RETAIL FINANCE AFTER THE CRISIS

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Introductory Remarks

Certainly, the financial crisis must be the point of departure for my short talk. But I also intend to share with you ideas and some learnings from recent academic work that will, as I hope, be of relevance even beyond the crisis.

Clearly, there was an immediate fall-out from the crisis on consumer credit. First comes to mind the impact that the crisis has had and still has on real economic. This affects households' willingness and ability to lever up their personal balance sheets and stretch their income gearing. The crisis has also an immediate effect on banks' willingness and ability to lend, both as their balance sheets have been impaired or as they expect tighter capital requirements or additional write-downs on their assets. To the extent that loans typically had been securitized, difficulties in reviving the securitization market also hold business down.

Securitization clearly plays a key role for unsecured consumer lending, such as credit cards or student loans, at least in countries where such forms of debt are prevalent. In fact, the learnings from this crisis notwithstanding, securitization has major economic benefits in creating, through packing and tranching, more liquid claims that are attractive to a wider range of investors.

Short Term

The immediate and short-term effects of the crisis are, however, vastly different between countries. I do not intend to provide a global macroeconomic overview, let alone an outlook. There would be little value added, as there is a large supply of such forecasts. I would like to provide instead, at this point, just a snapshot at the household level.

The US will often serve, in my talk, as the primary country of reference. This is, in my case, simply due to often better data availability and, in particular, the supply of high-level empirical research. Up-to-date surveys on American households show large effects of the crisis, albeit it seems that in contrast to previous recessions the impact is more diverse this time. One key aspect, which is also a key difference to other economies, is the large fraction of households with negative home equity. On average eleven per cent of households in a large representative panel have negative home equity. This is particularly the case for young households. They had the bad luck of putting their foot on the property ladder shortly before prices went down. In fact, an often overlooked aspect of the property crash in some countries is that of a massive intergenerational transfer from young households to older households.

And equity from homeownership plays a key role in the US not only in terms of total wealth, but also in terms of household spending. A careful recent study shows that the average homeowner extracts 25 cent of every dollar when house prices climb up. On average, this is not used to pay down other credit, but to finance consumption, including the consumption benefit from living in larger houses.

Overall, in the US the fraction of households experiencing financial distress seems to have increased drastically. In the same survey, almost one in five households was directly affected by financial distress, such as falling behind on mortgage payments, redundancy or foreclosure.

In other countries, the picture may look quite different. A case in place is Germany. The short recession has had little impact on unemployment, and – as household surveys show – little impact on household behavior. A different macroeconomic environment is one reason for this. But households' balance sheets are simply vastly different in the US and in Germany.

Though I will come back in more detail to international differences in household balance sheets, two aspects are noteworthy already now. Stock market investments play an almost negligible role for many German households, and compared to many other countries home ownership is also much less prevalent.

The current impact of the financial crisis is thus quite different across countries, both in more general economic terms and, more specifically, in terms of consumer credit. However, there will be a shared legacy that will persist, at least to some extent, across countries.

For once, households, firms and regulators have learnt lessons, albeit it will be interesting to see which side forgets fastest. Second, regulation that takes its roots or is at least concurrent with the financial crisis will be with us for some time being.

Basel

With respect to regulation, first comes to mind Basel 3, or better to say Basel 2.1. Despite the public outcry of some banks it represents only a gradual change. Calculations on what it may entail for the availability and pricing of consumer credit are premature, and the transitory impact may be quite different from the long-term impact. To see this, let us have a quick look at capital requirements. Here, I think, there is often a gross misunderstanding of the true costs of capital.

When banks have to finance their activities more based on equity and less based on debt, then this will raise banks' costs of capital, it is said. Surely, equity capital is more costly, meaning that holders of equity require a higher return, simply as it is subordinate to debt. Debt is thus less risky than equity.

But when banks are forced to rely more on equity, this makes both equity and debt less risky. In a world without taxes and without implicit guarantees by the public, banks' overall cost of financing should then not depend on how they raise finance. This is immediate, though admittedly there are complications from which I now have to abstract. However, the simple idea is that much of financing is merely about how you slice up a given cake: Some investors get sweeter, less riskier parts, but then pay a higher price; others, instead, take on more risk. But it remains a cake of a given size, irrespective of how you slice it up.

