# **Chapter 3** Economic impacts of uncertainty

The changes in the international environment that were examined in Chapter 2 have had far-reaching effects on cross-border economic activity. It has been pointed out for some time that heightened uncertainty drags down activities of companies and households. However, in recent years, as uncertainty over countries' policies in particular has been growing due to structural factors, its effects are not just temporary.

This chapter will look at the historical trends in the escalation of uncertainty as a perception-level factor among structural changes that have been shaking the international economic order, and quantitatively analyze the effects that the uncertainty has had on the global economy. The data used for the analysis in this chapter cover the period before and up to January 2025, and as a result, the effects of the tariffs and other measures implemented by the second Trump administration since then are not reflected in the analysis.

#### **Section 1** Structural increase of uncertainty

Tariffs and other policies that directly drag down corporate earnings and international trade naturally have significant effects on economic activity. However, in some cases, even without the presence of an actual policy event or change, the mere possibility of such an event or change occurring may sometimes cause economic activity to shrink and generate a greater economic impact than the impact of an event or change that actually occurs. If uncertainty over the future heightens, companies and households lean more toward a wait-and-see stance and tend to postpone investments or refrain from purchasing expensive goods. Even if the economic and policy environments do not actually change, the spread of expectations of a possible economic downturn in the future alone may trigger an actual economic downturn in a kind of self-fulfilling prophesy. This section will first provide an overview of the state of uncertainty by major country and region and analyze the effects of the escalation of uncertainty on the global economy.

## 1. Global uncertainty over economic policy

There are various sorts of uncertainty that cause an economic downturn. In the context of the international political and economic environments in recent years, uncertainty attributable to governments' economic policies is important. Since late 2024, trade policy uncertainty in particular has been attracting attention. However, uncertainty attributable to policy factors could arise in various sectors. For example, in the inflation phase in recent years, the view on the future course of countries' monetary policies, including the timing of the beginning of interest rate hikes and the pace of rate hikes, has been divided.

Essentially, uncertainty is difficult to identify, but the Economic Policy Uncertainty Index (hereinafter the "EPU Index"), developed by Professor Bloom of Stanford University of the United States and others, is intended to quantitatively capture various sorts of policy-related uncertainty. The EPU Index represents the indexation of the share of articles mentioning uncertainty related to economic

policy in the total number of articles in major newspapers in various countries and regions. The larger the value of the index is, the higher the level of uncertainty is.<sup>14,15</sup>

The EPU Index is composed for around 20 countries, but first, let us look at the Global EPU Index, which is calculated by weight-averaging the country-specific indexes by GDP weight (Figure I-3-1-1).

Regarding events that occurred in the 2000s, the Global EPU Index rose conspicuously at the time of the simultaneous terrorist attacks in the United States (2001), at the outbreak of the Iraq War (2003) and at the time of the global financial crisis (2008). During other times of the first decade of this century, the Global EPU Index basically remained flat. The trend during that decade suggested that the Global EPU Index has a stationary nature—that is, although the index may rise steeply initially after an event occurrence, it will return to the former level in due course unless the situation changes dramatically.

However, in the 2010s and later, the level of the Global EPU Index appears to have generally become elevated compared with the 2000s. After rising somewhat in the first half of the 2010s, the Global EPU Index followed a moderate uptrend from around 2015. After spiking up after the onset of the COVID-19 pandemic in 2020, the Global EPU Index has reached a record high level in 2025. To analyze the background to this uptrend, the EPU Indexes for major countries and regions will be examined in detail below.

World (2000 average values = 100)600 500 400 300 200 100 0 2000 2005 2010 2015 2020 2025 (Year)

Figure I-3-1-1. Global Economic Policy Uncertainty (EPU) Index

Note: This figure shows data up to January 2025.

Source: Economic Policy Uncertainty.

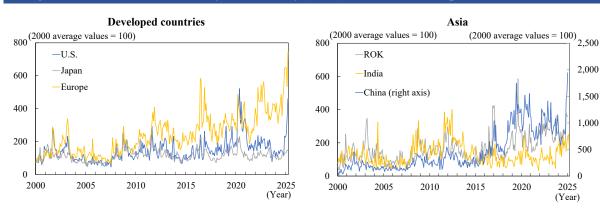
Economic Policy Uncertainty, "Economic Policy Uncertainty Index," https://www.policyuncertainty.com/ (as viewed on April 24, 2025)

<sup>&</sup>lt;sup>15</sup> Another example of a text-based uncertainty indicator is the World Uncertainty Index (WUI), which is computed by calculating the percentage of the word "uncertain" and related words in the country reports of the Economic Intelligence Unit, the research division of the publisher of the Economist, a U.K. periodical. The WUI is distinctive in that it captures uncertainty not related to economic policy as well and the scope of countries covered is broader. However, the EPU Index, based on newspaper articles in individual countries, is considered to more faithfully reflect reality in terms of capturing country-specific uncertainty.

