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Abstract

Financial institutions and markets occupy a key place in the economic and social well-being of individuals, companies and societies but, if they are not managed adequately, this can have important consequences, also in ethical terms. This work is a simple and brief explanation of the ethical problems posed by institutions, markets and financial products.

Keywords: Finance; Financial markets; Financial institutions; Financial products; Banks; Funds; Ethics

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MONEY AND FINANCE: ETHICAL CONSIDERATIONS

Financial institutions and markets render vital services to the economy: they provide funds for consumption and investment, facilitate access to payment systems, offer custom-designed risk-return combinations for asset management, and manifest an outstanding capacity for innovation in products and services, among many other virtues. Finance is concerned with money, credit, assets, debt, risk, banks, investment and a variety of investment funds, but it goes further than that: "Financing an activity really is creating the architecture for reaching our goals and providing stewardship afterwards to protect and conserve the achievement of that goal" (Shiller 2012, 6). So, finance has a social and moral significance, but it also has its dark side. It is often accused of being cold and even heartless, its managers sometimes prove willing to shade the truth and take whatever advantage lies open to them, and the apparent concentration of power in major financial institutions may work to the detriment of those without enough power or wealth.

However, this is nothing new. Since ancient times, people have criticized usury (charging abusive interest on loans), worried about the power of owners of capital, and fretted over the ways in which money and wealth elicit greed and profligacy. Finance creates opportunities for huge profits, sometimes at the expense of other people, or opportunities to take excessive risks, the unraveling of which can ruin families and companies. In recent years, the criticism has become stronger, particularly after the financial crisis of 2008, not to mention the manipulation of Libor and exchange rates, bankers' collusion in money laundering and tax evasion operations, or the supposed capture of legislators and regulators by the bankers' lobby. So, there are many reasons to undertake an ethical reflection on finance.

Financial ethics is the body of principles, norms and virtues that guide the behavior of financial agents and organizations toward goals that are not only efficient and profitable but also good, fair or proper. From the economic viewpoint, people make financial decisions based primarily on their preferences and a set of constraints (resources, relative prices and costs, regulations). Ethics is not a restriction imposed from the outside but an essential component of profitable and responsible decisions. Ethical principles (honesty, integrity, justice, truthfulness, prudence, responsibility, stewardship, accountability and many others) are common to all decisions. These principles are no different from those of general ethics, but their content and application must take into account the specific circumstances of each case (Argandoña 1995b). For example, fairness is required of a judge, not to mention a sports referee, as well as an account manager with a fiduciary duty toward his or her client or a broker who sells a standard bond to an

¹ On usury, see Munro (2003).

² There are many studies of the ethical side of the recent crisis: for example, Argandoña (2016), Donaldson (2012), Graafland and van de Ven (2011), Kolb (2010) and Nielsen (2010).

unknown customer. In each of these instances fairness is required, but the contents of that virtue will be different in each type of case.³

The ethical analysis of financial decisions arises from the theories and principles of philosophical or religious ethics, but these decisions cannot be analyzed in isolation from certain exogenous variables. One of these is the set of ideas and values shared in the community, which influence people's attitudes. Many shortcomings of financial institutions and markets reflect the social environment. For example, if citizens display an individualistic and selfish character, those working in finance will show similar moral biases.

Another relevant variable when judging financial ethics is the set of theories that provide a rationale for financial practices (Mackenzie 2008). These theories share with economics the goal of efficiency, along with some basic assumptions such as a narrow conception of rationality, the identification of good with the maximization of wealth, an instrumentalist interpretation of science and an alleged ethical neutrality (Ryan et al. 2010). Financial models are considered ethically neutral, but the assumptions underlying them imply conceptions of the person and society, their motivations and behaviors, and these have ethical implications. The criticism that some theories received during the recent crisis was due not only to technical faults but also to the alleged promotion of immoral behavior from within the models (Dembinsky 2009).

In the section below we outline the ethical issues raised by modern finance. In the first part we delineate the system's legal and institutional framework. In a longer second part we consider the roles of financial intermediaries, such as banks and investment vehicles, noting particular questions that arise with specific financial instruments (such as derivatives), as well as issues related to risk. The third part broaches two practices of financial markets: speculation and high-frequency trading. In the fourth part we provide a brief introduction to some alternative models of finance.

The Legal and Institutional Framework

Financial markets and intermediaries operate within a legal and institutional framework that determines how costs, benefits and risks are shared among the parties. This framework includes external institutions such as the rule of law, property, contract legislation and a national currency established by a central bank. Along with supervisory institutions, regulations and crisis management procedures internal to each bank, this framework both underpins and creates ethical obligations.

Although legality does not imply morality, because law and ethics pursue different goals, there is nonetheless a relationship between ethics and regulation. In some instances, high ethical standards may make some regulations redundant: ethics serves as a substitute for regulation. However, it is more common for them to be complementary: ethics goes beyond the law and addresses problems that the law must not be concerned with because they involve people's conscience (including inner attitudes or values) or their personal discretion. In other cases, ethics may demand more than the law, either because there are circumstances that the law cannot consider or because there are supererogatory duties that the law should not require. Finally, there

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 $^{^{3}}$ Heath (2010) offers an excellent analysis of fairness in finance.

