



II. PERFORMANCE OF EU MEMBER STATES

II. PERFORMANCE OF EUROPEAN UNION MEMBER STATES

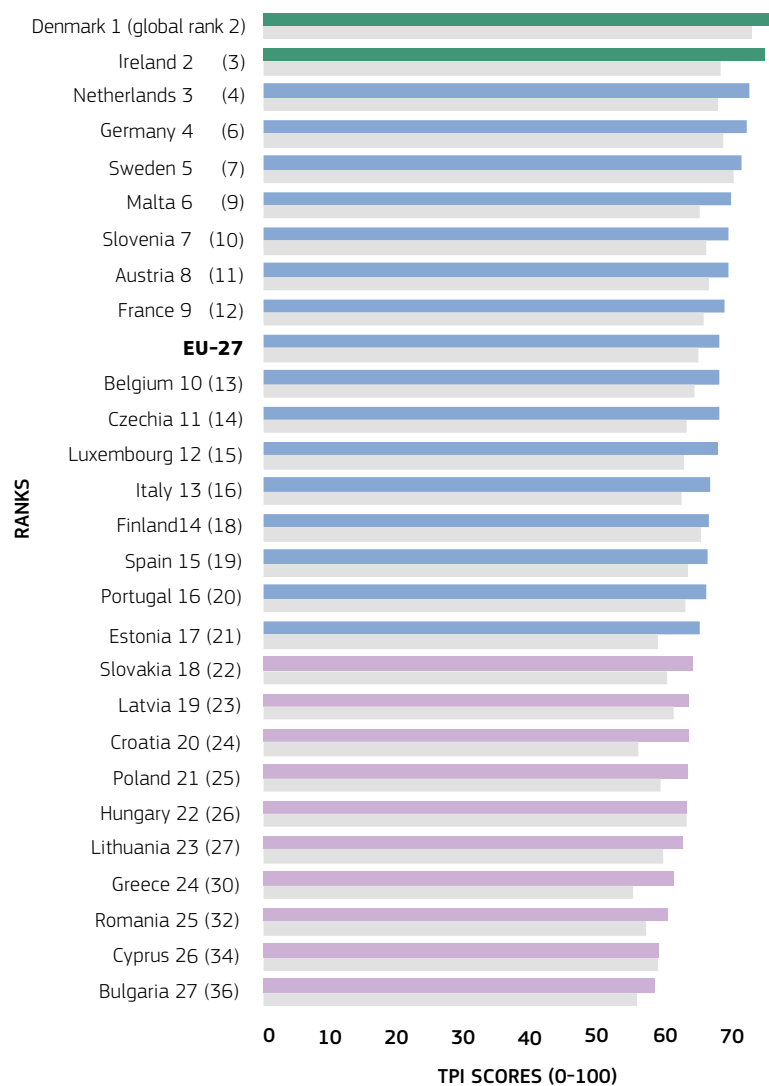
The four transitions (Economic, Social, Environmental and Governance) contribute jointly to defining a path towards a balanced situation whereby the quality of life is sustainably better for all.

The EU has set an ambitious agenda in this respect and has committed to further pursue and enhance this agenda. In the middle of the COVID-19 crisis, European Commission President Ursula von der Leyen declared: 'We chose to pull each other through and invest in a common future. (...) In past crises, the

better-off survived while the most vulnerable paid a heavy price. But this time it has to be different. This time, we can only get back to our feet if we all pull each other up.'

A simple monitoring tool is effective in communicating to stakeholders and to a wider audience about performance on overall key objectives of the transition. The TPI, by presenting a time series of 10 years, can also show progress. With its detailed country profiles, the TPI can also complement other policy monitoring frameworks.

FIGURE 1: EU-27 Member States ranking and transition groups



■ Transition leader [75-100] ■ Strong transition [65-75] ■ Good transition [55-65] ■ 2011

Note: The number in parenthesis indicates the TPI global rank.

Source: European Commission, Transitions Performance Index 2021.



