Regulating finance in the 21st century

François Valérian
Ingénieur général des Mines, Conseil général de l'Économie

[special issue of Réalités Industrielles, February 2019]

Abstract:
Finance – a swiftly-evolving area of global importance – is difficult to regulate. Regulation is needed, however, as finance affects the entire economy. The 2008 crisis gave fresh impetus to far-reaching regulatory plans and sharply highlighted the problems inherent in attempting to rein in a worldwide phenomenon from a fragmented political space.

Regulating finance may seem impossible. Finance is a future industry, and it has been since at least the 17th century BC, when loans were recorded on clay tablets. I do not use the term "future industry" literally, but rather to describe an activity that is entirely forward-looking, since the subject of all finance is the future: on which we bet or from which we attempt to protect ourselves.

The future is difficult to regulate, however. As Victor Hugo reminded Napoleon III, the future is not the property of princes and, depending on one's belief, it belongs either to no one or to God. Finance is always changing to embrace glimpses of a future from which we seek either profit or protection. This is why finance changes form, even though the principles have not changed since the dawn of the Assyrian Empire. Regulators often find that they have regulated an outdated form of finance, or that they are fighting a rear-guard action.

Finance is fluid over time and also in space, whereas policies and laws are most often confined within the boundaries of a given territory. There is therefore a spatial tension in financial regulation between the thing to be regulated and the regulatory authorities. To examine financial regulation is to examine the tension between the financial sphere and its flows on the one hand, and the political sphere and its rules on the other.

In this paper, I will examine the temporal aspect of this tension, both prior to the 21st century and following the 2008 crisis.

Was finance poorly regulated prior to the 21st century?

For reasons likely attributable to its very nature, finance was unregulated until the middle of the 20th century. Without attempting a complete history, I would like to present a few facts and figures that describe the relationship between finance and power prior to the *Fin de siècle*, attempts at state control during the 20th century and the late-20th-century beginnings of supra-national regulation.

Until the turn of the 20th century, the financier was the rebellious servant of princes

In the exercise of princely power, the financier has always been both a stepping-stone and an obstacle, and power has often intervened in the area of finance. Relations between princes and bankers began to cross boundaries of kingdoms in the Middle Ages. The chivalric orders organised cross-border financial relations, and when the Holy Land was lost, the property of the Knights Templar was seized by Philip IV of France. Florentine banks lent Edward III the money he needed to finance his war in France, which marked the beginning of the Hundred Years' War. When Parliament refused to levy the taxes that would have prevented Edward from defaulting, the banks themselves went bankrupt. A century later, Jacques Coeur's entire fortune was seized and he left France a poor man. Charles V was elected Holy Roman Emperor thanks to funds supplied by the powerful Fugger banking family, beating out his rival Francis I. In the 16th and 17th centuries, Spain struggled to prevent smugglers from undermining its monopoly on silver and gold from the Americas. In 1602, the Dutch East India Company founded the world's first stock exchange for dealing in its stocks and bonds. In the following century, another European expansion movement began, this time westward, and the Regent of France, swayed by Scottish financier John Law, attempted to transfer the kingdom's debt into shares of the Mississippi Company.

Although finance serves princes, it is a rebellious servant to them. This is something that must be considered, and that has always been a significant part of the history of finance. It is difficult and stressful to work on the future, and one cannot succeed if one is driven solely by concern for the general interest or for others. Financiers also seek to enrich themselves, and this quest places them in opposition to princes (and subsequently the State), both of which are eager to expand and take control of everything.

By the late 18th century finance was already an international affair – for example, 16% of England's public debt was held by foreigners at the start of the American War of Independence. In the 19th century, the expansion of bond markets, for the purpose of financing major capital and industrial investments such as roads, railways and mines, amplified this internationalisation. The Rothschild family, which was the most powerful financial institution the world had known up to that point, symbolised this shift. The five Rothschild brothers, sons of a German banker, built an international banking network between England, France, Germany, Italy and Spain that, far from being regulated by States, sometimes attempted to regulate them. Loans were made and bond issues were floated on behalf of the French and Prussian crowns, under the written condition that national parliaments agreed to repay them, either by earmarking specific revenues or capping the public debt.