⁴ Davies (2001) and Kane (2014) consider ethical issues related to the system's regulatory framework.

are many examples of situations in which a regulation (or a change in regulation) would not only affect risks and returns but also promote immoral behavior.⁵

Regulations may create ethical obligations for those who are bound by them. If they are not unnecessary, arbitrary or unfair, regulations and laws must be obeyed, even if they are imperfect or impose unreasonable costs on agents. However, regulations may also create perverse incentives, moral hazards (for example, when a bank takes a greater risk because the taxpayers, and not the shareholders, will bear the burden of bailing it out in the case of a crisis) or rent-seeking opportunities (because they confer advantages on some entities at the expense of others or of all citizens).⁶

There are also ethical duties regarding the basic framework of finance, including a general duty to maintain the proper legal and regulatory framework suitable for a free and decent society. More specific obligations might include drawing up a standard concerning banks' equity or creating a deposit insurance institution. Such endeavors have ethical content insofar as they have important consequences for citizens' welfare and condition their behavior.

Money is an important component of the economic system's legal and institutional framework. The word "money" has several different meanings. It may refer to a means of payment or to income, wealth or power, or it may suggest a cause of happiness, among other meanings. Given these senses, money may be either a means or an end. In a narrow sense, it refers to *currency*, the means used to make payments and to facilitate exchange. In this sense money serves a social function: it is liquidity, universal purchasing power, a means for achieving disparate ends. As such, money is also a creator of opportunities, allowing people to exercise individual freedom and collaborate impersonally in other people's projects.

As a means of exchange, it is better to have more money than less. However, money is more than a tool: it represents wealth, power, prestige and security. Money is a motivator for many actions, at least in the sense that it represents the power to acquire things or attain a status. And in some instances, not necessarily the best, the desire for money may constitute the end in itself.

As a means of payment and a store of value, money plays a key role in people's lives, so the ethical principles of ownership should be applied to it. Moreover, money is based on trust: we accept coins, notes and deposits as money because other people also accept them. Trust in money is built on three pillars: one institutional and legal; one based on trust in banks; and another that relies on the stability of money's purchasing power.

The legal framework of money includes legislation on currency counterfeiting, public guarantees on deposits and mechanisms for preventing bank crises. Trust in banks is necessary because they play a prominent role in the money creation process. However, confidence in banks is subject to limitations. Banks keep only a very small part of their deposits in liquid form (fractional reserve banking), which sometimes makes them unable to reimburse those deposits, and they also keep only a small part of their assets as shareholders' equity, which may entail a risk of insolvency.

⁷ On the history, status and function of money, see Hülsmann (2008).

⁵ Koehn (2010) discusses the ethical and technical implications of the unintended consequences of decisions.

⁶ On rent-seeking, see Tollison (2012).

⁸ Divergent perspectives on fractional reserve banking are found in Rothbard (2008) and White (1989).

This may cause losses to depositors, blockages in the payment system and paralysis of financing mechanisms in the economy, destroying trust.

Finally, the use of money as a means of exchange is based on the expectation that its purchasing power will be stable – that is, the inflation rate will be low. Inflation causes a lot of economic and ethical damage. It leads to unfair income and wealth distribution, it is an undemocratic and unfair tax on currency, and it generates inefficiencies that may lead to a deterioration of citizens' standard of living. There has been general agreement among economists that, in the medium and long term, inflation is caused by excessive growth of the quantity of money. Controlling this process is the job of monetary policy, which is implemented by the central bank.

At its origins, money is a spontaneous, nonstate creation, as explained by Hayek (1976) and others (Lietaer and Dunne, 2013). This spontaneity is seen in many developments that have taken place in recent decades. Here we will mention only three: e-money, private and social currencies, and virtual monies.

E-monies (PayPal, Apple Pay, Google Wallet and many others) are means of payment of limited acceptance, bereft of any legal backing, and are forms of mobile money. Various types of social, community or cooperative currencies have been developed by retail associations or local governments in several countries. They often have a social purpose, such as providing credit to local companies, fostering proximity of trade and consumption or encouraging fair trade. (For example, there is the Swiss WIR that has been operating since the 1930s, the Wörgl schilling in Austria, and the Bristol Pound in England.) Digital currencies have also flourished. The best known is the Bitcoin, a virtual international currency exchanged by digital means and not backed by any government but by a person-to-person network of users.

