ICTs and financial crime: an innocent fraud?

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Abstract: The democratizing dimension of the new information and communication technologies (ICTs) is a widely accepted proposition. Although this is repeatedly emphasized and explained by economic, political and social theories that deal with the analysis of the Information Society, a good deal of its significance has been systematically neglected. ICTs are exclusively approached either from the perspective of the globalization of knowledge or from the perspective of economic productivity. However, the democratizing role of ICTs includes an aspect that is far less treated yet more relevant: its ability to provide a greater transparency in the political, economical and social management of societies. This article describes the connection between the use of ICTs and financial crime; reports the fraud that, in the author's opinion, is being created by means of ICTs, and claims the need of a greater attention for ICTs as a tool to fight the lack of transparency and white-collar crime.

Keywords: Information and communication technologies, transparency, financial crime, clearing, and mass media.

Introduction

In a recently published work, a concise and illustrated synthesis of what may be considered indeed an intellectual will, John Kenneth Galbraith defines the present economic system as 'the economics of innocent fraud' (Galbraith, 2004). This is an economy estranged from the real world, an economy where the private sphere directs the public one (through the defense and arms industry) and where corporations work antidemocratically (the power is in the hands of those who own a minority of shares). This is also an economy in which the poor are denied access to the money they need to spend whereas the rich are granted the income they will save (according to Galbraith, this is the main effect of the tax cuts policies worldwide). And this is also an economy in which an elite of great men pretend to know what is not possible to know, the uncertainties of economic change (charging huge fees for it). In short, this is an economy which constitutes a real fraud to mankind. This fraud could be more or less 'innocent': it is sometimes an uncalculated status, taken for granted and assimilated by the majority as normal, and perpetuated with good intentions, starting by the mass media which do not condemn it; whereas at other occasions it carries an implicit and considerable burden of selfishness and malice.

According to Galbraith --- a system's critical economist from within the system ---, Enron, Arthur Andersen, and other financial scandals are the painful corroboration of the cracking of an innocence in which they used to believe ('That some [the hundreds of financial states read by Galbraith] managed to be a facade for a silent theft was something that never sprang to my mind'). And in which they never completely stopped believing. This is the reason why this fraud is still mostly 'innocent': Galbraith acknowledges the loss of a good part of this innocence but keeps his book title without a question mark.

However, from his words emanates the painful confirmation of a great disappointment. To the analysis of this disappointment this paper wants to add an element not mentioned by Galbraith and which constitutes one of the greatest scams of present times, the one which gives the name to the present age, and which defines a revolution whose true effects on our society are, for the time being, nothing more than technical or cosmetic. We refer to the fraud of an information society where the new information and communication technologies (ICTs) have been used predominantly for the sake of theft rather than being applied to fight theft itself. This article has the objective to shed light specifically on the following issue: how did new ICTs become predominantly a means and incentive for financial or white-collar crime, rather than an obstacle and a brake to it.

The account of the fraud we intend to describe will be presented in three steps. First we will see what is the presumed role of ICTs, and question whether this role is indeed fulfilled. We will then present the serious problem of financial crime in the information society, its magnitude and consequences. And we will recall already existing proofs of the empowerment that ICTs offer to fight against crime, proofs which have been, surprisingly, massively ignored. Finally we will include an assessment of the role that the mass media are playing in the whole issue.

The new information and communication technologies and its democratizing role through the increase in transparency

According to the World Bank, the ICTs sector is defined as the sum of hardware, software, and networks subsectors plus the media for retrieving, storing, processing, transmitting and presenting information (voice, data, text, images) (World Bank Group, 2002). The ICTs sector has involved a whole revolution throughout the most diverse areas of society, as has been recurrently and prolifically described previously, by a considerable number of authors during the last two decades (for example Nora and Minc, 1980; Katz, 1988; Monk, 1989; Carnoy et. al. 1993; Castells, 1997; Shapiro and Leone, 1999; Lessig, 1999; Slevin 2000; or Himanen, 2001). Nevertheless, some productive sectors have been especially affected by the idiosyncrasy of the change; amongst them are the financial sector and the mass media. Firstly, in the case of the financial services (1), we are facing the senior sector of the current globalization (as capitals initiated, thanks to computerization, the speed up of the current globalization process). Secondly, in the case of the cultural industries, to which the mass media are integrated, the impact has also been severe and manifold: extracorporative (outside the corporation, in the marketplace) and intracorparative (in routines and work practices inside the corporation), on the one hand; but also in the channel, message, production means and consumption, on the other hand.

