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HIGHER EDUCATION POLICY OF 'POST-COMMUNIST' COUNTRIES IN THE CONTEXT OF WELFARE REGIMES

RESEARCH QUESTION

To what extent higher education policy in the 'post-communist' countries exhibits characteristics different than in social-democratic, conservative and liberal countries? Do they constitute a separate 'regime' of higher education policies?

01 WHY IS THAT INTERESTING?

1. "The exclusion of 'communist' countries for more than twenty years from welfare state theorising has created an empirical and theoretical gap' [Aidukaite 2009, p. 23].
2. So far, we are not able to unequivocally answer the question whether one can speak about a specific 'post-communist' welfare regime.

02 HIGHER EDUCATION AS A PART OF WELFARE STATE

Expansion of HE used to be perceived as key to economic competitiveness, democratic development and improvement of human capacities.
HE can be analysed as a system that performs some functions of the welfare state, because:

1. Graduation from studies increases – if not determines – individual chances on the labour market (depending on the level of diversification and stratification in a particular HE system).
2. HE systems can redistribute directly through a set of financial instruments such as tuition fees and student scholarships, grants and loans.

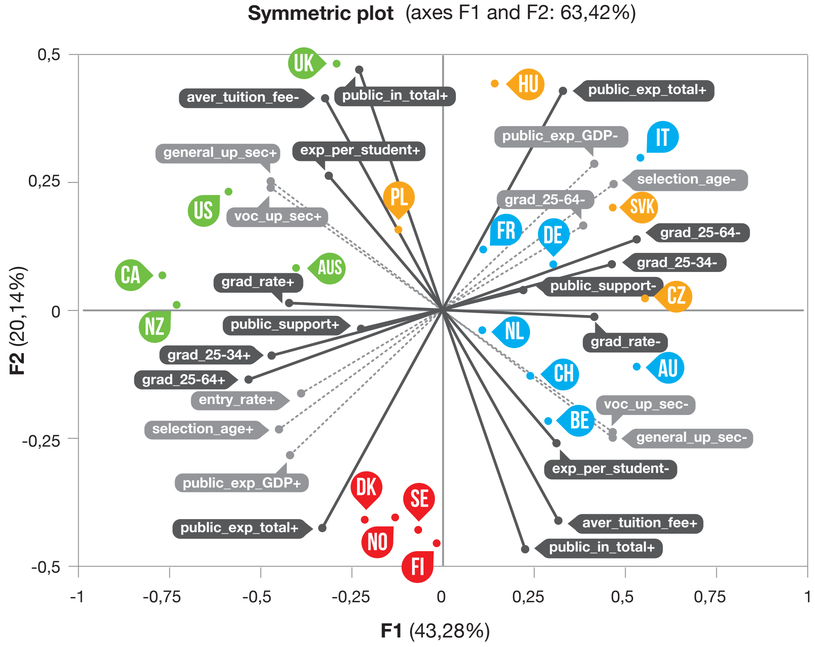
03 THE CONCEPT OF 'WELFARE REGIME' AS AN ANALYTICAL TOOL

Welfare regimes - 'a complex of legal and organizational features that are systematically interwoven' alongside the market, civil society and the family [Arts, Gelissen 2002]
Regime theory suggests a correspondence between historical and structural determinants and specific policy arrangements and outcomes [Castles, Obinger 2008, p. 339]. Distinctive regimes are constructed as 'ideal-types' that are helpful in exploring that correspondence.

04 RESEARCH DESIGN

The research, in general, follows the approach of Pechar and Andres [2011], with some operational modifications of indicators deployed.
The focus is on dependent variable: policy arrangements and outcomes in the Visegrad Group, which are the proxy of 'post-communist' countries.
Selection of liberal, conservative and social-democratic countries is based on Esping-Andersen's classical analysis [1990].
Key concepts employed in Esping-Andersen's typology are **decommodification and stratification**. Decommodification is reflected in the indicators of **(1)** *particpation in tertiary education,* **(3)** *educational expenditures,* **(4)** *tuition fees and student financial support.* Stratification is only partially touched upon in the form of **(2)** *pre-tertiary indicators.*
Thus, four general indicators are employed, consisting of a total of thirteen sub-indicators.