Finance in the 20th century: difficult for governments to control

At the turn of the 20th century, the balance of power between finance and governments seemed to be gradually shifting. The bond markets attracted crowds of investors, bringing with them panics. These panic phenomena were first documented in literature in the late 19th century, and then in academic descriptions in the early 20th century. A few years after the Panic of 1907, the US created a market intervention tool in the form of the Federal Reserve System. Governments set out financial accounting plans, began to regulate finance (somewhat), and sometimes cooperated during crises, as the banks of France and England did at the beginning of the 20th century.

The late 19th century and early 20th century also witnessed close alliances between major banks and specific countries, and a desire by these institutions for economic and political power. These included Morgan Bank in the United States, which quickly outstripped Rothschild Bank and which financed the Boer War; Deutsche Bank, which was founded in Prussia a few months before the birth of the German Empire; and Crédit Lyonnais, which financed Schneider's sale to Russia of railway lines – rails that would carry troops to the borders of the German Empire.

The 1920s witnessed wider international financial cooperation, with loans granted by England and France, under the aegis of the League of Nations, to those states created by the breakup of the Austro-Hungarian Empire. Germany's war reparations also required an international organisation, which took the form of the Bank for International Settlements in 1930. The Great Depression undermined these fledgling ties, and banks and countries that defaulted found no rescue, much like Austria's Creditanstalt, which declared bankruptcy in 1931.

Sometimes, finance that serves a State also turns against it. France and England, burdened by war debts, experienced this when the pound and the franc lost value on the stock market. These monetary crises, described by contemporaries as the result of speculative attacks, served to shift the ancient hostility – against the rich and powerful, against the abusive lender – towards the financial world as a whole. Suddenly, it was no longer Shakespeare's Shylock or Daumier's caricatures of bankers that were vilified, it was the "wall of money" decried by the Cartel of the Left in the mid-1920s, or the Popular Front's denunciation of the so-called "two hundred families" (the 200 largest shareholders in the Banque de France). These images became fixed in France's collective imagination/memory, resurfacing with each new crisis.

The Second World War marked the beginning of finance's long submission to State power, a situation that endured until the 1970s or 1980s, depending on the country. Clearly, the near-global victory of a political system that claimed to be planning the future obviously left an almost invisible place for finance as such. In the so-called West, including Japan, it continued until the early 1970s under the domination of the currency and gold reserves of a hegemonic America. Major monetary and financial decisions were made by governments in every Western country, including the US. From this point of view, France's nationalisation of large and medium-sized banks in 1981, which was seen at the time as a real break with the past, was carrying on a tradition of decades of banking policy that was set at the Finance Ministry or the presidential palace. Until the commodity crisis of the 1970s, stock markets were relatively inactive and communicated poorly with each other.

The beginnings of supra-governmental regulation at the end of the 20th century

The weakening of the US within the Western world and the weakening of the Western world in trading with countries that produce large quantities of raw materials led to a period of turbulence in finance in the early 1970s that continues to this day.

The movement of wealth to non-Western countries means foreign exchange markets are much more active and currencies are more volatile. The G6, formed in 1975, which became the G7 the following year with Canada and the G8 in 1997 with Russia, represents an attempt by government leaders to jointly regulate currency movements and coordinate certain aspects of their policies.

Governments are attempting to regulate finance, but other stakeholders are claiming regulation for themselves. Turbulence on the exchange markets in the 1970s caused one victim, Bankhaus Herstatt, to go bankrupt in 1974 on a foreign exchange transaction, but this accident gave rise to a non-governmental regulatory body, the Basel Committee, which brings together supervisors and central banks from different countries. All G20 countries are now members, and the Committee's recommendations are *de facto* binding – although not legally so – since they are transformed into substantive law by governments and implemented by most major banks even before that. This is regulation by market opinion, because the mere publication of a new recommendation creates an expectation among investors and market operators that banks must act.

