

# Financing the EU Budget: CCCTB and Other Sustainability-oriented Candidates for Tax-based Own Resources



**Danuse Nerudová, Margit Schratzenstaller**

Mendel University Brno, Austrian Institute of Economic Research WIFO

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# **WP 5: Analysing the impact of CC(C)TB in EU Member States**

- 1. Development of static model to measure CC(C)TB impacts**
- 2. Development of methodology for missing data imputation**
- 3. Development of dynamic model to measure CC(C)TB impacts**
- 4. Results of simulations are used for further research within WP8 to evaluate CC(C)TB as possible candidate for sustainability-oriented tax-based future EU funding**





# WP 8: Sustainability-oriented future EU funding

1. EU current system of own resources: historical development and criticism
2. Identification of fundamental pros and cons of tax-based own resources as an alternative own resource
3. Widening the perspective by innovative comprehensive concept of sustainability-oriented taxation
4. Establishing evaluation criteria capturing the four dimensions of sustainability relevant for taxation
5. Development and analysis/evaluation of candidates for sustainability-oriented tax based own resources



# Rationale for sustainability-oriented tax-based own resources

1. Current system of EU own resources does not contribute to central EU objectives: “smart, sustainable, inclusive growth” according to Europe 2020 strategy; SDG...
2. Sustainability-oriented tax-based own resources may reduce/ compensate for sustainability gaps in EU Member States’ tax regimes





# Sustainability gaps in EU Member States' tax regimes

1. High and increasing weight of labour taxes
2. Decreasing importance of Pigovian taxes
3. Intense tax competition including profit shifting
4. Tax compliance and tax fraud
5. Decreasing progressivity of tax systems



# Evaluation criteria for (tax-based) EU own resources

1. Criteria established by European Commission/HLGOR
2. Conventional criteria in literature
- 3. Sustainability-oriented criteria**





# Sustainability-oriented evaluation criteria for (tax-based) EU own resources (1)

- **Economic sustainability**
  - Economic growth
  - Fiscal sustainability
  - Economic welfare
- **Social sustainability**
  - Employment
  - Social inclusion, cohesion and mobility
  - Wellbeing and quality of life



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# Sustainability-oriented evaluation criteria for (tax-based) EU own resources (2)

- **Environmental sustainability**
  - Air pollution and climate change
  - Green innovation
  - Renewable energy
- **Cultural/Institutional sustainability**
  - Horizontal Tax Harmonisation
  - Tax non-interference
  - Fair distribution of financial burden across Member States





# Why use certain taxes as EU own resources?

1. Enforcement problems/ downward tax competition at national level due to mobility of tax subjects/ tax bases
2. Due to cross-border externalities national tax rates may be set at suboptimal levels
3. Unilateral tax measures may reduce pressure on other countries to implement unilateral tax measures themselves as they can act as free-riders
4. Tax revenues are not clearly attributable to individual countries  
=> assignment of revenues to EU level  
=> to fund EU expenditures





# FairTax sustainability-oriented candidates for tax-based EU own resources

1. CC(C)TB
2. Carbon-based Flight Ticket Tax
3. Financial Transactions Tax
4. Carbon Tax
5. Net Wealth tax
6. Nuclear Power Tax





# CC(C)TB as possible candidate for future EU funding – research premises

1. Departing point: **no link between the system of own resources and aims set by EU policies**
2. **Direct and indirect contribution of CC(C)TB to close sustainability gaps in the form of:**
  - increasing weight of taxes on labour
  - intense company tax competition
  - issues with tax compliance
  - issues with tax fraud



# CCTB and CCCTB as an option

- With respect to EU budget not discussed yet
- However, discussion about EUCIT
- Cattoir (2009): EUCIT can generate revenues of 3% of GDP in 2008
- EC (2013) – EUCIT can generate revenues of € 15 billion with a tax rate below 2%
- Remittance system