The questions that ethics raises about these currencies are similar to those it asks about traditional currencies: What is their social function (their contribution to the life and the economy of citizens)? Do they create excessive, poorly understood risks that prove difficult to hedge against (counterfeiting, inflation or depreciation)? Are they used for permissible or ethical ends (as opposed to fraudulent or illicit purposes)? And what is the basis of the trust that underlies their use? It is not enough for a currency to fulfill a social function for it to be accepted as ethically correct.⁹

The Ethics of Financial Intermediaries

The financial system is the set of markets and institutions that make up financial activities. Its social function is to satisfy efficiently the needs of the suppliers and demanders of funds: namely, to allocate savings in profitable, controlled-risk investments; to finance consumption, production or investment projects; to provide means of payment for the economy; and to manage and control risk. The fulfillment of these tasks gives legitimacy to the system and translates into ethical responsibilities for all the agents.

There are many varieties of financial institutions, but all have some common characteristics. They all operate within a network of institutions and markets, and each receives funds from clients (creditors) and lends them to other clients (debtors), thereby incurring risk but also the potential for profit. This simple explanation allows us to identify three areas of ethical responsibility

⁹ See Angel and McCabe (2014) for a discussion of the ethical issues of the various forms of currency.

common to all institutions: duties to their customers; duties to other actors; and internal duties of governance (management and control).

The main principle in the relationships of banks with their customers is that the customers' interest must take precedence over the banks' interest. The professional relationships between them are based on contracts that should be governed by principles of justice or fairness, which means that both parties must comply with the terms of the contract. In finance those contracts usually have nonexplicit terms, such as shared interests (both parties expect to gain from the relationship), mutual respect and impartiality (equitable treatment of different customers) and reciprocity (the relationship may be repeated in the future).

Financial institutions have more complete information about their products (and their risks) than their clients do, and the institutions may use this asymmetric information for their own benefit at the expense of their clients' interests. This situation entails the obligation of providing the clients with the full, fair, accurate, complete, objective, relevant, timely and understandable information they need to make rational decisions, ¹² in addition to negative obligations such as avoiding misrepresentation, confusion or concealment of important information, fraud, manipulation, pricerigging, inside trading, ¹³ conflicts of interest and other practices. Another moral duty refers to the appropriate use of sensitive (and confidential) information about the client.

Financial intermediaries often have greater power than their clients and can abuse that power, not respecting the other party's freedom to choose, contract, undertake and exchange. Abuse of power may take place when the contract is being drafted but also when it is being implemented. For example, the right to monitor the borrower to ensure the return of credit does not entitle the bank to interfere unduly in the debtor's business, and the emergence of difficulties in paying back the loan does not allow undue harshness against a defaulting client. Procedural justice demands equitable but not necessarily equal treatment of its various clients.

Some financial institutions have special duties to specific clients. For example, commercial banks must safeguard and diligently manage their deposit holders' funds and provide liquidity management services. Banks' obligations related to their lending activities include the honest examination of applications, prudent decision making in granting loans (fairness in setting interest rates, charges, installments, guarantees, collateral, etc.), monitoring the borrower and fair treatment in the event of default.

In a highly interconnected world, the actions of a financial institution can have a negative impact on many others – or, in positive language, financial institutions should cooperate for the common good of the industry. For example, poor management of liquidity or solvency on the part of one bank can cause general panic that endangers others. Problems may occur if all banks adopt the same models of analysis, which may meet rational criteria when applied to one institution but whose application may generate a uniform but unmerited risk in other banks – that is, systemic risk. Other forms of harm occur when a bank seeks special regulatory treatment that may be unfair to competitors and may allow the exploitation of clients, when it practices regulatory arbitrage (taking advantage of locations where regulations are more lax) and so compromises the

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¹⁰ See Koehn (1994) on professional contract ethics.

¹¹ See Johnson (2014) on reciprocity in finance.

¹² In each case, what this information will be depends on factors such as the client's ability to understand the transaction and its potential outcomes.

¹³ On the ethical problems of insider trading, see Engelen and van Liedekerke (2010) and McGee (2008).

system's stability, or when it obstructs the orderly functioning of the markets, impairing their social role as devices for the dissemination of information and the discovery of opportunities for all (Kleinau 2014).

These responsibilities toward other actors are important even when each institution is unable to understand all the consequences of its decisions on others. These responsibilities fall primarily on the supervisors, but this does not preclude the institution itself being held ethically responsible, especially when it is "too big" or "too connected to fail." Nevertheless, even if stability is a public good, it is not the only one. There are others, such as growth and innovation. A culture that fosters stability above all else may not be the best.

The ethical duties of banks to their clients and other entities turn ultimately into internal obligations for boards and managers. In general, financial crises draw justifiable attention to external shocks, but such crises also raise questions about failures in the management of incentives (conflicts of interest, remuneration schemes and agency problems), problems of information and control (transparency, risk management and supervision), and lapses in accounting (tampering with financial statements), among others. These problems also point to an information asymmetry between a bank's shareholders and its managers, when the latter may obtain a short-term personal gain at the cost of long-term risks or losses for the organization.