In both cases, either in the context of the media or in the financial sector or in any other sector, the arrival of ICTs during the second half of the 20th century has been accompanied by a tremendous expectation. Their potential is enormous, whether from a material and economic or an intellectual and social point of view. This expectation is for instance articulated in World Bank studies. In a report from December 2003, the World Bank (WB) dared to put figures at the growing link between ICTs and economic growth (The World Bank, 2004). This meant and still means a double link, according to the WB: the increasing production of ICTs contributes to a growth in production, employment and export; meanwhile, the use of ICTs increases productivity, competitiveness and economic growth as well. That is, these new technologies generate wealth as an industrial sector by themselves, and they contribute at the same time to an increase in the wealth of the sectors that use them. The WB does not pinpoint whether this technological race and economic growth are the solutions to the problems of humanity (though it acknowledges that the contribution from ICTs to the economic growth of developing countries is still limited) (2). However, the WB report concludes with an interesting sentence about the positive effect of ICTs on global economic development:

> Its applications provide access to worldwide information and allow for collaboration amongst people from different continents. Greater access to information and opportunities for collaboration can create job opportunities, transfer of skills, and greater efficiency **and transparency in politics and business** (the bold is ours) (The World Bank, 2004: 23).

This is the point. New ICTs have an additional potential, which is as encouraging as it has hardly been exploited: its enormous possibilities for increasing transparency of political and economic management of social agents.

This greater management transparency could become the biggest step forward ICTs might provide to our current society. ICTs could become a democratizing instrument not only regarding the globalization of knowledge but also in the fight against fraud. More than two hundred years ago, Immanuel Kant was defining transparency (publicity) as a useful instrument to measure justice of the acting principles in his work Perpetual Peace. 'Thus the principle of incompatibility between the maxims of international law and publicity provides a clear example of the nonconformity of politics to morality (as a, science of right)', as stated in regards to the theory of law (Kant, 1795). We could apply the same principle to the economic theory: a transparent economic management is not automatically fair and right but an economic administration afraid of publicity can hardly be fair and right. New ICTs that enable a maximum of transparency can provide a check on the fairness of our systems.

However, this publicity and by implication democratizing potential of ICTs is vastly wasted. Instead, all the attention and effort is concentrated towards their more economical side, such as the ability for spurring productivity and corporative profits.

Indeed, digitalization has affected in full the nature of all productive sectors, their corporate structures, and the way people belonging to these sectors work. One of the most outstanding effects derived from that is the increasing business concentration and the increasing competition and productivity. But the question that nobody asks is: where have the potential effects of ICTs in the increase of transparency gone?

The increase in transparency in the economic management referred to by the World Bank is one of the central elements in the assumed democratizing role of ICTs. This greater transparency would have been possible by means of two factors which usually characterize the digital revolution, and a third aspect far less explained. These are:

Firstly, and this is repeated ad nauseam, the greater volume of information available in this digital era means by itself an increase in transparency (3). And this is mainly true for both public and private organizations, whose data used to be available only in a physical carrier and at one point in time, have increased the volume of information by uploading their relevant corporate information into the Internet (specially legal filings as annual reports, fiscal years statements and forms, stock info, financial and corporate history).

Secondly, and equally endorsed (3), transparency increases not only by the greater volume of available information, but also by the greater amount of agents with access to that information, restricted in the past to a few channels and target groups.

And thirdly, and vastly underestimated, the computerization of the public and private spheres that massively happened since the 1980s involved an exponential increase in the control of information. Hence in turn, the public control of the private sphere. It also greatly increased the complexity of the functioning of the information systems, but that price was worth paying, or at least it seemed right, taking into account all the benefits: for the public sector it meant a greater control of the obligations of the private sector, and for this last one, it involved a tremendous simplification and improvement of its working procedures, and most important, a considerable reduction in costs. With digitalization everything is faster and better. And everything leaves a record, even the attempts to remove this record.

To the above, numerous weak points will later be added. The increase in the amount of information becomes an oversaturation which can become disinformative; the greater availability faces a huge gap not only in the access to information but also in the knowledge required to make this access effective; and globalization hinders any control over transnational corporations. But this ICTs potential does exist, and it is in this greater transparency that its attributed important democratizing function is based. However, and that is the key point in our argument, this democratizing role constitutes now a fraud, because, in practice, the benefits of ICTs are being more used (or at least as used) to escape the democratic control than to guarantee it.

Financial crime and the lack of transparency

It is widely known that the first phase in the speeding up of world globalization during the second half of the 20th century was the globalization of capital. According to many people, that is the proper definition of globalization. For instance:

> [Globalization or internationalization] is defined as the progressive process of integration of the national economies into the world market framework. A process of liberalization of exchanges and international movements of capital; a continuation of the old progressive liberalization trends for external exchanges, abruptly interrupted at different times in history by the success of protectionist ideas (Suárez Suárez 2001:2).

