- Thanks to IOSCO and the FCA for the chance to speak to this expert and distinguished, international audience.

- Georgina mentioned that I am both an academic and a Non-Executive Director at the FCA. I want to emphasise that I am speaking in my academic capacity and anything I say should not necessarily be taken as the views of the FCA.

- I am going to talk, this afternoon, about the role of behavioural economics in a market-based approach to regulation, as an introduction to the panel on behavioural economics which follows the coffee break.

- And I'm in particular going to aim to tease apart a little what that long phrase means: "the role of behavioural economics in a market-based approach to regulation".

Behavioural economics and markets?

We sometimes think of markets as if all players were like this …

- Starting with behavioural economics and markets…what do I mean by these?
- Well, we sometimes think of markets as if all players in those markets - whether these be suppliers, customers, issuers, investors, brokers or other intermediaries – essentially act like computers.
- That is, that they have lots of memory, tons of processing capability, and no emotions whatsoever, whether positive or negative.

Behavioural economics and markets?

We sometimes think of markets as if all players were like this …

… when in fact we may be more like this …

- In fact, though, we may be rather more like these real people.
- Like the woman in the picture, we may find it hard to think through issues, we may worry about big choices or we may worry more about losses than we gain benefit from gains.
- Or like the man, we may simply decide to just switch our brain off a little. So for example we might put off big decisions to tomorrow, rather than addressing them today. We might go for default options, and avoid making an active choice. We may use simple (but possibly wrong) rules of thumb. We may also be myopic, in terms of giving too little weight to the future, or we may be poor at judging risk.
- Moreover, and perhaps just as bad, some of us can – at least in some circumstances – also….

Behavioural economics and markets?

We sometimes think of markets as if all players were like this …

… when in fact we may be more like this …

… or think we're like this!

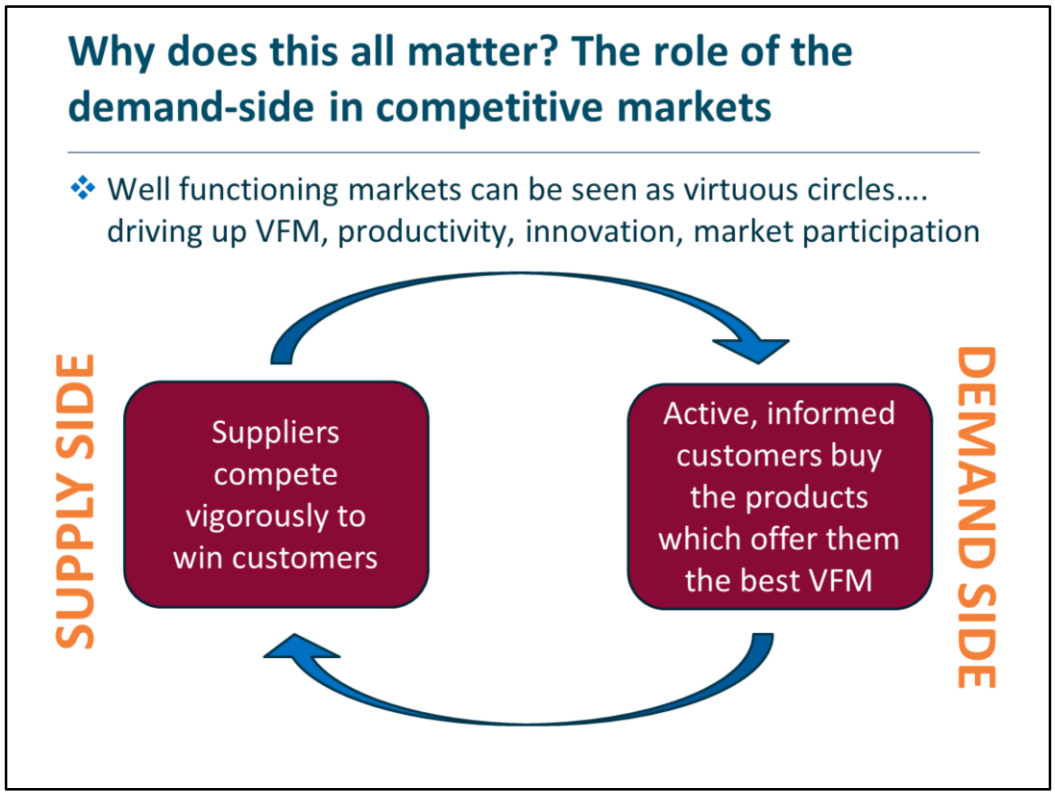
- ….think we're a bit like this…..Superman! So we may be over-confident, for example about our likelihood of being able to pay off a debt in the future, or about our ability to predict future movements in the market. Or, again like Superman, we can even be risk-loving.

