This summer was unusually long and warm. But this summer has now come to an end, as “seasons come and seasons go”.

But times are still good on the economic front. The economy is expanding at a robust pace, interest rates are still low, asset prices are high, and volatility in financial markets is relatively low. So, for the most part, the expectations regarding economic developments have been confirmed. Furthermore, there is currently a general consensus that growth will continue and that interest rates will slowly start to pick up again. It might seem, then, that there is nothing much new under the sun.

But the setting of strong growth and low interest rates has contributed to the build-up of vulnerabilities – and this trend has continued to the present day. We have already described these vulnerabilities in earlier Financial Stability Reviews.

- Underestimation of credit risk,
- Overvaluation of assets and loan collateral, and
- Exposure to interest rate risk.

And the clouds are already gathering on the horizon. Unlike last year, the risks to future economic activity are today skewed to the downside.

- Geopolitical risks have intensified.
- Trade tensions remain unresolved and could particularly harm the internationally open German economy.
- It is still unclear how the United Kingdom will withdraw from the EU.

So the downside risks to the economy have increased substantially. If these risks materialise, the ensuing market corrections would expose the vulnerabilities.

At the global level, too, financial sectors have become more vulnerable. Globally, private and public sector debt today is far higher than it was ten years ago. This limits the capacity of governments in some countries, in fiscal terms, to cushion a potential downturn in the economy.

This is the time to build up sufficient resilience for tougher times ahead. It is rather like the human body – we need to boost our immune systems long before the flu season breaks out. Once a flu epidemic is in full flow, it’s often too late to get vaccinated. But we don’t always follow sound advice like that.

What does this mean for the financial markets? It is precisely when the economy is in good shape that we can be tempted to underestimate the likelihood of catching the flu and neglect the need to make build up our defences.

1 Macroeconomic environment

The German economy is experiencing the longest period of expansion since the country’s reunification. This good setting is benefiting households. The positive economic situation and
sound financing conditions have contributed to the decline in the German unemployment rate. The number of consumer insolvencies has also fallen.

As a consequence, household debt as a percentage of gross domestic product, at roughly 50%, is at its lowest level in two decades.

Enterprises have boosted their capital from roughly 20% to 30% over the past two decades, and leverage in the corporate sector has receded slightly.

Similarly, high valuations in the financial markets reflect the strong economy and low interest rates. However, they also point to vulnerabilities in the financial system.

- Measured relative to leverage in the corporate sector, risk premia are low – investors are thus charging a very low “price” for taking on risk. This is evident not just in Germany, but also from an international perspective.
- Real estate prices in Germany have been rising steadily since the onset of the financial crisis, not just in urban centres. According to Bundesbank estimates, real estate prices exceed levels that would be justified by fundamentals such as regional or demographic patterns by about 15–30%.

Let me therefore give you a more detailed description of the vulnerabilities lurking in Germany’s financial system.

2 Underestimating credit risk

Future credit risk might be underestimated. The good situation for enterprises at present is being reflected in low provisioning at banks.

This has contributed to the rise in banks’ capital ratios. However, the risk-weighted capital ratio rose by more than the unweighted ratio. Larger, systemically important financial institutions tend to have lower unweighted capital ratios than smaller banks.

An economic downturn would put pressure on banks’ capital buffers due to the ensuing credit losses and increasing risk weights. This could reverse the trend observed over the past ten years. This period has seen the average risk weights for corporate loans and in retail banking – that is to say, business with households and small and medium-sized enterprises – decline. Furthermore, banks have restructured their investment portfolios towards exposures with lower risk weights.

However, a glance at banks’ credit portfolios also shows that there has been a shift in the borrower structure. Generally speaking, there has been a relatively strong increase in loans to financially vulnerable enterprises. Thus, the share of loans to enterprises with low capital ratios and high interest burdens has increased over time. In addition, a lower value-at-risk for market risk in the last two years has helped boost capital ratios. Thus, a sharp rise in financial market volatility could put pressure on banks.

3 Overvaluing assets and loan collateral

High valuations point to another weak spot in the financial system – the possibility that loan collateral values may be overestimated. Let me illustrate my point by taking the German real estate market as an example. The real estate market is crucially important for the German economy as a whole: loans for house purchase account for more than half of lending to households and enterprises. Our assessment of developments in the residential real estate market from a financial stability perspective is based on three indicators:

- Housing prices are continuing to increase dynamically.
But lending is growing at a below-average pace by historical standards.

And overall, credit standards have not changed remarkably – household debt, for instance, has remained almost static.

Overall, we currently see no need to activate any macroprudential instruments in order to contain risks to financial stability emanating from the residential real estate market. We are, however, continuing to closely monitor this market. Because the strong appreciation in prices harbours the risk that the quality of loan collateral is possibly being overestimated.

