Andreas Dombret: Greener finance – better finance? How green should the financial world be?

Speech by Dr Andreas Dombret, Member of the Executive Board of the Deutsche Bundesbank, at the Bundesbank symposium "Banking supervision in dialogue", Frankfurt/Main, 7 March 2018.

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1 Introduction

Ladies and gentlemen

May I wish you a very warm welcome to our Bundesbank symposium entitled "Banking supervision in dialogue". I am delighted to have the honour to open this, the 20th event of its kind.

Some of you might be wondering what has become of the good old Bundesbank symposium on its 20th anniversary. Have we really come here to talk about greenhouse gases, melting polar ice caps and dying species rather than credit risk, own funds and the banking union? Has the Bundesbank adopted a "devil may care" attitude?

On the contrary, ladies and gentlemen. You see, over the past 20 years the Bundesbank symposium has always made a point of discussing topics which drive the financial community. And I would like to use the last such symposium during my term of office at the Bundesbank to shed light on a matter which is – quite literally – of existential importance: climate change and the role of the financial community.

It's a topic which is becoming increasingly palpable, not least since the Paris climate agreement, which was endorsed back in 2015 and has since been ratified by nearly every country in the world. This global commitment to take action to curb climate change was the culmination of decades of effort and an achievement which many thought was scarcely possible. The global accord was presaged by the sobering and devastating realisation that climate change is man-made and can only be mitigated if all of humanity works together.

Successful though the agreement may have been, the true significance of the UN climate conference in Paris has not yet dawned on everyone, it would appear. For most people, it is still nothing more than an abstract arrangement to keep global warming below 2 degrees Celsius compared with pre-industrial levels and to pursue efforts to limit the temperature increase even further. But there's one thing we all need to be aware of: if the global community is even half-way committed to hitting the ambitious target of 2 degrees Celsius, there will need to be some far-reaching changes to the economic systems as we know them. And as for the time frame, the later we get started, the deeper our intervention will have to be. And we shouldn't expect the planet to make things any easier for us.

Quite specifically, this means we'll need to be ambitious – far more ambitious than before. And we'll need to take a systemic view of the matter in hand. Every area of the economy will need to adjust by correctly pricing the externalities of climate change and internalising them. And those adjustments mean more than simply trimming our CO2 emissions. They will transform the entire way in which we do business and affect the path along which the economy and society are progressing.

Specifically, I see three control loops in the economy which can be used to tackle climate change. First, the general issue of the green energy of the future – this is an area in which we have already come a long way. Second, the matter of green transport systems – regrettably, progress is still very vague here. And the third climate change challenge is sustainable and green nutrition – this is a topic where we still do not have many robust projections about how developments could play out.

There is no doubt that the financial sector is also affected in every one of these control loops. Banks and savings banks, in their capacity as providers of credit for the real economy, will not be left unscathed by the impending greening process in the economy. And that brings us to the subject of our symposium here today and to the topic of my opening speech.

I imagine you will all be more or less familiar with the term "green finance". In essence, it's about the way in which the financial sector responds to climate change, and how it can help mitigate its impact and promote ecological sustainability – for instance, by channelling funding into environmentally friendly technologies and economic sectors – while also capitalising on their growth. For me, green finance is more than anything "patient finance", if you will – a financial world which looks primarily at the long-term repercussions of its actions. So it's nothing less than a paradigm shift. Will we succeed in overcoming short-term thinking? Will we succeed in prioritising long-term investment over short-run trading opportunities? Don't we want to be "buy and hold" shareholders rather than high-frequency traders? Today's event aims to raise awareness about all these questions.

But there is at least one other aspect which is of paramount importance, and especially so from the perspective of banking supervision. That is the risk which climate change and the transformation of the economy might present for the financial sector – and the matter of how far financial institutions will need to adapt to shield themselves from that risk.

And last but not least, we as central bankers and supervisors need to face up to the question of the role we are able to, and intend to, play in transitioning to a green financial system. These three topics – the risks facing the financial industry, the opportunities for the financial industry, and the role of supervisors – are the subject of my speech here today.

2 The risk perspective: what are we talking about, exactly?

Let's begin by taking the risk perspective. Mention climate change and the first thing most people think about is natural catastrophes: storms, heatwaves, droughts, floods and hurricanes. You might remember that last year's Atlantic hurricane season was one of the worst on record. Catastrophes on that scale mainly inflict widespread human suffering, of course, but they also present economic risks, or "physical risks", as they are known. And those risks can affect every one of us: individuals, government budgets, insurers, and other financial institutions.