- Why is all this relevant to markets? Because if real people don't behave like computers, then this will affect how markets work. Behavioural economics in this context essentially means using insights from psychology to improve our understanding of, and influence over, how markets work.

- Now, it is worth highlighting that much focus in discussing BE tends to be on consumers and investors – on the Demand side - and one can see why. However, it is becoming increasingly well recognised that firms are not simple profit-maximising computers either, and can also suffer from behavioural biases. They are only made up of humans after all. Culture matters hugely within firms, and can have a dramatic effect on behaviour. But even with a good culture, there is evidence that group decision-making, such as occurs within firms, can sometimes be worse than individual decision-making. Plus the people that succeed in business will often be those over-confident and risk-loving types, the people who identify with Superman! And this can have its own implications.

- So businesses are not immune to behavioural issues, and this can be true whether they are acting as buyers of financial services or acting as suppliers or intermediaries. The panel which follows the coffee break may touch on issues that may arise when the supply side exhibits behavioural biases. However, my focus today will be around biases on the demand side of the

market, but recognising that this demand side comprises not only individual consumers - or in financial services often investors - but also business buyers/investors



- Why does all this matter? To understand this, it is worth remembering how competitive markets are supposed to work.

- If we have a well-functioning supply side in the market, then we will have suppliers competing vigorously to win custom. If we also have a well-functioning demand side, the active, informed customers will buy the products (or services) which offer them the best value for money, and this incentivises the suppliers to offer exactly this.

- Thus, well-functioning markets can be seen as virtuous circles, which work to drive up value for money, productivity, innovation and market participation. And all of this supports all-important growth.

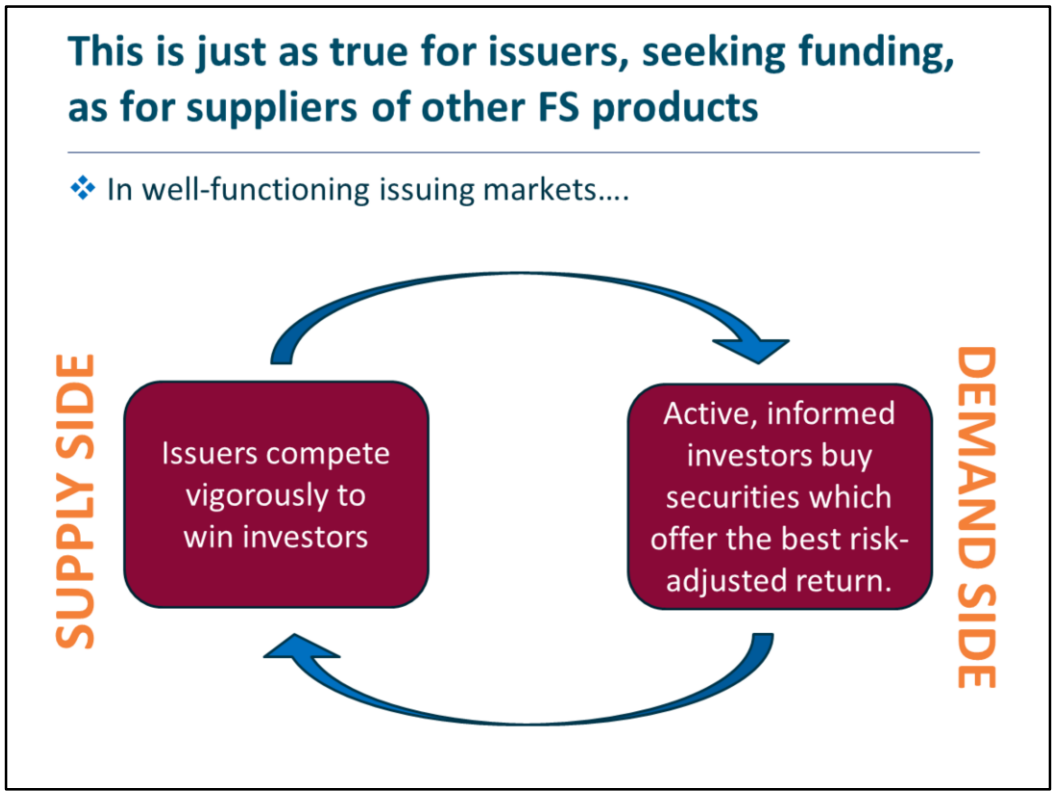
- But, and it is a big 'but', what if the demand-side doesn't work so well?