In the event of a correction, the value of collateral might decline unexpectedly sharply, pushing up losses from residential real estate loans as a result. One stress test exercise reveals that an economic slump and shrinking real estate prices would in some cases take a heavy toll on the real estate lending portfolios of German banks.

4 Interest rate risk as a result of maturity transformation

Finally, the German banking system has become more vulnerable to an abrupt increase in risk premia and thus in interest rates. The share of newly granted loans with an fixed-term interest rates of over ten years has risen from 26% at the beginning of 2010 to 45% at last count. If interest rates were to quickly spike higher, this would instantly drive up the costs of funding these loans. But interest income would only increase with a time lag.

This would affect savings banks and cooperative banks more than the larger credit institutions. And precisely because many institutions would be affected simultaneously, it would not be possible to cushion the impact by stepping up new lending business. In an economic downturn, especially, credit demand would decline.

A “snapback” in interest rates would not be the only risk to financial stability. Persistently low interest rates close to the zero lower bound would also continue to put pressure on the financial system. In this scenario, risk-taking incentives would remain.

This means that both risk scenarios – a “snapback” in rates, and persistently low rates – would affect the German banking sector as a whole. And other parts of the financial system would barely be able to offset the impact. That is because insurers and pension institutions might also come under pressure in both scenarios.

5 Potential pro-cyclical impact of the financial system

What does this imply for financial stability? The vulnerabilities I have just mentioned all have one thing in common: we have evidence to suggest that market participants are tending to underestimate the risks they incur and that they are tending to not charge enough for them. Underestimating risk is not synonymous with a credit bubble. Although the materialisation of individual risks would be manageable, credit, valuation and interest rate risk may well intensify within the financial system. Market participants might potentially underestimate downside risks to the economy. An unexpectedly strong economic downturn and falling asset prices would then simultaneously expose different vulnerabilities. The financial system could intensify unexpected negative developments in the economy. In particular, its highly interconnected network allows the financial sector to perform its key functions, which are to finance the economy, ensure that payment systems operate smoothly, and hedge risk. However, interconnectedness also entails a risk of contagion.

Let me illustrate this point by using an economic downturn as an example. If the trade conflicts escalate, for instance, this could hit the German economy hard – external demand might soften, or value-added chains might become more fragile. Insolvencies might increase in the corporate sector.
An economic downturn would put pressure on banks’ equity capital, which would be squeezed by losses, write-downs and mounting risk weights.

How might banks looking to fulfil the capital ratios set by supervisors or expected by markets respond to this scenario?

Banks might respond by increasing their capital internally. That is, they would retain profits and pay out less to shareholders. But this particular avenue would be blocked off, especially if the economic slump eroded banks’ profits or even causes losses.

Another response might be to tap the markets for additional capital. But here again, if many banks try to take that particular road in times of crisis, they will end up blocking it for everyone. Confidence in entire segments of the market may well erode as a result.

That leaves us with the third possible response, which is to deleverage the balance sheet. Overall, this would reduce the supply of credit to households and enterprises. This could well amplify an economic slump by spilling out across the financial system.

Whether and with what magnitude an economic downturn is amplified by the financial system depends on the buffers within the financial system. It is thus a welcome development that German banks have increased their capital since the financial crisis. This is due to numerous microprudential regulatory measures that have already been implemented or will be implemented in the near future as well as to capital buffers for systemically important banks.

However, the vulnerabilities are not confined to individual institutions; they affect the entire system. This risk is particularly acute when market participants are overly optimistic in good times. In other words, each bank on its own would act in a risk-conscious manner and attempt to strengthen its capital buffers. But there is no way it can have a full picture of the potential impact on the financial system as a whole. This is how systemic risk potentially comes about.

6 Need for macroprudential action

Macroprudential policy aims to identify such risks to financial stability at an early stage and to take timely measures to ensure that the financial system functions smoothly. Germany’s financial system has become more vulnerable over the past years – the impact of credit risk, asset repricing, and interest rates on the financial system might be underestimated. At the same time, the downside risks have increased. This means that action needs to be taken.

- First, each individual market participant needs to build up sufficient resilience to unexpected events. Even when the economy is less favourable, financial institutions should have sufficient capital to cover the risks they take. Risk management and financing decisions should take scenarios that could lead to large losses into account. This applies especially to political risks such as the possibility of a “hard Brexit”.
- Second, cyclical risks call for timely preventive action. Buffers against economic risks need to be built up in good times. This can reduce the likelihood that contagion effects within the financial system might amplify an economic downturn. The macroprudential toolkit includes warnings and recommendations as well as macroprudential capital buffers.
- Third, effective financial stability surveillance calls for improved data on the residential real estate market, as recommended by the German Financial Stability Committee. Detailed information is needed about developments in property prices, the debt levels of investors, and especially those of households, as well as lending conditions. When it comes to systematically capturing some of these indicators, Germany remains near the bottom of the league in Europe.

To summarise, the favourable economic situation at present offers a good opportunity to bolster
balance sheets and build up resilience for a rainy day.