FIGURE 1 **Correspondence analysis of countries and tertiary, pre-tertiary, educational expenditure, and tuition and student financial-aid indicators.**



Regimes and countries are significantly associated with the indicators (χ^2=526,81, d.f.=475, p<0,0001).

METHOD

Exploration of the cross-country and cross-regime differences in the four general indicators was conducted with the use of correspondence analysis (CA) - a multivariate statistical technique particularly helpful in analysing cross-tabular data in the form of numerical frequencies, and results in an elegant but simple graphical display (where each row and column is depicted as a point) which permits more rapid interpretation and understanding of the data [Greenacre 2007, p. ix]. Twenty countries are represented in columns. Rows comprise of thirteen indicators (identified in Tables 1-4, where their labels are also listed). XLSTAT was used to compute the coordinates of profile points, conduct the statistical tests and create the graphical representation of data. The map (Figure 1) displays the projection of points in the subspace defined by the first two principal axes that account for the largest amount of the overall inertia (36%).

RESULTS

1. The analysis of updated data with slightly modified sub-variables generally upholds Pechar and Andres (2011) finding that there exists a correspondence between higher education policies and welfare regime, although there is still some variation within each group and partial overlap among the three regimes.

2. When rows (variables) are considered, graduation rates, public support and the proportion of the 25-34 year old and 25-64 year old population with tertiary credentials are best matched along **the horizontal axis** (which accounts for 43,28% of total inertia). Therefore **indicators of participation in tertiary education are mostly associated with this axis**, with 'less expansion' matching with the countries on the right and 'more expansion' with the countries on the left. Financial incentives to study also play some part here.

3. With respect to **the vertical axis** (20,14% of total inertia), five row profiles contribute the most: the share of public relative to private expenditures on tertiary education, average tuition fee, the level of public support (which seems to diversify the countries the most) and, to a lesser extent, public tertiary educational expenditures as a percentage of total public expenditure and annual expenditure per student. Therefore **this dimension can be called the 'tertiary education funding' dimension.**

4. Looking at the CA map, **one cannot clearly distinguish a separate grouping of the Visegrad/'post-communist' countries**. The analysis of tabular data also confirms that. Poland distorts the picture the most, with its slight liberal leaning. Czech Republic and Slovakia might be considered to belong to the conservative regime, although when they are looked upon with Hungary, it is clear that all three countries stand out of that grouping with lower public spending, higher (on average) age of first selection and higher average tuition fees. Hungary is also specific for its high annual expenditure per student. These three countries represent also a sort of upper-wing of conservative grouping on the map, but it has to be underlined that they still exhibit a substantive variation between each other.
The Visegrad Group countries show a consistent specifity only with regard to the first general variable. In the second and the fourth the variation is significant, and in the third they align closely to conservative regime countries. In general, they represent larger variation than each of the three 'classical' regimes. **Therefore one cannot speak about the 'post-communist' regime of higher education policy, when it is regarded as a part of welfare state.**

5. This does not necessarily mean that the concept of welfare regimes cannot help in better understanding of policies in those countries. Patterns typical for other regimes might be discovered as model solutions for policy makers (this could possibly explain Poland leaning towards liberal cluster) or might be a source of path dependency (historical influence of political institutions of conservative countries like Germany and Austria on Czech Republic, Slovakia and Hungary). Further examination of these issues would require a shift of attention from dependent variable to factors that drive institutional changes.

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TABLE 1 **Indicators of participation in tertiary education (ISCED 5A and 5B) in selected OECD countries[a]**

	CONSERVATIVE							LIBERAL					SOCIAL-DEMOCRATIC				VISEGRAD			
COUNTRY	AU	FR	DE	NL	IT	CH	BE	CA	US	AUS	NZ	UK	SE	DK	NO	FI	CZ	SK	PL	HU
Entry rates into higher education (%) **[entry_rate]**	66	53	57	61	49	56	66	77[b]	74	67	102	66	77	80	73	68	69	64	84	70
Graduation rates from higher education (%) **[grad_rate]**	42	36	44	42	33	47	41[b]	65	49	66	73	63	43	59	42	49	43	50	56	37
Population aged 25–34 years that has attained tertiary level credentials (%) **[grad_25-34]**	21	43	26	41	21	40	44	56	42	44	46	46	42	38	47	39	23	24	37	26
Population aged 25–64 years with tertiary level credentials (%) **[grad_25-64]**	19	29	26	32	14	32	35	50	40	37	40	37	34	33	36	37	17	17	23	20

[a] Data sources: OECD [2012], for France: Ministry of Higher Education and Research [2010].
[b] Data are not available. An average value for the respective 'regime' was imputed.

