The New Frontiers of Digital Finance
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Thank you, Verena, and all to be here in Consob. I will go through my brief notes from an NCA standpoint, in view to facilitate further debate. I have three main points to make:
1. A foreword (Where we are).
2. What are the issues at stake.
3. What we can do.

1. Foreword. Where are we? The given context.

Let me start with a few words on the current key market trends in digital transformation. As underlined also by other distinguished panelists, the new norm is cloud computing with big data analysis and appliances.

These bring new business models in capital markets, which means:

- Rapid deployment of AI/ML systems (not only in payment services but also in asset management, Robo-advice, and HFTs),
- ICT dependence and fragmentation of the value chain,
- Platformization of finance and data economy.

Business models of digital platforms are typically based on two-sided network externalities:

- platforms perform an intermediary function, bringing participants together: the more participants,
- the greater the value creation.

Nowadays, centralized platforms coexist with decentralized platforms thanks to blockchain and decentralized finance.

Prominent on the supply side is the offer of new types of complex and bundled (client-specific) services and products.

On the demand side the new "average" investor is less readable through the traditional lenses of economic fundamentals because of the use of AI/ML in trading algorithms and market sentiment analysis; and because of gamification (no value rewards) and the role of fin-influencers. Also, the new investor may be motivated by non-financial purposes (e.g. sustainability) and is connected through social media; this means that she is capable to coordinate and build campaigns - we all well remember the Gamestop case - and she is accustomed not to paying for services.

The future is going to be a path to open finance, with the prevalence of programmable and composable data-sharing systems.

2. *What is the issue at stake?*

I believe that – all in all – we (regulators, legislators, market participants, etc.) are confronted with the challenge of shaping a new concept of **Trust**: investors, operators, stakeholders, and the public in general demand an "**Augmented Trust**".

I'll briefly expand on this. Traditional trust (issuers' solvability reflected in market prices and transparency) was mainly based on quantitative data, easily and globally comparable financial information thanks to 50 years of harmonization effort (i.a. global common accounting and audit standards). This is no longer enough.
Beyond solvability and transparency, *Augmented Trust* also implies sustainability, tech reliability, and security. To start with (this is not a closed list).
But Augmented Trust is also more vulnerable, due to at least six factors:

I. Tech elements, just to give few examples, let's think about:
   - bugs in self-executing smart contracts or unexpected outcomes from algorithms;
   - biased/unreliable AI (because of low quality data, lack of explainability, herding behaviors leading to self-fulfilling predictions);
   - blockchain pseudonymity, opaque governance and related enforcement challenges.

II. Non-quantitative analysis (i.e.: qualitative elements, e.g. in assessing sustainability without any or long-standing standards);

III. Security elements (i.e. cyber resilience and data integrity);

IV. Challenges in protecting data privacy and risk of personal data exploitation;

V. Informational challenges, since non-quantitative information may be easier to exploit for ordinary information asymmetries but also for manipulation by malicious actors (individuals, corporations, State actors);

VI. Market concentration (lack of competition). Incumbents suffer several legacy issues, while the use of AI/ML and big data require major investments, affordable only by larger intermediaries. As I mentioned, digital platforms enjoy strong network externalities leading to winner-takes-all (or winner-takes-most) situations, with few big actors (tech or fin) gaining the power to "shape" the market.

In fine, these Augmented Trust vulnerabilities do apply to intermediaries and even more to critical infrastructures like trading venues/market operators.

3. *What we can do – notes for the present and the future.*

Caveat regulators! Warnung, Aufsicht! Be aware that old recipes no longer work!

I want to give just a couple of examples, but many more may apply.

I. Inducement: current distribution models (and inducements) are destined to be superseded by platformization and data economy. Why?

We have new generations of investors accustomed to quoted and unquoted services and not willing to pay for trading or advice; obviously, there is no free lunch: they simply prefer to give up their data! Intermediation applies at a different (less transparent/hidden) level (e.g.: payment for order flow). As a consequence, incumbents are no longer able to rely on traditional economic rents, given the increasing competitive pressure from tech companies and platforms.

My personal take on this: better to change before it's too late!

II. Investment research: platform economy may help increase the production of unbiased investment research and analysis. Why? Service may be offered to attract new users and increase network effects. Just look to Google Finance which already displays climate ratings by unbiased third parties. But particularly in this context competition becomes crucial to ensure pluralism and prevent market manipulation.