What makes this possible? There are here two issues, essentially. The first one is the political will, dramatized with the arrival of conservative leaders to the government in financially stronger countries. Such leaders advocated for the need to restore free trade, which they unfailingly associated with economic prosperity (essentially Reagan in the USA and Thatcher in the UK). The second issue is the exponential growth of technological development, essentially in the context of communications and transport, experienced in the most developed countries. We can find other reasons --- such as the role of the World Trade Organization, multinationals, and the worldwide acceptance of North American culture --- but none of

these are as relevant as the previous two ones. And the first wave of globalization that the new technologies do accelerate is the one that affects the financial markets.

> Global capitalism started in the 70s. Oil producing countries joined into the Organization of the Petroleum Exporting Countries (OPEC), and raised the price of crude oil (...). These countries suddenly faced substantial commercial surplus (...). The responsibility for recycling these petrodollars laid on the Western commercial banks with the approval and unspoken help of their respective governments. The Eurodollar market was then born --- or rather, it experienced an extraordinary push ---, and with it, the first serious experiment of internationalization of the financial markets took place (Suárez Suárez 2001:8-9).

This internationalization of the financial system at such a speed and scope would have been completely impossible without new ICTs. But the greater speed, connection and data control that ICTs allowed was not exploited, paradoxically, to create a more transparent system --- essential for legal business --- but rather, to escape from the transparency itself. Indeed, the phenomenon of capital internationalization in such a way accelerated, but not initiated, in the 70s was going to experience an unprecedented splitting at the same time when a new system parallel to the legitimate one was born: tax havens.

Tax haven is the popular denomination by which the offshore financial centers are known, where 'offshore' is an euphemism for 'located in a lawless land' (or with a relaxed legal regime) (Hernández Vigueras, 2005). Tax heavens --- also born in the 70s --- peaked around the 1980's, this peak being

> associated to the suppression of legal impairments, exchange controls, and the development of telecommunications, which have intensified the international movements of financial capitals. Their growth has been fostered by the flows of digital information which allow the easy and inexpensive transfer of money and data in real time (Hernández Vigueras, 2003).

According to Ramón Tamames, a tax haven is a land with a 'tax regime that favors foreign residents and local societies with low or non-existent taxes' (Tamames, 2002). In 2000, the Organization for Economic Co-operation and Development (OECD), after years of work, identified 35 countries and territories which should be considered tax havens (OECD, 2000). This figure would increase and change later on, depending on the classifying organizations and according to a degree of permissiveness. The absolute permissiveness is found in countries such as the Bahamas, Caiman Islands, British Virgin Islands, where neither financial audits nor presentation of accounts in any public office are required, nor the communication of profits or the identification of the society's managers and/or shareholders. There, the legislation to repress transactions and laundering of money arising from crime is only recent. Less permissive tax havens are Andorra, Barbados, Jamaica or Monaco, where specifications of obtained profits, the register of social accounts in public registries and the compulsory identification of the managers, are all now required (4).

After many hindrances --- due to the opposition of many countries (5)---, at the end of the 1990s a group of strong countries within the OECD agreed that offshore territories serve essentially to tax evasion and capital laundering. In particular, investment Bank Merrill Lynch estimated in their report World Wealth Report 2002 that in 2001 one third of the world wealth was kept in tax havens; i.e. $ 8.5 trillion from a total of $ 26.2 trillion of financial assets belonging to the great world fortunes (Merrill Lynch, 2002: 2 and 11). Considering that Merrill Lynch estimates are regarded as conservative by anti-white collar crime organizations, the evolution of this phenomenon is worrying. Even more if we look at the recent past, as these estimations have been continuously increasing. Merrill Lynch calculated the capitals in offshore financial centers as $ 6 trillion in 2000 (Komisar, 2003) and other sources estimated $ 5 trillion deposits in 1998 (Pedrero 2004: 155).

The role of the banking system in this phenomenon is also clearly visible within the sector records themselves. In 2000, Merrill Lynch calculated that at least half of the $ 6 trillion located in offshore centers was placed in banks located in tax haven countries (Merrill Lynch, 2001). That is, according to the estimations of the banking system, a third of the financial assets of high net worth individuals (people with more than $1 million in financial asset wealth) can be found offshore, and banks manage at least half of them.

Financial entities have thousands of branches sited in tax havens. Most of these are not offices from unknown banks, but delegations or branches belonging to the world's main financial companies. Jean Ziegler describes the main thoroughfare of Nassau, home town to more than half of the population of Bahamas:

> The offices of hundreds of IT professionals, audit specialists, financial analysts, lawyers and notaries are located along the main street of Nassau. These professionals (...) are the foundations of this offshore haven. Amongst them there are around 300 Swiss citizens, who are mostly directors or employees from one of the thirty-four Swiss banks managing businesses for the most important and selected clients (Ziegler, 2002).