This simple insight is often forgotten in the current debate. And this simple insight makes pretty much useless many of the calculations that have been performed to gauge the impact of Basel III. Still, tougher capital requirements will have an impact. This is so for three reasons. First, debt financing is often advantageous due to taxes. Second, banks will still enjoy an implicit bail-out guarantee, which subsidizes debt financing. However, there is talk

about ironing out differences in the tax treatment of equity and debt and about imposing more discipline through tight resolution regimes. Unless these parameters have been determined, the implications of Basel two-point-one on banks' cost of refinancing will be uncertain.

In my talk, I want to focus, however, on a different regulatory legacy that the crisis will have, namely that in the area of consumer financial protection. My focus on this topic may also provide a good fit to tomorrow's introductory remarks by the German minister of consumer affairs.

Consumer Financial Protection

There is a notable shift in many jurisdictions towards tougher regulation of retail financial services, albeit different countries and different supervisors seem to have different priorities. Needless to say, in the US the focus is very much on consumer credit. There is much talk about so-called predatory lending practices, in particular, in payday lending and subprime mortgages.

Policymakers, as well as researchers, have expressed concerns about some contract features in the consumer credit markets. These features, it is thought, give rise to suboptimal contract and repayment choices. The financial crisis may then act as a catalyst for further and possibly more far reaching regulation in this respect.

Procrastination

Consumers may sometimes have a taste for immediate gratification. And they may sometimes be prone to procrastinate. Even worse, they sometimes seem to be ignorant of this tendency, and thus prone to regret their past choices. In many countries, most notably the UK and the US, there are concerns about households' low savings rates. According to some figures at least, the UK's household savings rate was even negative in the first quarter of 2008, for the first time in fifty years.

When households have a tendency to procrastinate, researchers talk about time-inconsistent preferences. They generate the following bias. Today, households may plan to start saving tomorrow. However, comes tomorrow they reverse their preferences and

consume immediately instead of saving. When people are not aware of their tendency to procrastinate, they may suffer significant welfare losses.

To illustrate this, take first a particularly simple example. Take a consumer who decides not to return a rented video today, as the immediate disutility from walking to the shop exceeds the small charge for an additional day's rent. This decision may be fully rational for a consumer who rightly expects the opportunity costs of returning the video to be higher today than tomorrow. But if the consumer naively underestimates the possibility of procrastinating tomorrow, then the whole game repeats—and he may incur a long and costly delay until he actually does return the video.

Firms that want to exploit such a bias should then offer credit contracts that are seemingly cheap when repaid quickly, but that incur large penalties when borrowers fall behind the specified front-loaded repayment schedule. Contracts are thereby designed so that borrowers who underestimate their taste for immediate gratification both pay the penalties and repay in a manner that leads to higher charges than they expected. On top of this, the same misprediction leads such non-sophisticated consumers to underestimate the true cost of credit, so that they then end up borrowing too much.

Researchers as well as policy makers are quick to point out that features of such seemingly exploitative contracts seem to prevail for many credit products. In particular, subprime mortgages frequently postulate drastically increased monthly payments shortly after the origination of the loan or a large "balloon" payment at the end of a short loan period. Failure to make these payments or refinancing could trigger significant penalties. For credit cards, low teaser rates or even a "grace period" are also frequent.

Different jurisdictions have recently acted and, for better or worse, imposed restrictions on such practices and contracts. In the US, the Federal Reserve Board has since 2008 severely restricted the use of prepayment penalties, and the US Credit CARD act of 2009 prohibits the use of interest charges for partial balances the consumer has paid off.

But regulators and policy makers in other countries should be aware that there are profound cross-country differences, which is why research conducted with US data or based on US stylized facts may often be inappropriate elsewhere. As I discuss at the end of my talk, these

differences are not only with respect to readily observable characteristics such as household income. But there are also fundamental differences in attitudes and consumer behavior.

Still, there seems to be a discernible shift in the attitude of regulators and also in the attitude of economists. Many economists have not long ago viewed the rise of households' indebtedness as a sign of a well-functioning market. Financial innovation and increasing competition have allowed credit card companies to profitably enter also small markets and to reap economies of scale. In the US, the proportion of households who hold at least one credit card has doubled over 30 years. Aggregate leverage, both in absolute terms and in relation to income, has exploded for households, at least in the US.