The end of the 20th century therefore gives us a contrasting vision of financial regulation or finance in its relationship with governments. Supra-governmental forms of regulation, through groupings of countries or outside of them, have emerged. At the same time, finance often appears to be deregulated, upended by regional crises (Latin America, Asia, Russia, etc.) or frequent sectoral crises (technologies, etc.), and driven by powerful, forceful players who are unconstrained by the rules. Corporate performance is mainly judged by value creation, and it was in the name of this value that financiers bought and broke up RJR Nabisco in the late 1980s, earning them the nickname "barbarians" by the *Wall Street Journal*. At the turn of the 21st century, other barbarians were swept away by the collapse of the major companies they had brought to the top of the stock exchange: Enron and WorldCom. We think we are regulating to avoid this type of crisis forever, President Bush remarked when he signed the Sarbanes-Oxley Act. Six years later, in 2008, the world experienced a financial crisis that began in the West, the most violent and global crisis since 1929.

Financial crisis and supra-governmental regulation at the beginning of the 21st century

The consequences of the 2008-2009 crisis are still with us: it weighs on our memories and on political shifts in North countries, and it has considerably modified the public's opinion of finance. The call for stronger financial regulation has run up against many difficulties and continues to do so, although we have seen some examples of regulation, generally supra-governmental in nature.

The experience of the crisis and the indictment of finance

The 2008-2009 crisis has often been poorly described, since it was caused by financial instruments that were more difficult to understand than an Internet start-up or a share price boom.

We can summarise what happened as follows: in a context of long-term US real estate price growth, an increasing number of housing loans were granted, particularly to low-income households. These loans, known as subprimes, were resold on a secondary market driven by US public companies. They were attractive to lenders and secondary investors because their interest rates included a premium linked to the risk that subprime borrowers represented. However, the loans were not perceived as dangerous by the borrowers themselves, who were drawn to low repayment rates during the first few years of the loan and who were sometimes dazzled by spiralling real estate prices.

Financial innovation spread this financial and real estate bubble to the entire world. Real estate loans to subprime borrowers were purchased en masse by securitisation vehicles that were financed by issuing bonds on the bond markets. These bonds, called CDOs, served various interests depending on their priority in the default risk exposure of the acquired loan portfolio. Through the use of large numbers, it became possible for rating agencies to grant a triple A rating to bonds which only began to absorb losses above 25% or 30% of defaults within the portfolio held.

We thought we had created a system that allowed each level of risk to find its investor, and each investor to find his or her acceptable level of risk. As long as US housing prices continued to climb, the financial world and the economy as a whole did very well. When housing prices began to stagnate and then decline, subprime bonds suffered heavy losses.

Further financial innovations helped ratchet up the losses. Several major banks created synthetic CDOs and credit default swaps on those CDOs; this made it possible to buy and sell protection on assets that are simply listed, but not contained within the CDO. In this, Goldman Sachs was more successful than AIG, the American financial services and insurance firm which the government was forced to bail out. However, the case received widespread media scrutiny and Goldman Sachs was called to testify before the US Senate, where it had difficulty convincing the senators that it was acting merely as a "market-maker", i.e. the guarantor of the liquidity of certain markets, by pushing clients to invest in positions that the bank was betting against.

Emotions ran high nearly everywhere. The subsequent economic crisis was generally attributed to the excesses of finance, which had to be eliminated once and for all. The G20, which had remained at ministerial level since 1998, brought together heads of state in Washington, D.C. in the autumn of 2008, and now meets at least once a year.

It should be noted that this recent development of the G20 has given considerable visibility and therefore influence to a body whose creation had marked a decline in Europe. An interesting feature of the G8, which is now largely superseded by the G20, is that all its members were great powers a century ago, with the sole exception of Canada, and even that is questionable given its integration into the British Empire. The same cannot be said of the G20, which was founded in 1998 as a response to criticism of the IMF's management of the Southeast Asian crisis. To make room for Saudi Arabia, Argentina and South Africa, several European countries were not given seats at the G20 table. Spain, the Netherlands, Switzerland and Norway (depending on oil prices) could have qualified on the basis of GDP. The compensation of a seat for the European Union, the twentieth member of the G20, was very small in this respect.

A financial regulation secretariat was set up under the aegis of the G20, the Financial Stability Board or FSB. Since the crisis, the G20 and the FSB have been coordinating – or pretending publicly to coordinate – bodies that are outside G20 governments' authority (and indeed outside the authority of every government and financial undertaking in the world), such as the IMF, the World Bank and the OECD.