We are already seeing the costs materialising on the balance sheets of non-life insurers and reinsurers today. They add up to more than US$200 billion for the 2017 hurricane season. That is why these costs usually make the headlines. But natural catastrophes can have a direct impact on banks and savings banks as well if the assets they finance – be they real estate, production facilities or tradables – are affected. Indirectly, this might disrupt value creation and delivery chains, having a knock-on effect on customers. And there is nothing to say that weather and climate-related losses of this kind will still be insurable if climate change continues to dramatically increase the likelihood of natural catastrophes and the expected amount of losses.

But we need to think one step further. Besides the direct impact of climate change, there are yet more risks which we need to bear in mind, because the shift towards a lower-emission, "greener" economy is itself a source of potential risks, which go under the somewhat unwieldy name of "transition risks".

The background to this is as follows. To make this transition, potentially disruptive technological advances and far-reaching changes in climate policy are called for. These developments will leave hardly any economic sectors unscathed. And it is safe to say that these upheavals will force market participants to reprice many assets.

Does the term "stranded assets" mean anything to you? To hit the 2 degrees Celsius target, we will need to curb the amount of carbon dioxide we emit worldwide. At a rough estimate, our CO2 emissions are probably not much more than 1,000 gigatonnes away from exhausting our budget. However, the CO2 content of the known fossil fuel reserves still in the ground is far higher – something like three times as much. What this means is that much of these reserves will need to be left untapped. And the problem is that many businesses' valuations depend to a significant degree on the future anticipated value of such fossil fuel reserves. But if those reserves are out of bounds, as it were, they are effectively worthless, making them "stranded assets". The loss in the value of these assets puts the companies' very survival on the line. As a case in point, the market capitalisation of the major US coal businesses has contracted by roughly 60% over the past five years, and by around 90% over the past ten. And that was against the backdrop of the US equity market as a whole racing from one record to the next.

And that's just one example of many I could mention. Depending on how quickly and unexpectedly the transition and the resulting repricing process take place, they may well have a huge bearing on the stability of entire sectors of the economy. So it will mainly become an issue whenever businesses and investors are unable to plan for the long term because they need to be in a position to respond to short-term policy impulses. This poses the risk of cliff effects, which can trigger disruptions and financial losses that then affect the financial system and its stability.

3 Climate risks in the German banking system

Let's now jump straight from theory to practice. To what extent would German banks and savings banks be affected by a shift to a lower-emission economy?

At first glance, the amounts lent by German institutions to sectors emitting especially high levels of CO2 appear insignificant: loans of €1 million or more granted by German banks to coal mining companies currently amount to no more than just under €1 billion in total. However, loans to coal mining companies can make up 1-2% of individual institutions' issued loans of €1 million or more. So caution is warranted here after all.

Furthermore, we must not forget that the greening process will have a much wider knock-on effect. If we include loans to just those firms involved in the extraction of crude oil and natural gas and in the processing of coal and mineral oils, this boosts the volume of loans of €1 million or more granted by banks to almost €20 billion. Individual institutions have issued up to 6% of their loans of €1 million or more in these sectors.

If we add energy suppliers, this figure goes up once again. Around 60 institutions issue more than 10% of their loans of €1 million or more to the sectors I have just cited. At some, volumes even exceed the 20% mark.

You can see what I'm getting at – this is a chain that could keep going for quite some time. The big question now is, what can we infer from these figures?

Let me start by saying that, even based on this relatively rough-and-ready overview of the situation, there is no way we can rule out significant risks for individual institutions. That said, there are some caveats.

First, the data that I have provided are of low granularity. This makes many correlations unclear. And many of the borrowers included in the calculation are conglomerates that make only part of their profits in energy-intensive industries.

Second, there is a significant degree of uncertainty with respect to how the greening process will pan out, and thus with respect to which sectors would be affected and in what way. Just take the automotive industry, for example. It's all but impossible to predict the extent to which individual manufacturers or national automotive sectors will be affected by the economic transition. What climate policy measures will be introduced – emission limits, bans on vehicles, free public transport? Which technical standards will become the norm in the area of sustainable mobility?