# CC(C)TB - variants

**CCCTB-** full VAT replacement

- full GNI replacement
- partial GNI replacement

**CCTB** - full VAT replacement

- full GNI replacement
- partial GNI replacement





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	CCCTB mil EUR	nominal tax rate 2015	CCCTB tax yield mil EUR	VAT own resource mil. EUR	% to reach current contribution from CCCTB tax base	% to reach current contribution from CCCTB tax yield
Austria	15 151.33	25.00	3 787.83	453.00	2.99	11.96
Belgium	19 803.89	34.00	6 733.32	508.60	2.57	7.55
Bulgaria	3 156.42	10.00	315.64	58.70	1.86	18.60
Croatia	4 632.63	20.00	926.53	63.00	1.36	6.80
Cyprus	43.53	12.50	5.44	23.00	52.84	422.72
Czech Republic	9 357.75	19.00	1 777.97	183.80	1.96	10.34
Denmark	19 154.84	23.50	4 501.39	279.50	1.46	6.21
Estonia	5 123.47	20.00	1 024.69	25.70	0.50	2.51
Finland	7 360.38	20.00	1 472.08	270.50	3.68	18.38
France	78 895.64	38.90	30 690.40	2956.40	3.75	9.63
Germany	50 457.67	31.00	15 641.88	3698.70	7.33	23.65
Greece	1 777.18	29.00	515.38	286.00	16.09	55.49
Hungary	5 879.28	20.90	1 228.77	118.10	2.01	9.61
Ireland	6 635.53	12.50	829.44	203.20	3.06	24.50
Italy	56 663.80	31.30	17 735.77	1760.10	3.11	9.92
Latvia	1 854.47	15.00	278.17	32.50	1.75	11.68
Lithuania	1 206.39	15.00	180.96	40.30	3.34	22.27
Luxembourg	3 963.59	29.20	1 157.37	38.50	0.97	3.33
Malta	252.16	35.00	88.26	10.60	4.20	12.01
Netherlands	75 266.62	25.00	18 816.65	818.60	1.09	4.35
Poland	16 265.76	19.00	3 090.50	445.10	2.74	14.40
Portugal	6 834.10	29.50	2 016.06	242.30	3.55	12.02
Romania	10 491.01	16.00	1 678.56	161.30	1.54	9.61
Slovakia	3 683.40	22.00	810.35	69.00	1.87	8.51
Slovenia	755.45	17.00	128.43	52.80	6.99	41.11
Spain	40 745.02	33.40	13 608.84	1382.00	3.39	10.16
Sweden	40 095.25	22.00	8 820.96	553.10	1.38	6.27
United Kingdom	325 455.31	20.00	65 091.06	2932.90	0.90	4.51
Total	<b>810 961.89</b>		<b>202 952.69</b>	17667.30		



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Austria	15 151,33	25,00	3 787,83	2 197,50	219,75	5,80	439,50	11,60	659,25	17,40
Belgium	19 803,89	34,00	6 733,32	2 864,40	286,44	4,25	572,88	8,51	859,32	12,76
Bulgaria	3 156,42	10,00	315,64	315,30	31,53	9,99	63,06	19,98	94,59	29,97
Croatia	4 632,63	20,00	926,53	294,60	29,46	3,18	58,92	6,36	88,38	9,54
Cyprus	43,53	12,50	5,44	107,70	10,77	197,94	21,54	395,89	32,31	593,83
Czech Republic	9 357,75	19,00	1 777,97	1 023,50	102,35	5,76	204,70	11,51	307,05	17,27
Denmark	19 154,84	23,50	4 501,39	1 737,70	173,77	3,86	347,54	7,72	521,31	11,58
Estonia	5 123,47	20,00	1 024,69	138,30	13,83	1,35	27,66	2,70	41,49	4,05
Finland	7 360,38	20,00	1 472,08	1 365,30	136,53	9,27	273,06	18,55	409,59	27,82
France	78 895,64	38,90	30 690,40	15 025,00	1502,50	4,90	3005,00	9,79	4507,50	14,69
Germany	50 457,67	31,00	15 641,88	21 737,70	2173,77	13,90	4347,54	27,79	6521,31	41,69
Greece	1 777,18	29,00	515,38	1 410,90	141,09	27,38	282,18	54,75	423,27	82,13
Hungary	5 879,28	20,90	1 228,77	700,80	70,08	5,70	140,16	11,41	210,24	17,11
Ireland	6 635,53	12,50	829,44	1 108,00	110,80	13,36	221,60	26,72	332,40	40,08
Italy	56 663,80	31,30	17 735,77	11 443,00	1144,30	6,45	2288,60	12,90	3432,90	19,36
Latvia	1 854,47	15,00	278,17	192,70	19,27	6,93	38,54	13,85	57,81	20,78
Lithuania	1 206,39	15,00	180,96	253,80	25,38	14,03	50,76	28,05	76,14	42,08
Luxembourg	3 963,59	29,20	1 157,37	171,40	17,14	1,48	34,28	2,96	51,42	4,44
Malta	252,16	35,00	88,26	49,40	4,94	5,60	9,88	11,19	14,82	16,79
Netherlands	75 266,62	25,00	18 816,65	5 493,30	549,33	2,92	1098,66	5,84	1647,99	8,76
Poland	16 265,76	19,00	3 090,50	2 787,00	278,70	9,02	557,40	18,04	836,10	27,05
Portugal	6 834,10	29,50	2 016,06	1 271,10	127,11	6,30	254,22	12,61	381,33	18,91
Romania	10 491,01	16,00	1 678,56	1 090,40	109,04	6,50	218,08	12,99	327,12	19,49
Slovakia	3 683,40	22,00	810,35	502,60	50,26	6,20	100,52	12,40	150,78	18,61
Slovenia	755,45	17,00	128,43	247,20	24,72	19,25	49,44	38,50	74,16	57,74
Spain	40 745,02	33,40	13 608,84	7 850,30	785,03	5,77	1570,06	11,54	2355,09	17,31
Sweden	40 095,25	22,00	8 820,96	3 219,60	321,96	3,65	643,92	7,30	965,88	10,95
United Kingdom	325 455,31	20,00	65 091,06	14 475,00	1447,50	2,22	2895,00	4,45	4342,50	6,67