# 2. Uncertainty in major countries and regions

Among the major countries and regions that are components of the Global EPU Index, the EPU Index has risen conspicuously for major European countries, <sup>16</sup> China and the ROK since the 2010s (Figure I-3-1-2). In particular, the EPU index has followed an uptrend for European countries since the first half of the 2010s and for China since the second half of the 2010s, contributing to the rise in the Global EPU Index.

Figure I-3-1-2. Economic Policy Uncertainty (EPU) Index for developed countries and Asia



Note: This figure shows the data on the ROK and China up to January 2025 and the data on other countries and regions up to March 2025. The EPU Index for China is derived from the Hybrid China index series, which is a composite of the index based on *South China Morning Post (SCMP)*, an English-language newspaper in Hong Kong, and the index compiled based on *People's Daily* and *Guangming Daily*, newspapers in mainland China.

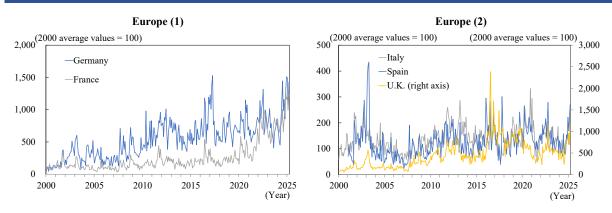
Source: Economic Policy Uncertainty.

#### (1) Europe

Figure I-3-1-3 shows the EPU Indexes for major European countries. From 2010 onwards, concerns over the sustainability of government debts grew significantly in financial markets as recession caused by the global financial crisis continued (European debt crisis). Not only for Greece, the epicenter of the debt problem, but also for Spain and Italy, where long-term interest rates rose due to spillover effects, the EPU Index rose steeply in 2010-2012. In addition, as the business performance of euro-area financial institutions holding large amounts of government bonds issued by Southern European countries deteriorated, uncertainty also grew in France amid spreading moves to sell bonds. In the meantime, German long-term interest rates continued to decline as Germany attracted funds as a safe haven, and the EPU Index for Germany remained stable at a low level. In short, presumably, the main factor behind the rise in the EPU Index for Europe in the first half of the 2010s was the debt crisis, which mainly affected European countries other than Germany.

<sup>&</sup>lt;sup>16</sup> A composite index of the EPU Indexes for France, Germany, Italy, Spain, and the United Kingdom.

Figure I-3-1-3. Economic Policy Uncertainty (EPU) Indexes for major European countries



Note: This figure shows data up to March 2025, and as for Spain, the data from 2001 onward is aggregated (with this, as a basis for indexation, the 2001 average value is set as 100).

Source: Economic Policy Uncertainty.

The European debt crisis was gradually brought under control in 2012 and later, but political uncertainty subsequently grew considerably in European countries. The huge influx of immigrants into Europe from the Middle East after the "Arab Spring" in 2011, coupled with a prolonged period of recession that followed the global financial crisis and the European debt crisis, worked to increase support for populist arguments advocating anti-immigrant and anti-EU stances in European countries.

In the United Kingdom, contrary to predominant expectations, a majority voted for an exit from the EU (Brexit) in a referendum held in 2016, with the EPU Index for the United Kingdom rising to an extraordinarily high level. After Brexit was formally adopted as a national policy, the negotiations with the EU over the withdrawing process proved to be very difficult, so corporate activity straddling the United Kingdom and the EU faced several years of deep uncertainty. The EPU Index for France also rose steeply in 2017, reflecting the shock delivered by the results of the first round of the presidential election in April of the same year, in which the candidate of a far-right party came in second. After the presidential election, the escalation of uncertainty came to a temporary halt, but, against the backdrop of the "yellow vest movement," which spread in protest against surging fuel prices, the EPU Index did not fall to the levels seen in the 2000s. Meanwhile, in Italy and Spain as well, support for far-right parties spread and the EPU Indexes for those countries fluctuated.