The solution to these problems requires, at the organizational level, the establishment of good practices to avoid opportunism and conflicts of interest, and also a culture of high ethical standards. If agents have acquired solid virtues, it will be easier for them to identify emerging ethical problems, assess their consequences, look for alternatives and make the best decision, and also develop the will to implement that decision effectively. Prudence or practical wisdom is probably "the banker's characteristic virtue" (Termes 1995, 130). The second virtue is justice or fairness, and this is accompanied by honesty, integrity, good faith, truthfulness, diligence or professionalism and accountability, among others. These virtues manifest themselves in everyday conduct and they reflect, more generally, a society in which there is trust. As a public good produced and enjoyed by all, trust also depends on institutional factors, including the rule of law, a fair judicial system and a dependable framework of financial regulation.

Commercial Banks, Shadow Banks, Investment Banks

Commercial banks are the financial intermediaries par excellence.¹⁴ Traditionally they were financed by deposits, granted medium and long-term credit to households and companies, maintained close relationships with their customers and were integrated into their local communities. However, this model has undergone significant mutations in recent decades, due to innovations in products and processes, technological changes (which have, for example, expanded clients' opportunities and encouraged greater appetite for risk, a short-term outlook and less loyalty to banks), new means of payment (which could render obsolete one of the banks' main functions) and deregulation (which opens up new opportunities for other intermediaries and increases competition).

The reaction of many commercial banks to these changes has been to adapt their business models to those of their nonbank competitors, and this has also changed their principles and behavior. For example, securitization provided opportunities to obtain finance by routes other than deposits

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¹⁴ On the ethics of banks' operations, see Cowton (2002), Green (1989), and Koslowski (1995 and 2011).

and changed the banking model from "originate-to-hold" (holding the credit on its balance sheet until its due date) to "originate-to-distribute" (converting the credit into collateral for a security, selling it and taking the risk off the balance sheet). The use of automated procedures for granting loans has weakened personal relationships, thereby replacing a service ethos with a sales-driven culture.

As a result of these changes, the culture of many commercial banks has changed. They are financed impersonally in wholesale markets and they lend impersonally through securities; they use sophisticated risk models, pursue purely short-term financial targets and have stopped working with their local communities.

The term "shadow banking" does not imply any negative legal or moral judgment. It is used to designate those organizations (investment banks, brokerage houses, finance companies, structured investment vehicles and many others) that provide banking services to specific clients but neither receive deposits nor handle payment systems, which puts them outside the official backstop system (the central bank as a source of liquidity, along with deposit guarantee programs). They operate in a less regulated environment than commercial banks, though often they are owned and managed by them, and have lower costs, substantial competitive advantages and opportunities for big profits.

The ethical problems affecting shadow banking are similar to those of commercial banks, although they are more acute because the business model is more aggressive, the risk level is higher, the leverage is greater and the equity levels are lower. Shadow banks are highly connected with other institutions, which may create systemic risk, and they may also be prone to problems related to opacity, herd behavior or conflicts of interest.¹⁵

Investment banks undertake a broad range of operations with other financial intermediaries and private customers. They help private companies obtain financing by means of public share offers; they trade with institutional investors on the secondary markets; they act as market makers, adding depth and liquidity to the market; they trade in derivatives; they facilitate transactions on the repo markets and provide clearing services to other financial institutions; and they also carry out operations on their own behalf. They are usually large organizations, with a considerable resource-generating capacity and a powerful influence on the economy.

Investment banks have often been criticized due to the risks they take and transmit to the rest of the system, the complexity of their products, the opacity of their operations and their interconnection with many markets and institutions, which leads to negative knock-on effects.¹⁶

Investment Funds, Mutual Funds, Exchange-Traded Funds, Hedge Funds

Investment funds are collective investment institutions that hold portfolios containing only financial or real-estate assets. Investors buy shares in these funds, thereby becoming co-owners of the portfolio.¹⁷ Mutual funds target modest investors who cannot manage their wealth personally and offer them diversified portfolios with yields that are higher than the investors could obtain on their own. Pension funds receive employees' savings to provide them with income when they retire. In exchange-traded funds, investors buy and sell the fund's shares on the stock

¹⁶ See Painter (2010) and Reynolds and Newell (2011) for a discussion of the ethics of investment banks.

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¹⁵ On shadow banking, see Pozsar et al. (2013).

¹⁷ Bonvin and Dembinsky (2002) and Dembinsky et al. (2003) discuss the ethical responsibilities of investors.

market. Their assets consist of indexed shares; they are diversified products, easy to operate and with low costs.

The ethical problems that usually arise with respect to these funds include managers' interests being put before those of clients (for example, a manager strategically executing his own trade prior to what a client has requested), the generation of unnecessary trades (churning) to collect more commissions, or unfair dealing with an investor. Excessive risk taking is not frequent due to the strictness of regulations.¹⁸

Hedge funds have grown rapidly in recent years. They are usually large, have a small number of high-net-worth clients and impose strict terms on them, particularly for the withdrawal of funds. These funds operate under lax regulations and are heavily leveraged. Their strategies are opaque and they offer high yields with high risk. They charge high commission rates and their managers also have other incentives tied to the fund performance.