For a traditional economist there are two reasons why higher household debt is, at first, a sign of a well-functioning market. First, households should optimally smooth consumption over their life time, which typically requires to go into debt early. Further, as in other markets, rapidly expanding consumer credit should be, first and foremost, a sign of increasing competition that brings down prices and costs. An increase in insolvencies is then just a natural consequence of higher indebtedness in a market economy with volatile employment and income.

But this view has changed fundamentally. Previously, it was mainly sociological and not economic studies that tended to reproach households for acquiring too much debt and policymakers and banks for allowing them to do so. Now, however, policymakers and lawyers with a mission to curb household indebtedness have found an ally in behavioral economics.

Behavioral Economics

There is much current interest in the growing academic field of Behavioral Economics. This literature draws heavily on work in other fields, such as psychology and marketing. It differs from so-called mainstream economics by focusing on cases in which decisions and actions are presumed to non-marginally and consistently deviate from the predictions of what could be called the "standard decision model."

This standard model makes a host of presumptions about how individuals should process information and how their preferences should be organized and shaped. In a nutshell, while

the decision maker in the standard model is clearly not omniscient, he should, however, be fully aware of any limitations and should correctly process new information.

Research in household finance has identified different behavioral biases that lead, for instance, to inefficient trading and portfolio choices. A famous example are online brokerage accounts, where it is frequently found that male investors, but not female investors, on average forego a substantial part of their return through excessive trading, often at the wrong time. A standard explanation is overconfidence: Male investors are commonly confident that they are better than the average – which, of course, cannot be true on average.

When it comes to people's judgment whether they will be able to repay credit, is there a similar type of overconfidence at work? I am not aware of any research, though this seems promising both from an academic and from a practical perspective. Researchers in the field of behavioral economics, in particular, have recently stressed the importance of cognitive limitations and limited knowledge. Often, this research documents a pervasive lack of even basic financial knowledge, coupled with an inability to perform essential financial calculations such as taking percentages.

In studies that have been carefully administered and that can claim to be representative, sometimes up to one third of adult respondents fail to grasp the implications of inflation. That is, they fail to see in simple questions that inflation will shrink, for a given nominal interest, the bundle of goods and services that they will be able to purchase for a given amount of savings.

I wonder whether households have similar problems when they evaluate their future burden from long-term mortgages or other debt. When households have problems distinguishing nominal from real interest rates and returns, long spells of low inflation may contribute towards boosting household indebtedness.

Age

Ongoing research also shows a consistent and significant relationship between cognitive ability and errors. The lack of diversification in household portfolios can be partially attributed to this. For credit products, several recent studies suggest that when cognitive

ability, which often declines from a certain age onwards, is combined with experience, an inverted U-shape arises: Households are best at financial decision making at the age of around 45 to 50, while they make more errors at both younger and older age.

Take the use of credit card balance transfer offers. A perfectly rational individual, who also has the time to do this, would take up teaser-rate offers that allow to transfer balances on new cards at low APRs. But he would then not make new purchases with this card, as typically new debt comes at high interest rates. Will individuals behave optimally – and if not so immediately, maybe after some time or at least after they have repeatedly transferred their balances?

Research by Sumit Agarwal from the Chicago Fed and co-authors, shows that such an "Eureka" moment may never come for some individuals. The likelihood that it comes, over a certain period of time, is highest for households in the medium age bracket.

Younger and older households may also have less experience or less ability to shop around and identify attractive credit offers. There is also some evidence that older households, in particular, may get stuck with worse offers. They are also more likely, it seems, to end up paying late or over-limit fees. More research is needed here as well, in particular in light of the growing activity of authorities that are concerned with consumer protection.

Harmonization

From a European perspective, there is a danger that regulators will try to impose harmonized regulation across Europe, notwithstanding the profound differences between countries. Not long ago such an attempt was made with respect to mortgages. It was proposed to ban or at least severely limit prepayment penalties. The creation of standardized mortgages across Europe and, thereby, the creation of a large market for securitized products was surely one objective. Needless to say that this is no longer such a priority.