In Germany, too, a far-right party advocating an anti-immigrant stance obtained increased support, mainly in eastern states, but a significant escalation of uncertainty was avoided until the late 2010s. However, the EPU Index for Germany started to rise gradually against the backdrop of the trade conflict between the United States and the EU<sup>17</sup> during the tenure of the first Trump administration, followed by a sharp rise after the onset of the COVID-19 pandemic in 2020. While reduced policy predictability due to containment measures to control infection (lockdowns of cities) was a common challenge for all countries, what was notable about the trend in the EPU Index for Germany is that after 2020, the index showed a sharp upward shift that may be characterized as a structural change. The background factor

<sup>&</sup>lt;sup>17</sup> See Part I, Chapter 2, Section 1.

that first comes to mind is a steep decline in the ability of the three-party ruling coalition government, comprised of the Social Democratic Party (SPD), the Green Party, and the Free Democratic Party, to implement economic policies, including fiscal pump-priming, due to various conflicts of opinion that had continued since its inauguration after the general election in 2021. Moreover, the Russian aggression against Ukraine, which started in February 2022, and the associated energy price upsurges, created a strong headwind against Germany. This, coupled with the deterioration of the relationship with China, caused the Germany economy to plunge into structural recession, which mainly affected manufacturing industries. In addition, since the autumn of 2024, uncertainty has escalated because of the collapse of the coalition government, the remarkable rise of a far-right party in the subsequent general election, and the hardline comments and policies over trade, security and domestic politics from the second Trump administration of the United States, with the EPU Index for Germany rising to a new record high.

To sum up, in Europe since 2010, factors to heighten uncertainty have emerged one after another, including the recession that followed the global financial crisis, the European debt crisis, the rise of populism and political instability that came against the backdrop of increasing numbers of immigrants, the headwind created by the Russian aggression against Ukraine, and various political demands coming from the United States. As a result, the EPU Index for Europe continuously rose.

## (2) China

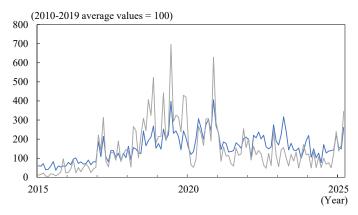
Behind the conspicuous rise in the EPU Index for China, there are multiple factors, as in the case of Europe. Around 2015, when the index started to rise, expectations for the medium- to long-term growth of China began to wane because structural downward economic pressures, such as a decline in the population growth rate, gradually became apparent while the effects of large-scale economic stimulus measures taken after the global financial crisis ran their course. Indeed, when the People's Bank of China announced the devaluation of the Chinese yuan in 2015, concerns over the future course of the Chinese economy grew rapidly in financial markets, resulting in stock price plunges in countries around the world.

Afterwards, the EPU Index for China temporarily rose around the time of events such as the large-scale protest activity in Hong Kong in 2019, the strict enforcement of COVID-19 containment measures (zero-COVID-19 policy), and the decision to grant an unprecedented third term for President Xi Jinping in 2022.

However, the greatest factor of the recent uptrend in the EPU Index for China is the conflict with the United States, mainly in the area of trade. The Trade Policy Uncertainty Index for China, which is based on the number of newspaper articles mentioning trade policy uncertainty, spiked up between 2017 and the end of 2020, a period overlapping with the tenure of the first Trump administration, acting as the driver of the EPU Index's rise (Figure I-3-1-4). After the end of the first Trump administration, the spike-up of the Trade Policy Uncertainty Index disappeared, but the index remained at a high level compared with the period before 2017, as the succeeding Biden administration continued to strengthen restrictions on Chinese products. Since late 2024, when the inauguration of the second Trump administration became a foregone conclusion, the Trade Policy Uncertainty Index for China has been gaining upward momentum once again.

Figure I-3-1-4. EPU Index and Trade Policy Uncertainty Index for China

- -EPU Index (two newspapers in mainland China)
- -Trade Policy Uncertainty Index for China



Note: This figure shows data up to March 2025. The Trade Policy Uncertainty Index for China, which is shown in Figure I-3-1-2 above, is calculated based on these two newspapers in mainland China as well as on SCMP, an English newspaper in Hong Kong. However, in this figure, as the Trade Policy Uncertainty Index is based on these two newspapers in mainland China, the EPU Index depicted here is based on these newspapers in mainland China, too.

Source: Economic Policy Uncertainty.

As explained above, the main driver of the uptrend in the Global EPU Index is the heightening uncertainty in Europe and China, a major cause of which is the deterioration of trade relationships with the United States.

On the other hand, the EPU Index for the United States stayed stable, at least until late 2024. Although it rose early in the pandemic period in 2020 and around the time of the beginning of the cycle of interest rate hikes in 2022, the index remained stable at other times, providing a contrast to the uptrend in the Global EPU Index.

