Jens Weidmann: Securing stability - challenges from the low interest rate environment

Keynote speech by Dr Jens Weidmann, President of the Deutsche Bundesbank and Chairman of the Board of Directors of the Bank for International Settlements, at the 8th EIOPA (European Insurance and Occupational Pensions Authority) Annual Conference, Frankfurt am Main, 20 November 2018.

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1 Introduction

Ladies and gentlemen,

I would like to thank you for inviting me to your Annual Conference. It is a great pleasure to speak before such a distinguished international audience.

These days, we often look back at the events of ten years ago, in the autumn of 2008, when the financial crisis dramatically came to a head. And with good reason – after all, we're still grappling with the fallout of the crisis even now.

I, too, would like to take this chance to recall an event from that time and briefly look back on the life of an extraordinary person. On 1 November 2008, Jacques Piccard, one of the most important explorers of the deep sea, passed away. His name is chiefly associated with a great adventure: diving to the deepest part of the world's oceans.

Together with his father, he had designed a new kind of submersible, named the *Trieste*. Jacques Piccard and his companion Don Walsh used this vehicle in 1960 to become the first people to dive to the bottom of the Mariana Trench, a descent of almost 11,000 metres.

Their journey took more than four hours, the pressure on the vessel increasing with every metre. To get an idea of what this would have felt like at the bottom of the sea, imagine three SUVs stacked on top of each other and balanced on your toe. But the *Trieste* withstood the enormous pressure and returned its passengers safely from the ocean bed to the surface.

Jacques Piccard's record has never been broken. No person has ever dived deeper since then.

Why am I telling you this? What does this legendary diver have to do with the topics we're addressing today? Allow me to keep you in suspense a little longer and I will reveal the answer a few minutes from now.

In the meantime, I would like to address some challenges for insurers that arise from the persistent low interest rate environment. When contemplating where real interest rates will be heading, the so-called natural rate of interest may provide some insights. I will focus on this concept from a monetary policy perspective.

2 Lessons learned from the crisis

But first, let's return to the autumn of 2008. In the past few weeks, reports on the events of that time have mostly centred on the demise of the investment bank Lehman Brothers. That was a game-changing moment – there's no question about that. But it's easy to forget that the US insurance corporation AIG was also on the brink of collapse at the same time.

AlG was a company with more than 76 million customers in about 140 countries. But AlG was not only much larger than Lehman Brothers. It was so heavily interconnected with the entire financial system that its insolvency would have shattered confidence in already fragile financial

markets.

The unforeseeable consequences of a possible AIG bankruptcy compelled policymakers to take action. Just one day after the Lehman Brothers bankruptcy, the US government jumped in to save AIG.

With that in mind, one key lesson learned from the financial crisis is that, in terms of risks to the stability of the financial system, it would be short-sighted to look only at banks. Rather, all financial intermediaries need to be adequately regulated and effectively supervised. This applies also, and especially, to insurance undertakings.

We've already made great strides here. Under the European supervisory regime, Solvency II, capital requirements are now explicitly risk-based. Additional capital buffers act in a similar way to flu vaccinations: they don't just protect the individual, but also prevent others from becoming infected.

Insurers with more capital are more robust in themselves and thus render the financial system as a whole more resilient at the same time. So the current regulatory regime for insurance corporations is already helping to mitigate systemic risk. However, it was designed from a microprudential angle.

We should also take a system-wide perspective. Insurers could act as systemic amplifiers due to their high degree of interconnectedness with the financial system.

If insurers respond to shocks in a similar way, this can lead to contagion effects. For instance, Insurers may decide to stop holding certain asset classes. The sale of assets into a falling market could amplify the initial fall in asset prices. By doing so, the insurance sector could reinforce or pass on shocks to the rest of the financial system as well as to the real economy.

I find it a welcome development, then, that both EIOPA and the ESRB have taken up this issue and turned to discussing the system-wide perspective and the potential need for additional instruments in the insurance sector. Their reflections will be channelled into the review of the Solvency II Directive.

Macroprudential tools for insurance companies could prevent a collective build-up of exposures or dampen amplifiers to avoid spillovers to other sectors. As the Bundesbank pointed out in its latest Financial Stability Review, two examples of instruments under discussion in international fora are insurer-specific systemic capital add-ons and countercyclical capital buffers.¹

Three aspects, I believe, are particularly crucial in this context. First, insurers are not banks. They are exposed to different types of risks – underwriting risk, for example. Moreover, the vulnerability even to the same risk type may differ depending on the business model of financial firms. Therefore, macroprudential instruments cannot simply be copied one to one from banking system to insurers.