    - If customers buy things that are wrong for them, then competition will work to deliver those wrong things.

    - Worse, if customers can be won through suppliers' engaging in, say, misleading sales practices – then competition may drive firms to compete to offer the most misleading sales practices they can get away with. That's not the sort of competition that drives good outcomes – not the sort of competition that we want.

- So, getting the demand-side right, or at least understanding the biases in the demand side,

is crucial in understanding how markets really work, and how best to try and rectify them through market-based regulation.



- I have described this so far in terms of suppliers and customers.
- I also want to highlight, given this audience, that exactly the same is true in markets where the supply-side comprises issuers and the demand-side comprises investors.
- And I also want to emphasise that a well-working market doesn't only benefit the demand-side – here the investors. It is also important for the supply side – here the issuers – not least because of the market participation effect.
    - If the markets don't deliver what investors want, and crucially if investors don't trust, or have confidence, in those markets, then investors will – at least at the margin - find other things to do with their money!
- So, we have seen that the demand-side is important in markets, and why ensuring that it works well (or as well as it can) is crucial to a market-based approach to regulation. I now want to return to the role of behavioural economics,

We know about D-side info issues and costs. Behavioural biases can make things worse!

Asymmetric information	Consumers may know less about products than their suppliers.	Worsened if customers find it hard to digest info!
Search costs	It may be costly to seek out product information across suppliers.	Worsened if customers find it hard to compare!
Switching costs	Switching product or supplier can be costly.	Worsened with customer inertia or status quo bias!
Other behavioural biases	Customer can be 'myopic', lacking self-control, 'over-confident', loss averse, poor at assessing risk.	

- This slide sets out some of the key things that can go wrong in respect of the demand side in markets.

- We have all known for some time that information issues - asymmetric information between buyers and sellers and search costs - and also switching costs, can be important in limiting the effectiveness of the demand-side in markets. As a result, over recent years, regulators in financial services have had a significant focus on the left hand side of the first three rows on this slide:

    - reducing asymmetric information, in particular through disclosure,

    - reducing search costs for example through requiring information to be provided publically in standardised and easily comparable forms

    - reducing switching costs eg through banning unfairly high exit charges in contracts, or eg in the UK making it possible to switch bank account safely within 7 days.

- What then does behavioural economics add? Well, it not only worsens the situation, but it can also mean that these traditional regulatory interventions may be less effective, ineffective, or potentially even harmful.

    - First, behavioural biases can worsen the issues associated with AI. If customers find it hard to digest the info which they are given, then disclosure may not help and could even confuse them. This raises important questions about the usefulness of disclosure as a remedy, unless it is carefully designed to ensure digestibility.

    - Second, information overload and bounded calculation skills can limit the ability of customers to make reasoned comparisons across suppliers or products, even when they have be given the relevant information. This is especially true where information

is complex. Behavioural biases can also involve the use of rules of thumb – such as focussing on one simple aspect of a product - which may be misleading. Again, this may mean that disclosure remedies need to be designed carefully, or even that the choice architecture facing customers may merit regulatory scrutiny.

    - Third, behavioural factors such as inertia and status quo bias can act as additional barriers to switching, even if real switching costs have been reduced through regulation to a low level. These psychological barriers to switching can be particularly difficult to overcome, and this seems to be a real issue in UK banking for example.

- All of these though – the top three boxes on my slide - are really about difficulties in identifying facts and making rational decisions about them. Arguably more problematic still are the behavioural biases that customers may suffer which relate to their own preferences and beliefs, and which in turn mean they may not act in their own best interest. So for example, they may be myopic, over-confident, loss averse and poor at judging risk.

- To remedy such biases requires careful remedy design, which fully takes account of the real drivers of demand-side behaviour.

Demand-side interventions in practice: FCA competition remedies – actual/proposed

	General Insurance Add-ons	Cash Savings	Retirement Income
Transparency remedies	✓	✓	✓
Search/ Comparison remedies	✓	✓	✓
Switching/ unbundling remedies		✓	✓
Restrictions on sales practices	✓		✓

- What does this mean in practice for market-based regulation which seeks to ensure that the demand-side plays as strong as role as it can do in driving competitive outcomes?