This chapter presents the TPI scores and rankings for the EU, while Chapter II presents the global results (for 72 countries).

Five performance groups are defined with fixed score intervals. All EU countries belong to either leaders, strong transition, or good transition groups. None belongs to the moderate or weak transition groups (**FIGURE 1**). This is therefore a robust indication of the overall positive impact of EU policies.

Denmark (ranking first among EU countries) and Ireland are transition leaders, and two Member States of the so-called ‘friends of the cohesion group’ (Malta and Slovenia) perform better than the EU average. Most EU countries (17) are either transition leaders or in strong transition.

Progress over the 2011-2020 decade

TABLE 2 shows that all but one EU country have improved their performance since 2011, particularly Croatia, which showed an exceptional result of catching up (13.5%), and Greece and Estonia (above 10% progress). The sharp increase in Ireland (9.8%) demonstrates that a country can continue to progress even from a leading position. Many strong performers continue to progress at high speed.

A large number of countries (Belgium, Bulgaria, Czechia, Germany, Italy, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Slovenia and Slovakia) progressed above the EU average (4.9%). Cyprus, Finland and Sweden progressed less than 2%, whereas Hungary is the only EU Member State stagnating over the last 10 years (-0.2%). These countries are at risk of losing ground in the transition process unless they renew collective efforts.

Performance in the four transitions

When looking at the performance by pillar, EU Member States have not improved sufficiently in the Economic and Environmental transitions (**TABLE 2**). Pursuing ambitious targets and related investments in these domains is an absolute necessity if the EU and Member States wish to achieve balanced and sustainable prosperity.

Similar patterns across EU countries call for a coordinated policy at least in terms of objectives and targets. In this respect, the financial contribution from the COVID-19 recovery package – NextGenerationEU – goes in the right direction. However, it is now up to each country to decide how to ensure an effective use of these resources. Moreover, this does not preclude the need for policy decisions on norms and targets that may encourage the speed of adaptation.

All EU countries achieve leadership or strong performance in the Social transition. Except for Hungary and Greece, all achieve leadership or strong performance in the Governance transitions.

The EU-27 is in the strong performance group. In this group, Ireland achieves a leadership position in the Economic transition. Portugal and Spain lag behind as moderate performers in the Economic transition, and Estonia, Finland and Luxembourg do so in the Environmental transition.

As indicated by the Environmental-Social-Governance transition gap (ESG gap)¹⁶, EU Member States succeeded in leveraging their economic structures to progress in these three transitions, with room for progress in the environmental dimension (for an interpretation of the ESG gap, please refer to section III.3).

Analysis on EU Widening Countries

According to Horizon Europe¹⁷, ‘Widening countries’ are Greece and Portugal plus the 13 countries that have joined the EU since 2004 (Bulgaria, Croatia, Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia)¹⁸. These countries benefit from widening instruments to reduce the innovation gap with other EU Member States and more specifically to improve their participation in EU Framework Programmes.

16 The ESG transition gap is computed as the difference between the weighted average of the Social, Environmental, and Governance transition scores and the Economic transition score, divided by the TPI score.

17 European Commission, [Widening participant and spreading excellence](#).

18 It also includes ‘Associated countries with equivalent characteristics in terms of R&I performance and the Outermost Regions’ (defined in Art. 349 TFEU) for which data is not always available at that level in the TPI.