Second, we have to take the macroeconomic repercussions into account. After all, regulation is always an act of balancing. On the one hand, regulatory reforms aim to improve the resilience of the financial system as a whole. On the other hand, regulation could suppress market activities that foster efficiency, innovation and growth. A system that tries to prevent crises at all costs would very likely not fulfil its macroeconomic function.

And third, when developing new instruments, we should always consider the interplay with existing regulations and interdependencies with other parts of the financial system. Claudio Borio recently warned of possible evasive action, saying that macroprudential instruments "can leak, i.e. they are subject to regulatory arbitrage (...) possibly pushing activity into the darker corners of the financial system".²

Such leakages are typically the result of too narrow interventions in the sense that they were designed to target very specific market segments or activities. As a result, the scope of the macroprudential tool could easily be circumvented. For example, in Malaysia tighter loan-to-value limits on mortgages were only imposed on mortgages to individuals. That led to a surge in home purchases by firms which were specifically established to bypass the restrictions.³

To avoid arbitrage or migration of risks between sectors, the scope of measures employed needs to be broadened. The aim is always to look at the bigger picture of the financial system. In sum, regulation needs to strike a balance between adequately addressing sector-specific risks and ensuring consistent rules across sectors.

3 Insurers in the low interest rate environment

Ladies and gentlemen

Regulation with high requirements on the risk management is necessary, but increases the administrative burden and short-term costs for insurers. In contrast to that, its benefits in the form of financial stability only unfold in the long term.

However, new regulation is not the only challenge currently facing insurers in Europe. There is also the matter of advancing digitalisation. New competitors such as fintechs are entering the market. Established insurers need to adjust to stay successful. They must be prepared for new customer expectations on communication, reachability and responsiveness.

Nonetheless, insurance companies can benefit from digitalisation by taking advantage of opportunities to raise flexibility and productivity and simplify processes. Big data analysis, for example, can improve the assessment of risks and fraud detection.

Over the next few years, the insurance market is likely to experience high innovation momentum and even fiercer competition. Insurers are therefore well-advised to adapt to new technologies where there is a sound business case for doing so.

Another challenge facing insurers is the low interest rate environment, which is putting many established business models to the test. A "low-for-long" interest rate scenario would lead to depressed net cash flows and solvency ratios, and thus to greater risk of insolvency, as a recent BIS paper confirms. The report also shows that such a scenario would ultimately be harder on insurers and pension funds than on banks.⁴

But an abrupt interest rate hike also harbours risk, as Mark Feodoria and Till Förstemann highlighted in a Bundesbank Discussion Paper.⁵ Let's take the example of life insurers. In Germany, surrender options allow policyholders to liquidate their investments early and receive the policy's surrender value. The amount does not depend on current market interest rates, but rests on paid-in premiums at a guaranteed rate of return (adding profit participation).

If interest rates rise, the value of insurers' asset holdings will fall. Beyond a critical companyspecific interest rate level, the guaranteed surrender values exceed the market value of the asset holdings. This increases the incentive for policyholders to surrender their policies and reinvest the proceeds at higher yields.

But an upsurge in policy lapses would mean considerable liquidity outflows for insurers. To meet their policyholders' claims, they could be forced to offload their assets, which might accelerate the fall in bond prices, driving up interest rates even further.

This can be more than a merely hypothetical scenario. Surrender-driven runs on insurance companies have occurred in the $past^{6}$ In 1997, in the wake of the Asian currency crisis, market interest rates in Korea shot up from just over 12% to around 30% within one year. This saw

monthly surrender rates for pension products climb as high as 4%. In 2008, one of Belgium's largest insurance companies faced a severe surrender-driven liquidity crisis. The impact of the financial crisis had pushed the market value of the insurer's asset holdings so low that the company needed to raise €1.5bn in new capital. In the end, the government stepped in to halt the flow of redemptions.

Both incidents had a relatively minor impact on the wider financial system. However, we cannot take such an outcome for granted for the future. Liquidity risk in the life insurance sector and its interconnection with interest rate risk should, therefore, remain on the radar screen of insurance companies and their regulators.

So what we've learned so far is that both persistently low interest rates and an abrupt hike in interest rates can pose serious problems for insurance undertakings. And this observation brings us back to Jacques Piccard's intrepid diving expedition, which I mentioned in my opening remarks.