Hedge funds were criticized harshly in the recent financial crisis for their size and power, aggressive strategies, high potential profits (and losses) and the risks they would take or transfer to other participants. They were also criticized for the lack of transparency of their operations, although this is not relevant for the market's efficiency when such information concerns a fund's internal strategy and is accepted by its participants. There may also be agency problems (the managers' interests being put ahead of the clients' interests) and conflicts of interest (for example, when managers carry out proprietary trading that can lead to lower profits for clients).¹⁹

Financial Derivatives and Securitization

Derivatives are financial instruments in which an asset's value depends on or is derived from the value of another underlying asset, index or interest rate. There are many types of financial derivatives. The best known are forward contracts (buying or selling at a price fixed beforehand, with delivery at a specified time in the future), futures (the same operation with standardized products in organized markets), options (the right, but not the obligation, to buy or sell something at a given time in the future at a specified price) and swaps (two parties agree to swap financial instruments at a given time in the future at a specified price: for example, a contract at a fixed interest rate for another contract at a variable rate). Derivatives have been used for centuries to hedge risks. For example, farmers sell their harvest beforehand in the futures market at a fixed price to protect themselves against an eventual drop in prices.

Derivatives are morally legitimate products, which – like many others – can be used inappropriately, becoming "toxic assets."²⁰ Sometimes they are viewed with mistrust, perhaps because their operation is not understood properly. For example, a future is a zero-sum contract – what one party wins, the other party loses – but it enables the risk to be borne by the party who is best able to do so, with compensation. Another reason for criticism is their speculative

¹⁸ On the ethics of funds, see Hess (2010) and Johnsen (2010). For discussions of particular ethical issues, see Almeder and Snoeyenbos (1987) on churning and Boatright (2001), Carson (1994), and Palazzo and Rethel (2008) on conflicts of interest.

¹⁹ Donaldson (2010) provides an overview of the ethical problems of hedge funds.

²⁰ Overdahl (2010) and Raines and Leathers (1994) deal with the ethical issues of derivatives. Cvjetanovic (2014) and Murdock (2013) discuss specific derivatives in the recent crisis. On the ethical aspects of securitization, see Buchanan (2015), Nielsen (2010) and Schwarcz (2009). The ethical failures of rating agencies in the valuation of derivatives are explained in Scalet and Kelly (2012) and Strier (2008).

use and the potentially high risk. For example, when an option is financed with debt, the gain can be very high, but if there is a loss, it can be also very high.

Securitization consists of pooling credits that are part of a financial institution's assets (such as mortgages, auto loans or credit card-linked debt), taking them out of its balance sheet and transferring them to what is called a special purpose vehicle (SPV) to act as collateral for derivatives sold to investors. Securitization is a good technical and ethical practice, which allows financial institutions to transfer the risk to other investors, reduce their equity requirements and obtain liquidity to fund new operations. However, this practice can also be used in an imprudent way. For example, in the years of strong real estate growth in the United States, driven by low interest rates and policies promoting the extension of family homeownership, subprime loan originators – who were paid according to the quantity and amount of loans granted, regardless of the risk of defaults on them – had an incentive to conceal the potential borrowers' true risk and even make misleading statements. Mortgage lenders were not diligent in controlling those risks because, via securitization, mortgages and risk would disappear from their balance sheets.

During placement of the collateralized debt obligations (CDOs) and other derivatives in the years before the financial crisis of 2008, basic rules of prudent investment were also disregarded, such as ascertaining the nature and scope of the risk. The rating agencies, which played a central role in the design and valuation of derivatives, committed big mistakes: the sophisticated criteria used were not appropriate, and conflicts of interest arose because an agency was faced with assessing the products submitted to it by the same banks that paid the agency's fees. The derivative portfolios' risk was hedged by credit default swaps, in which the issuer undertook to compensate the investor if the asset on which the contract was based lost value or defaulted, in exchange for a premium. Not only were the credit default swaps complex, they also created the illusion that the hedged assets were secure, thereby increasing their imprudent use.

Risk Management

All financial transactions involve expectations about the future and therefore carry a risk. This risk may be understood both as a hazard and an opportunity. Sometimes it is worth accepting a risk to get a higher return. At other times, it is best to protect oneself from a risk, pass it onto someone else or simply avoid it. The goal of risk management is to prevent any losses that may occur in the future because of the risk and to ensure that the occurrence of critical events does not endanger the organization's survival.²¹

Risk is not just a technical issue but also an ethical one because of its consequences on the welfare of the agent and others, and it may even endanger the functioning of the financial system as a whole (systemic risk). A bank's portfolio risk, for example, is borne not only by its shareholders but also by its creditors and even by other agents who act as counterparties in its operations, but decisions on these risks are frequently made by bank managers without considering the interests of other stakeholders.