Presumably, the divergence between the EPU Index for the United States and the Global EPU Index, which was mentioned in Part I, Chapter 1, Section 1, is attributable mainly to the United States' presence as the single predominant economic power. There are few cases when the United States is directly affected by domestic political instability in Europe or other regions. Nor did trade conflicts under the first Trump administration hurt the U.S. economy or U.S. stock prices on the whole because the strength of the U.S. economy was sufficient to more than offset the negative effects of tariff hikes and other trade measures. As a result, the firmness of the U.S. economy has held down uncertainty in the United States, in contrast to the European economy, which has continued to be anemic since the global financial crisis, and the Chinese economy, for which growth expectations have been declining.

That is also evident from the VIX Index. The VIX Index, which represents expected volatility calculated from prices of S&P 500 Index options, reflects investors' outlook on market uncertainties and risks. The VIX Index tends to rise steeply when uncertainty in financial markets grows, as it did at the time of the global financial crisis, so it is also known as a "fear index." A comparison between the trends in the VIX Index and the EPU Index for the United States shows that the two have been mostly

moving in tandem with each other except since late 2024 (Figure I-3-1-5). The trends of these two indexes indicate that even at the time of events that might potentially heighten uncertainty, such as the presidential elections, trade conflicts, and the COVID-19 pandemic, a continuous escalation of uncertainty in financial markets was avoided as long as the U.S. economy remained robust, a situation that led to the stability of the EPU Index for the United States.<sup>18</sup>

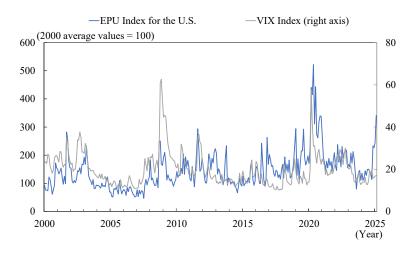


Figure I-3-1-5. Changes in EPU Index and VIX Index for the U.S.

Note: This figure shows data up to March 2025. Sources: Economic Policy Uncertainty, FRED.

As described above, the EPU Index for the United States continued to move in tandem with the VIX Index while maintaining stability, but since late 2024, the level of the EPU Index for the United States has risen significantly. That is because uncertainty, mainly over trade policy, has escalated considerably following the inauguration of the second Trump administration. The Trade Policy Uncertainty Index for the United States, a component of the EPU Index for the country, has recorded an unprecedented rise since the beginning of 2025, shooting far above the level seen under the first Trump administration (Figure I-3-1-6).

Not only does the tariff policy advocated by the second Trump administration have a far broader coverage that the one implemented under the first Trump administration, but also, the level of

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In recent years, the divergence between the VIX Index and the Global EPU Index has been attracting attention. For example, the IMF (2024) pointed out the risk of a future upsurge in market volatility indicators, including the VIX Index, because of a sharp downward deviation of those indicators from the EPU Index. Attention is focusing on the divergence presumably because the VIX Index has been regarded as an indicator of uncertainty in global financial markets due to the inclusion of many multinational companies with global business operations in the S&P 500 Index and, in fact, it was basically moving in tandem with the Global EPU Index until 2015. However, as described in the main text, given that the linkage between the VIX Index and the EPU Index for the United States has consistently been maintained (it was maintained at least until the end of 2024), what the VIX Index reflects may be uncertainty in U.S. financial markets, rather than uncertainty in global financial markets. In that line of thinking, the divergence between the VIX Index and the Global EPU Index is understandable. More fundamentally, rather than the divergence between those two indexes, the divergence between the Global EPU Index and the EPU Index for the United States is important.

predictability over how the administration will proceed with the policy has remained low. For example, the administration abruptly announced target countries and the rough outlines of items subject to tariffs, without revealing the details until just before implementation in some cases. In other cases, the administration announced pauses in implementation or policy changes just before or after tariff implementation. Regarding the reciprocal tariffs, announced in early April, immediately after implementation, the administration announced a 90-day pause for the add-on portions. The elevated level of uncertainty over trade policy is highly likely to put strong downward pressure on the economies of the United States and other countries (see the next section).

(2000 average values = 100)

7,000

6,000

5,000

4,000

3,000

2,000

2010

2015

2020

2025 (Year)

Figure I-3-1-6. Trade Policy Uncertainty Index for the U.S.

Note: This figure shows data up to March 2025.

2000

2005

1,000

Source: Economic Policy Uncertainty.