TABLE 2 **Pre-tertiary indicators in selected OECD countries[a]**

	CONSERVATIVE							LIBERAL					SOCIAL-DEMOCRATIC				VISEGRAD			
COUNTRY	AU	FR	DE	NL	IT	CH	BE	CA	US	AUS	NZ	UK	SE	DK	NO	FI	CZ	SK	PL	HU
Earliest age of selection (years) **[selection_age]**	10	15	10	12	14	15	12	16	16	16	16	14	16	16	16	16	11	11	16	10
Proportion in upper secondary general education (%) **[general_up_sec]**	23,2	55,7	48,5	33	40	33,8	27	94,4	71,2[b]	52,5	69,9	67,9	43,9	53,5	46,1	30,3	26,9	28,7	51,8	74,2
Proportion in upper secondary vocational education (%) **[voc_up_sec]**	71	44,3	51,5	67	60	66,2	73	5,6	27,8[b]	47,5	26,1	32,1	55	46,5	53,9	69,7	73,1	71,3	48,2	15,4

[a] Data sources: OECD [2012], 'Earliest age of selection' after Pechar, Andres [2011], supplemented with Eurydice [2013] for Visegrad countries.
[b] Data are not available. An average value for the respective 'regime' was imputed.

TABLE 3 **Educational expenditures in selected OECD countries[a]**

	CONSERVATIVE							LIBERAL					SOCIAL-DEMOCRATIC				VISEGRAD			
COUNTRY	AU	FR	DE	NL	IT	CH	BE	CA	US	AUS	NZ	UK	SE	DK	NO	FI	CZ	SK	PL	HU
Public tertiary educational expenditures as a percentage of GDP **[public_exp_GDP]**	1,4	1,5	1,3	1,7	1	1,3	1,5	2,5	2,6	1,6	1,6	1,3	1,8	1,9	1,4	1,9	1,3	0,9	1,5	1
Public tertiary educational expenditures as a percentage of total public expenditures **[public_exp_total]**	3	2,4	2,8	3,2	1,7	4,1	2,7	4,7	3	3,1	5,7	1,6	3,7	4,2	4,8	3,9	2,3	1,9	2,4	2,2
Share of public expenditure on tertiary educational institutions (%) **[public_in_total]**	87,7	83,1	84,4	72	68,6	81[b]	89,7	62,9	38,1	45,4	67,9	29,6	89,8	95,4	96,1	95,8	79,9	70	69,7	78,5
Annual expenditure per student relative to GDP per capita (%) **[exp_per_student]**	25	30	27	28	18	21	27	39	58	25	31	29	25	25 b	21	28	26	26	34	33

[a] Data sources: OECD [2012],
[b] Data are not available. An average value for the respective 'regime' was imputed.

TABLE 4 **Tuition fees and student financial support in selected OECD countries[a]**

	CONSERVATIVE							LIBERAL					SOCIAL-DEMOCRATIC				VISEGRAD			
COUNTRY	AU	FR	DE	NL	IT	CH	BE	CA	US	AUS	NZ	UK	SE	DK	NO	FI	CZ	SK	PL	HU
Public support for households and other private entities as a percentage of total public expenditure on higher education **[public_support]**	19,6	7,4	20,7	27,4	22	8	13,4	15,8	19,6	33,5	43,1	54,2	24,9	27,1	40,3	15,8	2,8	22,1	1,4	14,3
Average tuition fee per student as a percentage of GDP per capita **[aver_tuition_fee]**	1,6	1,4	1,3	3,1	6,6	2,6	1,1	7,2	25,5	10,8	7,3	8,6	0	0	2,7	0	0	3	4	4

[a] Data sources: OECD [2012] for public support indicator. For average tutition fee indicator: Willemse, de Beer [2012], European Commission [2012] for the Czech Republic and Hungary, GUS [2010, 2012] for Poland and http://studentskefinancie.sk/univerzita/rebricek-2012 for Slovakia (values for Poland and Slovakia weighted for public and private fees and enrollment).