The nature and level of risk must be known, identified and evaluated in order to decide on the best strategy: either accepting the risk (if, for example, the institution has enough of a capital buffer to cover the possible losses) or protecting oneself against it (balancing the assets and liabilities, monitoring borrowers, as the banks do, passing on the risk through securitization,

²¹ On the ethical problems of risk management, see Boatright (2012) and Young (2010).

hedging with derivatives or taking out insurance). There are also immoral forms of risk transfer: by deceit, abuse of power, product opacity or the creation of moral hazard.

Prudence is the main virtue of the risk manager: excessive risk taking may be an imprudent action, even if it does not immediately lead to losses. Currently, most regulators delegate an important part of risk control to the financial institution. This reduces costs for the bank but does not lessen its responsibility, and may increase costs for others, including taxpayers. Sound risk management (both technically and ethically) and the exercise of accountability contribute positively to the creation of trust.

Using complex mathematical models has made risk management easier, but it has also created new problems. Sometimes it has been forgotten that the results of these models are dependent on their underlying assumptions and on the information used to calibrate them. Decisions have been left to so-called experts who do not always have the appropriate experience. Reliable models may create the illusion of safety and lead to excessive risk taking. Moreover, each manager sees only the part of the problem that affects him or her, so the protection of a particular manager's institution may be compatible with the creation of greater systemic risks. Finally, the widespread use of similar models based on the same assumptions may create situations of herd behavior, leading to excessive optimism during booms and panic during crashes.

The Ethics of Financial Markets

Financial markets put buyers and sellers into contact with each other, either directly or through intermediaries (brokers, dealers, market makers). The main contribution of these markets to the welfare of society is setting prices and providing information to market participants and to society.

Sometimes it is argued that markets are unethical, due to the suspicion that the people who operate in them are moved by greed. However, a legitimate personal interest should not be confused with greed. Moreover, markets are only a means to achieve buyers' and sellers' goals. The morality of transactions depends on the goals of the agents and on the means used. If the parties operate in suitable conditions of freedom and access to information, both of them gain from the exchange and they contribute to efficient resource allocation.

The markets' proper operation depends on a suitable legal and institutional framework that guarantees fair treatment and avoids manipulative, fraudulent or misleading conduct. Fairness in financial markets is defined by a set of freedoms and rights: freedom from coercion, misrepresentation and nonrational impulses, as well as rights to (roughly) equal information, intellectual processing power, bargaining power, as well as efficient prices.²² The weight of these responsibilities falls upon regulators, but the participants' duties cannot be ignored. For example, they must not commit fraud, be deceitful, or abuse a dominant position due to asymmetric information; they should not engage in opportunistic behavior when they are in a position to breach a contract with impunity; and they should take into account possible externalities that transfer to a third party the costs generated by the decision maker. Here we will discuss two typical problems of financial markets: speculation and high-frequency trading.

²² These freedoms and rights were suggested by Shefrin and Statman (1993), a classic in the literature on fairness in financial markets.

Speculation

Speculation is a routine practice on financial markets.²³ Strictly speaking, it is the purchase (or sale) of an asset without a simultaneous hedging operation being performed, with the hope that the asset's price will be higher (or lower) in the near future, while at the same time running the risk that the expectation may not be fulfilled. However, often people use the word "speculation" improperly to refer to any operation involving buying low and selling high.

A grocery store does this, but its profit is often justified by the service rendered when consumers are provided with the products they want. The moral justification of speculation is based on the exercise of free initiative. Whatever their motivation, each party expects to win on the exchange, and the other party makes it possible. Obviously, if people buy cheap because they expect the price to increase and this occurs, they will gain in the operation, and the sellers will lose in comparison, but this does not mean that buyers have behaved unfairly, unless they have engaged in immoral practices, such as price rigging, hoarding or spreading false news to cause shortages. The morality of the operation will depend, above all, on the observance of the rules of justice in exchange. Thus, speculation contributes to the market's social function. It provides liquidity (enabling the parties to buy or sell whenever they want without excessive cost) and it provides information to the market, and this improves efficiency.

Speculation is sometimes criticized for the sheer amount of profit that the speculator can earn, quickly and effortlessly (but with risk), but the morality of these actions does not depend on the amount of profits, so long as they have been obtained by fair means.²⁴ Another aspect is risk: speculators take on a risk, but this is not necessarily immoral, as we said before. The fact that some speculators are ruined has more to do with their misjudgment of the circumstances than with the market's morality.

Electronic and High-Frequency Trading

New information technologies expand and accelerate the possibilities of analysis, decision making and communication. Consequently, finance is becoming more interconnected, faster and more complex – and less human. This may be an advantage in terms of the addition of speed, memory or power coupled with the removal of emotion, distraction and error. However, this does not lessen the moral responsibility of the people who use these technologies.