TABLE 2: European Union TPI ranking, pillar scores and transition groups

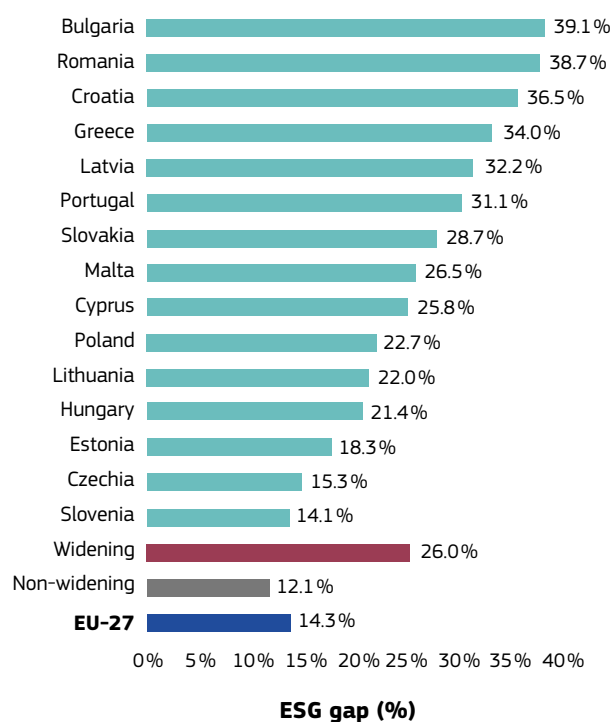
RANK		COUNTRY	2020 TRANSITIONS SCORES				PROGRESS	ESG GAP	
REGION	TPI	NAME	TPI	ECONOMIC	SOCIAL	ENVIRONMENTAL	GOVERNANCE	2011-2020	(% OF TPI)
1	2	Denmark	78.4	73.4	85.5	73.1	84.0	6.0%	7.9%
2	3	Ireland	75.9	76.1	78.3	72.3	79.0	9.8%	-0.3%
3	4	Netherlands	73.6	66.7	84.8	64.7	82.5	7.2%	11.7%
4	6	Germany	73.1	70.7	82.0	65.0	79.1	5.1%	4.0%
5	7	Sweden	72.3	73.0	84.3	57.0	83.7	1.8%	-1.1%
6	9	Malta	70.7	55.7	80.1	74.4	70.1	7.2%	26.5%
7	10	Slovenia	70.4	62.5	85.9	60.9	77.7	5.0%	14.1%
8	11	Austria	70.4	70.2	80.6	59.1	78.0	4.6%	0.3%
9	12	France	69.6	58.9	81.0	66.8	73.2	4.6%	19.3%
		EU-27	69.0	61.1	77.5	65.0	74.0	4.9%	14.3%
10	13	Belgium	68.9	67.9	81.6	59.1	73.3	5.6%	1.9%
11	14	Czechia	68.8	60.4	83.9	59.0	77.3	7.6%	15.3%
12	15	Luxembourg	68.7	69.3	75.5	52.9	85.0	8.2%	-1.1%
13	16	Italy	67.6	56.7	70.2	73.8	65.7	7.0%	20.2%
14	18	Finland	67.4	68.2	84.1	47.9	80.7	1.7%	-1.6%
15	19	Spain	67.1	54.2	74.7	65.4	73.7	4.5%	24.1%
16	20	Portugal	67.0	50.3	76.9	66.4	73.1	5.1%	31.1%
17	21	Estonia	66.1	56.4	79.2	53.9	80.3	10.8%	18.3%
18	22	Slovakia	65.0	50.1	80.9	60.2	70.9	6.4%	28.7%
19	23	Latvia	64.4	47.9	72.2	68.4	66.0	3.8%	32.2%
20	24	Croatia	64.3	45.6	72.0	67.6	68.7	13.5%	36.5%
21	25	Poland	64.2	52.5	74.1	59.7	71.8	7.0%	22.7%
22	26	Hungary	64.0	53.0	75.3	66.2	60.5	-0.2%	21.4%
23	27	Lithuania	63.5	52.3	71.7	61.6	68.4	5.2%	22.0%
24	30	Greece	62.1	45.2	70.9	65.5	63.8	11.0%	34.0%
25	32	Romania	61.2	42.2	66.0	65.3	66.6	5.8%	38.7%
26	34	Cyprus	59.9	47.6	79.2	51.6	66.1	0.4%	25.8%
27	36	Bulgaria	59.3	40.8	65.3	61.2	66.7	4.9%	39.1%

■ Transition leader [75-100] ■ Strong transition [65-75] ■ Good transition [55-65] ■ Moderate transition [45-55] ■ Weak transition [0-45]

Notes: (1) 'ESG gap (% of TPI)' refers to the difference between the sum of the social, environmental, and governance (ESG) pillar weighted scores and the economic pillar score, as a percentage of the TPI score, in 2020. (2) 'Progress 2011-20' refers to the percentage growth of TPI scores from 2011 to 2020.