How far will car manufacturers succeed in playing a leading role in these technologies?

In other words, we find ourselves in uncharted territory. The situation is unclear: searching for historical time series on probabilities of default and losses given default is pointless, while established risk models can only help so much. So we are faced with uncertainty.

4 How banks can deal with risks

So the next question is this: what needs to be done?

If you take only one thing away from my speech, it should be this: it's not enough to examine the issue of greener finance through the lens of corporate social responsibility. Potential climate-related risks need to be taken into account as part of risk management. In other words, banks and savings banks need to know just how much they themselves, their customers, and their customers' business models, could be affected by climate-related risks, and they need to be aware of the risks that this entails for their financial exposures.

We don't need to reinvent the wheel to do this. Even though the sources of risk that we are dealing with are new, their effects also fall into the established financial risk categories of credit risk, market risk and operational risk.

But we shouldn't oversimplify things either. It isn't enough to have your risk managers log up the exposures to a few high-emission sectors and find that they are manageable when looked at in isolation. Greening is a complex process – it is far from over and will give rise to transmission mechanisms that we are only now beginning to understand.

Historical data and established statistical procedures cannot be used as they normally would. Scenario analyses could serve as a useful tool for raising awareness of problems. Furthermore, we need to start a discussion about best practices in the financial system. By bouncing ideas off each other, we can come up with new risk measurement approaches and evaluate them in terms of their effectiveness and benefits.

5 How banks can profit from the transition

Ladies and gentlemen, climate change is quite rightly viewed primarily as a challenge. However, we must not forget that, in addition to the aforementioned risks that the transition to a greener economy poses for financial institutions, there are considerable opportunities. In this context, green finance can be so much more than the opportunity to present a green image.

That's because the economic transition will, of course, also open up new business areas for banks and savings banks. In all of the major social upheavals of the previous centuries, it was people from the financial sector who supported change and often helped shape it. And that's what is needed once again now.

The opportunities are clear to see if we look at the investment required: the level of global investment needed to hit the 2 degrees Celsius target set out in the Paris agreement is estimated to run into the tens of trillions. The European Commission anticipates that additional annual investment of €180 billion will be needed in the European Economic Area in order to achieve the Paris climate targets by 2030.

So what we're talking about here are major projects in fields such as energy supply. But even everyday financial services such as residential property financing could be affected if sustainability standards play a greater role here. We're also talking about funding technical progress and innovation. Think, say, of energy generation, transmission and storage, of e-mobility or efficient recycling.

Finally, we have seen retail demand for green investments increase significantly in recent years. Between 2006 and 2016, the volume of sustainable investment in Germany, Austria and Switzerland went up more than twelvefold – from around €20 billion to over €240 billion.

So you see, there’s a wealth of potential here. I believe that the challenge is to guide the transition in a responsible manner and help shape it.

What do I mean by that? Credit institutions that want to play a role in financing green investment need to either gain or expand their expertise in relevant areas at an early stage. Because noble as your intentions may be, you have to make sure that you do not fall victim to typical innovation risks. Wherever technologies and innovative products are hyped, there is a risk of distorted valuations and of sudden price corrections. Only true experts can keep an eye on possible dangers, on the one hand, while catering for their customers’ future expectations and requirements, on the other. Both these skills are necessary for financial institutions if they want their business to benefit from the economic transition.

6 How green do supervision and regulation need to be?

I have talked at length about what climate change and the economic transition mean for your work. But what do they mean for regulation and supervision? In other words, how green do regulation and supervision need to be?

Before I go any further, let me put your minds at ease – just like you do not need to completely reinvent the wheel in the field of risk management, nor do we banking supervisors when it comes to prudential requirements. The Minimum Requirements for Risk Management, or MaRisk, and the corresponding European rules already require institutions to take into account all material risks to which they are, or could be, exposed. So on this score, we have already covered the new sources of risk, too.

But there is no doubt in my mind that the onus is very much on supervisory authorities to raise institutions’ awareness of climate-related risks – especially in the early days. And we are doing our bit to achieve that by running today’s symposium. What is more, I can well imagine instances where climate-related risks are also raised at supervisory meetings with credit institutions.