In summary, this is a problem of great dimensions mainly sustained for political reasons --- a real determination to finish with them does not exist, on the contrary, there are voices in favor (6) --- as well as technical reasons --- their existence is only possible thanks to ICTs and the lack of transparency in their use. Herbert Schiller already forecasted so a decade ago:

> Those who believe state power will be enhanced with the new information technologies and expanded information flows may be overlooking one critical point. The main, though not exclusive, beneficiaries of the new instrumentation and its product, already are the powerful global corporations. As they have done in the past, they will be the first to install and use these advanced techniques. In fact, they have been doing so for some time (Schiller, 1996:103).

> There is no doubt that financial companies are at the head of these 'powerful global corporations'.

It is possible, then, to state that new technologies have been, and still are, working in the service of the greatest possible profit operated by agents whose final objective is to evade legislations with poorly liberalized tax systems. However, to speak about difficulties in the control of capital movement, and the impossibility to control movements, transactions and intangible flows can only be an ignorance-related fickleness. Nothing is more tangible that the electrical impulse which forms the digital bit of information itself. Indeed, ICTs (essentially computing and telecommunications) which set up electronic banking transactions in the second half of the 20th century, did not subsume the banking system within the virtual shadows. Instead, they put the very key to transparency in our hands. The fact that all the transactions are conducted electronically does not mean they can be hidden from public opinion, but that they are under a greater control; an absolute control in fact. Nowadays everything remains recorded in electronic registries. Although these electronic registries can be erased, manipulated or altered, this is at the expense of leaving a footprint. Never before has a similar tool to control such complex systems been available. Therefore, fraud is anything but innocent, as will be seen next when we discuss financing.

The role of ICTs in fraud: The clearing case

It is not a paradox but common sense, that the same technology which allows parallel opaque financial systems to exist, may be the key to change this state of affairs. This is the main lesson to extract from an important investigation embodied in two books that have had hardly any impact on the public opinion: Révélations (Revelations) (2001) and La boîte noire (The Black Box) (2002). Both books are written by French researcher and journalist Denis Robert, who describes a long and dense investigation proving, amongst other things, that the weakness of the criminal financial system stems from the very strength of the system --- that is, from ICTs use. To understand this we must first talk about contemporary history of the financial systems and the meaning of clearing.

During the early 1970's, several banks established around the world decided to associate and set up an interbanking cooperative. At that time they were only a hundred (today they add up to more than two thousand) and their objective was to create a system to facilitate international banking exchanges, which would be called clearing. Denis Robert explains it in this way:

> Let's go back some decades. When an insurance agent from Chicago wanted to sell part of his company's capital to a Greek shipowner, how did he do it? He went to see his banker, let's say the Bank of New York, and confided to him the task of selling the bonds. The banker took a plane to Athens, where he was going to meet with the shipowner's banker, for instance the Greek subsidiary of the ABN AMRO Bank. Clearing allows, on one hand, to save time, and therefore, money. It is not necessary to travel. From then on, a central organization has guaranteed the happening of the exchange. The basic principle is trivial: bankers from different countries should join to create a confidence area where the banking exchange will be registered and guaranteed. Unlike the stock

exchange market, which brings together the different elements of a transaction, a clearing company is an infrastructure apparently passive. It takes care of registering and guaranteeing the modification. The bonds do not move, only the name of the owner is changed (Robert, 2001:22-23).

The clearing system, also known as 'compensation systems', pretended to bypass the minimum two weeks which the foreign buyer had to wait before the bonds arrived (for instance, a Rome bank buying IBM shares from a bank in New York, as requested by a client). It was aimed at avoiding time and money costs (the shipment had to be insured, and precious time was wasted while the bonds were physically traveling).

The first clearing society, Euroclear (7), was created in 1968 in Brussels and was founded by an American bank, Morgan Guaranty Trust Company of New York, which at the time was the biggest private bank in the world. The second clearing society appeared in 1970, called Cedel (now Clearstream) (8), as a reaction from the European or American banks who had not participated in the creation of the first clearing society.

These are, until now, the two only current transnational clearing societies. Euroclear and Clearstream allow their member institutions to exchange titles (shares, securities, and the like) (9) to balance their accounts after performing operations at their own risk or on behalf of their clients. Their success was such that all current important international transactions are now dealt through one of these two societies exclusively. A compulsory step that involves 'the almost real time recording and storing of a footprint of a transaction in codified documents' (Robert, 2001:24).

Although these are the only two clearing systems at a cross-border level in the world, clearing systems exist at the national level almost in any country. Their tasks are limited to domestic compensatory operations of capital exchange, and the amounts of money shifted around by the national societies cannot be compared at all to those of the international societies. In December 2004, Clearstrem alone claimed to be performing 250,000 transactions daily (the total number of international transactions processed by Clearstream rose to 17.2 million throughout 2004), while the value of assets held in custody on behalf of customers rose to approximately EUR 7.6 trillion (10).