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	CCTB (incl. cross-border loss offsetting) mil EUR	nominal tax rate 2015	CCTB tax yield mil EUR	VAT own resource mil. EUR	% to reach current contribution from CCTB tax base	% to reach current contribution from CCTB tax yield
Austria	8 962.81	25.00	2 240.70	453.00	5.05	20.22
Belgium	22 646.75	34.00	7 699.90	508.60	2.25	6.61
Bulgaria	3 515.53	10.00	351.55	58.70	1.67	16.70
Croatia	1 764.69	20.00	352.94	63.00	3.57	17.85
Cyprus	0	12.50	0	0	0	0
Czech Republic	8 499.76	19.00	1 614.95	183.80	2.16	11.38
Denmark	18 744.71	23.50	4 405.01	279.50	1.49	6.35
Estonia	1 334.43	20.00	266.89	25.70	1.93	9.63
Finland	9 936.21	20.00	1 987.24	270.50	2.72	13.61
France	64 419.78	38.90	25 059.29	2956.40	4.59	11.80
Germany	43 608.33	31.00	13 518.58	3698.70	8.48	27.36
Greece	1 441.68	29.00	418.09	286.00	19.84	68.41
Hungary	2 481.85	20.90	518.71	118.10	4.76	22.77
Ireland	9 157.70	12.50	1 144.71	203.20	2.22	17.75
Italy	47 027.83	31.30	14 719.71	1760.10	3.74	11.96
Latvia	1 455.27	15.00	218.29	32.50	2.23	14.89
Lithuania	987.86	15.00	148.18	40.30	4.08	27.20
Luxembourg	9 030.40	29.20	2 636.88	38.50	0.43	1.46
Malta	51.57	35.00	18.05	10.60	20.55	58.73
Netherlands	81 996.87	25.00	20 499.22	818.60	1.00	3.99
Poland	9 275.70	19.00	1 762.38	445.10	4.80	25.26
Portugal	7 078.11	29.50	2 088.04	242.30	3.42	11.60
Romania	7 517.62	16.00	1 202.82	161.30	2.15	13.41
Slovakia	3 577.00	22.00	786.94	69.00	1.93	8.77
Slovenia	670.89	17.00	114.05	52.80	7.87	46.29
Spain	45 617.76	33.40	15 236.33	1382.00	3.03	9.07
Sweden	33 256.35	22.00	7 316.40	553.10	1.66	7.56
United Kingdom	390 624.74	20.00	78 124.95	2932.90	0.75	3.75
Total	<b>834 682.20</b>		<b>204 393.81</b>	17667.30		



