A crossroad in combating and preventing financial crime

Combating and

Looking for synergetic instruments for attack and prevention

preventing financial crime

127

Antonello Biagioli and Massimo Nardo Ufficio Italinao dei Cambi, Italy

Abstract

Purpose – The paper aims to address regulators, enforcers and the academy, presenting reflections on some research-driven innovative approaches, strategies and tools in the fight against financial and economic crime, with reference to some instances of concrete application deriving from the Italian FIU's experience and know-how.

Design/methodology/approach – The paper focuses on the need for a systemic approach both in considering the problems of the regulatory/operational apparatus for combating financial crime (including evaluation issues) and in identifying solutions devised to improve such apparatus and its results. This approach cannot be detached from a methodological attitude based on synergies between the various parts involved.

Findings – In the light of such systemic approach, new perspectives and innovative ideas are put forward with reference to some major topics of the strategies for combating financial crime. These refer to themes such as measuring AML/CTF costs and benefits, bridging regulatory and professional frontiers, modelling and monitoring the status of the financial system and the behaviour therein, developing prevention tools, integrating interdisciplinary knowledge, and profiting from research.

Research limitations/implications – A systemic approach in understanding and fighting financial crime and its complex issues implies pooling together knowledge and expertise gathered under different complementary disciplines. This may provide information on the manifold sides and tinges of the phenomenon. By the same token, it is essential to take into consideration the systemic effects that specific action undertaken by the authorities may entail due to the subsequent reactions from other parts in the system.

Practical implications – Data provided by the system offer a privileged practical basis in order to model the system's structure and understand its dynamics and its reactions to endogenous and exogenous impulses.

Originality/value – The paper explores themes and issues to which the international community is becoming increasingly sensitive, and which would certainly benefit from innovative vision and approach. The ideas and solutions expressed surely need further development, test and discussion, but they are bound to become part of the most significant prospective challenges in the combat against economic and financial crime.

Keywords Finance, Crimes, Costs, Benefits, System monitoring, Knowledge management

Paper type Viewpoint

This paper is the result of the structured integration between the papers presented by the authors at the 24th Cambridge Symposium on Economic Crime, September 2006.

The authors acknowledge a special gratitude to Mr Giorgio Merlonghi for his generous and intelligent collaboration. They remain of course fully responsible of the ideas expressed in this paper and of any possible mistakes.



Journal of Financial Crime Vol. 14 No. 2, 2007 pp. 127-137 © Emerald Group Publishing Limited DOI 10.1108/13590790710742627



Raising the costs of the criminal enterprise

A significant span of time has passed since the problem of an institutional response to the threats posed by financial crime was first addressed in the USA and in the UK legislation. Such response has since been growing both in complexity and in dimension, leading to the consolidation of regulatory and institutional standards that increasingly expand world-wide in the community of nations.

As it happens, the virtual maturity reached by the system paves the way to less one-sided consideration, and contributions emerge from many parts about the possibility and requirements of measuring both its effectiveness (in terms of balance between goals and outcomes) and its efficiency (in terms of balance between benefits and costs)[1].

Costs and threats of financial crime in particular have been traditionally and widely investigated according to various viewpoints but a thorough estimation is difficult to achieve, and unavoidably based on assumptions, approximations and guesswork.

The task is made even more difficult because fighting crime is a typical example of "public good": the costs of its implementation encumber on a limited class of actors (the financial intermediaries, the surveillance authorities), while the benefits are shared by the whole community.

Costs and benefits

Measuring the costs and benefits of the fight against money laundering and the financing of crime implies being confronted with significant quantification and measurement problems, since the quantitative approach to the assessment of private goods' economic impact does not apply when it comes to public goods, as it is in this case.

As a matter of fact, costs, though difficult to measure, appear to be more explicit and sometimes easier to quantify in cardinal terms. Indeed, quantitative experiments have repeatedly been tried in the past, not always successfully.

When it comes to the benefits, though obvious in their nature, they offer large grounds for specific complexity, given the difficulty of measuring them concretely: this induces to classify benefits only according to principles of ordinal hierarchy.