In today's low interest rate environment, you could say that insurers are a lot like divers: For a while, they are fine in the deep. But if the dive lasts longer than expected, they risk running out of oxygen at some point. On the other hand, coming back up too quickly can result in decompression sickness. Divers who surface from very deep water too quickly can suffer serious symptoms. At worst, these can be life-threatening. Divers are therefore advised to make a slow but timely ascent to the surface. It's probably safe to say that many insurers are hoping that a similar scenario will unfold with respect to interest rates – in other words, a gradual rise.

4 Natural rate of interest

Ladies and gentlemen,

The evolution of interest rates concerns us all – insurance companies and monetary policymakers alike.

Whenever the future level of interest rates is discussed, attention quickly turns to central banks. Amongst other reasons, this is because of the special role they have been playing in responding to the financial crisis. Central banks all over the world took extraordinary measures, pushing policy rates to zero, providing excess liquidity, and purchasing assets on a large scale. In doing so, they contributed to a low interest rate environment that persists in the euro area to this day.

Ten years on from the peak of the financial crisis, we may have emerged from serious crisis threat, but the Eurosystem's monetary policy stance remains exceptionally expansionary. The anticipated end of net asset purchases marks only the beginning of the exit from the ultra-loose monetary policy. It is the first step on a path of normalisation which will last several years.

What does this mean for insurers and pension funds which depend on capital markets rates? Needless to say, interest rates will pick up as monetary policy gradually returns to normal. However, monetary policy does not dictate the levels of capital market rates at the end of this process.

Real long-term interest rates are crucially determined by saving and investment decisions made by households and enterprises. And even in an imaginary world without a financial sector, a rate of interest would emerge.

Indeed, beyond the recent period of low interest rates, we have witnessed a considerable decline in real yields on long-term government bonds in major advanced economies since the start of the 1980s. Owing to its persistence and outreach, this decline is often attributed to secular or global forces. In particular, a recent study points to lower trend growth as a major factor, which is possibly linked to demographic changes.⁷

Given the decline in the actual real rate of interest, numerous studies suggest that the so-called natural rate has also decreased in recent decades – that is, the real interest rate at which the goods market is in equilibrium and prices are stable.

This rate may have important implications for monetary policy. In particular, the natural rate is often seen as an important benchmark for the monetary policy stance. If the key interest rate less the expected inflation rate is below this interest rate, monetary policy is expansionary, as it provides incentives for consumers to purchase more and for enterprises to step up investment and output.

Therefore, the natural rate may be an important anchor for monetary policy to achieve its objective of price stability – at least from a more theoretical perspective. Simply put, if monetary policy tracks the natural rate in the medium term, it will likewise stabilise inflation in the medium term.

Importantly, this implies that a depressed natural rate of interest would pose serious challenges for monetary policy to stabilise the economy and achieve price stability. Monetary policy would see its policy rates come up against the lower bound more and more frequently. This might raise calls for a change in monetary policy strategy (a higher inflation target, for example) or a change in policy instruments (such as asset purchases).

However, before jumping to conclusions, we have to take studies pointing to a trend decline in the natural rate with all due caution. This rate cannot be observed directly. We have to rely on models and econometric methods to estimate it. And the estimated level varies greatly depending on the method and data used. On top of that, it can often only be gauged with very wide uncertainty bands.

Over 80 years ago, the American economist John H. Williams put it in a nutshell: "The natural rate is an abstraction; like faith, it is seen by its works. One can only say that if the bank policy succeeds in stabilizing prices, the bank rate must have been brought in line with the natural rate, but if it does not, it must not have been."⁸

What is more, ultra-expansionary monetary policy compressed long-term interest rates for a prolonged period of time, which may feed into estimates of the natural rate.

In addition, many methods fail to take account of the risk dimension that prevails in the real economy. They often use as a starting point yields on government bonds which are regularly deemed riskless. But the concept of the natural rate refers to characteristics of the real economy, so it would be appropriate to apply a risk-bearing return on capital.

Taking this observation on board and analysing returns on equity or total capital, say, we see a different picture. There's no sign of any long-term downward trend.⁹

All in all, a study carried out by the Bundesbank comes to the following conclusion.¹⁰ A robust monetary policy strategy should not lean too heavily on the concept of the natural interest rate, but should regard it instead as one of many indicators for evaluating the monetary stance whilst remaining aware of its limitations.