I am a firm advocate of the idea that supervisors and central banks themselves should strive to perform a special function as a role model and catalyst. This means, for example, helping to forge a deeper understanding of how the mechanisms behind the risks work. It was for this reason that the "Network for Greening the Financial System" was established only a short time ago. This network will serve as a platform for a group of central banks and banking supervisors from around the world to exchange views on climate risks for the financial sector, regulatory issues and green bonds, to name but three topics. Whatever supervisors strive to achieve, I believe it is particularly important for us to establish a consistent taxonomy and uniform definitions as the basis for credible standard setting in the area of green finance. Klaas Knot will tell you more about this in just a few moments.

So we're not coy about playing our part as supervisors in the decarbonisation of banks’ balance sheets. Yet there are other demands being placed on banking supervisors and regulators which I am keeping a very close eye on, because I consider them to be dangerous.

In the debate surrounding the implementation of the Paris climate targets, some have suggested using the prudential framework to actively steer financial flows away from emissions-heavy sectors to more environmentally friendly ones. More specifically, there have been demands recently for banking regulation to include special rules that tip the regulatory scales against environmentally unfriendly "brown" investments or in favour of "green" financial assets on banks’ balance sheets – via capital requirements, for instance. This has been dubbed the "green supporting factor".

However, sustainability in the sense of environmental friendliness does not necessarily go hand in hand with reduced risk – I already mentioned innovation risks earlier on in my speech today. And that is also why capital requirements should be calculated on the basis of just a single factor – the riskiness of the exposures in question. Financial market regulation in general and banking supervision in particular need to be focused on their core tasks and remain geared to risk. Watering down the regulatory mandate would create conflicts of interest and ultimately lead to risks to financial stability – and surely that cannot be what we want.

The European Commission today unveils its action plan on sustainable finance. It is important for us that promoting the greening process does not take place through the back door via financial market regulation and banking supervision. This is something we will watch out for when the action plan is implemented.

Instead, policymakers can use other, traditional instruments such as tax incentives to foster the development of green economic sectors. This approach is more effective and limits unwanted side effects for financial stability.

7 Conclusion

Ladies and gentlemen, the Paris agreement is a strong political commitment to climate protection. It is now a matter of ensuring that climate protection goals are integrated into the market economy. The greening process will only ever be successful if market mechanisms function in the right direction: behaviour that is sustainable needs to pay off; behaviour that harms the environment and future generations should no longer be worthwhile.

Climate change is first and foremost – but not exclusively – a topic for policymakers. Financial institutions, too, have a duty to address climate change and climate policy issues as part of their risk management operations. It is crucial to plan ahead and engage with the topics of climate change, climate policy and climate risks early on – remember, I said we find ourselves in uncharted territory. But there are opportunities, too. In their capacity as providers of credit to the real economy, banks and savings banks can capitalise on the greening process whilst also helping to shape it.

Supervisors and regulators need to be aware that they share responsibility and need to set an example, while at the same time heeding the perimeters of their mandate. Specifically, it would be wrong to misuse regulation and supervision as a means of promoting economic development. And so I fail to see any merits in proposals to introduce a green supporting factor that weakens the focus on risk. What I do think might be worth considering, however, are disincentives for "brown" finance – but only via traditional instruments such as tax rules.

Ladies and gentlemen, I would like to use my final words at the last Bundesbank symposium during my term of office to make an urgent appeal: climate change affects us all – and the clock is ticking. The longer we wait, the higher the costs and the more dramatic the consequences will be. I would encourage you, and all of us, to take action.

With these words, I will now draw my last speech at the Bundesbank symposium to a close. Over the last four years, I have spoken at this event on the topics "What is good regulation?", "Digitalisation and what it means for the German banking sector", "European deposit insurance" and "Basel III". It was an honour to speak here alongside such respected figures as Danièle Nouy, Stefan Ingves, Sabine Lautenschläger, Felix Hufeld and Klaas Knot.

Of course, it’s too early to bid a proper farewell at this point. I do, after all, still have around seven more weeks of my tenure left to serve before I leave the Bundesbank. Although it was my own decision and long-term plan not to extend my term of office, I will be leaving with a heavy heart. I wish my successor in banking supervision all the very best and will always be on hand to offer help and advice if they so wish. There will always be a special place in my heart for the German banking industry, where I have spent 33 years of my career since my time as a banking apprentice.

As a departing member of the Bundesbank's Executive Board, I will not be adopting a "devil may care" attitude – and nor should we when it comes to taking care of our planet.

Thank you.