## 3. CESEE monitors

## 3.1. CONVERGENCE MONITOR: CATCH-UP MOSTLY ON TRACK BEFORE PANDEMIC HIT

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- In 2019, the convergence process continued in almost all CESEE economies, except Turkey, Russia and Belarus. The Czech Republic reached 76.9% and Slovenia 72.8% of German GDP per capita at Purchasing Power Standards (PPS) by the end of last year (Figure 3.1)<sup>13</sup>.
- The speed of convergence was higher in countries of EU-CEE last year, with nine out of eleven economies gaining more than 1 percentage point (pp) against Germany, and Romania gaining even 3.8 pp. Outside of EU-CEE, only Serbia, Montenegro and Kazakhstan achieved more than 1 pp of convergence relative to Germany (Figure 3.1).
- > Wages per employee at PPS relative to Germany rose across most of CESEE last year. Only Turkey registered a decline, by 1.6 pp compared with 2018. The biggest increases were registered in Romania (3.9 pp), Hungary (3.4 pp) and Serbia (3.0 pp). Wage convergence was stronger than that of per capita GDP in 17 CESEE countries in 2019, with the largest positive differential in Russia, Ukraine and Serbia.
- > Taking the 2000-2019 period as a whole, catch-up with Germany for per capita GDP at PPS was strongest in Lithuania (37 pp), Romania (36 pp) and Estonia (35 pp). For wages at PPS, the strongest convergence with Germany took place in Estonia (32 pp), Russia and Montenegro (both 31 pp). 14
- Non-EU-CEE economies have particularly low wages per employees at PPS relative to Germany. Within this group, only Montenegro and Bosnia and Herzegovina recorded wages at PPS above 50% of the German level in 2019. By contrast, among EU member states in CESEE only Bulgaria had not yet reached 50% of the German level by the end of last year.
- Large disparities in nominal gross wages per employee persist across CESEE. Euro-denominated gross wages per employee in EU-CEE as a whole were almost double the average level of non-EU CESEE in 2019. For individual countries, the disparities were even greater. Whereas Slovenia recorded gross annual wages per employee of above EUR 21,000, Moldova and Ukraine posted values only slightly higher than EUR 4,000 (Table 3.3).

## 3.1.1. Methodological note

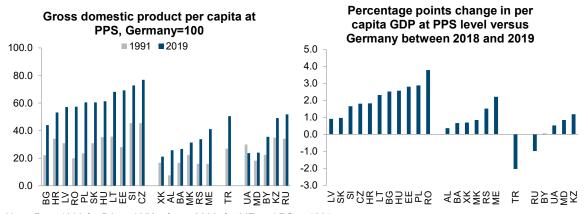
In this report we follow Eurostat in changing the Purchasing Power Standards (PPS) definition for the EU. As the EU now consists of 27 countries, the average purchasing power of one euro in the EU27 is taken as equal to one PPS. According to this new definition, the PPS rate for the EU28 (i.e. including the United Kingdom) was equal to 1.02129 in 2019. This impacts our data in Table 3.1 for both per capita

Please see a methodological note, explaining changes in calculations of GDP per capita and wages at PPS, below.

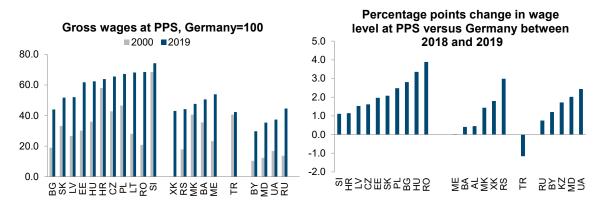
<sup>14</sup> It should also be noted that data for Romania and Lithuania are not taken into account as they are not directly comparable as both countries now include in this indicator employers' social security contributions.

GDP and wages, both of which we adjust for PPS to remove differences in purchasing power. For comparison we publish Table 3.2 with data based on PPS=1 for the pre-Brexit EU (EU28) which shows that the new approach reduced all values of indicators in Table 1 comparing to Table 2 by 2.1%.