Source: European Commission, Transitions Performance Index 2021.

FIGURE 2: ESG gap for widening countries



Source: European Commission, Transitions Performance Index 2021.



Compared to the 12 non-widening EU countries (EU-12) with an average score of 64.1, the 15 widening countries are lagging behind in performance, particularly in the Economic transition (50.7 on average). They also show larger ESG gaps (**FIGURE 2**), suggesting an imbalance and room for improvement in the Economic pillar.

Over 2011 to 2020, however, widening countries have significantly improved their scores in the Economic pillar (over 10% compared to 5% for the EU-12) with Bulgaria and Poland showing the larger upward trends. This progress has been mainly driven by an increase in Wealth, as well as Labour productivity and R&D intensity. Although R&D intensity surges in widening countries (with an average R&D expenditure of 39.6% of GDP), large disparities prevail, with higher progress in Poland and Greece and sharp declines in Estonia and Slovenia.

Most of the widening countries seem to be in a catching-up phase, whereas non-widening countries are cruising and progressing (**FIGURE 3**). There is also an improvement in education among the widening countries, whereas the industrial base has been declining on average over the last 10 years.

In most widening countries, TPI results suggest a decrease in the innovation divide compared to the EU-12 countries. Nevertheless, there is still a need to improve R&I capacities in these countries.

Different actions have been implemented under Horizon 2020 and now under Horizon Europe to reduce this innovation gap. The programme component 'Widening Participation and Spreading Excellence' aims to support and improve R&I systems in these countries. It consists of actions to encourage the participation of these countries in partnerships, promote collaboration and upskill workers in research institutions and universities (twinning), create and support centres of excellence and encourage reforms and investments to improve R&I systems (teaming), attract and maintain talents in widening countries (ERA Chairs) and develop networking (COST). These widening actions receive 3.3% of the total Horizon Europe budget. The Smart Specialisation Platform, created in 2011, has a similar objective and offers expertise to help national and regional policymakers identify areas of competitive strengths and foster innovation partnerships.

19 For comparison, the world TPI arithmetic average is 6.2%.

20 Most goalposts are based on policy targets (see Appendix II). Both targets and goalposts may be revised in the future, in view of increased ambition or global progress.

21 Council of the European Union, '[EU budget 2021-2027 and recovery plan](#)' and [Next Generation EU – COVID-19 recovery package](#)

The general underperformance of the widening countries in the EU Framework Programmes has been well documented at the country level but also now at the regional level by the recent work of the European Parliamentary Research Service. Taking into account the regional dimension, the initiative FIT-4-NMP aims to identify and prioritise underrepresented regions in Horizon 2020 nanotechnologies, advanced materials and new manufacturing processes (NMP) projects. The FIT-4-NMP consortium actively supports talented newcomers, especially SMEs, from the prioritised underrepresented regions so as to increase the number and the quality of applications for Horizon 2020 NMP projects. This shift of the analysis from a country level to a regional one, acknowledging that countries are not homogenous in their transition performances, is a possible avenue for further analysis of the TPI.

II.1. THE EUROPEAN UNION, THE UNITED STATES AND CHINA

To respond to global challenges and benchmark countries beyond the EU, a global metric is needed. The TPI 2021 has a geographical coverage beyond the EU to cover 72 countries. It is possible to increase the country coverage in the future.