In summary, since the 1970s, clearing 'has learned to make itself discretely essential' (Robert, 2001:40), and has been progressing in close association with economic liberalization. 'Clearing has contributed to the foundation of what economy and financial journalists have christened as the Global Village (much later after bankers and clearing users adopted Marshall McLuhan's term). A Village where power and information centers are interconnected' (Robert, 2001:41). Currently, there is no important international transaction that is not channeled through one of these two big companies, Euroclear and Clearstream. The clearing system has become, by mouth of an ex-official of Clearstream, 'the world's notary' (Robert, 2001:244).

Sure enough, the rulers of the clearing societies are the new world's digital notaries. Every single international or national financial transaction is registered there, and anyone trying to avoid the clearing societies risks ending up outside the world's banking system. That is, international clearing systems are the mechanisms of mutual confidence created by banks so they have a chance to play on the world's financial field. It is an organized system that has accompanied the explosion of financial markets, and here you have the big discovery by Denis Robert: clearing has superbly adjusted to the interest of some key groups.

Robert, with the help of an insider from one of the two big cross-border clearing societies, Ernest Backes, co-author of one of his books, concludes that these systems are an ideal method for money hiding and laundering, and that it is in this way how they are being used. Thanks to a perversion of the clearing systems --- states Robert --- fraud opportunities at the international level are made much easier, making them practically undetectable. But, even if undetectable and invisible for public control, they are still existing and can be prosecuted. Robert and Backes describe details for this with a wealth of evidence. They reveal how both clearing societies use the undisclosed accounts system (created for a particular legitimate use) to hide certain transactions. Transactions carried out in these undisclosed accounts represent, according to Robert and Backes, a tremendous opportunity for those seeking 'maximal discretion in the global village' and succulent profits for the clearing society. Further, they state:

> We have been able to establish that most of the accounts managed from tax havens, especially those from large European and American banks, are undisclosed accounts. We can interpret this as the search for maximum discretion, in this way, a double security lock. Not only do they create a subsidiary in a tax haven, but they also provide it with undisclosed accounts (Robert, 2001: 206-207).

In summary, both researchers claim that clearing societies, other than being used for the objectives they were intended --- to facilitate international transactions, thus providing the conditions for financial and economic globalization by the end of the 1990s --- are additionally used as a means for organized crime.

For this article, the importance of the work published by Robert and Backes does not lie in its explicit accusation but on the warning that is implicitly derived from it: that the same conditions allowing global fraud are the very ones that facilitate fighting it.

Indeed, although Clearstream and Euroclear were created to speed up the exchange of equities and to avoid the physical transfer of titles and money, this would have not been possible without the fundamental role of ICTs. Essentially, computing and telecommunications enabled the creation of clearing societies, which in turn guarantee their management. All clearing societies keep records of every single transaction performed. Even if pretending not doing so, it would be absurd, as this is their safety guarantee against their most influential clients. It is the use of this sophisticated technology that makes these societies trustworthy; it is precisely their technology that allows managing the complexity of the system and keeping it under control. Any judicial or criminal inquiry about international crime would be able to progress drastically if it would have open access to the registries of these two big societies.

ICTs are related to such a degree to the creation and maintenance of the financial world core that the main instrument of these clearing societies is itself a technology company: The Society for Worldwide Interbank Financial Telecommunication (SWIFT). SWIFT was created by the main shareholders of the two international clearing systems (a group of 239 European and North-American banks) in Belgium in 1973. Currently, it belongs to more than 3,000 banks and connects more than 7,600 financial institutions. The aim of creating SWIFT was to provide clearing societies with an instrument for extra fast transmission of cash in every currency. Nowadays, nearly all the banks in the world are connected by means of this system. SWIFT is the technology platform that links all the world's financial institutions and that is used by the two big clearing societies. According to data from the company itself (11), in 2004 the SWIFT world network transferred several billion dollars a day for the 3.5 million messages negotiated daily (which meant more than 2,000 million messages negotiated that year). And, anything can be found in the SWIFT channels, 'from a Serbian dictator's bank to that of an Iraqi chemical weapons dealer, including the investment society of a Colombian dealer or the broker company from a Panamian shipowner' (Robert, 2001:42-43).

However, the clearing societies and SWIFT are not the only link in the chain for those wanting to launder money. An accomplice entry bank that is ready to risk accepting doubtful funds must be involved. But this is not a problem thanks to tax havens. Robert goes further in stating that 'tax havens would not exist without large trading banks and without the international clearing societies belonging to these large trading banks' (Robert, 2001: 252). He adds to this that the growth of offshore systems is nearly paralleled by the growth of the clearing system:

> Nowadays, most of the literature in this subject report up to at least fifty per cent of the world financial movements as circulating through tax havens. The comparison with the increase in power of the international clearing is surprising (Robert, 2001:251).