But also champions of consumer rights supported such regulation, arguing that surely the right to prepay early without a penalty would benefit consumers. Of course, these consumer advocates expect that such an option comes at no cost.

From an economic perspective, it is, however, unclear why households should benefit from buying, lumped into their mortgage, a massive one-way bet on inflation, in which they benefit from refinancing to a lower nominal interest rate if inflation falls.

In fact, some years ago, in an influential study for the UK's Treasury, David Miles has argued forcefully against such prepayment provisions – and for this he also appealed to consumer protection. His argument, born out by data, was that a sizeable fraction of households fail to optimally exercise their prepayment option. As more savvy customers value this option more and as they are also more willing to search for the cheapest mortgage, financial institutions design their products to the benefits of savvy customers. Less savvy customers end up, instead, paying indirectly a higher price for their mortgage, simply as they do not benefit in the same way from the prepayment option.

To my knowledge, the proposal to harmonize prepayment clauses across Europe has been shelved indefinitely. If it crops up again, there are good economic reasons to be more than skeptical about it – as well as about other fast-track regulation that will come out of this crisis.

Why are there so pronounced cross-country differences in household balance sheets? With respect to credit, a well-known study by Marco Pagano and co-authors shows that not only GDP but also institutional characteristics such as the efficiency of legal institutions provide some explanation. From this perspective, consumer credit can expand more in countries with creditor-friendly personal bankruptcy laws and efficient courts. In what remains of my time I want to look, instead, at soft determinants, relating to households' attitudes.

I firstly report on some very recent studies that should be of particular relevance to you as they deal with credit products. Then, I will spend some time discussing households' asset side.

Soft Factors

A co-author of mine – and I will discuss shortly joint work – has looked into the repayment behavior of European households. He uses data from the European Community Household Panel that offers information also on households' difficulties in meeting various scheduled payments, such as rents, mortgages or credit installments.

The novelty of my co-author's study is that he looks at arrears at a regional level and uses as potential determinants information from the World Value Survey. This is specially designed to measure households' values and norms. He finds that, controlling for many other factors, arrears appear to be more common among households living in regions with, as he calls it, lower "social capital". These are regions where households on average have low confidence in politics and where many believe that there is corruption in local institutions, and also regions with a lower fraction of religious people.

Using survey data instead of actual arrears, a very recent study by researchers from Italy and the US suggests likewise a strong correlation between households' propensity to default and their moral attitude towards it. Earlier research suggests that, in some countries, the increase in household debt went together with a reduction in the stigma associated with ultimate default.

Households' attitude towards financial institutions has also changed over time. For the US, the fraction of people who have great confidence in the leaders of banks and other financial institutions has fallen dramatically over the last decades. Now, in 2009, only five percent report having full trust in financial institutions.

I do not know how important trust in financial institutions is for a viable credit business. After all, it could be said, it is borrowers who must be trusted, but not lenders. That being said, all the talk about irresponsible or predatory lending in some countries suggests that some aspects of trust may be relevant also in the credit business, and that volume and margins can be affected when trust in financial institutions and their agents shrinks.

Trust

I will talk now about the asset side of households' balance sheets.

In a recent paper, I have looked at how trust in financial institutions affects households' willingness to hold risky assets. We use for our empirical study data from a large European survey: The Eurobarometer survey. Households are asked whether they invest, directly or indirectly, in stock. Overall, the fraction differs widely between countries, and it is generally low, as the following figure shows. Further, both trust in financial advice and consumers' perception of consumer protection are important.

But the more important insight can be found at the right-hand side of the table. It shows that trust matters only for less educated households, while perceived consumer protection matters only for more educated households.

What is more, they are also economically significant. For instance, when a less educated household expresses trust in financial advice, then – keeping all else constant – this increases his likelihood to hold stock by four per cent. This is much, as on average only eighteen per cent of these households hold stock. Thus, trust increases the propensity to hold stock by almost one fourth.

We obtain the same findings when we split households according to their perceived complexity of financial decision making. Again, trust is only relevant for those households who believe that financial decisions are complex.