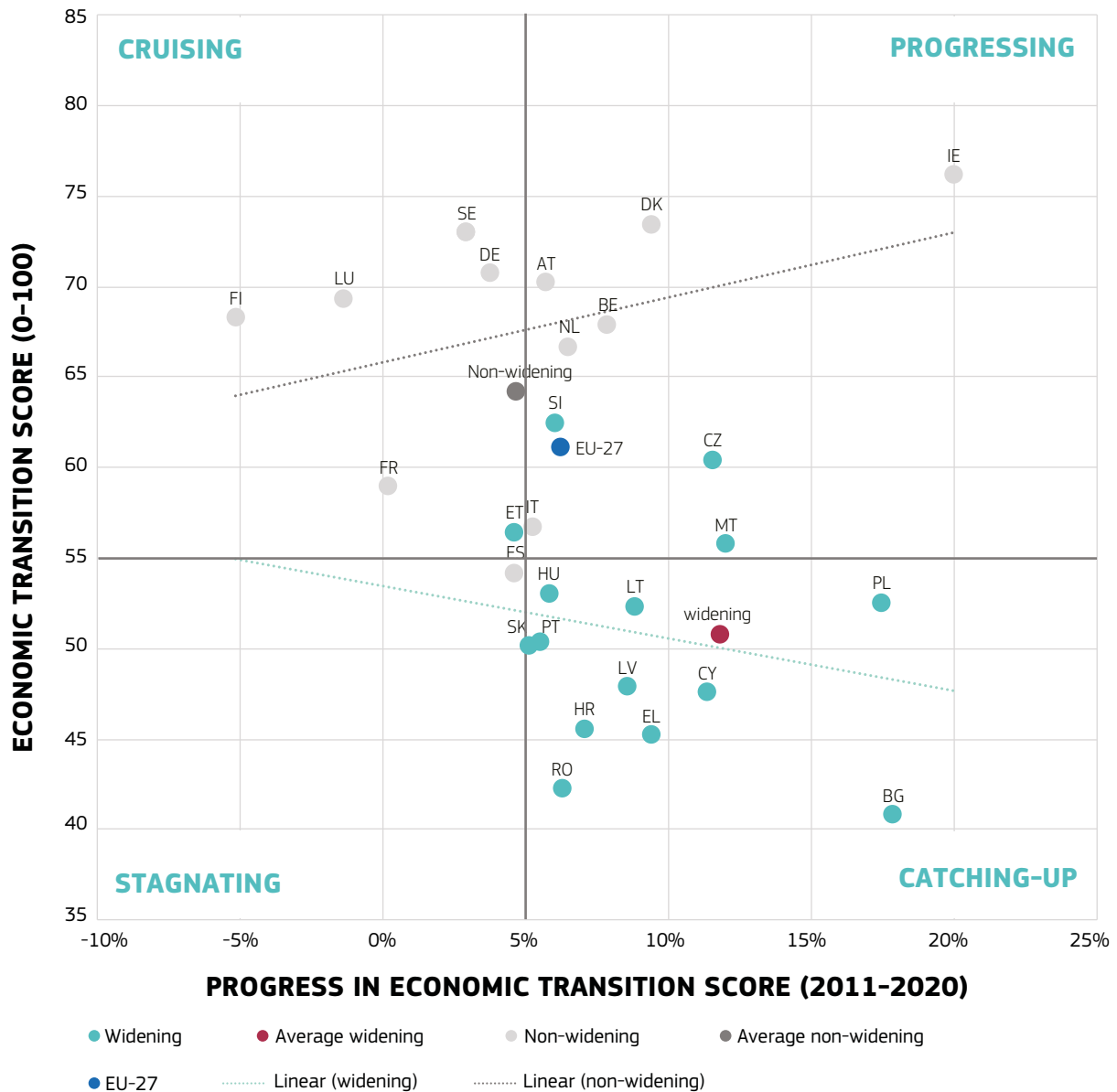
FIGURE 4 shows the relative position of the three main trading blocs, namely the EU, the United States, and China.

Since 2011, China has progressed by 7.6%, the United States by 3.3% and the EU by 4.9%¹⁹. For the United States, catching up will depend partly on governmental policy orientations and also on civil society: in certain States there has been a push for a reduction in greenhouse gas emissions.

