

Axis 3 - Global crises, economic intelligence and new financial crimes.

Pr Patrick Boisselier (PU, Cnam ESDR3C), **Rémy Février** (MCF, HDR, Cnam, ESDR3C); **Hervé Boullanger** (Cour des Comptes)

Associated researchers: : Jean-François Gayraud(CNLRT) ; **Joel Brenner**(MIT) ; **Gilles Ténéau,Stéphane Linou**

PhD students : Carole Seeman ;Nicolas Lesaux.

This team is interested in the interactions between the emergence of global crises (health, monetary, financial, political) and the intelligence and/or regulatory tools dedicated to them. Initially, the work was developed along two lines:

The traceability of financial transactions

When faced with terrorist or criminal acts, an understanding of the financing circuits, while not solving everything, most often makes it possible to trace the culprits and/or dismantle the network responsible for criminal acts that are likely to be repeated. In some cases, the ex-ante detection of 'abnormal' financial movements can even anticipate and prevent crimes and attacks. While the advent of crypto-currencies holds great promise for financial inclusion, transaction efficiency and cost reductions (for both individuals and institutions), it is not without its risks. On the one hand, critics of these new technologies argue that these systems, most often pseudonymous, encourage criminal acts such as money laundering and illegal trafficking.

The famous example of the Silk Road website, where people could buy weapons and illegal substances online, paid for in bitcoins, is often cited. On the other hand, supporters of these crypto-currencies point out that cash is still the most widely used means of financing all kinds of prohibited activities, and that the development of certain crypto-currencies, particularly when they have objectives of total traceability and transparency, could offer many advantages in terms of reliability and security of use that should be encouraged. It is therefore this central question of how to improve the traceability of financial transactions and the detection of illicit financing, particularly in the era of crypto-currencies, that this section should study.

Mechanisms for incentives, risk control and organisational governance

Following on from the seminal article by Jensen & Meckling (1976) on the Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure, this adjacent area studies the governance of organizations and the mechanisms and incentives that need to be put in place to reduce the risks of fraud and so-called 'white-collar' crime. Although many 'best practices' in corporate governance, mostly inspired by or derived from a 'principal/agent' analytical framework, have been introduced over the last twenty years in many jurisdictions, the results are still far from perfect. The recent financial crisis has highlighted the extent to which the risks of individual fraud, collective failure (e.g. of a team or a set of risk controls), or even - and perhaps above all - the combination of the two, remain significant (e.g. the Kerviel affair, where a future position of around 50 billion euros gradually built up by a trader - well beyond the official risk limits - was eventually discovered by the bank's highest authorities, and was unwound in a hurry, resulting in a loss of almost 5 billion euros). By analysing various reports (e.g. AFEP-MEDEF, Bouton or Viénot for France) or legislation (e.g. Sarbanes-Oxley or Dodd-Frank for the United States), this research aims to study how to improve corporate governance in general, and that of financial institutions in particular. By focusing on individual incentive and sanction mechanisms (and the risks that some continue to pose), compliance and risk management procedures, and organizational architecture, this project aims to strengthen corporate security and reduce the risk of fraud (individual or collective).

The 'Global crises, economic and financial intelligence' theme is particularly interested in the dynamics of the triggering and propagation of systemic crises (epidemics, climatic phenomena, massive population movements, conflicts over the control of resources, etc.), and their impact both physically and in the cognitive sphere. Whether in terms of the environment or health, our planet is now exposed to dangers that have no equivalent in the past. Epidemics have the capacity to spread throughout the world, as shown by the Covid-19 epidemic; global warming is exposing us to increasingly frequent and violent climatic disturbances and phenomena; pollution and the depletion of natural resources are causing disease, famine and profound imbalances within natural biotopes.

It is these risks of a systemic nature that this team is interested in, attempting to identify the major risks and their consequences, and to offer both analytical tools and possible solutions. It is based on a three-pronged approach, in line with the genesis of global crises. The onset of a crisis is characterized by a deviation from the normal state of affairs in a particular area; a number of difficulties then arise, often stemming from a deeper failure in the very matrix of the system. In this context, technology can both amplify crises and facilitate progress of all kinds. To understand these global crises, we can study them in terms of the concept of emergence: new issues that were previously difficult to define involve the invention of new words (in a constructivist approach to reality), the development of new methodological tools and the construction of new paradigms.

This line of research is currently reflected in the integration of the concept of resilience into the work of institutions such as the French National Research Agency (ANR) and the European Commission (EC). Indeed, the ANR is placing its calls for projects in line with the National Recovery and Resilience Plan (PNRR). For example, the Agency is calling for the major transitions of the century, such as digital technology, to be anticipated. Moreover, as part of the EC's drive to make Europe more resilient, strategic foresight has gained in importance in Brussels since the Covid-19 crisis. The latest European report on the subject, covering the social, economic, geopolitical, ecological and digital dimensions of the crises, demonstrates both the relevance of this area and the multidisciplinary positioning of SDRT-I3C. The team working in this area favours a positive approach. While global crises put our civilization models to a severe test, they also present a number of opportunities for decision-makers. As a factor of uncertainty, they should not be synonymous with a 'strategic vacuum', but on the contrary fertilize collective thinking and encourage us to exploit the sometimes unsuspected room for manoeuvre, in order to formulate effective and novel responses based on multi-disciplinary research. This is the primary aim of this research area.

Firmly committed to a 'top-down' approach to crises, the research team favors a positive approach. Indeed, while global crises put our models of civilization to a severe test, they also present a number of opportunities for decision-makers. As a factor of uncertainty, they should not be synonymous with a 'strategic vacuum', but on the contrary fertilize collective thinking and encourage us to exploit the sometimes unsuspected room for manoeuvre, in order to formulate effective and novel responses based on multidisciplinary research. This is the primary aim of this research area.

This line of research draws on the work of the CIRERO, which is dedicated to organizational resilience, and in particular its journal *Les Cahiers Risques et Résilience*. Its 2023 issue was devoted to the societal, national and individual dimensions of resilience in the face of terrorism. In addition, a day was planned in October 2023 devoted to 'cyber-resilience': this was designed to launch a conference devoted to systemic crises and resilience in 2024.

The economic intelligence and new financial crimes dimension seeks to compare the practice of these finance professionals with academic research into criminology, cyber-threats, taxation, etc. When faced with terrorist or criminal acts, understanding the financing circuits, while not solving everything, most often makes it possible to trace the culprits and/or dismantle the network responsible for criminal acts that are likely to be repeated. In some cases, the ex-ante detection of 'abnormal' financial movements can even anticipate and prevent crimes and attacks. While the advent of crypto-currencies holds out many promises of financial inclusion, transactional efficiency and cost reductions (for both individuals and institutions), it is not without its risks. This area examines the central question of how to improve the traceability of financial transactions and the detection of illicit financing, particularly in the era of crypto-currencies. This research aims to study how to improve corporate governance in general, and that of financial institutions in particular. By focusing on individual incentive and sanction mechanisms (and the risks that some continue to pose), compliance and risk management procedures, and organizational architecture, this project aims to strengthen corporate security and reduce the risk of fraud (individual or collective). A protocol allows for training and research work with the Cour des Comptes.

Related research questions

Financial crises and market resilience

Organizational resilience of companies in crisis situations

The role of demography in systemic crises

Ideologies, origins or consequences of crises?

Pandemics and population resilience

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