- I'm going to focus on the FCA briefly, primarily because it is the authority I know best. I am sure many other authorities here will be doing very similar things.

- Since 2013, the FCA has had a new competition objective and it now carries out competition-focussed market studies. Getting the demand-side right is an important aspect of these. The FCA carries out serious empirical work to understand how the demand-side really works, and the remedies proposed to date have been specifically designed with behavioural biases in mind.

- Some of these remedies are set out on this slide in a stylised form, with 3 key market studies along the top and 4 key types of demand-side remedy down the side. Talking through these quickly, you will see that:

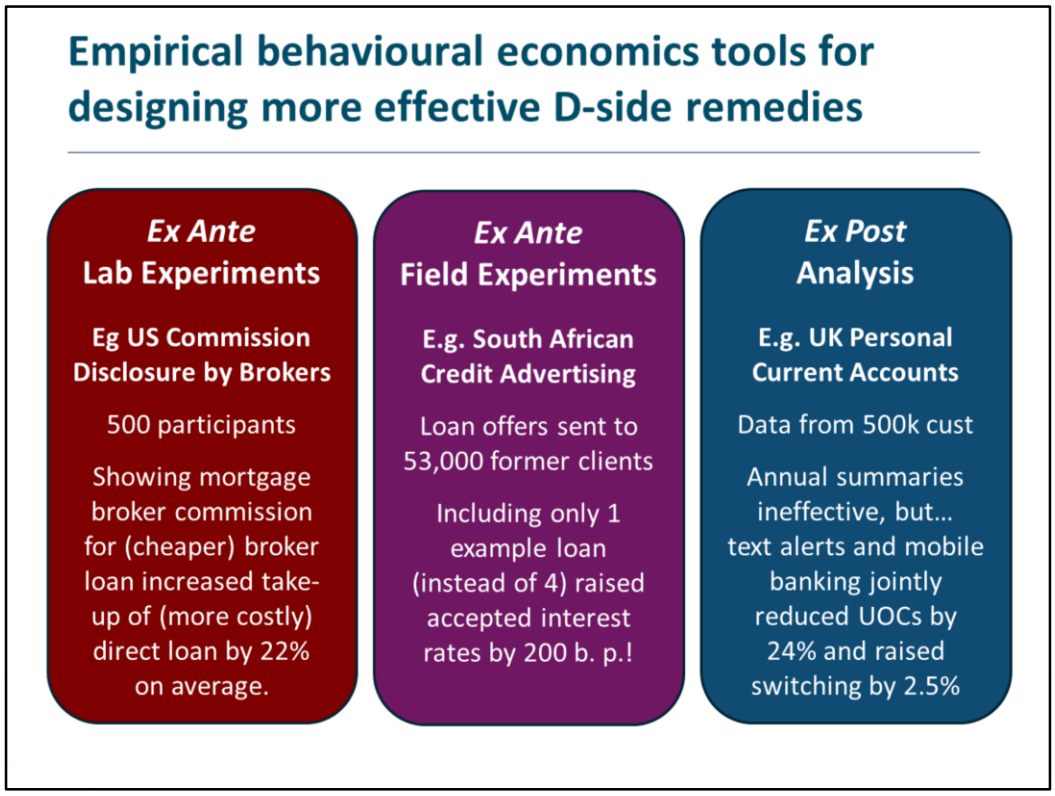
- There are transparency remedies designed to address asymmetric information issues. For example, in the general insurance add-ons study, a proposed remedy is firms should be disclose some form of comparable measure of the value of the add-on on insurance, to improve consumer understanding and facilitate choice. In the case of retirement income, there is a requirement that incumbent suppliers set out for consumers how the price of their product compares to what customers would get if they went to the open market. In both cases, the FCA is thinking carefully about, and indeed consulting on, how best to design these remedies so that they really work to improve customer choices.

- There are also remedies designed to enhance search and switching. So for example, in the cash savings market study, there are proposed remedies designed to facilitate rate comparison across providers and allow for speedier transfers, including the greater use of electronic identity checks.

- Especially interesting here is the final row of the table: the remedies which effectively involve direct restrictions around sales practices. These reflect the understanding that sales practices can unfairly exploit behavioural biases. Such restrictions can include requirements not to sell products at all, to sell them only in certain ways, or requirements which are designed to ameliorate conflicts of interest on the part of the supplier.
    - So for example, in the case of retirement income, a requirement has been placed on suppliers to ensure that their sales practices facilitate good decision-making, while in general insurance add-ons the FCA is actively banning the use of pre-ticked boxes and requiring deferred opt-in for GAP insurance.