Benefits' quantification poses the classical problem of the "control solution" in which one should know what the "alternative reality" would have been, so as to evaluate the actual benefits deriving from the present situation through a comparison with one or more possible alternatives and their hypothetical projections. But, as we know from economics, the "if... then..." conditional sentence is difficult to estimate.

It may be relevant to underline that also apparatus(es) and compliance may have indirect costs both for the community and the criminals, and benefits for the society as a whole. A typical instance in point is the increase in the cost of laundering money that more stringent regulation or controls can bring about. A more rigorous regulatory setting produces the obvious benefit of a reduction of the laundered volumes but, once again, overall effect is difficult to quantify.

A set of indicators

Yet, some aspects of cost/benefit analysis might be dealt with in a more approachable, innovative way.



In terms of merits' estimation, given the absence of criteria that have proven to be better appropriate, a first attempt might consist in working out different indicators for different alleged benefits. Thus, we may have a set of indicators, which, though certainly questionable, may represent a basis for a multi-dimensional analysis. Here, the major risk to be aware of, and possibly to avoid, is the hazard of building on estimations.

In graphical terms, this approach could be represented via a polygon, where the number of angles depends on the number of factors that are deemed to be significant. Relevant variables might include parameters, such as: the FATF evaluation ranking of the country, the recovered assets amounts, the financial institutions' reputation and integrity level, the number of suspected cases and values, and the size of grey economy. Alternatively or additionally, other elements can be taken into account. The importance of each factor determines each vertex's distance from the centre of the polygon. Thus, depending on the allotment of weights to each element, a different picture can be drawn, showing potential imbalances and the consequent areas for further action (Figure 1).

Once again, the challenge is identifying appropriate criteria and related indicators. Synergies between different disciplinary approaches and a systemic vision are essential[2]. Forums should be promoted at the widest level, since consensus is vital.

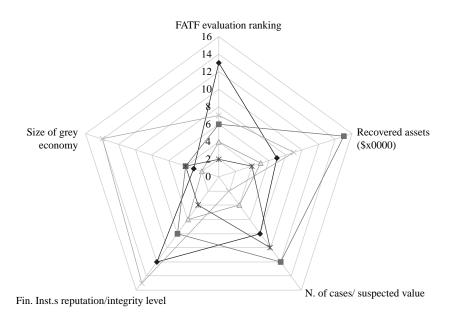


 Figure 1.



JFC 14,2

130

Bridging the frontier

The money-laundering phenomenon has an intrinsically transnational relevance and many of the efforts made so far have gone in the direction of defining platforms that be mutually agreed among different states. The European legislation is a typical instance in point: the so-called Third Anti Money Laundering Directive consolidates and widens the measures for the fight and prevention of money laundering, restating and partially reforming approaches, definitions, addressees and, most important, shifting the focus of AML/CTF compliance from a rule-based to a risk-based approach.

At a systemic level, the transnationality of phenomena keeps posing problems concerning the identification and contingent removal of "borders" and "frontiers" in terms of:

- application of the law;
- · jurisdiction;
- · management of information (access, treatment, use); and
- professional continuity of the different institutional actors involved.

The latter two aspects are relevant also within each individual state, where rules regarding privacy regimes, the existence of different institutional roles, the concourse of diverse professions underline the difficulty to define the borders for the allotment of functions, competence, rights, faculties, tasks and responsibilities amongst different subjects.

United by the objective of combating the threat of financial crime and at the same time divided by the respective educational and professional backgrounds, bankers and law enforcement officers, lawyers and economists, experts in financial analysis and markets find themselves, when collaborating with each other, in the need of integrating their knowledge and skills, defining shared exchange platforms, in an attempt to optimize synergic paths.

Barriers, actual and potential, have here both a legal and a structural connotation.

Skills' integration vs creation of a new, integrated skill

Given the above setting, a question cannot be ignored: when trying to cope with the frontier problem, what is the optimum solution? A situation where bankers, lawyers, law enforcement officers, economists collaborate, share information and competencies – or rather a situation where such integration is a prerequisite, a sort of integrated professional mix built in, embedded in one single figure entailing expertise in all those fields?