A large number of regulatory initiatives have been launched, and several have been completed; others could have been started but were not.

Some post-crisis regulatory initiatives

There are several noteworthy examples of financial regulation since the 2008-2009 crisis; the list makes no claim to be exhaustive and focuses on supra-governmental regulations.

In both Europe and the United States, derivatives trading has been made less risky by the significant increase in the number of products that can only be traded on a market with clearing infrastructures.

Very significant efforts have been focused on the ratio of equity capital to total assets, one of the critical instruments when it comes to banks' profitability and risk-taking. A bank's return on equity corresponds to the return on assets net of their financing cost, divided by the share of equity in the balance sheet total. Less cautious bankers were tempted to embrace the most profitable, and therefore riskiest, assets, the cheapest financing and the highest leverage of debt and deposits. Return on equity thus becomes a significant multiple (from 7 to 12) of the return on assets, but the risk on equity – which can be defined as the standard deviation on their profitability considered as a random variable – is equal to the same multiple of the risk on assets.

With the publication of Basel 3, the Basel Committee continued its efforts to rein in the banks' leverage effect, particularly the largest banks, while giving them flexibility in times of crisis to avoid asset fire sales. However, increased capital requirements are likely to lead to stock market panics, and therefore instability, when a bank struggles to meet them. New debt securities have also emerged, which can be converted into equity in times of crisis. Basel 3 also reintroduces the issuance of a simple solvency ratio with unweighted assets, liquidity ratios (the importance of which was highlighted by the 2008 crisis), and capital surcharges for global systemically important banks, the list of which is updated every November by the FSB.

These initiatives with respect to systemic banks are in response to concerns expressed immediately after the 2008 crisis and taken up by the G20 under the slogan "End too big to fail". The aim was to put an end to the moral hazard caused by a bank that was too big for the public authorities – and therefore taxpayers – to not rescue it, since its bankruptcy would cause damage to the financial system and the economy, or would ruin depositors. In the months and years following the crisis, there was much discussion about a new Glass-Steagall Act, with the separation of deposit and investment banks. This resulted in British banks hiving off deposit banking and the prohibition of proprietary trading in the US and France, but these efforts have not come close to a separation of the kind legislated in 1934 in the United States.

On the other hand, some thirty banks appear on the FSB's list; the criteria for inclusion are complex, since it is not only a question of measuring a bank's size, but also its interconnections with the entire system. From this point of view, American stakeholders are probably under-represented, as some provide essential services, for example in payment systems. An unintended consequence of the list, and contrary to its original intention, is that it forms a sort of honour roll of global banks: to be dropped from the list is seen as a failure, to be listed is a great success, to return to it a sort of revenge. The title "systemically important" tends to reassure investors, who tell themselves that a bank on the FSB's list will never be abandoned by its supervisor. It should be noted that an equivalent list has been drawn up for allegedly systemic insurance companies, yet very little evidence of systemic importance has been found in the insurance industry.

There was also heightened vigilance as regards the major banks in the euro area. In the wake of the subprime crisis, countries were obliged to rescue or provide support to banks. Subsequently, those countries – whose indebtedness increased significantly as a result of lower revenues and increased expenditure – had to deal with their own sovereign debt crises. This immediately affected banks that held significant portions of those debts, and this led to a new need for weakened countries to intervene on behalf of their banks, which were themselves very weakened. European solidarity played its part, but measures were decided for the future: commonly-accepted fiscal rules from which Italy is now seeking to free itself, and supervision of the 200 of the euro area's largest banks by the ECB – a supervision that not as close to banks, and more meticulous than before with respect to all types of risks, even the most unlikely.

Banks are more regulated and also more penalised, especially in the US, which sanctions domestic as well as foreign banks. National regulation with transnational consequences is a form of financial regulation that has grown considerably recently. Only large countries or economic areas can enact them: the EU has the means, but in practice it is the US that has made extensive use of this tool in recent years. For the US, it is a question of leveraging its economic power to impose American rules on non-US companies, which also apply to their activities outside the States. If the companies in question do not comply, they are no longer allowed to operate in the US, or be listed on US stock markets.