According to this investigator:

> The dreadful couple "international clearing-banking haven" offers extra protected opacity pockets only accessible to the initiated: secret services or ministries, but mostly, banks, multinational companies, turbid companies... (Robert, 2001: 259-260) (12).

In short, ICTs enable reliable and safe interconnection of finances around the world. But this interconnection belongs to the private hands of the interconnected agents themselves, which has led to 'unsustainable diversions to the detriment of transparency in the markets' (Robert, 2001:261). The pretended self-regulation of the financial markets and the agreements amongst some large banks and multinational companies, trying to hide their benefits, has added to the substantial profits arising from managing gains related to terrorism and drug dealing. This has led to the perversion of the system which, still working for its legitimate original purpose, has suffered an illicit broadening of its uses.

But, at the same time, clearing societies offer an ideal point of view: they are the perfect vantage point over the financial markets.

A popular argument amongst politicians and economists regarding organized crime, and more specifically, financial crime, is the impossibility to control world transactions. This is the main reason why, for instance, critics of the Tobin Tax (13) consider it impossible to apply. However, the ad fundum

knowledge of the real function of financial markets leads to quite different conclusions: it is perfectly possible (and relatively easy) to accurately quantify the daily value of international financial transactions. The reason being as much technical as corporative. The most important financial transactions are cleared and recorded electronically by only two international clearing societies (the national transactions are in the corresponding national clearing societies). The reliability and accuracy of such exchanges has to be guaranteed, otherwise the system would not be safe and reliable enough to be used by its own users and clients.

Therefore, it should not be a problem to claim a tax for international transactions, to control the main financial movements in the world, or to ascertain the whereabouts of large sums of vanished money, as long as the international clearing system made its technological platform accessible to magistrates, the police, politicians and citizens. When a journalistic source speaks about an enormous volume of illegal or crime-related money that is vanished and that evades justice, what this source should rather talk about is money 'protected within the opacity' in which clearing societies work. Money is not evaded, what has been evaded are legal responsibilities. The reason is simple: clearing --- the real functioning of the markets, the technological foundation for world finances --- is an absolute unknown.

The role of the mass media and the financial and digital illiteracy

The macro- and microkeys determining the ups and downs of financial markets are a subject of continuous debate amongst financial and economic experts who try to explain the present and foresee the future for our economy. Theories are common; as are conjectures, speculations and hypotheses surrounding these theories. These are the basis of predictions considered impossible by some (Galbraith, 2004). However, nobody tackles the technical approach, the real functioning of the financial system engine.

On the contrary, the financial world is, to the collective mind, a vague, diffuse and far away scenario, where some distant agents make decisions, forecast events and give accounts for facts that most people do not understand. This majority of people though, does include those who are supposed to understand better: judges, magistrates, politicians, researchers, security bodies... Few of them have ever heard about clearing, and amongst them, even fewer understand its real functioning. And the same happens in the field of communication networks. Economics expert Jean Ziegler mentioned in one of his most critical works against the financial system the technical impossibility of controlling the identity of the capitals in constant migration, due to the easiness offered by the cyberspace (Ziegler, 2002). The digital scenario is still intangible and elusive for many.

In fact, both worlds, of finance and digital technology, suffer from the same problem: their degree of complexity requires a high level of comprehension and competence. A further step which only a few are willing to take. Therefore, we could say that there is a popular illiteracy, or if one prefers, a total lack of interest for these issues --- considered mere technical issues for the outsiders. This lack of interest and knowledge could be boosted by the financial system itself. 'In the financial community, secrecy is considered natural' states former World Bank Senior Vice President and Chief Economist Josep Stiglitz (Stiglitz, 2002). Clearing societies --- that is, the main financial institutions and the most important world corporations controlling clearing --- are not interested in anyone able to interfere in their control. For the reasons stated in this article it can be easily deduced that such international mechanisms should be under democratic control.

However, this democratic control fails, in the private sphere but also in the public one. Not only the mass media fail to provide transparency to the finances-technology pair but, occasionally, the media even increase confusion. This, if not appearing as if media were aimed at serving interests unrelated to democratic principles. The research on clearing from Denis Robert mentioned above, is a good example to verify this statement. European coverage of the works where this significant investigation was made public has been extremely disappointing. In France, during the fortnight following the publication of the first text, Révélations, the non-financial and reference press, which presumably should have shown more interest in the serious accusations made by Robert, showed instead an enormous lack of enthusiasm and even apprehension. Some selected examples follow:

--- In France: Le Monde published several negative articles about Robert's text, and Libération labeled it as 'controversial'. The critical press such as Canard Enchaîné or Le Monde Diplomatique expressed no opinion.