Indeed, to overcome this difficulty two possible scenarios can be foreseen:

(1) The above-mentioned barriers might be conceived not as dividing lines, but rather as contact points, continuity and proximity segments that allow the different subjects involved to get in touch with each other, "crossing the border" to pool and share experiences and knowledge, translating them into forms and languages accessible to the subjects that dwell "beyond the frontier". In this perspective, the present professions might be stretched towards a new level of specialization, that may allow them to carry out osmotic flows of information through those contact lines and areas that, until now, have represented a restraining element and a potential obstacle;

Combating and

(2) One could imagine a dissolution of those barriers, following a path of integration that leads to merge in one single unit the excellence elements that have characterized each individual profession so far. "Bridging the frontier" might then mean investing in education, building an area of shared information and knowledge, conceiving a unified territory, not just a common platform, where all the potentialities deriving from the different disciplines, institutions, experiences might converge.

This same issue was indeed dealt with since the inception of the anti money laundering regulation. Yet, in those days the question was brought up in terms of conceptual speculation, as an intellectual – almost esoteric – challenge. Nowadays, instead, in our perception, this has become an operational need. Given the present institutional and regulatory framework, we feel a critical mass has been reached. No space is left for random developments: time is ripe for a specific reflection, in view of a concrete implementation[3].

Cost effectiveness and educational challenges

In our case, it is certainly difficult to evaluate which of these two alternatives would be better in abstract terms. An approach based on concrete, result-oriented decision-making should take into consideration also the cost-benefit structure of the two scenarios, searching for a solution based on cost-effectiveness.

As we have seen, benefits' indicators should include the increase in the cost of criminal actions brought about by changes in the regulation. How would then the cost of laundering money change depending on the adoption of one of the two above-stated alternatives? Which of them would be better able to maximize the burden for financial criminals?

The same question may be raised with reference to implementation costs. Which would the cost of implementing the two proposed hypotheses be? The idea of giving shape to new forms of expertise, characterized by an increased complexity and integration, brings to the forefront the necessity to estimate the cost of carrying out such an approach. In particular, which would the cost be for instituting and managing a sort of "excellence school" a training and educational centre specialized in the creation of new professional figures, more complete and able to tackle thoroughly the complexity of the situations under analysis? How many and what sort of (economic, financial, intellectual) resources should be conveyed towards the constitution of such newly conceived and implanted formative structures?

Seen from this angle, the educational horizons should range from the provision of an integrated, wide and effective kit of analytical instruments, to the development of innovative visions and evaluation skills. Certainly this new educational and professional approach should be founded on a holistic attitude, that allows a vision and understanding of the whole system, rather than on sectional specialization.

Surveying the system

In no field as in combating financial crime are exploration and knowledge of the system essential to guide the deeds of the reference sectoral institutions: both this research activity and its consequent findings in terms of system structure, patterns and trends do shape the authorities interventions.



As with any other sort of pathological condition, different possible phases can be identified: prevention, early diagnosis, cure, amputation.

Each one of these different phases requires its own tools and strategies, as well as proper time for implementation. Posing the emphasis on one factor, rather than on another, results in a distinct setting and, thus, in potentially diverging outcome.

Yet, all these aspects are closely interrelated and concentrating on the first step of this "action chain" does produce benefits on the following phases, in terms of knowledge, learning economies, ability to foresee events and make projections. For instance, an increased prevention permits an early diagnosis, which in turn influences positively the effectiveness and timeliness of the cure, and may circumscribe the need for final interventions by aiming at selected targets.

But, which is the right or best combination of all these components? Is there an optimal mix? Certainly, the temptation may exist to resort to the most radical actions and to concentrate on running after the crooks once they have committed their crimes, so as to recover their loot. But, paradoxically, no matter how fast we run, the crooks may always be ahead of us.

Therefore, prevention is fundamental in the strategy of countering criminal actions. In this perspective, financial investigation is the path to follow.

This impacts directly on the kind of activity public authorities should carry out:

- on the one hand, enforcing the law through investigation, seizure, confiscation;
 and
- on the other hand, studying financial patterns, assessing the cases that we come across and giving indications to economic and financial actors on how to prevent the use of the financial system for money laundering or terrorism financing purposes.