- One view of this last form of remedy is that they essentially involve accepting the market cannot be made to work well and essentially giving up. I disagree. When designed well, they can help the market to work well to deliver good outcomes, rather than getting stuck in bad equilibria.
    - The ban on the use of pre-ticked boxes is a nice case in point. It is best if competition works to deliver genuinely good value for money, not just apparent value for money in terms of the upfront price which in fact turns out to be bad value for money when all the pre-ticked options are added onto the final price!

- The last thing I want to highlight in this brief talk is that, while it is not so hard to design these sorts of demand-side remedies in theory, what is really important is whether they are actually likely to be effective. This is where the empirical tools that have been developed in the context of behavioural economics can be hugely valuable…



- I want to mention three key categories of such empirical tools.

- First, ex ante lab experiments. Ex ante because they are best done before regulation is put in place. Lab experiments because you literally take a set of willing volunteers – in practice, often university students – put them in lab, and set them tasks. Not unlike laboratory rats really! Lab experiments can be more or less hi-tech. At their lowest-tech they are effectively just surveys. At their most high tech, the participants play complex games, and are often given real financial incentives to do well.

- The example I have cited on the slide is one of the oldest (from 2004) but still one of the more influential. The US FTC asked 500 volunteers to act as 'customers' needing a mortgage and then offered them a choice of two mortgages. In some cases, the customers were also told the commission the broker would be receiving on the cheaper of the two mortgages. Of course, all that matters in the end to the customer is the cost of the mortgage, not the commission. However, the effect of revealing this commission was to actually increase customer take-up of the more expensive mortgage by 22% on average! So on average, customers were paying more when given more information about borkers' commissions. Obviously this doesn't mean disclosure is always bad; it can often be very valuable. But does provide a warning – it can distract people away from what really matters!

- Lab experiments can generate very powerful results, but an important minus of them is that of course people in the lab may well behave rather differently to how they would in the real world. Because of this, field experiments, where possible, are often preferred. These are also known as Randomised Controlled Trials, and the key difference from the lab experiments is that the participants don't realise they are part of a study, that they are being experimented upon. They are just people 'out there', who

are made a (real) offer and respond (or not) in a completely natural way.

- The example I cite on the slide is a rather lovely South African study from 2010, in which a consumer lending company agreed to send letters to 53,000 former clients offering them loans. These letters were not the same, however. They differed in terms of the interest rates offered and also the format of the letter. The response rates to the different types of letter allowed the academics involved to calculate the impact of different letter format in terms of the average interest rate paid by respondents. This is a rich study, but one of the most interesting results was that including only 1 example loan in the letter, instead of 4, raised the average interest rate of accepted loans by 200 basis points!

- This is an excellent example of choice overload, people who got the more complicated set of facts were less likely to accept the loan unless the rate was really good. This is of course highly relevant to rules around disclosure. Perhaps less relevant to remedy design perhaps, but it is worth also noting that having a picture of a smiling woman on the letter also raised the interest rates people were willing too, by 300bp for men!

- Finally, I also want to emphasise that we can often learn a lot just by looking *ex* post in a scientific way at the results of past interventions, especially if we are lucky and different sets of consumers are treated differently, so that you observe a sort of 'natural experiment'. As an example, the FCA recently examined a couple of natural experiments that arose in UK banking. First, in a bid to improve consumer decision-making, banks have been required to produce annual summaries, but these have been rolled out gradually over time. This allowed the FCA to compare the behaviour of consumers who had received them and those who had not. Additionally, banks have introduced text alerts for consumers who are about to go overdrawn and also mobile banking, but in both cases consumers have had to sign up for these services, allowing the FCA to compare the behaviour of those who do sign up and those who don't.

- The FCA in fact finds annual summaries to have been ineffective in changing behaviour – which is sobering for those of us that argued for them! – but they find that text alerts and mobile banking jointly reduce unauthorised overdraft charges by 24% and increased switching by 2.5% - both pretty dramatic effects, with important potential implications for future remedy design! It also sows the power that innovations can bring.

- To conclude, I hope I have managed to provide a useful background to the role behavioural economics can play in a market-based approach to regulation. The panel session after the break will, I'm sure, build upon this.

- Thank you for listening.