--- In Spain: Some relevant newspapers, such as El País or El Mundo, would hardly dedicate a short article to the book. El País mostly pinpointed possible contradictions and mistakes found in the book.

--- In Germany: Stern voided a dossier already prepared on the issue.

--- In Luxembourg: Letzebuerger Land and Tageblatt directly condemned the investigation.

--- In the UK: No important newspaper echoed the publication of these two books.

Denis Robert writes in La boîte noire that, for most of these media and others he does not mention, the interest that his writings awoke amongst journalists was far superior to what was finally published. He suggests herewith, even accusing, that the two clearing societies had exerted a considerable pressure over the companies that own these mass media.

In spite of this, the publication of Robert's research got to unchain an investigation against Clearstream in Luxembourg (home country to this society). However, Luxembourg authorities closed this investigation three years later, in November 2004, pleading lack of proof in showing that Clearstream was laundering money. Actually, Robert's investigation does not claim directly that both clearing societies launder money, but that they conceal money (which can then be used for laundering). Yet it would be Robert himself who would be sued for libel, as would be the French newspaper Le Figaro (in both instances, however, all financial demands of Clearstream were rejected by the judges).

All of this happened amongst the biggest confusion. No significant news media was able to explain plainly what was happening, while press releases from the clearing societies made their way through the most noteworthy financial and non-financial newspapers. Journalism failed spectacularly in all its functions: commitment to the truth, loyalty to the citizens, need for verification, independence from the news sources, independent monitor of power, its role as a public forum offering voice to the voiceless, the obligation to respect journalists' individual values... (14) Everything indicates that many European journalists understood the seriousness of Robert's accusation perfectly but they were not able to freely transfer this onto their media.

In any case, this event was not successful in bringing what was really important to the frontline. That was:

1. Most of what ICTs are used for does not involve helping society or democracy; instead, ICTs are mostly directed to fulfill selfish interests of a few;

2. What is more, we can consider ICTs as the main instrument available for financial crime and international crime;

3. And last but not least, the fight against financial and organized crime is not an unattainable goal: one only needs to keep their technological centers --- that is, the clearing systems --- under democratic control.

Conclusions

In summary, it is necessary to exploit the democratic and transparency dimension of ICTs. As stated before, such a controlling tool of the above-mentioned complex systems has never been available before.

Therefore, the lack of transparency is not due to the scarcity of tools, but to the lack of willpower to use them. In reality, we have a triple lack of transparency. Banking entities fail to keep the transparency principle when they hide their leading role in cases of financial crime; the mass media fail to keep transparency by not treating such failure of banking entities in depth. Furthermore the mass media are not transparent regarding a third aspect: their links and dependency with the financial power. (One may measure the significance and dependency of such links as a function of the relevance of financial-related news that are kept from the public by the mass media, or, in the best case, are incompletely reported).

We ought to redirect the objectives towards which we employ digital resources. New ICTs are not an aim by themselves, and their success should not be measured exclusively against profitability criteria either.

More than four centuries ago Francis Bacon wrote that *scientia potestas est*, that is: knowledge is power (Bacon, 1597). As Gordon Graham points out in an outstanding book, this is only true sometimes: Although knowledge is a honorary term, the real fact is we can have a genuine knowledge of trivial and useless things which are not worth knowing (Graham, 1999). Moreover, sometimes this worthless knowledge seems intended to keep public opinion away from relevant things. Mastering all the economic and financial jargon disseminated by universities, financial centers and the mass media may not lead to a trivial and useless knowledge but it does not secure you to master the subject. However, it is enough to keep public opinion away. Thus, the compulsory complexity of financial networks adds up to the unavoidable complexity of digital society and its networked economy, these later described in detail by sociologist Manuel Castells (1997). Both concepts, suitably intermingled, allow to fill the media and academic pulpits with theories and terminology that frighten off those who are not in the circle.

The fact that nobody wondered until now about how the world financial markets really work is amazing. As we have seen, the answer to the question is technological. And this may explain why, together with the wariness imposed by the financial field, there is a prevailing evasion from reality in our society. Both the lack of digital knowledge and the smoke launched by the financial sector are distractive and scary. But this evasion is clear and it has been condemned by renowned economists such as Galbraith, who states that such evasion is only sustained by the power and prestige of banks and bankers and by the magic linked to money (Galbraith, 2004). Only the digital illiteracy besides this fake reputation have succeeded in maintaining such a fictitious framework.