In recent decades, the growth of electronic trading has provided easy access to the markets without the intervention of intermediaries. This has increased competition and developed continuous, integrated and more efficient markets. Subsequently, supercomputers were introduced that operate at superspeed using complex algorithmic programs, and it is here that new moral problems arise.²⁵

²³ Angel and McCabe (2010) and Koslowski (1995) discuss the ethics of speculation. A particular case is that of short selling (selling securities or other financial instruments that are not currently owned and subsequently repurchasing them) (Angel and McCabe 2009). This practice adds another ethical issue: the possibility that the short sale will trigger an overreaction in the market, accentuating the fall of the security's price.

²⁴ On the morality of profit see the opposite positions of Arnold (1987) and Brown (1992).

²⁵ Hulburt et al. (2009), Kraemer et al. (2010) and West (2014) analyze the ethical issues arising from the use of new information and communication technologies in the financial markets.

A particularly significant form of the use of this technology is high-frequency trading (HFT). These are sophisticated programs that carry out operations in a fraction of a second and do it thousands of times a day by holding numerous positions open for very short periods of time. By locating the intermediaries' computers very close to the markets' computers, they receive orders a few milliseconds before slow traders. If, for example, a buying order arrives, they can place another order before the selling order arrives from a slower trader, obtaining a minimal profit per unit but multiplied by a very large number of operations. In addition, they can anticipate market movements, placing many orders that forestall the actions of slow traders, running ahead of them to get a profit.

High-frequency trading is a rent-capturing procedure at the expense of slower traders, and its social benefits are extremely debatable. It provides arbitrage opportunities, identifying small price differences, but the millisecond lead does not provide any significant benefit in liquidity terms. Neither does the reduction in transaction costs, due to the narrower spread between bids and ask prices. Furthermore, stuffing the market with fictitious orders can be a type of deception. For example, a trader might launch a large number of fictitious purchase orders to create the false impression of trying to make a purchase, sparking sales orders from other traders, although the released orders will be canceled immediately. These practices heighten operations' endogeneity, giving markets a life of their own, disconnected from agents' financial needs.²⁷ They may have destabilizing effects, triggering a chain reaction processed by computers, without human intervention – but with human responsibility – in response to an erratic market movement.

Computers and networks perform vital functions in financial markets: they provide access to more and faster information, they reduce costs, and they empower customers. However, they can also have negative effects: speed may accentuate volatility, increase risk, hamper some agents' free access to the market and unfairly discriminate among operators. The technical advantages of computers are undeniable but, from the ethical viewpoint, it is the human's agency, initiative and freedom that may be at stake, because it is the human who designs the programs and endorses their use who is ultimately responsible for the decisions made by computers.

Alternative Finance

Ethical Banking, Ethical Funds, Socially Responsible Investment, Crowdfunding, Microfinance

Over the course of history, many investors have felt responsible for the use of their money and have not wished to become collaborators or accomplices in the possible immoral dealings of the companies they have financed. Taking a positive approach, they wanted their wealth to be used toward economically and socially beneficial activities. From the other side of the market, investors' demands have been reflected in the provision of ethically and socially responsible

²⁶ On the ethical problems of HFT, see Angel and McCabe (2013), Cooper et al. (2016), Lin (2014) and Madonna (2013).

²⁷ Dark pools are electronic trading networks that facilitate anonymous trading, hiding it from the market to prevent their strategy from becoming known. They are, in a way, defense mechanisms against high-frequency operators (Koehn and Koehn 2014).

investment products and in the actions of organizations that try to conduct their management in accordance with ethical standards.

Investors with these concerns often see the financial world as something complex and opaque, in which questionable ethical practices abound. To correct this, new models of financial institutions and products have emerged, such as ethical or sustainable banking, ethical funds, socially responsible investment and impact investing. Their goal is to direct resources toward broader goals than profit, offering savers the possibility of cooperating for the good of the activities in which they invest, without sacrificing financial return. The adjectives "ethical," "sustainable" and "responsible" differentiate these institutions, but this does not mean that other organizations are not ethical, sustainable or responsible or that the organizations with these adjectives live up to them in everything they do.²⁸

Initially, attention was focused on negative investment criteria, excluding businesses involved in the production of weapons, tobacco or pornography, or industries that pollute. Later on, positive criteria were added, so that investments would be made preferentially in socially desirable activities, such as community development, fair trade or renewable energies. More recently, shareholder activism was included to get companies to apply environmental, social and governance criteria in their actions.

There have been many highly varied innovations in the field of alternative finance. For example, crowdfunding, person-to-person lending and social lending consist of raising funds in a flexible way through social media, often by means of a large number of small contributions, in order to finance economic, social or hybrid projects. Their ethical appeal arises from their possible social goals and the involvement of communities interested in the project, although they are sometimes criticized for the high interest rates charged to borrowers, uncertainty regarding guarantees, a lack of transparency about the projects and ex post accountability, and their possible use for illicit activities.²⁹

Originally, microcredit consisted of granting small loans to entrepreneurs with the collective guarantee or social control of a group of small entrepreneurs. The commitment to returning the funds was taken very seriously, and the interest rate was usually high, as justified by the operation's risk and the interest charged by alternative sources. Microfinance includes microcredit and other instruments (savings, payment systems, insurance) to which the recipients do not have access for geographical reasons or lack of income or collateral. The ultimate goal of microfinance was to combat poverty and foster development by financing sustainable microenterprises.

