

Speech by Hanzo van Beusekom, DNB Conference on Financial Inclusion

'People are not dumb. The world is hard'

Richard Thaler, Professor of Behavioural Science and Economics at Chicago Booth School of Business, and 2017 Nobel Memorial Prize in Economic Sciences

In a previous role, I worked for as a consultant for the World Bank on the topic of Financial Inclusion. I recall a previous project in Lesotho, helping the government there design rules and regulations that would help build a sustainable and inclusive financial services market. Like many consultants I could often get stuck in the day-to-day legalistic details - meetings with central bankers, with policymakers, with experts. But I also tried my best to get outside those details – to go visit the people we were ultimately trying to help. At some point I visited a group of women who had started their own informal savings and loan community – helping each other. This informal approach enabled them to access loans in a way that wouldn't otherwise be possible. It helped them be financially included. Visiting them helped me understand the reality of people's lives and to remind me of the importance of putting them at the heart of our approach.

In this talk, I hope to convince you that simply giving people access to a bank account is not the ultimate goal of financial inclusion. Having a bank account is not enough to be financially included. We also need to ensure that financial services are designed with real humans in mind. To do that we need to understand real human behavior. Without understanding people's behaviour we cannot begin to put them at the heart of what we do. And without putting them at the heart of what we do, we face an uphill battle in providing a strong, stable and inclusive financial system to the people we serve.

I'm going to talk about three things: First, recap on what we mean when we talk about financial inclusion. Second, provide some examples of how a richer understanding of consumer behaviour can help us ensure that financial services are working in the best interests of everyone that they serve. Some of these examples are possible only through innovative products developed with ever improving technology. Third, I'm going to finish by discussing some instances where technology and innovation might not always help build an inclusive financial services market. These are important risks for us all as regulators to monitor and to act on where necessary.

What is financial inclusion?

The story I told at the beginning of this talk is just one example of financial inclusion. But if I asked you what you mean by financial inclusion, you would probably give me different examples. There is no fixed definition of financial inclusion. There is lots of material from the World Bank, The Global Partnership for Financial Inclusion, The Global Financial Inclusion Index and even from our Queen, Queen Maxima, who is the UN's Special Advocate for Inclusive Finance for Development.

Although these organizations have different perspectives, their definitions did have some common themes: Access alone is not enough to be included. Inclusion also means that products are “useful” and “affordable.” That consumers have access to products that are “convenient” and “delivered” in a “responsible” and “sustainable” way. It often also includes the ability to weather financial shocks through insurance or savings – financial resilience.

Our fellow supervisor and host for today, the DNB uses three building blocks for financial inclusion: **Access**; **education** or knowledge; and, finally, **resilience**. In the next part of my talk, I’ll use these blocks to indicate how recent developments in our understanding of consumer behaviour indicate that more needs to be done to raise the inclusion bar within the financial sector.

How does a realistic picture of human behaviour help us understand financial inclusion?

So, I’d like to think about how a more realistic picture of human behaviour can complement and enhance regulators understanding of financial inclusion, along the dimensions of access, education and resilience. But first, what is this realistic picture of human behaviour? Well, that consumers are not always rational. That they do not have limitless time and capacity to reach economically optimal decisions. That they take mental shortcuts to help them navigate the world. That they are social animals, influenced by others. And that they exist in a complex environment where small details can alter their decisions for better and for worse. As Richard Thaler, Nobel Prize winner and author of Nudge put it: “People aren’t dumb. The world is hard.”¹

Accessibility is more than just proximity to products

The first aspect I’m going to discuss is **accessibility**. Now, accessibility in the simplest sense of the word is not really an issue for most individuals in the Netherlands. According to the Global Financial Inclusion Index, 99.6% of the Dutch population have a bank account. Even going beyond the provision of basic financial services, the Dutch financial system is one of the most sophisticated in the world, going back centuries and offering a wide range of products and services to cater for a seemingly infinite number of consumer needs.

However that is not the end of the accessibility story. It is precisely **because** of the range of products and services and the complexity of everyday lives, that we have to think carefully about how products are made accessible. In a world of fully-rational, all-knowing super-humans, consumers are able to navigate complexity and are unswayed by the way in which their choices are presented.

Unfortunately, no one is superhuman and hyper rational. In practice we know that the way information and choices are presented can have a large impact on the decisions that individuals make. And so when we think about financial products, having access to those products is important. But accessing the right products at the right time is also about how those choices are framed – something called “choice architecture”.

So, some bad products are framed in such a way as to seem essential items for everyday life. Whilst some quite good products are made inaccessible or inappropriate through simple design features when the product is sold.