By 2002, the Sarbanes-Oxley Act had imposed better governance rules on any company issuing financial securities in the United States, which forced many US-listed firms to comply. Sarbanes-Oxley was followed by the Dodd-Frank Act of 2010, whose scope was much wider, as well as the boycott of several countries, of which BNP Paribas bore the brunt. The increase in the numbers and amounts of sanctions undoubtedly have had a substantial influence on banking practices, with considerable resources being earmarked for compliance issues.

If there is one subject where G20 interventions, national regulations with transnational effect and civil society actions are intertwined since the crisis, it is tax avoidance. Calls for transparency have been strong since autumn 2008, perhaps somewhat unfairly, because the so-called opaque products at the time were financial instruments that were difficult to understand. However, this requirement for transparency quickly found favour amongst governments that were concerned about sudden budget deficits and that were eager to recover money from tax avoidance. At its London summit in April 2009, the G20 proclaimed the end of the era of banking secrecy. This was rather hasty, as the OECD quickly found out, which was too quickly satisfied with bilateral tax agreements to thin its lists of tax havens. Then came the scandal of tax avoidance that was aided and abetted by UBS, a scandal that witnessed the first use of the provision of the Dodd-Frank Act, under which whistleblowers received between 10% and 30% of the sums recovered in litigation. The UBS employee who informed the US authorities spent a year in prison and was given $100 million. Following this scandal, the United States passed the FATCA law in 2010, which requires banks around the world to report to the American authorities any accounts opened for the benefit of American citizens. This US law with transnational consequences has forced several countries, including Switzerland and Austria, to change their banking secrecy rules. In 2014, many countries concluded an agreement on the automatic exchange of tax information, which only few rather radical NGOs had called for in 2009. The Panama Papers case served to heighten the sensitivity of public opinion to the subject, and the determination of a number of governments.

Currently, the primary form of supra-governmental financial regulation is support provided by central banks to the debt economy, in a concomitant and therefore more or less coordinated manner. For a number of governments and companies, this has resulted in negative interest rates that contradict the very foundation of finance, uncertainty about the future. This is unfavourable for individuals who are net savers in our countries, but it is favourable to governments and indebted companies, whose refinancing risk, or exposure to variable rates, increases as their debt increases.

The main obstacles to regulation

One of the primary obstacles to financial regulation lies in the tension, as discussed above, between globalised finance and fragmented politics. In a space that is not physical and therefore borderless, financial transactions flow at the speed of electronic information. The danger of regulatory shopping is very high. What is true about the climate also applies to finance: it is a global challenge that can only be regulated by international cooperation in its most global form, otherwise dollars and euros take flight as easily as carbon atoms.

Another significant obstacle, particularly in Europe, is economic growth. A balance must be struck between the economy's need for financing and the limits to be imposed on banks' debt. By placing excessive limits on banks' indebtedness, we also limit the size of their balance sheets and the volume of financing they provide to the economy, especially since investments in companies, in the form of loans or equity, penalise equity capital. This hinders growth or puts the onus of financing on individuals. The new American administration, its excesses notwithstanding, has raised this question, which merits discussion and which is reflected in European insurance regulations under the new Solvency 2 Directive – economic growth is not promoted if shareholding is penalised in insurance companies' balance sheets even though holding Greek or Italian bonds costs nothing in terms of capital.

The growing complexity of finance itself is the source of other obstacles.

Finance is becoming increasingly automated, governed by algorithms that often produce financial information, analyse it and trigger buy and sell orders based on this analysis. The 2010 Flash Crash was one in a series of more or less serious incidents that remind us of the risks associated with IT technology and the issues, more or less well controlled, involved in regulating it.

Moreover, the human mind is very agile when it comes to inventing financial products that are not always understood by their users. JP Morgan lost $6 billion for letting a department of the bank, which was supposed to prudently invest excess liquidity, speculate on credit derivatives. These same credit derivatives, already used by Goldman Sachs in the years preceding the crisis to speculate on bond risk, played an obvious role in the collapse of the three main Icelandic banks in 2008 and in the euro area sovereign bond crisis a few years later. It is difficult for a regulator to decide whether a financial innovation is harmful or whether it should be accepted because it provides the market with additional liquidity.

