The application of insights from behavioural and social sciences into public policy provides a unique opportunity for regulators to improve the way we regulate markets and educate investors.

It is not that influencing behaviour is a new business for regulators. As policy makers we do expect that regulation, enforcement and education activities will have an impact on investors and market participants. However, it is now clear that designing programs and initiatives grounded as much as possible in strong scientific evidence is highly desirable.

For securities regulators, the application of behavioural insights is especially relevant, as complex products and difficult financial decisions may exacerbate the negative effect of the different behavioural biases.

We know that there are different levels of experience among regulators, with developed markets with more advanced experiences, but all jurisdictions can benefit from it.

That is what I plan to explore today, sharing the CVM experience as a regulator that placed BE as a central part of its strategy to fulfil its mandates.

So, why it BE is so important to CVM?

It is because we do not only have the traditional roles of a securities regulator, we have also a legal mandate to foster the formation of savings through securities markets.

That means that our work on education has two different focuses: investor education programs; and financial literacy initiatives that target the Brazilian middle-income class.

It must be said that, in Brazil, wealthy investors are highly literate people, capable of discussing more complex subjects. Our investor education programs target their needs and could also mitigate their biases when making difficult financial decisions.

On the other side, the middle-income class has different needs; they have to save for their future. Over the last 15 years, 45 million people have moved to middle-income class in Brazil, but we still have a low savings rate (less than 17% of GDP) and it is declining.

Saving is hard. Individuals need to change their habits, resist temptation spending, control impulses and change time-preferences. There is why back in 2006 we realized that fostering savings would require a new approach.

Initially we build partnerships with capital market SROs, then we expanded the partnership to other regulators and markets in order to launch a National Strategy for Financial Education. As part of the initiative, CVM coordinated a FE in schools program that included insights from economic psychology into educational materials.

Inspired by the promising results of the schools project, we decided to further explore ways to embed behavioural insights in our policies. In 2013 we organized our first conference on BE and Investor Education, gathering together professors, experienced researchers, policy makers and market participants from around the world. As a result of the discussions held during the event, in early 2014 CVM decided to establish a Behavioural Sciences Advisory Panel, called NEC. NEC is an interdisciplinary, independent advisory committee that gathers together psychologists, neuroscientists, anthropologists, economists and other experts, that aims to help CVM to apply behavioural economic insights. It reviews our proposals for new projects, advise on scientific matters and provide guidance to our research agenda.

However, NEC is an advisory panel and will not do implementation work. In order to implement projects, in 2014, the Board of Commissioners set up a Behavioural Sciences Unit (COP) to apply behavioural and social insights into our policies. COP has multiple objectives: carry out research to improve our programs; understand investors decision making process; develop methodologies to foster savings; evaluate programs and, through surveys; give a voice to investors on how CVM is performing its public services.

That is how CVM is structured to carry out research projects and progressively embed behavioural sciences into our policies. It is a low cost approach and is based on partnerships.

Since 2014 we have completed some projects.

The first project was a study carried out at very low cost, using an existing CVM educational program, the Program TOP. The initiative focuses on university professors who teach financial market-related subjects. The program provides an overview of capital market topics during a week-long course in São Paulo, twice a year.

We wanted to find out if there were any change in the professors risk profile and knowledge as a result of the program. This was important because those professors can influence the views of their students on capital markets. We surveyed the university professors who attended the July 2015 edition of the Program and found out that:

- In spite of the high levels of financial literacy and income of the participants, average savings rate were low (below 20%) and savings account was still the most popular investment among capital market professors. We also found out that 56% of the finance professors devoted less than 4 hours a month to review current and future investments.

However, the follow up survey, after the course, found out that the program was able to change the INVESTMENT PERCEPTIONS of the professors. The Programme **improved the knowledge** of investment products, and it also generated **more interest in securities**.

The other project that we have completed in 2015 was the crowdfunding survey. Before the public notice and comment period of a proposed rule on equity crowdfunding, a questionnaire was sent out to 300 investors. The survey was designed to understand preferences and opinions of retail investors that might be useful to draft the rule.

The responses revealed a high level of interest in investing in such projects (86%), but more than 70% of investors responded that they would be willing to invest **less than US$ 2,500** and expected returns within 3 years after the first investment.

The survey provided relevant information to draft the rule, and as soon as it is published for comments, in 2016, a new survey will focus on the understanding of the proposed rule. As we partnered with the association of crowdfunding platforms, the survey will also target crowdfunding investors.

In 2016, we launched new projects that focus on public employees and on the new middle-income class. We started to offer financial education classes to the civil servants of the government of Rio de Janeiro in 2011, but recently we saw a growing interest among public employers to offer financial planning programs to their employees, because they are heavily in debt.

In order to be more effective, we partnered with the local branch of FPSB, to offer a high-quality financial planning course, and volunteered CFP's helped to design the program and delivered presentations to the participants.

CVM started the initiative in April, offering a one-week pilot program for a class of the Rio de Janeiro State firemen. In May, CVM delivered an improved version of the program for one class of Rio de Janeiro State policemen, applying, for the first time, an evaluation tool based on the Transtheoretical Model of behaviour change. TTM is a model based on studies of change that have found that people move through a series of stages when modifying behaviour. We expect that this model can help us to track change, if it happens, through the different stages.

Classes ended in June, and CVM is now sending out financial news and nudge messages to the treatment group of policemen. The follow-up evaluation will be held in August.

The project was also offered to the Brazilian Navy. We were luck to partner with the Navy welfare team, a group of psychologists and social workers that will help to improve the design of the program. Thursday, this week, a workshop with 50 military personnel will pre-test and refine the design, and an expanded two month program will be launched in September 2016.

Finally, I would like to share with you that CVM partnered with the Catholic University of Rio de Janeiro to design a program to foster savings and promote the financial wellbeing of middle-income class families. A special attention was devoted to design the tools that might increase the participation of the families in the program. Since January 2016, a group of professors from the Departments of Economics, Psychology and Design have being working together to design the project.

The discussions in focus groups with families provided useful information on how they manage their financial lives and insights on possible approaches that will be tested in the pilot project. After the evaluation, the program will be expanded to other cities and adapted to local realities, when relevant.

Finally, I would like to point out to few takeaways:

- A high quality scientific advice is desirable, so a scientific panel might be a low cost but effective approach;
- Partnerships are key to develop interventions; Navy welfare team will work hard on the research part of the project.
- When we managed to find resources to carry out a large research project, we decided to partner with a University and pushed the different departments to work together, in a truly interdisciplinary approach.