Indeed, we cannot limit our action to running after continuously changing innovative criminal behavior. We have to follow a systemic approach not only to support integrated analysis, but also to evaluate the reactions that a change would produce in the whole system, either on the criminals' side or on the regulators' side, exploring even unanticipated reactions. The problem is whether and how this is possible, and what effective "proactive" strategies/instruments we may be able to work out.

UIC is already moving in that direction. A number of experiments are being conducted in the field of innovative scrutiny methodology, streamlining the role of interdisciplinary analysis, and exploring new approaches and tools.

At present, the conceptual process that is being explored and tested at UIC may be represented by the following scheme:

- the financial system reports to the UIC monthly aggregate data on the transactions performed by their clients;
- the study of these data leads to a knowledge of the system, of its inner characteristics and of phenomena potentially related to money laundering;
- the elements emerging from specific cases are distilled into operational typologies, to be later inserted in the list of potentially suspicious behaviours provided to the reporting entities;
- the reporting entities enhance and nourish the "active collaboration" mechanism, leading to better quality suspicious transactions reports.

133

Some mafia related investigations, large financial cracks, cases of abuse of the financial markets that involve the public at large have sometimes reached the first pages of the newspapers, inducing a stir in the common perception of the negative impact of financial crime on the stability and reliability of the system as a whole.

In this context, the observation of concrete transactions has shown the potential relevance of financial movements with distinctive features (for instance, incoming/outgoing wire transfers involving off-shore centres, large investments in specific financial products, relevant one-shot transactions, numerous qualified transactions carried out in a limited span of time). These characteristics could be subsequently distilled into a set of benchmarking elements against which other transactions might be measured and evaluated in terms of potential suspicion.

Following the action process mentioned above, these concrete cases could be considered to be examples of more general "behavioural models" and thus be used to typify such models in abstract terms. In turn, these models might be resorted to with the aim of screening information in search of similar, potentially suspicious operational patterns.

It remains to be seen how much effort must be devoted to such activities, in order to achieve a "critical mass" that may maximise the awareness and reputation effects, providing at the same time additional help for the FIU's mission and objectives.

Also in this domain, it becomes vital to reconcile different needs and competencies, examine the core variables and instruments (financial and investigative analysis, enforcement and prevention), have a unified approach to the scheme of institutional roles and responsibilities which may, as in the Italian system, be entrusted to different institutions. Again, a systemic vision appears the best (if not most viable) option to explore.

Systemic vision

The complexity and the dynamic evolution of money laundering and terrorism financing techniques increasingly require countering authorities to develop new and more sophisticated instruments of detection. As a matter of fact, one cannot think that a winning fight against financial crime may be based on sectoral interventions. Thus, as already anticipated in the previous pages, a need for a systemic approach has emerged.

A systemic approach is necessary not only to support the function of integrated analysis of the different elements and to define the overall picture, trying to combine preventive actions, a knowledge-based attitude and a quantifying effort, but also to enable the evaluation of the reactions that the change brought on in some elements will produce within the whole system. In fact a social system is a whole made of parts (individuals as well as groups and institutions) each one acting (and reacting) on the basis of their own choice.

Therefore, the value added as well as the challenge posed by this approach lie in foreseeing and anticipating:



- on the one hand, the possible reactions of the various participants in the system to a given action; and
- on the other hand, the adjustment of the system itself to localised changes, along the path to a new equilibrium.

Indeed, "once we want to intervene in a system, we must be aware that the system will spontaneously react rearranging its internal structure and procedures, and take this reaction into account. In other words, we have to work out in advance what reaction the action we are planning to implement will produce in the system – in its whole as well as in its relevant components. We have then to evaluate our action not simply according to our goals, or according to the immediate effects we expect it may produce, but according to the acceptability of the reaction we may expect from the system. Should this reaction appear unacceptable, but we feel we need to implement our action anyway, we must extend our planning to proper second-level action, able to confront such unwelcome reaction. And we have to assess also this second-level action in systemic terms, that is in terms of subsequent (acceptable) second-level reaction by the system. And so on and on, as every good cheque player might explain" (Nardo, 2006). Systemic effects are indeed the most powerful "hidden" aspect to consider when acting within a system.