And that is a good stance to take for another reason, too – the use of the natural interest rate as a policy benchmark is based on the assumption that the natural rate is independent of policy. This proposition has recently again been called into question. Economists at the Bank for International Settlements (BIS) point out that economic developments are determined, among other things, not just by business cycles but also by financial cycles.

In particular, a financial crisis can dampen the output path of an economy persistently. Consequently, the BIS economists write: "To the extent that monetary policy (...) can influence

the financial cycle, it too may have a persistent impact on the economy's long-run path, and hence also on real interest rates."¹¹

The impact of this finding extends far beyond the use of the natural interest rate as a benchmark for monetary policy. It also raises the issue of whether monetary policymakers should focus more of their attention on the financial cycle. As we have witnessed, financial crises have a considerable impact on macroeconomic outcomes and, ultimately, on central banks' ability to guarantee price stability. Since the financial cycle is longer than the business cycle, this comes down to extending the policy horizon.

Jacques-Yves Cousteau, the pioneer of modern underwater diving, was well aware that it is often a good idea to take the longer-term view, too. Speaking in 1992, he said: "We are living in an interminable succession of absurdities imposed by the myopic logic of short-term thinking". $\frac{12}{12}$

Taking a longer-term perspective on inflation, central banks might be compelled to act on the build-up of financial imbalances, even if they pursue only the single objective of price stability. This would also help to reduce asymmetric responses by monetary policy.

I am convinced that monetary policy should have a symmetrical effect over the entire economic cycle. In a downturn, policymakers must respond vigorously; but in an upswing, when risks in the financial sector can build up, they must also be able to tighten the reins again as needed.

5 Conclusion

Ladies and gentlemen,

A golden rule for divers is: don't exceed the maximum time. I'd say that's good advice for speakers, too. So I will now bring my speech to a close.

Our financial system is much more stable today than it was ten years ago. A large number of weaknesses have been addressed and reforms initiated. Now our task is to make sure that the rules we have created are applied consistently.

The former Chairman of the Fed, Paul Volcker, recently cautioned that "financiers are slipping back into bad habits, chasing chicanery and lobbying to loosen regulation".¹³ We should take his remarks seriously. There is a danger that the lessons learned from the crisis could be thrown to the winds as the memory of the crisis fades.

There's no denying that the financial crisis and its repercussions were bad. But it would be even worse if we learned nothing from it.

Thank you for your attention.

- ² C Borio, Macroprudential Frameworks Experience, Prospects and a Way Forward, BIS speech, June 2018.
- ³BIS, Financial stability implications of a prolonged period of low interest rates, CGFS Papers, No 61, July 2018.
- ⁴ Bank for International Settlements, Annual Economic Report 2018, p 68.
- ⁵ M Feodoria and T Förstemann, Lethal lapses how a positive interest rate shock might stress German life insurers, Deutsche Bundesbank Discussion Paper No 12/2015.
- ⁶ Geneva Association (2012), Surrenders in the Life Insurance Industry and their Impact on Liquidity, August 2012.
- ^Z The study also points to an increase in the convenience yield for safety and liquidity, as the real interest rate on

¹ Deutsche Bundesbank, Makroprudenzielle Instrumente im Versicherungssektor, Finanzstabilitätsbericht 2018, pp 102–103.

safe and liquid securities is considered. See MDel Negro, D Giannone, MP Giannoni and ATambalotti (2018), Global Trends in Interest Rates, NBER Working Paper No. 25039.

- ⁸ J H Williams (1931), The Monetary Doctrines of JM Keynes, The Quarterly Journal of Economics, 45(4), 547– 587.
- ⁹ R Caballero, E Farhi and P-O Gourinchas (2017), Rents, Technical Change, and Risk Premia. Accounting for Secular Trends in Interest Rates, Returns on Capital, Earnings Yields, and Factor Shares, American Economic Review: Papers & Proceedings 107(5), pp 614–620. M Marx, B Mojon and F R Velde (2017), Why Have Interest Rates Fallen far Below the Return on Capital, Banque de France Working Paper No. 630.
- ¹⁰ Deutsche Bundesbank, The natural rate of interest, Monthly Report, October 2017.
- ¹¹ C Borio, P Disyatat and P Rungcharoenkitkul (2018), What anchors for the natural rate of interest?, mimeo.
- ¹² Los Angeles Times, "As Population Grows, People Will Live 'Like Rats', Cousteau Says", 6 June 1992.
- ¹³ Financial Times, "Volcker sets a challenge for the next generation", 26 October 2018.