For example when looking at credit provided for the purchase of mobile phones, we found that a well-intentioned firm was using a pre-filled form with an estimate of the consumer’s income. This might seem like a good idea in helping the consumer to understand what information they had to provide and to perhaps speed up the process. However we were a little bit concerned that using a pre-filled income estimate acted as

¹ <http://freakonomics.com/podcast/richard-thaler/>

an anchor, defaulting consumers into an income amount that might not be correct, which would invalidate the loan agreement and at worst, lead to consumers borrowing money to purchase a phone that fundamentally could not afford.

So, with this in mind, we worked hand in hand with the firm to run a field experiment. This experiment tested - in real time and with real people making real decisions - whether the presence of the prefill changed the amount of income individuals declared.

The results were conclusive.² When shown a pre-filled amount, individuals would more often than not, stick with that amount. But a different group, who were just given a blank box to fill in, had a much more normal distribution of income and expenditures. We published this research and put out a warning to the industry not to use pre-filled boxes for loan applications. We hope this improves consumers' access not just to the loan product, but to the right loan.

This is of course important in how the market for phone credit works. But it can also apply to other borrowing decisions where anchors and defaults could be leading consumers to borrow more than they can afford. And it illustrates a much broader point that is important for regulators to grasp. The context in which consumers make decisions can have a profound impact on the quality of the products they choose. For better and for worse. Good nudges and bad. In general, firms tend to control this environment and so it is important for regulators to spot and challenge environments that could lead to bad outcomes, and advocate and push firms towards environments that enable consumers to take informed and beneficial choices.

There are many paths to knowledge

Second, **knowledge**. Clearly basic levels of numeracy and literacy are important, so that consumers can understand the basic features of products. There are many organizations in the Netherlands and overseas already encouraging financial literacy and financial education.

But research in behavioural science shows that traditional forms of financial education only gets you so far.³ And that's for good reason. We have limited cognitive capacities and imperfect memory recall. So learning something in a classroom might not always be the most effective way to help us make decisions years later when we take out our first mortgage. Or being told about how interest rates work now might not help us next week when, in the heat of the moment, we need to work out the total cost of a loan.

So what other approaches can we think of to help consumers have the right knowledge and information at the right time to make an informed choice. There are a few avenues that might help consumers. I'll mention two briefly and then discuss a third in more detail.

Firstly, we shouldn't expect consumers to always be educated, financially literate or cognitively perfect. And firms shouldn't expect it either. And so when thinking about how firms can put their clients first, they need to think about how those clients really make decisions. Not expect them to take a two day training course before they take out a mortgage.

² AFM, [Prefilling income and expenditure has large and unwanted effects on telephone credit applications: a field experiment](#), news article, March 2018.

³ https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2333898

Secondly, to help us out when our lives are busy and our memories are poor, we should consider giving just-in-time information or education. Individuals don't need to retain all knowledge at all times, but they do need help when it matters. Finding these "teachable moments" is important.

And finally, might we be able to help consumers develop simple rules of thumb or "heuristics" to help consumers make better decisions in complex environments. There are a couple of examples where such interventions have proved highly successful in randomized controlled trials in emerging economies such as Ecuador.

The "cheat sheet" on the slide was developed in 4 weeks and then implemented with a group of micro-businesses in Quito, Ecuador.⁴ The cheat-sheet provides "rules of thumb" or heuristics in 4 key areas of business. Importantly and in a similar way to the experiment we ran on the prefilled income amounts, the research compared the outcomes of people who received the cheat sheet with those who didn't. Those who received it had 7.3% higher sales and 8.2% higher profits than those who didn't. Substantial gains for a simple intervention developed with 4 weeks work.

Building resilience to weather our storms

For households, resilience means being able to weather the stormy moments in their lives – to have a financial buffer that protects them from unexpected shocks like a broken washing machine, a car accident or losing their job unexpectedly.

A rational model of human behavior would suggest that individuals will forecast the probability of shocks well, intend to save more to weather such shocks and then follow through on their intentions. However for real humans, every step in this process is difficult. Individuals may be over confident that they will not suffer such shocks. They may use the past as evidence that the future will be just the same. Or they may simply have a strong preference for spending money now, even though they may later intend to save. Even if they decide to start saving money today, small hurdles will become large barriers to action, the so called intention-action gap.

So in this environment, with this knowledge of human behavior, it seems difficult to simply tell individuals that they need to save for a rainy day. The financial services market must design products that work with the grain of real human behavior to help people develop this buffer.

There is an exciting example from the UK. In the UK, individuals are auto-enrolled into a pension. Nest Insight, the research unit set up by the pension provider Nest, is trialling a combined savings tool that allows employers to save into a liquid account alongside their illiquid pension account.⁵ The Sidecar Savings idea is intended to make saving for a rainy day easy, whilst also harnessing the existing framework that the pension system has created. NEST Insight is currently testing the idea with a number of employers to evaluate its effectiveness.