Inevitably, those who are engaged in the field of prevention and fight of financial crime will have to adopt such an approach, exploring even unanticipated directions. This means not only taking into account different elements, but also avail oneself of the potential contributions coming from various (at times even apparently unrelated) disciplines. Indeed, as for the overall structure of the financial system no "map" exists so far: those who are aware of it and of the opportunities it may provide do that only by virtue of their own knowledge, experience or expertise.

The ultimate goal is to achieve a more general and systematic level of knowledge, which may allow the organisation of the existent information according to its heuristic potential, that is, in a way that allows us to use it for spotting other, even diverse, occurrences of the same scheme or of similar patterns.

In this perspective, our aims must include the attempt to maximise the positive externalities that can derive, in the fight against financial crime, from the development of solutions that allow and exploit synergies between different relevant components, disciplines, institutions. This also means venturing in a yet unknown field, where research and innovation become crucial.

Mapping the field

Also in this field, a number of experiments have been set off at UIC in the direction of innovative scrutiny methodologies, stressing the component of interdisciplinary and systemic analysis, with the aim of identifying behavioural models, system's operational maps, alarm pointers and action triggers, as well as synergies between different contributors in this area of research.

In order to better illustrate the rationale behind of this approach, let us make use of an analogy.

Let us imagine a group of smuggling experts acting on behalf of some criminal network with the aim of illegally transferring goods (drugs, weapons, humans).

What shall they do first?



They will probably be considering what elements and options they have available from the system (in this case, the geographic environment): the landscape and its structures (hills, rivers, marshes) and infrastructures (roads, bridges, havens, transport means); the position of police/custom stations, that may exert control or intervene readily; spots where they can exploit poor control or – conversely – spots where they can exploit frequent/wide traffic flows that may make control looser; and finally, necessary crossroads where they shall inevitably face risk (and they have to decide how to cope with it).

They will end up choosing a specific path and scheme of action (by opting for specific means, timing, meeting and displacement points, role players).

Similarly, let us imagine a group of experts in financial markets/transactions who are trying to transfer funds on behalf of some criminal/terrorist organisation.

What shall they do first?

Once more, they will probably be considering what elements and options they have available from the financial system: the different types of intermediaries; the different channels or transaction types; the different financial instruments (from the most sophisticated derivatives to the most traditional invoicing mispractices); the localisation of compliance checks/officers or investigation centres, that may exert control or intervene readily; spots where they can exploit poor control or – conversely – spots where they can exploit frequent/wide financial flows that may make control looser; and finally, necessary crossroads where they shall inevitably face risk (and they have to decide how to cope with it).

And again, they will end up choosing a specific path and scheme of action (by selecting specific processes, means, timing, intermediaries, countries, checkpoints).

Should authorities be in condition of bringing off a model of the system on the basis of the same information available to the criminals, they might deploy and modify more flexibly their resources and instruments. They might possibly intercept the offenders' expectable plans, or foresee, or even anticipate and influence, changes in their behaviour, so as to address investigation and display preventive action. Paradoxically, authorities are better off in this aim, because they may have much more opportunities and may rely on much deeper professional knowledge for analysing theoretical ways and means of laundering money through sophisticated techniques available in the market.

But how can we get such knowledge of all the different elements in the system and the result of integration, estimating the systemic effects, the reactions from all the parts of the system that lead to a different – often unprompted, even unwelcome – equilibrium state?

We need to integrate and properly select different types of knowledge and expertise in order to gather an understanding of:

- the structure of the system;
- the way financial firms/intermediaries work;
- · commercial/fiscal regulations;
- instruments, opportunities, professional skills available in the market; and
- overall effects.



JFC 14,2

136

What we may obtain in the end is a kind of "map" of the options offered by the system and of the joints and paths which connect the different components and may allow the criminals to surf through the system undisturbed.

Alarm pointers and action triggers

The process of detection of these key-factors, and the consequent awareness of the functioning of the system, entails an interesting by-product: the possibility of identifying sensitive points in the system.

These may include:

- structural links and connections;
- key-passages and crucial gates which the money trail will probably need to converge to in every case; and
- loopholes through which constraints can potentially be avoided or breached.

Through all this, we may work out suitable spots for new controls to be placed, targets to be addressed and removed and – last but not least – proper "indicators" to be set up in the most suitable locations, in order to get information on the status of the system.