We need, thus, to reconsider what we are using the ICTs for, and reliably redirect these towards solidarity, democracy and justice. The current technological fraud is everything but innocent. This fraud claimed, for instance, thousands of civil victims in the Indian Ocean during Christmas 2004. Over the years, financial speculation and war have monopolized the main ICTs resources and ICTs investment in the world. Whenever there is a crisis or there are stock exchange scandals ruining thousands of people, or natural disasters like the Indian tsunami, the blame goes to the unforeseeable forces of nature (whether human or environmental). But for some of the countries devastated by the tsunamis, there was a margin of hours to warn the population. However, the lack of the necessary communication systems and logistics prevented making use of this time. On the contrary, as we have shown in this article, the economic and financial power centers get plenty of use of such communications and infrastructures. Now it is time that the media explains that the uses these centers of power are making of ICTs are not always legitimate. And that we can efficiently fight against this; a possibility that is kept hidden from us again and again. This constitutes the big fraud.

Notes

(1) By financial services we understand what J.K. Galbraith defines as 'the financial world, banking, financial societies, stock markets, investment funds, and financial advisory companies' (Galbraith, 2004).

(2) In fact, there is not yet a successful explanation of the 'productivity paradox' (as Nobel Prize-winning economist Robert Solow defined it in 1987) from the neoclassical economists (for example Jones, 1995a, 1995b in the USA and De Loo and Soete, 1999 in Europe). This paradox shows that although R&D efforts have risen continuously in advanced countries during the postwar periods, productivity growth has, if anything, declined. At the same time, some economists suggest that there is no paradox (Triplett, 1999). From this point of view, 'it is not so much a belief that the computer has increased productivity, but rather a belief that productivity has improved, based on other evidence' (Triplett, 1999:26). These authors contend, for instance, that what is really different about the U.S. economy in the late 1990's is the behavior of its labor market, not the ICTs question (Bosworth and Triplett, 2000).

(3) Greater volume of information and greater access to this greater volume are the main virtues almost all information society theories have pointed out firstly of the ICTs revolution since Vannevar Bush predicted in 1945 the reduction of Encyclopedia Britannica to the volume of a matchbox (Bush, 1945). The national information society projects of the 80s are all born from these beliefs (Mattelart, 2001). Derrick de

Kerckhove, for instance, uses the concept 'global transparency' in reference to the effects of this greater volume (de Kerckhove, 1995).

(4) For a detailed description of the criteria used to define a State as a tax haven, see the report published by the OECD in 1998 (OECD, 1998), generally accepted as the first step in the real campaign against tax havens by this organization.

(5) Many tax havens are dependent of non tax havens countries (Guernsey, Isle of Man and Jersey are UK crown dependent; Bermuda, Gibraltar, Anguilla and Turks and Caicos are UK overseas territories; Netherlands Antilles are part of the Netherlands; and others have links with European countries and the EEUU, as can be checked at IMF, 2000).

(6) See for instance: http://www.offshore-fox.com

(7) Euroclear web site: http://www.euroclear.com

(8) Clearstream web site: http://www.clearstream.com. Clearstream was acquired by the Deutsche Börse Group in June 2002.

(9) In particular, clearing societies practically monopolize the entire world's bond exchanges.

(10) As read in the press room of http://www.clearstream.com

(11) See http://www.swift.com/

(12) While at the beginning the clearing system was restricted to banks, it would be later authorized to industrial companies as well. For instance, Unilever, Accor Wagons-Lits, Shell and Siemens, amongst others, were included in Denis Robert's report of companies holding secret accounts in clearing societies.

(13) Ibrahim Warde is the author of this useful historic summary of the Tobin project: 'In 1972, while the world was under monetary typhoons, economist James Tobin proposed in a conference at Princeton University, to levy taxes on exchange transactions, with the aim of allowing governments to reach some autonomy in macroeconomic policy matters. The idea failed but (…) reappears periodically. In 1992 and 1993, due to the European monetary crisis, and at the end of 1994, with the collapse of the Mexican peso, the 'Tobin tax' resurfaced. In 1994, president Francois Miterrand relaunched the idea during the Social meeting in Copenhagen; in the G-7 lobbies in Halifax, in 1995, the tax was suggested again. In every occasion though, the project was quickly discarded and seemed doomed to be irremissibly labeled as 'idealist' or 'unrealistic'' (Le Monde Diplomatique, 2000;59).

Since 1995, the so-called Tobin tax has been analyzed in detail by several expert groups and has gathered a considerable support amongst politicians, NGOs and academia, however not within the economic profession. Further, in 1998, a civil organization was created aimed at promoting the implementation of the Tobin Tax: ATTAC, the international movement for the democratic control of financial markets and its institutions.

(14) The results of the Committee of Concerned Journalists (Kovach and Rosenstiel (2003:18) can be taken as an example of the functions of journalism.

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