However, due to the distance to the frontier defined by the TPI goalposts²⁰, unless the United States and China further intensify their efforts, it is unlikely that they can catch up within the next decade; the EU in the meantime has recently confirmed its Green Deal priorities and announced that its COVID-19 recovery package aims at a collective effort to accelerate transitions²¹.



FIGURE 3: Economic transition scores and progress grid



Source: European Commission, Transitions Performance Index 2021.

The analysis of progress of the three geographical entities (FIGURE 5) is informative. The highest rate of progress in China is mostly in the Economic transition in sub-pillars Wealth, Education, and Labour productivity and R&D intensity, and in Social transition (in Health life expectancy and Work and inclusion). China is still a weak performer in the Environmental transition.

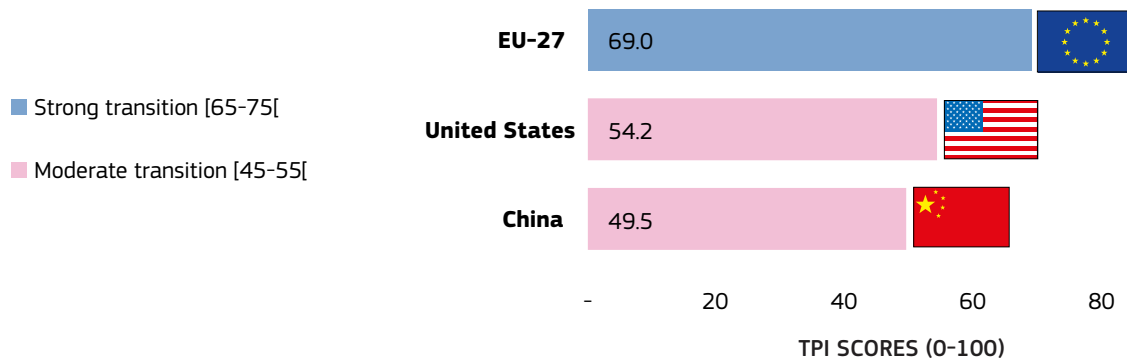
The US's strong point is the Economic pillar (with a decline in the Industrial base, however). Despite the United States' progress in the Environmental pillar, facilitated by the low base level in 2011, its overall performance in this pillar

remains weak (progress has been made notably in Resource productivity and Energy productivity with a deterioration in Greenhouse gas emissions reduction and Material footprint).

The EU performance increased in all four pillars. The overall progress in the Environmental pillar (8.6%) hides differences: good progress in Energy and Resource productivity, but limited progress in Emissions reduction, Biodiversity protection and Material footprint.