Such indicators will offer a guide for action by functioning as warning signals, alarm pointers or action triggers at a twofold level, since:

- (1) their mere existence implies the presence of a significant risk level at that point of the system; and
- (2) indicators' (relevant) levels may point out that a critical risk threshold has been reached and that we have to set out an appropriate response strategy.

To start such an attempt, Italy's regulatory framework may offer an advantage, given the unified structure of the archives financial institutions have to set up by law.

In the Italian jurisdiction, all financial institutions have to structure their databases in exactly the same way. Transactions are filed in standardised data bases kept by each intermediary, where transactions are classified on the basis of the nature of the transactions executed, according to uniform "analytical codes" set out by UIC. Such standardised structure may allow data comparison, integration and aggregation. This system also enables UIC to cross-query all the aggregate data reported by its supervised institutions, and to gather from them a general overview of financial flows.

Once properly customised, results and methodologies developed through such tests might prove to be applicable also in different areas or sectors of a globalised financial market[4].

Different disciplines converge in offering contributions to the picture, and wider co-operation among AML-ATF institutions and advanced research centres world-wide may smooth the progress of projects of this kind. Contribution from these different disciplinary approaches and co-operation from specialised research centres are essential for such goals to be achieved. This is the reason why UIC is interested in exchanging ideas, experience and knowledge with academic and other institutional actors who are concerned with similar aims, and willing to invest in such a process of research and development.

Once again, this approach cannot be detached from a methodological attitude based on synergies between the various components involved, as well as on a systemic view



of the whole picture. But the most effective process of mapping the system and the building up of significant indicators of its status may be bound to become one of the most significant challenges of the future.

Our common commitment is in contributing to the development and diffusion of this approach and in identifying and sharing possible solutions.

Combating and preventing financial crime

Notes

- Recently, the 24th International Symposium on Economic Crime, held in Cambridge between the 4th and the 9th of September 2006, gave these issues a privileged stance for wide discussion.
- Partial help might come in this field from estimations based on bound-maximisation techniques, approaches founded on opportunity costs and shadow prices.
- 3. Recent speculations on the optimisation of proceedings and trials against financial crime and terrorism have underlined the need both for putting together different approaches and for exploiting fully the available information. As it was pointed out in the press (*The Financial Times*, 2006), the process should lead to save a very significant amount in the long term but the problem remains of the amount of resources to devote to this activity. Inevitably, these considerations induce to reflect on the costs and benefits of different courses of action.
- 4. The methodological requirements to be in place in order to "customise" such experience have formed the object of "Spotlight" a research project which UIC has been carrying out in association with the London School of Economics and a number of European enforcers, regulators and financial institutions pooled under EC aegis. The research structure and the main outcomes of the Project can be found at: www.spotlight.uk.com

References

Nardo, M. (2006), "Building synergies between theory and practice – countering financial crime on a systemic approach", *Journal of Financial Crime*, Vol. 13 No. 3, p. 296.

The Financial Times (2006), "Longer jail terms proposed in report on beating fraud", The Financial Times, 25 July.

About the authors

Antonello Biagioli is an Alternate Director-General of Ufficio Italiano dei Cambi (UIC – Italy's Financial Intelligence Unit), where he has been since 1991 the Head of the Foreign Exchange Department and of the Statistics Department. Prior to joining UIC, Mr Biagioli was in the Research Department of the Bank of Italy. He is also a member of various international bodies and committees dealing with methodological and analytical statistical matters (European Union, European Central Bank, IMF). Antonello Biagioli is the corresponding author and can be contacted at: antonello.biagioli@uic.it

Massimo Nardo is a Director of Financial Flows Analysis in the Anti-money-laundering Department of UIC, also responsible for contacts with research and academic institutions. Since, 1975, he has carried out studies and analyses concerning currency restrictions controls, organisational issues, systemic approach and anti-money-laundering, and has published a number of articles in these areas. He is also Research Advisor in joint research initiatives between UIC and some international partners (among which the LSE) aiming at a general view on innovative methodologies for combating financial crime, with particular regard to analysis of flows and modelling of behaviour.

To purchase reprints of this article please e-mail: reprints@emeraldinsight.com
Or visit our web site for further details: www.emeraldinsight.com/reprints



137

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.