Figure 3.1 / GDP per capita at PPS convergence against Germany



Note: Data 1990 for BA and XK refer to 2000, for ME and RS to 1995. Source: wiiw Annual Database incorporating national statistics and Eurostat.



Note: Gross wages are based on administrative data. In 2019 Lithuanian and Romanian wages include employers' social security contributions. Turkey wages: data 2000 refer to 2003; wiiw estimate for 2019.

Source: wiiw Annual Database incorporating national statistics and Eurostat.

Table 3.1 / CESEE GDP per capita and gross wages per employee at PPS (EU27), 2019

												EU-
	BG	CZ	EE	HR	HU	LT	LV	PL	RO	SI	SK	CEE11
GDP per capita	16,600	29,000	26,100	20,080	23,110	25,720	21,560	22,810	21,620	27,440	22,820	22,920
Gross wages	14,779	22,034	20,767	21,469	20,977	22,908	17,481	22,590	23,009	24,926	17,374	21,505

													non-
	AL	BA	BY	ΚZ	MD	ME	MK	RS	RU	TR	UA	XK	EU12
GDP per capita	9,710	10,080	13,390	18,540	9,080	15,530	11,830	12,730	19,540	19,040	8,940	7,980	17,230
Gross wages	10,378	17,002	12,546	11,064	9,983	18,105	16,015	14,852	14,969	14,193	11,902	14,470	14,051

Note: Gross wages are based on administrative data. Lithuanian and Romanian wages include employers' social security contributions. Turkey wages: wiiw estimate.

Source: wiiw Annual Database incorporating national statistics and Eurostat.

Table 3.2 / CESEE GDP per capita and gross wages per employee at PPS (EU28), 2019

												EU-
	BG	CZ	EE	HR	HU	LT	LV	PL	RO	SI	SK	CEE11
GDP per capita	16,960	29,620	26,660	20,500	23,600	26,270	22,020	23,300	22,080	28,020	23,310	23,410
Gross wages	15,094	22,503	21,209	21,926	21,424	23,396	17,853	23,071	23,499	25,457	17,744	21,963

													non-
	AL	ВА	BY	ΚZ	MD	ME	MK	RS	RU	TR	UA	XK	EU12
GDP per capita	9,920	10,290	13,680	18,930	9,280	15,870	12,080	13,010	19,960	19,440	9,130	8,150	17,600
Gross wages	10.599	17.364	12.813	11,299	10.196	18.491	16.356	15.168	15.288	14.495	12.155	14.778	14.350

Note: Gross wages are based on administrative data. Lithuanian and Romanian wages include employers' social security contributions. Turkey wages: wiiw estimate.

Source: wiiw Annual Database incorporating national statistics and Eurostat.

Table 3.3 / CESEE GDP per capita and gross wages per employee EUR at ER, 2019

												EU-
	BG	CZ	EE	HR	HU	LT	LV	PL	RO	SI	SK	CEE11
GDP per capita	8,780	20,990	21,220	13,260	14,950	17,460	15,920	13,870	11,530	23,170	17,210	14,500
Gross wages	7.814	15.946	16.884	14.181	13.569	15.554	12.912	13.733	12.272	21.046	13.104	13.504

													non-
	AL	ВА	BY	ΚZ	MD	ME	MK	RS	RU	TR	UA	XK	EU12
GDP per capita	4,780	5,170	5,990	8,760	4,010	7,960	5,400	6,620	10,340	8,230	3,270	3,970	8,300
Gross wages	5.110	8.720	5.608	5.232	4.412	9.276	7.306	7.719	7.922	6,134	4.351	7.200	6.821

Note: Gross wages are based on administrative data. Lithuanian and Romanian wages include employers' social security contributions. Turkey wages: wiiw estimate.

Source: wiiw Annual Database incorporating national statistics and Eurostat.