The example of JP Morgan also brings us back to the "too big to fail" concept, but in the form of "Too big to manage". JP Morgan's management, all the way up to its president, clearly did not understand the potential implications of trading in credit derivatives, nor was UBS's management in 2011 able to prevent Kwaeku Adoboli's actions. In the case of UBS, there was individual fraud, which was not the case for JP Morgan, but in both companies there was managerial failure in the face of complexity.

The problem with governance – i.e. bank governance – remains a problem. A prime example of this is Danske Bank's failings with respect to its Estonian branch, which was generating so much money that no one stopped to wonder whether its customers weren't Russian businessmen who were laundering their ill-gotten gains. Only a risk control function that is independent of senior management can hope to improve this type of situation. The very high salaries paid by some banks – not necessarily Danske Bank but certainly JP Morgan and many others – can blur the risk assessments, especially when the spectre of risk lies far in the future, while bonuses are only months away. This subject was one of those raised after 2008. It has ceased to be a priority, but could return.

Finally, there are elements in the way market continue to function that could encourage bubbles. Up until the 1970s, credit agencies were paid by investors, but since then have been paid by issuers, i.e. by the very entities they rate. They are criticised in every crisis and experience shake-ups, but finally they are left unscathed. However, their method of compensation is intrinsically exposed to conflicts of interest.

Accounting standards, both IFRS and Solvency 2 insurance standards, also pose problems in their requirements that assets and liabilities be assessed at market value. When the stock market goes up, banks' shares go up even more, as their assets increase, and the reverse is also true. Bank balance sheets, by their very method of valuation, thus promote market booms. It is also worth noting the paradox of banks whose perceived risk is increasing, and whose debt is therefore falling in value, which results in profits for the bank by reducing its liabilities.

Looking ahead

What can we say about the near future, and the next crisis?

No crisis can be predicted by a broad consensus: the mere fact of consensus concerning the high probability that a crisis could occur would trigger it. We can only make a few observations. First of all, since the 2008-2009 crisis, we have been experiencing turbulence, and even successive crises, such as those concerning sovereign debt. Negative interest rates are a concern, as they encourage a build-up of debt that may no longer be financed when rates rise. Debt is rising, and debtors, especially public debtors, will one day regret this rise, as Humphrey Bogart said to Ingrid Bergman in *Casablanca*, "maybe not today, maybe not tomorrow, but soon". Perhaps the bond bulge will create a speculative bubble whose collapse will trigger the next crisis, with panic sales on the bond market, perhaps itself another crisis? One thing is certain, a crisis is coming, and countries, with their current level of sovereign debt, will be much less equipped than eight years ago to deal with it.

It is very difficult to reverse this upward trend in public debt. Debt reduction is only possible if the budget, which is in deficit, turns into a surplus. However, the presentation of the deficit in points of GDP is misleading, because it does not give a sense of the effort needed to reduce it: 3% of GDP also represents 30% of the budgetary resources of a country like France.

The private debt of companies, financial or otherwise, is also considered by some to be a matter of concern. There is a very recessive way to limit the role of finance and the severity of crises: by restricting loans to the creation of new capital or related expenditures, such as research. This prevents loans from feeding speculative bubbles on existing assets, but we would no longer have loans for the purchase of an apartment. The economy would be much less active, there would be far fewer purchases of companies and properties, which would be increasingly passed on through succession. This idea was raised in the years following the 2008-2009 crisis, and it cannot be ruled out that it may return during a very severe crisis.

Turning to current financial practices, a very worrying aspect, linked to low interest rates, is the return to the securitisation of risky loans, particularly those oddly referred to as leveraged loans. These are nothing more than loans to companies that are sufficiently risky to have to pay high rates. These loans are then shared between bond investors in the securitisation vehicle according to their appetite for risk. There is no real way of knowing whether these leveraged loans are properly valued, and there is a significant risk factor here, a risk that is more systemic than that on share categories, because it is widespread on the global bond markets.

Reducing public debt, and probably also private debt, and even better, controlling risk-taking in financial institutions, is probably the path to reducing the risks to which our economy will be exposed in the years to come.