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Austria	8 962,81	25,00	2 240,70	2197,50	219,75	9,81	439,50	19,61	659,25	29,42
Belgium	22 646,75	34,00	7 699,90	2864,40	286,44	3,72	572,88	7,44	859,32	11,16
Bulgaria	3 515,53	10,00	351,55	315,30	31,53	8,97	63,06	17,94	94,59	26,91
Croatia	1 764,69	20,00	352,94	294,60	29,46	8,35	58,92	16,69	88,38	25,04
Cyprus	0,00	12,50	0,00	107,70	0,00	0,00	0,00	0,00	0,00	0,00
Czech Republic	8 499,76	19,00	1 614,95	1023,50	102,35	6,34	204,70	12,68	307,05	19,01
Denmark	18 744,71	23,50	4 405,01	1 737,70	173,77	3,94	347,54	7,89	521,31	11,83
Estonia	1 334,43	20,00	266,89	138,30	13,83	5,18	27,66	10,36	41,49	15,55
Finland	9 936,21	20,00	1 987,24	1365,30	136,53	6,87	273,06	13,74	409,59	20,61
France	64 419,78	38,90	25 059,29	15025,00	1502,50	6,00	3005,00	11,99	4507,50	17,99
Germany	43 608,33	31,00	13 518,58	21737,70	2173,77	16,08	4347,54	32,16	6521,31	48,24
Greece	1 441,68	29,00	418,09	1 410,90	141,09	33,75	282,18	67,49	423,27	101,24
Hungary	2 481,85	20,90	518,71	700,80	70,08	13,51	140,16	27,02	210,24	40,53
Ireland	9 157,70	12,50	1 144,71	1108,00	110,80	9,68	221,60	19,36	332,40	29,04
Italy	47 027,83	31,30	14 719,71	11443,00	1144,30	7,77	2288,60	15,55	3432,90	23,32
Latvia	1 455,27	15,00	218,29	192,70	19,27	8,83	38,54	17,66	57,81	26,48
Lithuania	987,86	15,00	148,18	253,80	25,38	17,13	50,76	34,26	76,14	51,38
Luxembourg	9 030,40	29,20	2 636,88	171,40	17,14	0,65	34,28	1,30	51,42	1,95
Malta	51,57	35,00	18,05	49,40	4,94	27,37	9,88	54,74	14,82	82,11
Netherlands	81 996,87	25,00	20 499,22	5493,30	549,33	2,68	1098,66	5,36	1647,99	8,04
Poland	9 275,70	19,00	1 762,38	2787,00	278,70	15,81	557,40	31,63	836,10	47,44
Portugal	7 078,11	29,50	2 088,04	1271,10	127,11	6,09	254,22	12,18	381,33	18,26
Romania	7 517,62	16,00	1 202,82	1090,40	109,04	9,07	218,08	18,13	327,12	27,20
Slovakia	3 577,00	22,00	786,94	502,60	50,26	6,39	100,52	12,77	150,78	19,16
Slovenia	670,89	17,00	114,05	247,20	24,72	21,67	49,44	43,35	74,16	65,02
Spain	45 617,76	33,40	15 236,33	7850,30	785,03	5,15	1570,06	10,30	2355,09	15,46
Sweden	33 256,35	22,00	7 316,40	3219,60	321,96	4,40	643,92	8,80	965,88	13,20
United Kingdom	390 624,74	20,00	78 124,95	14 475,00	1447,50	1,85	2895,00	3,71	4342,50	5,56

# Conclusion (1)

## **VAT-based own resource replacement by CCCTB**

- portion remitted to EU budget would be lowest for Estonia (2.51%)
- highest for Greece (55.49%).
- Cyprus is able to generate only € 5.44 million from CCCTB, while its VAT-based contribution amounts to € 23 million

## **VAT-based own resource replacement by CCTB**

- portion remitted to EU budget would be lowest for Luxembourg (1.46%)
- highest for Greece (68.41%).
- Cyprus is not able to generate positive tax base



# Conclusion (2)

## **GNI-based own resource replacement by CCCTB**

- full replacement not possible for 7 Member States
- Cyprus not able to remit the tax revenues even in case of 10% GNI-based contribution replacement

## **GNI-based own resource replacement by CCTB**

- full replacement not possible for 8 Member States
- Cyprus is not able to generate positive tax base





# Flight ticket tax (1)

- Group of European countries which gave up their ticket taxes almost as large as group of countries still having them
- Constant discussion and downward pressure on existing flight ticket taxes
- Tax rates rather low and no systematic link to carbon intensity of flights
- Limited experience corroborates theoretical expectation that due to (alleged) tax competition aviation taxes cannot be implemented effectively at national level  
=> „stuck to the bottom“ rather than „race to the bottom“



# Flight ticket tax (2)

## EU revenues for three different scenarios

- Low-tax scenario (25 €/tonne CO<sub>2</sub>): € 3.9 billion
- Medium-tax scenario (30 €/tonne CO<sub>2</sub>): € 4.6 billion
- High-tax scenario (35 €/tonne CO<sub>2</sub>): € 5.4 billion



# Flight ticket tax (3)

- International approach necessary due to cross-border nature of externalities and (alleged) tax competition
- Revenues from taxing international flights not attributable to individual Member States
- If introduced in 2014, passenger numbers would not have increased by 4% but would have remained constant => potential to at least dampen massive annual air passenger growth
- Limited revenue potential, but stable revenue source
- Distributional effects: limited empirical evidence points at rather progressive effects
- (EU-ETS and current problems)





# Key arguments for tax-based EU own resources

- Contribution of sustainability-oriented tax-based own resources to central EU strategies (EU 2020 strategy, Sustainable Development Goals, Paris Agreement) and “Budgeting for Results”
- Non-attributability of revenues to individual MS
- “Additionality” of suggested candidates for tax-based own resources – but within a fiscally neutral approach (tax-based own resources as alternative, not as additional own resources)
- Strengthening fiscal coherence
- Implementation possible within current legal/constitutional framework





# Key issues and problems which need to be addressed

- Stronger sustainability-orientation of EU expenditures as a key prerequisite for realistic chances of implementation (otherwise tax-based own resources might even increase resistance against further European integration)
- Implementation within current legal framework (remittance system)
- Long-term sufficiency of effective carbon taxes

