

Annex: Variations of Scenario 2

- As the reaction of companies to the tax base change (scenario 2) is extremely uncertain, we present a table with different reaction strengths here
- We consider the scenario as presented in the PB as most likely, the alternate values here are purely for reference in case readers hold other values to be more likely
- We always assume that profit distributions of SOEs will react half as strongly as dividends/deemed dividends by private companies

ECT revenues for different reaction strengths of taxpayers to new tax base

Reduction of (deemed) dividends by private companies / profit distributions of SOEs	2016		2018	
	UAH bn	% of GDP	UAH bn	% of GDP
20/10 (scenario 2)	**19.1**	**0.8%**	**27.4**	**0.9%**
40/20	14.7	0.6%	21.1	0.7%
60/30	10.4	0.4%	14.7	0.5%
80/40	6.0	0.3%	8.4	0.3%
100/50	1.6	0.1%	2.1	0.1%

Source: Own calculations