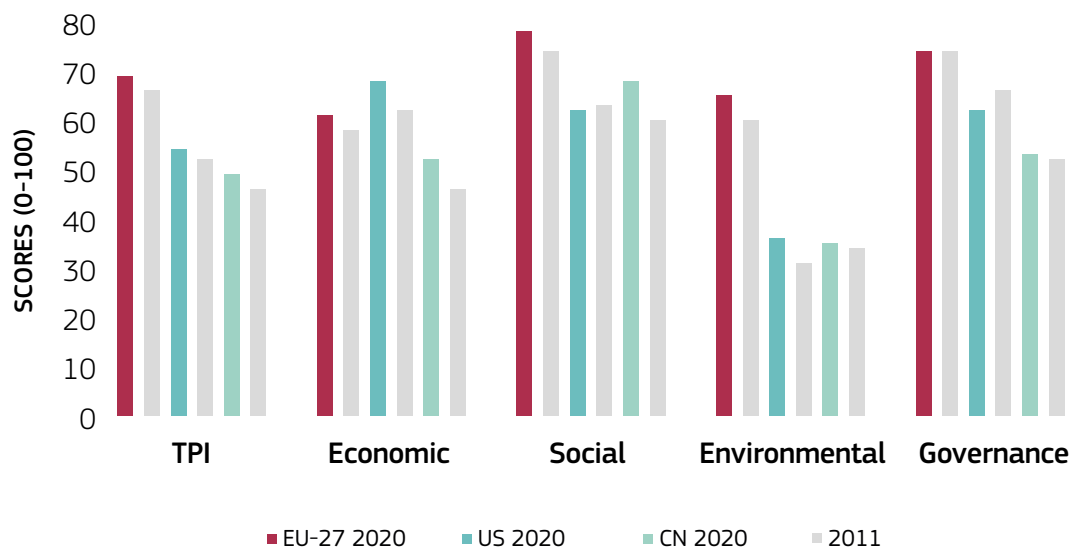


FIGURE 4: EU-27, United States and China scores and transition groups



Source: European Commission, Transitions Performance Index 2021.

FIGURE 5: EU-27, United States and China TPI and pillar scores and progress since 2011



Source: European Commission, Transitions Performance Index 2021.

II.2. THE EUROPEAN UNION AND ITS MAIN TRADING PARTNERS

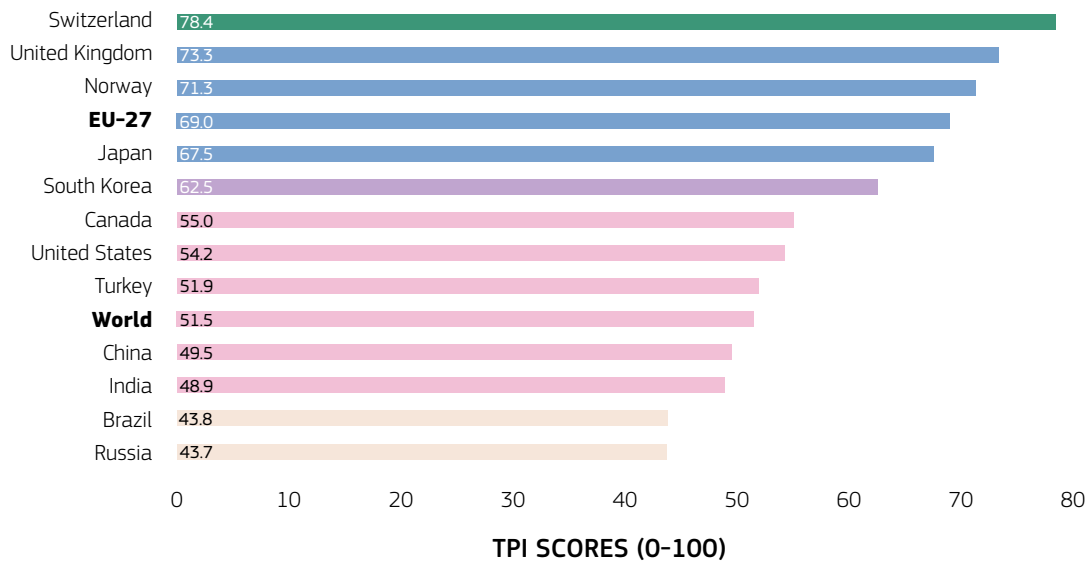
When looking at the EU’s ten main trading partners, the EU ranks fourth (**FIGURE 6**) in strong transition. Switzerland, the United Kingdom and Norway are the top three, with Switzerland and EU countries Denmark and Ireland among the TPI leaders.

The only main trading partner in the same transition group as the EU outside of Europe is Japan, while South Korea, which is in good transition, is not far behind (**FIGURE 6**).

The gap with Canada and the United States is substantial; both countries are in moderate transition, performing slightly better than Turkey, China and India. The world average represents an average moderate performance as well, whereas Brazil and Russia are in the weak transition group.



FIGURE 6: EU-27 and main partners TPI scores 2021 and transition groups



■ Transition leader [75-100] ■ Strong transition [65-75[■ Good transition [55-65[■ Moderate transition [45-55[■ Weak transition [0-45[

Source: European Commission, Transitions Performance Index 2021.