Microfinance has been highly praised – Grameen Bank, one of the pioneer institutions, and its founder, Muhammad Yunus, were awarded the Nobel Peace Prize in 1976. However, microfinance has also been criticized, not so much for its goals as for its procedures and results. ³⁰ As a tool for development, microfinance institutions were expected to be able to cover their costs and make enough profit to attract new investors, ensuring their economic sustainability. However, the expectation of profit and the pressure of investors changed the nature of the lending operations

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²⁸ The ethics of socially responsible investing is treated, among others, by Louche and Lydenberg (2010), Mackenzie and Lewis (1999), Sandbu (2012), Sparkes (2002) and Vandekerckhove et al. (2011). For critical perspectives on this form of investing, see Entine (2005).

²⁹ Hossain and Oparaocha (2015) analyze the ethical problems of crowdfunding.

³⁰ There are many studies on the ethical issues of microfinance, in relation to its pioneering role in the economy and the promotion of development, such as Argandoña (2010) and Schmidt (2012).

from the creation of microenterprises to more general consumer credit, in competition with commercial banks. Interest rates increased along with the pressure to repay the debt. Behind those developments were changes in the ownership of the institutions, which often ceased to be social enterprises, foundations or NGOs and instead became for-profit banks.

The expected social results of microcredit have not always been achieved, perhaps because expectations were too high or because a region's development depends on more than the existence of small projects targeting a local market that can end up becoming saturated. Microcredit can be used to stabilize a middle class of small entrepreneurs and create jobs, but the debt burden on the poorest limits their ability to eliminate poverty. The future of microfinance has yet to be determined, but now we know more about its possibilities and limitations.³¹

Islamic Finance

Islamic finance is a radical alternative to Western finance, based on the principles of sharia or Islamic law.³² It is not intended as a mere correction of the capitalist model, as it is based on religious principles. Sharia seeks to develop a way of life, a collective morality and a spirituality. Any human activity, including economic operations, must seek human good and apply principles of justice, equality, harmony and moderation to achieve a balance between material and spiritual needs. Islamic finance includes both moral principles and legal regulations that are applied to any activity and, in particular, to the financial institutions created and managed in accordance with sharia.

Sharia prohibits any financial activity related to the production of or trade in unpermitted goods, such as pigs, alcohol and gambling. Money does not beget money; consequently, it is forbidden to charge interest (*riba*) on a loan. Costs, profits and risks must be shared between the parties to the contract. The concept of justice refers not only to the procedure but also to the results and, above all, it must create value for society. Islamic banks do not just lend money to their clients. The banks also establish close relationships with them, including a partnership in the business, dispensing advice and providing supervision. Financial institutions serve the community, not only individuals, and responsible finance includes controlling the behavior of lenders and borrowers, avoiding, for example, overindebtedness.

Concluding Remarks

In the preceding pages we have explained the nature of several ethical issues that arise in finance. Such issues are not morally different from other human decisions, because there are no autonomous moral principles for different activities. Nonetheless, each financial asset or endeavor has its own character, whether because of the nature of the transaction, the product itself, the sponsoring institutions or the circumstances of the overall market. And through it all there are human relationships.

³¹ Microfinance is related to what is known in Spanish as *bancarización* ("bankarization" or access to banking services) and financial inclusion, which seeks to enable all citizens to access a variety of financial products as a means for overcoming significant obstacles to their opportunities, security and participation.

³² The literature on Islamic finance and its ethical implications is already very wide. Interesting contributions can be found in Hassan and Kayed (2009), Rice (1999) and Wilson (1997).

Good financial professionals act for the benefit of their clients. In so doing, these professionals must ask themselves questions such as the following: Is it wise for a householder without a regular job to commit a significant portion of his or her income to a mortgage to buy a home? Do investors have any specific responsibility for the activities of the company in which they place their money? Does the expectation of a large profit justify highly leveraged option trades? Is it lawful to sell a complex financial asset to a client who has no financial education or experience? The answers to these queries have an economic dimension in terms of variables such as income and expenses, yields and risks, solvency and liquidity. They also have a moral dimension – fairness, prudence, and responsibility – that sets the flourishing of individuals and the common good of society as its goals. This ethical dimension has become more complex in recent decades, but it cannot be compromised for an economic variable or reduced to a technical decision of risk and return.

Finance needs ethics not just to soothe investors' consciences but to improve the industry's practices, to develop solid legal and regulatory (not to mention theoretical) frameworks, to sustain appropriate institutional and cultural foundations, and to create the atmosphere of trust without which finance cannot succeed. Good ethics is good finance – not necessarily because it contributes to greater returns but, above all, because it is a condition for financial institutions to be managed well and for all individuals to have full lives.

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