Households who perceive themselves to be in a better position to make financial decisions on their own simply do not need to rely on advice, which is why also trust is not important for them. Instead, when they take the plunge into risky investments more-or-less based on their own judgment, their perception of consumer rights is key.

As I said, this is a study in retail investment products. Possibly, advice is less important for credit products, but in some countries consumer credit may still be granted on the basis of a mutual relationship. Advice and trust may then be of importance.

Advice

My last observations now paint, however, a not-so-benign picture of this relationship. With co-authors I have carried out an in-depth analysis of the trading portfolios of customers at a German bank. We have detailed data of the various transactions and also of the bank's revenues from these transactions. These revenues mostly originate from so-called loads: These are the fees that retail investors pay up-front when they purchase mutual funds or other investment products. It comes on top of the subsequently paid management fee.

We also know which products were incentivized – that is, they were "on promotion" and customer relationship managers were encouraged to sell these products. We also have detailed survey data on client-advisor relationships. The upshot of our empirical analysis is as follows. In a nutshell, after controlling for many factors, those customers we report to

strongly rely on their adviser's recommendation end up generating much higher revenues for the bank.

This is largely due to increased trading activity. In figures, when a customer, all else equal, relies strongly on advice, then his volume of security sales and purchases is one quarter higher. This is a very large effect! In fact, we find that reliance on advice is the single most important determinant of an advised household's security trading—after, of course, the overall size of his portfolio.

Per year this leads to around 250 Euro more revenues for the bank, when customers relied on advice. Needless to say that customers who rely more on advice also end up investing more in what I called "incentivized products". Using survey data on who takes the initiative and on how frequently customers are contacted, we can further support the picture that at least in our sample retail investment products are "not bought but sold".

The bank whose data we used conducted the survey so as to improve its service to customers. In the current environment, where customers are increasingly aware of conflicts of interest and where they may also be prone to overreact, it is key for any financial institution to know what its relationship with customers entails, for both sides.

Experiment

In an ongoing study for the European Commission I look into whether people are, in general, sufficiently wary of conflicts of interest, or whether additional disclosure, say of commissions, may be warranted. Different regulators around the world experiment with various disclosure regimes.

We have conducted a large online experimental, with more than six thousand participants, across several European countries. We use incentivized experiments, and not only survey questions. There are two key findings so far, albeit we have not yet published these. Subjects in these large experiments have enormous difficulties seeing through incentive problems. They seem to fail to understand, by and large, that an adviser who is paid on commission has an incentive to induce more turnover. Only very strong "health warnings" make subjects somewhat wary of this conflict of interest.

Our second finding relates to a proposed solution to this problem, namely to forbid commissions and to require retail clients to pay upfront for advice. Clearly, such a proposal could also relate to mortgage brokers and other intermediary agents. Unfortunately, we find that almost one third of the subjects in our large experiment have a seemingly excessive aversion towards paying up-front for advice. Mandatory up-front payment for professional financial advice may then backfire.

We conjecture that this is so as such a payment results in a sure loss for the customer: He must pay even when subsequently he chooses not to make a purchase or investment. Unfortunately, I do not have time here to discuss more broadly this phenomenon of loss aversion, which has received substantial support from the literature of behavioral economics

Concluding Remarks

One objective of my talk was to bring out where future regulation as a legacy of this crisis can be expected – and what arguments, based for instance on behavioral economics, can be expected as justification for such regulation. However, as we learn more about households' financial decision-making, this may also open up new business opportunities.

For instance, one often observed puzzle in the empirical literature is that some households who have outstanding credit card debt with high interest rates have, at the same time, liquid assets. Some explain this through a cognitive process that they call "mental accounting". Providing households with tools to manage their liquidity – or more generally their balance sheets and P&L – may be advantageous not only for households. In fact, online brokerage accounts increasingly offer their customers additional services to optimize their portfolios, and they may also charge for advice.

What can be done on the credit side? Also policy makers and regulators may want to think about such innovations as a way to improve households' financial decision making. They could be an alternative to more regulation.

To conclude, I hope that I managed, in my short talk, to convey to you some insights from past and ongoing research on household finance. Future research will rely heavily on data availability, in particular when it comes to understanding cross-country differences and what these differences tell firms and policy makers.