Here come some (8) proactive actions for our reflection and debate:

I. Leverage technology. Technology has a crucial role in delivering an Augmented Trust, made of transparency and security, e.g. by:

a. Fully exploiting the potential of DLT, AI, and IoT for financial supervision, audit, and compliance;
b. Fostering automatic, embedded compliance (programming regulatory requirements in the code of algorithms to design upfront compliant smart contracts);
c. Employing AI in risk management and identification of flaws in the code of the smart contract, in a sort of “reverse engineering”.

II. Avoid winner-takes-all (or winner-takes-most) situations. Market competition should be encouraged, e.g. by:
a. Supporting new market entries, including decentralized platforms (leaving decentralized finance to others would be a mistake), *ca va sens dire* in a regulated framework;
b. Pursuing platform interoperability and regulatory interventions to help open “closed-loop” systems;
c. Building open finance taking into account that fintech companies at the start do not possess large networks, customer bases, or funds (and the more promising may quickly be taken over by BigTechs or global banks).

III. Simplify the institutional architecture and foster cooperation. Competent authorities should focus more on the interaction between vertical/sectoral rules and horizontal frameworks (e.g. GDPR, AI regulation, Data Act, Digital market act, digital service act, AML, cybersecurity). There is a need for:
a. Cross-sector collaboration taking place on an ordinary basis (need to work more closely with AML, competition, cyber, and data protection authorities, at a minimum within the EU);
b. Strengthening cross-sectoral cooperation at an international level, especially across G-7 countries given today’s geopolitical context.

IV. Modernize the regulatory framework to bridge the gap with other more developed and attractive capital markets beyond the EU. Unfortunately, the EU’s Capital Market’s Union is progressing too slowly. This has been recognized in the recent announcement by the three presidents making a call for a more ambitious CMU. The initiative is very welcome. But in parallel, the CMU should be revisited considering the digital transformation. For instance, there is a need to:

i. Improve the visibility of our issuers, maybe even through a pan-European index for SMEs, given the major role of index tracker funds;
ii. At the same time, recognize active management as an essential driver of market efficiency and price discovery.
   1. Tracker funds are price-takers: passive management enables to low-cost investment products by exploiting this free riding.
   2. Active management should be incentivized to the benefit of long-term investments in EU issuers.
iii. Avoid product arbitrage (e.g.: between Mifid and insurance products).

V. Adapt the single rulebook and enable easy compliance in the digital space by:
i. Leveraging sandboxes and other venues to promote an open dialogue with market participants;
ii. Endorsing a more activity/outcome-based functional approach;
iii. Looking at the policy objectives of the rules and allowing for their achievements in innovative ways.

This is particularly needed in MiCAR, where we should work not only on regulatory perimeters and jurisdiction but also on several brand-new issues, including the following:

- How to adapt governance rules to decentralized autonomous organizations?
- How to apply custody and segregation protections in the crypto space?
- What triggers crypto market abuses? To what extent the practice of "miners' extraction of value" is legitimate?

On the other hand, MiCAR is capable to capture to some extent DeFi and global platforms if we apply rules ensuring that substance prevails over form/labels. We should also remind ourselves that reverse solicitation is an exception, so it must be interpreted in strict terms.

More broadly, our big challenge is maintaining an open mind, without however being captured by the FOMA (fear of missing out) ourselves.

VI. Move quickly towards more convergent supervision and enforcement in the internal market. Here, ESMA's role is crucial in ensuring:
   i. A common understanding of EU rules;
   ii. Convergence in day-to-day practice and prevention of arbitrage (no options and discretions!);
   iii. Data-driven supervision;
   iv. Raising awareness.

   ESMA is going to play a fundamental role in identifying market trends and vulnerabilities and common supervisory actions.

VII. Financial education. Here again, current patterns are no longer viable.
   i. With new generations entering the investment cycle, we need to adapt to their media, social media: i.e. simplified and clear messages.
   ii. We welcome ESMA last effective warning campaigns in this vein – I believe it is an excellent example to be followed at the national level.

VIII. A last thought for you Verena…last but not least.
   i. Resources (financial and human) are (con)strained for all of us. We (all) have difficulty (or, frankly, no go) in accessing skilled and diverse STEM resources, given the competition of Big Tech in this segment of the labor market.
   ii. I do not see any possibility of a situation change without a major change of pattern. That's why I think we need to pool (human) resources at both the national and EU level.

   What about an ESMA or ESAs Innovation Academy devoted to research and training, financed by in-kind national contribution (e.g.: short-term secondments), on a PPP model with industry & academia?

   Here ESMA could play a major role in pooling knowledge with the active engagement of NCAs, for the benefit of the EU financial ecosystem.

   We stand ready to help out. Pronto.

Thank you for the attention!