Sidecar saving is one way firms can develop products that help individuals create a savings buffer, but it's not the only way. Other examples we've seen in the market include allowing firms to use their salary in advance of

⁴ <https://medium.com/@gridimpact/a-better-way-to-improve-financial-outcomes-for-microentrepreneurs-in-developing-economies-b8586bf4d41e>

⁵ <http://www.nestinsight.org.uk/wp-content/uploads/2017/09/Liquidity-and-sidecar-savings.pdf>

their monthly salary cycle, or savings tools that automatically round-up spare change and move it into a savings account.

Will technology paradoxically lead to less inclusion?

Finally, I wanted to spend a little bit of time thinking about how regulators need to remain ever vigilant to changes in technology over the coming years. The expansion of digital, mobile and online services has increased financial inclusion in many countries. For example Go-Jek in Indonesia, Grab Financial in Malaysia and Juntos Finanzas in South America. I'm sure it will continue to be a driving force for financial inclusion around the world.

But for some countries, will an increasingly digital marketplace paradoxically lead to **more exclusion** for some? My headline response is "Possibly, but not necessarily". I want to draw on two topics – cashless payments and personal risk pricing in the insurance sector.

A cashless society?

One very obvious example of exclusion stood out to me as I visited a supermarket, close to our offices. A notice was placed largely and prominently between the doors and the entry barriers announcing that the store only took credit and debit cards. No cash!

Going cashless has clear efficiency savings for firms and can be beneficial for customers wishing to minimize their cash holdings. But it can have downsides too.

First, might digital payments and contactless payments lead people to spend more than they would? There is some evidence going back to 1996 that going cashless reduces the so called "pain of paying".⁶ Putting your thumb on the ApplePay button simply feels less salient, less tangible and less painful than handing over the equivalent in cash. Research in 2016 using fMRI scans seems to back up these claims – paying with cash triggers the same affective systems as those that are triggered when people feel pain.⁷ Although a similar study commissioned by the DNB in 2014 suggests that individuals actually get more enjoyment from spending cash.⁸ Either way, these results suggest that moving to an entirely cashless society might have some side-effects on how freely we spend money.

Second, and perhaps even more important, might a cashless society further exclude those already at the margins? On the same street where I saw that sign you will find homeless people asking tourists and locals for change. There are many things we can do to help these people, but preventing them from buying the basics using cash will almost certainly make things worse. We must not lose sight of those marginalized members of society who might not have access to plastic money. And we must work with governments and civil society to ensure that a cashless society is not an exclusive club.

Personalized pricing in insurance

A question that gets asked quite a lot is the role of personalized pricing in insurance markets, and whether this poses a risk to the traditional model and purpose of collective insurance. The AFM and DNB recently published

⁶https://www.researchgate.net/profile/Ofer_Zellermayer/publication/280711796_The_Pain_of_Paying/links/55c1d9ca08aed9dff2a52e9f/The-Pain-of-Paying.pdf

⁷ https://faculty.insead.edu/hilke-plassmann/documents/Mazar_Plassmann_et%20al%20POP_WP_under%20review.pdf

⁸ <https://www.bundesbank.de/resource/blob/710116/b40a04849544f93c7cc08af852074e12/mL/the-usage-costs-and-benefits-of-cash-2014-data.pdf#page=132>

a paper on the topic and we're confident that personalized pricing can be a good thing for the market, extending insurance to individuals who were previously underserved and making it more responsive to what consumers actually need.⁹

We also do not necessarily believe that it is unfair that groups who engage in more risky behaviours should pay more for their insurance. Even where individuals cannot influence their risky behaviours directly, taking a more data driven approach may even increase the collective nature of insurance, as firms will be able to better match individuals on a wider set of characteristics.

We continue to work with the sector on the insurance sector on the issue of AI and the collective nature of insurance – which we call solidarity. It is first and foremost the sector that has to take the lead: insurers can and must consider how the deployment of AI applications relates to solidarity. The AFM and DNB will continue to think along with the sector and ensure that improvements in technology do not lead to financial exclusion.

Conclusion

In concluding I'd like you take back to your offices in your respective countries three key messages from my talk today:

People are not dumb. Life is hard. Regulators and firms must understand humans and the lives they lead if we're to have any hope of building a sustainable and inclusive financial services market.

Technology and innovation continues to improve financial inclusion and to ensure that consumers have access to the right products at the right time, informed by timely information and education. Over time, this can help individuals build financial resilience. Regulators need to keep an eye on the context in which consumers are making choices, pushing back against evil nudges and pushing towards good nudges.

Technology can help, but we must be alert to its potential dangers, in excluding some individuals from financial services and making decisions too quick and too easy.

⁹ <https://www.afm.nl/~profmedia/files/rapporten/2019/afm-dnb-verkenning-ai-verzekeringssector.pdf?la=nl-nl>